Ohio Environmental Protection Agency

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

12/3/2015

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Mr. Mark Swallen
3M Elyria
1301 Lowell Street
Elyria, OH 44035

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0247040822
Permit Number: P0109808
Permit Type: Initial Installation
County: Lorain

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA)Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA
Ohio EPA-NEDO; Canada

FINAL

Division of Air Pollution Control
Permit-to-Install
for
3M Elyria

Facility ID:	0247040822
Permit Number:	P0109808
Permit Type:	Initial Installation
Issued:	12/3/2015
Effective:	12/3/2015

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
3M Elyria

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Authorization

Facility ID:	0247040822
Facility Description:	Synthetic Sponge manufacturing
Application Number(s):	A0044193, A0050589, A0054312, A0054822
Permit Number:	P0109808
Permit Description:	This permit is for already installed emission units, which were initially thought to be de minimis: P011 viscose blending system; P012-P017 mixer nos. 2-7 for sponge mass production; P018 storage silo for anhydrous sodium sulfate; P020 & P021 trickling tower nos. 1 & 2; P022 wastewater pit; and P023 Reclaim salt pit.
Permit Type:	Initial Installation
Permit Fee:	$10,500.00
Issue Date:	12/3/2015
Effective Date:	12/3/2015

This document constitutes issuance to:

3M Elyria
1301 Lowell st.
Elyria, OH 44035-4864

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)963-1200

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0109808
Permit Description: This permit is for already installed emission units, which were initially thought to be de minimis: P011 viscose blending system; P012-P017 mixer nos. 2-7 for sponge mass production; P018 storage silo for anhydrous sodium sulfate; P020 & P021 trickling tower nos. 1 & 2; P022 wastewater pit; and P023 Reclaim salt pit.

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

Emissions Unit ID:	**P011**
Company Equipment ID:	P011
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P018**
Company Equipment ID:	Anhydrous Sodium Sulfate Silo
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P022**
Company Equipment ID:	P020
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P023**
Company Equipment ID:	P021
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Mixers

Emissions Unit ID:	**P012**
Company Equipment ID:	P012
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	P013
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P014**
Company Equipment ID:	P014
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P015**
Company Equipment ID:	P015
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P016**
Company Equipment ID:	P016
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

Emissions Unit ID:	**P017**
Company Equipment ID:	P017
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

Group Name: Trickling Towers

Emissions Unit ID:	**P020**
Company Equipment ID:	P018
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P021**
Company Equipment ID:	P019
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

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.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) 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 re-issuance, or modification.

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, revoked, or revoked and reissued, for cause. 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 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.

4. 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, 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.

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, 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.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written 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. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. 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 are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to theOhio EPA DAPC, Northeast District Officein accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) 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 Ohio EPA DAPC, Northeast District Office 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. 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 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.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s)not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

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

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted,no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d)must be obtained beforeoperating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services"facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

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 quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed.The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

19. 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.

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. OAC rule 3745-31-05(A)(3) - Ohio Best Available Technology (BAT) Requirements – The emissions units specified in B.2.a) are subject to the Ohio BAT requirements specified in B.2.b) through e) and B.3.a) through c):

   a) P001, P002, P003, P004, P007, P008, P009, P010, P011, P012, P013, P014, P015, P016, P017, P020, P021, P022 and P023.

   b) The building enclosure serving the emissions unit(s) specified in B.2.a) shall be maintained under negative pressure as required by this permit whenever any of the emissions unit(s) is in operation and shall capture the volatile organic compound (VOC) emissions from these emissions unit(s).

   c) The VOC emissions from the emissions unit(s) specified in B.2.a) shall be vented to a biofiltration system that shall meet the operational, monitoring, and record keeping requirements of this permit when one or more of the emissions units are in operation, except for P012, P013, P014, P015, P016 and P017 (the sponge mass production mixer nos. 2 through 7).

   d) The permittee shall capture VOC and hydrogen sulfide (H_2S) emissions from the facility at a minimum of 85% and route them to the biofiltration control system.

      This requirement is applicable to the backup scrubber only during periods when the permittee operates the backup scrubber to demonstrate compliance with an applicable emission standard.

   e) The biofiltration system shall remove a minimum of 80 percent (%) of VOC emissions vented to it and the control efficiency determination shall be based on the arithmetic average of the preceding sixty (60) consecutive days' average removal efficiency.

      This requirement is applicable to the backup scrubber only during periods when the permittee operates the backup scrubber to demonstrate compliance with an applicable emission standard.

      [Authority for term: OAC rule 3745-31-05(A)(3)]

3. OAC rule 3745-31-05(A)(3) - Ohio BAT Operational Restrictions

   a) The building enclosure shall be maintained under negative pressure whenever any of the emissions units specified in B.2.a) is in operation. Negative pressure shall be visually monitored using streamers, plastic flow indicating strips, string, or other visually noticeable flow indicating device that shows the direction of air flow through “select” natural draft opening to be into the enclosure.

      [Authority for term: OAC rule 3745-31-05(A)(3)]

   b) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable air pollution control equipment parameters, that shall be maintained in order to demonstrate compliance during any period of time when any of the emissions unit(s) controlled by the biofiltration system is in operation are as follows:

(1) The daily average gas temperature at the inlet of the biofiltration system shall not exceed the average temperature measured during the most recent performance test that demonstrated the emissions unit(s) was in compliance or during a performance test conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements.

(2) The daily average acceptable pressure drop across the biofiltration system that shall be maintained in order to demonstrate compliance, shall be between two standard deviations less than the mean and two standard deviations more than the mean measured during the most recent performance test that demonstrated the emissions unit(s) was in compliance or during a performance test conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements.

(3) The daily average conductivity of the biofilter system discharge liquor shall not exceed the average conductivity measured during the most recent performance test that demonstrated the emissions unit(s) was in compliance or during a performance test conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements.

[Authority for term: OAC rule 3745-31-05(A)(3) and 40 CFR Part 63, Subpart UUUU]

c) The acceptable average daily range or limit of the following backup scrubber operating parameters shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range or limit for each parameter is established to demonstrate compliance for each day the permittee operates this piece of control equipment to demonstrate compliance with an applicable emission standard:

(1) the pressure drop across the scrubber;

(2) the scrubber liquid flow rate; and

(3) the scrubber liquid pH, conductivity or alkalinity.

This requirement is applicable to the backup scrubber only during periods when the permittee operates the backup scrubber to demonstrate compliance with an applicable emission standard.

[Authority for term: OAC rule 3745-31-05(A)(3) and 40 CFR Part 63, Subpart UUUU]

4. OAC rule 3745-31-05(A)(3) - Monitoring and Record Keeping Requirements

a) The permittee shall perform inspections on a once per 8-hr shift basis of the building enclosure to ensure that the following conditions are being maintained when any of the emissions unit(s) specified in B.2.a) is in operation:

(1) the direction of air at each natural draft opening is inward, as shown by streamers, smoke tubes, tracer gases, and/or other air flow monitoring devices; and

(2) the operating status of the twin "biofilter" fans, which draw the captured exhaust gases to the biofiltration control system and the backup scrubber. A "biofilter" fan is located after the biofilter system and after the scrubber.

Records shall be maintained of the results of each inspection and shall include any corrective actions taken by the permittee.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b) The permittee shall monitor the inlet concentrations of VOC and H_2S to the biofiltration system and to the plant ventilation stack during operation of any of the emissions units specified in B.2.a) including periods of startup and shutdown in order to determine the capture efficiency of VOC and H_2S emissions. The permittee shall record the VOC and H_2S concentrations on a once per 8-hr shift basis or a minimum of three sets of samples per day and analyze the samples with a gas chromatograph. The gas chromatograph shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

(1) The VOC and H_2S emissions capture efficiency shall be determined as specified in B.17.a) and recorded as a daily average for each day of operation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) The permittee shall monitor the inlet and outlet concentrations of VOC of the biofiltration system during operation of any of the emissions units specified in B.2.a) including periods of startup and shutdown in order to determine the control efficiency of VOC emissions. The permittee shall record the VOC concentrations on a once per 8-hr. shift basis or a minimum of three sets of samples per day and analyze the samples with a gas chromatograph. The gas chromatograph shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

(1) The VOC emissions control efficiency shall be determined as specified in B.16.c) and recorded as a daily average for each day of operation.

(2) The VOC emissions removal efficiency, as a 60-day average, shall be determined and recorded each day.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d) The permittee shall properly install, operate, and maintain equipment to continuously monitor the biofilter system parameters during operation of any of the emissions unit(s) specified in B.2.a), except for P012-P017, including periods of startup and shutdown. 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. The permittee shall record the biofilter system parameters on an hourly and as a daily average for each day of operation:

(1) the gas temperature at the inlet of the biofiltration system, in Fahrenheit;

(2) the pressure drop across the biofiltration system, in inches of water column; and

(3) the conductivity of the biofilter system discharge liquor, in millisiemens (mS).

[Authority for term: OAC rule 3745-31-05(A)(3)]

e) The permittee shall properly install, operate, and maintain equipment to continuously monitor the backup scrubber parameters during operation of any of the emissions unit(s) specified in B.2.a), except for P012-P017, including periods of startup and shutdown. 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. The acceptable backup scrubber parameters shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance The permittee shall record the following backup scrubber parameters on an hourly and as a daily average for each day of operation when the permittee operates the backup scrubber to demonstrate compliance with an applicable emission standard:

(1) the pressure drop across the scrubber;

(2) the scrubber liquid flow rate; and

(3) the scrubber liquid pH, conductivity or alkalinity.

[Authority for term: OAC rule 3745-31-05(A)(3)]

f) Whenever the monitored value(s) for any biofilter system or backup scrubber parameter(s) deviates from the range(s) or minimum limit(s) 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:

(1) the date and time the deviation began;

(2) the magnitude of the deviation at that time;

(3) the date the investigation was conducted;

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

(5) 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 within the acceptable range(s), or at or above the minimum limit(s) 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:

(6) a description of the corrective action;

(7) the date the corrective action was completed;

(8) the date and time the deviation ended;

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

(10) the pressure drop, temperature, conductivity, flow rate, and/or pH readings immediately after the corrective action was implemented; and

(11) 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.

These range(s) and/or limit(s) for the biofilter system or backup scrubber parameter(s) are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted range or limit for the biofilter system and backup scrubber parameter(s) based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC and H_2S emissions rates for these emissions unit(s). In addition, approved revisions to the range or 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.

[Authority for term: OAC rule 3745-31-05(A)(3)]

5. OAC rule 3745-31-05(F) – Voluntary Restrictions to Limit Potential Emissions

a) The emissions of VOC shall not exceed 222.5 tons/year from the facility.

[Authority for term: OAC rule 3745-31-05(F)]

b) The emissions of H_2S shall not exceed 9.95 tons/year from the facility.

[Authority for term: OAC rule 3745-31-05(F)]

6. OAC rule 3745-31-05(F) - Monitoring and Record Keeping Requirements

a) The permittee shall maintain monthly records of the following information:

(1) the VOCemission rate from the facility for each month of operations; and

(2) theH_2S emission rate from the facility for each month of operation.

[Authority for term: OAC rule 3745-31-05(F)]

b) The permittee shall maintain annual records of the following:

(1) the VOC emission rate from the facility for each calendar year; and

(2) theH_2S emission rate from the facility for each calendar year.

[Authority for term: OAC rule 3745-31-05(F)]

7. OAC rule 3745-31-05(A)(3) and OAC rule 3745-31-05(F)Reporting Requirements

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

(1) all periods of time during which the air flow indicating strips or other flow indicating device, at any natural draft opening, showed no air flow or air flow in a direction leaving the enclosure whenever any emissions unit specified in B.2.a) operated;

(2) any period of time (start time and date, and end time and date) when any emission unit(s) specified in B.2.a), except for P012 through P017, was in operation and the process emissions were not vented to the biofiltraton system;

(3) any period of time (start time and date, and end time and date) when any emission unit(s) specified in B.2.a), except for P012 through P017, was in operation when the biofiltration system was not in operation and the process emissions were not vented to the backup scrubber;

(4) each day when the daily average VOC capture efficiency of the biofiltration system was less than 85 percent (%) and the actual average VOC capture efficiency during the deviation period;

(5) each sixty (60) day period when the average VOC removal efficiency from the biofiltration system was less than 80 percent (%) and the actual 60-day average VOC removal efficiency for each deviation period;

(6) each period of time (start time and date, and end time and date) when any emissions unit(s) specified in B.2.a), except for P012 through P017, was in operation and any of the average daily biofilter system parameter(s) specified in B.3.b) was outside of the acceptable range; and

(7) each period of time (start time and date, and end time and date) when any emissions unit(s) specified in B.2.a), except for P012 through P017, was in operation and any of the average daily backup scrubber parameter(s) specified in B.3.c) was outside of the acceptable range when the permittee operates the backup scrubber to demonstrate compliance with an applicable emission standard.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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.

[Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-31-05(A)(3)]

b) The permittee shall submit annual deviation (excursion) reports that identify the following:

(1) all exceedances of the annual, facility-wide emission limitation for VOC and the actual VOC emissions from the facility during the calendar year; and

(2) all exceedances of the annual, facility-wide emission limitation for H_2S and the actual H_2S emissions from the facility during the calendar year.

The reports shall be submitted annually by April 15 of each year and shall cover the previous calendar year.

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.

[Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C) and OAC rule 3745-31-05(F)]

8. **MACT Rule(s) Applicability - The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart UUUU (National Emission Standards for Hazardous Air Pollutants for Major Sources: Cellulose Products Manufacturing): P001, P002, P003, P004, P007, P008, P009, P010, P011, P012, P013, P014, P015, P016, P017, P020, P021, P022, P023, P024, P025, T001, T002, T003 and T004. The complete Maximum Achievable Control Technology (MACT) requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northeast District Office.**

This facility has miscellaneous viscose processes which are existing, cellulosic sponge operation(s).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

9. **40 CFR Part 63, Subpart UUUU - Emissions Limitation(s) and Work Practice Standard(s) and Operating Limits**

a) As required in 40 CFR §63.5505(a), the permittee must meet the appropriate emission limits and work practice standards in the following Table 1 to 40 CFR Part 63, Subpart UUUU:

For . . .	at . . .	you must . . .
1. the sum of all viscose process vents	a. each existing cellulose food casing operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 25% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	b. each new cellulose food casing operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	c. each existing rayon operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 35% within 3 years after the effective date based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems; and ii. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 40% within 8 years after the effective date based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems.
	d. each new rayon	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at

	operation	least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	e. each existing or new cellulosic sponge operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
	f. each existing or new cellophane operation	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least 75% based on a 6-month rolling average; ii. for each vent stream that you control using a control device (except for retractable hoods over sulfuric acid baths at a cellophane operation), route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems (except for retractable hoods over sulfuric acid baths at a cellophane operation).
2. the sum of all solvent coating process vents	a. each existing or new cellophane operation	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
3. the sum of all cellulose ether process vents	a. each existing or new cellulose ether operation	i. reduce total uncontrolled organic HAP emissions by at least 99%; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
4. closed-loop systems	each existing or new cellulose ether operation	comply by operating the closed-loop system.
5. each carbon disulfide unloading and storage operation	a. each existing or new viscose process affected source	i. reduce uncontrolled carbon disulfide emissions by at least 83% from unloading and storage operations based on a 6-month rolling average if you use an alternative control technique not listed in this table source for carbon disulfide unloading and storage operations; if using a control device to reduce emissions, route emissions through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems; ii. reduce uncontrolled carbon disulfide emissions by at least 0.14% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems; iii. install a nitrogen unloading and storage system (as defined in §63.5610); or iv. install a nitrogen unloading system (as defined in §63.5610); reduce uncontrolled carbon disulfide emissions by at least 0.045% from viscose process vents based on a 6-month rolling average; for each vent stream that you control, route the vent stream through a closed-vent to the control device; and comply with the work practice standard for closed-vent systems.
6. each toluene storage vessel	a. each existing or new cellophane operation	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. if using a control device to reduce emissions, route the emissions through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems.
7. equipment leaks	a. each existing or new cellulose ether operation	i. comply with the applicable equipment leak standards of §§63.162 through 63.179, except that references to “process unit” mean “cellulose ether process unit” for the purposes of this subpart; or ii. comply with the applicable equipment leak standards of §§63.1021 through 63.1037, except that references to “process unit” mean “cellulose ether process unit” for the purposes of this subpart.
8. all sources of wastewater emissions	each existing or new cellulose ether operation	comply with the applicable wastewater provisions of §§63.105 and 63.132 through 63.140.

9. liquid streams in open systems	each existing or new cellulose ether operation	comply with the applicable provisions or §63.149, except that references to "chemical manufacturing process unit" ether means "cellulose ether process unit" for the purposes of this subpart.
10. closed-vent system used to route emissions to a control device	each existing or new affected source (except for retractable hoods over sulfuric acid baths at a cellophane operation)	conduct annual inspections, repair leaks, and maintain records as specified in §63.148.
11. closed-vent system containing a bypass line that could divert a vent stream away from a control device, except for equipment needed for safety purposes (described in §63.148(f)(3)	a. each existing or new affected source (except for retractable hoods over sulfuric acid baths at a cellophane operation)	(i) install, calibrate, maintain, and operate a flow indicator as specified in §63.148(f)(1); or (ii) secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration and inspect the seal or closure mechanism at least once per month as specified in §63.148(f)(2)).
12. heat exchanger system that cools process equipment or materials in the process unit	each existing or new affected source	monitor and repair the heat exchanger system according to §63.104(a) through (e), except that references to "chemical manufacturing process unit" mean "cellulose food casing, rayon, cellulosic sponge, cellophane, or cellulose ether process unit" for the purposes of this subpart.

b) Per 40 CFR §63.5505(d): Opening of a safety device, as defined in 40 CFR §63.5610, is allowed at any time that conditions require venting to avoid unsafe conditions.

c) Per 40 CFR §63.5505(c): As provided in §63.6(g), the permittee may apply to EPA for permission to use an alternative to the work practice standards in this section.

d) Per 40 CFR §63.5505(e): The emission limits in Table 1 to this subpart used to control emissions from storage vessels do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 1 to this subpart, must not exceed 240 hours per year.

e) The permittee must comply with but is not limited to the emission limits and work practices identified in the following item nos. of Table 1 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments: 1.e, 5, 10 and 11.

f) As required in 40 CFR §63.5505(b), the permittee must meet the appropriate operating limits in the following Table 2 to 40 CFR Part 63, Subpart UUUU:

For the following control technique . .	**you must . . .**
1. condenser	maintain the daily average condenser outlet gas or condensed liquid temperature no higher than the value established during the compliance demonstration.
2. thermal oxidizer	maintain the daily average thermal oxidizer firebox temperature no lower than the value established during the compliance demonstration.
3. water scrubber	maintain the daily average scrubber pressure drop and scrubber liquid flow rate within the range of values established during the compliance demonstration.
4. caustic scrubber	maintain the daily average scrubber pressure drop, scrubber liquid flow rate, and scrubber liquid pH,

	conductivity, or alkalinity within the range of values established during the compliance demonstration.
5. flare	maintain the presence of a pilot flame.
6. biofilter	maintain the daily average biofilter inlet gas temperature, biofilter effluent pH, and pressure drop within the operating values established during the compliance demonstration.
7. carbon absorber	maintain the regeneration frequency, total regeneration adsorber stream mass or volumetric flow during carbon bed regeneration, and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)) for each regeneration cycle within the values established during the compliance demonstration.
8. oil absorber	maintain the daily average absorption liquid flow, absorption liquid temperature, and steam flow within the values established during the compliance demonstration.
9. any of the control techniques specified in this table	if using a CEMS, maintain the daily average control efficiency of each control device no lower than the value established during the compliance demonstration.
10. any of the control techniques specified in this table	a. if you wish to establish alternative operating parameters, submit the application for approval of the alternative operating parameters no later than the notification of the performance test or CEMS performance evaluation or no later than 60 days prior to any other initial compliance demonstration; b. the application must include: information justifying the request for alternative operating parameters (such as the infeasibility or impracticality of using the operating parameters in this final rule); a description of the proposed alternative control device operating parameters; the monitoring approach; the frequency of measuring and recording the alternative parameters; how the operating limits are to be calculated; and information documenting that the alternative operating parameters would provide equivalent or better assurance of compliance with the standard; c. install, operate, and maintain the alternative parameter monitoring systems in accordance with the application approved by the Administrator; d. establish operating limits during the initial compliance demonstration based on the alternative operating parameters included in the approved application; and
	e. maintain the daily average alternative operating parameter values within the values established during the compliance demonstration.
11. alternative control technique	a. submit for approval no later than the notification of the performance test or CEMS performance evaluation or no later than 60 days prior to any other initial compliance demonstration a proposed site-specific plan that includes: a description of the alternative control device; test results verifying the performance of the control device; the appropriate operating parameters that will be monitored; and the frequency of measuring and recording to establish continuous compliance with the operating limits; b. install, operate, and maintain the parameter monitoring system for the alternative control device in accordance with the plan approved by the Administrator;
	c. establish operating limits during the initial compliance demonstration based on the operating parameters for the alternative control device included in the approved plan; and
	d. maintain the daily average operating parameter values for the alternative control technique within the values established during the compliance demonstration.

g) The permittee must comply with but is not limited to the operating limits identified in the following item nos. of Table 2 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments: 6, 10 and 11.

h) On 7/10/2009, U.S. EPA, Region V approved 3M's request to monitor biofilter system liquid effluent conductivity in lieu of biofilter system liquid pH for the purposes of demonstrating compliance with 40 CFR Part 63, Subpart UUUU and as required by 40 CFR §63.5505(b).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

10. 40 CFR Part 63, Subpart UUUU - General Requirements

a) Per 40 CFR §63.5515(c), the permittee must develop a written startup, shutdown, and malfunction (SSM) plan according to the provisions in 40 CFR §63.6(e)(3).

b) The permittee must comply with other applicable sections of 40 CFR §63.5515 including any revisions or amendments.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

11. 40 CFR Part 63, Subpart UUUU - Monitoring Installation, Operation, and Maintenance Requirements

a) Per 40 CFR §63.5545(a), for each continuous monitoring system (CMS) required in 40 CFR §63.5545, the permittee must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the provisions in paragraphs (a)(1) through (3) of 40 CFR §63.5545.

(1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

b) In the site-specific monitoring plan, the permittee must also address the provisions in paragraphs (b)(1) through (3) of 40 CFR §63.5545.

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR §§63.8(c)(1), (3), (4)(ii) and 63.5580(c)(6);

(2) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR §63.8(d)(2); and

(3) Ongoing record keeping and reporting procedures in accordance with the general requirements of 40 CFR §§63.10(c), (e)(1), (e)(2)(i) and 63.5585.

c) The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d) The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

e) For each continuous parameter monitoring system (CPMS), the permittee must meet the requirements in paragraphs (f)(1) through (9) of 40 CFR §63.5545.

(1) Satisfy all requirements of performance specifications for CPMS upon promulgation of such performance specifications.

(2) Satisfy all requirements of quality assurance (QA) procedures for CPMS upon promulgation of such QA procedures.

(3) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(4) To calculate a valid hourly average, there must be at least four equally spaced values for that hour, excluding data collected during the periods described in paragraph (f)(6) of 40 CFR §63.5545 .

(5) Have valid hourly data for at least 75 percent of the hours during the averaging period.

(6) The CPMS data taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow for all or a portion of an affected source, must not be considered in the averages.

(7) Calculate a daily average using all of the valid hourly averages for each operating day during the semiannual reporting period.

(8) Record the results of each inspection, calibration, and validation check.

(9) Except for redundant sensors, any device that is used to conduct an initial validation or accuracy audit of a CPMS must meet the accuracy requirements specified in paragraphs (f)(9)(i) and (ii) of 40 CFR §63.5545.

a. The device must have an accuracy that is traceable to National Institute of Standards and Technology (NIST) standards.

b. The device must be at least three times as accurate as the required accuracy for the CPMS.

f) If flow to a control device could be intermittent, the permittee must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow.

g) The permittee must comply with other applicable sections of 40 CFR §63.5545 including any revisions or amendments.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

12. 40 CFR Part 63, Subpart UUUU - Continuous Compliance Requirements

a) As required in 40 CFR §63.5555(a), the permittee must demonstrate continuous compliance with the appropriate emission limits and work practice standards according to the requirements in Table 5 to 40 CFR Part 63, Subpart UUUU:

For . . .	at . . .	for the following emission limit or work practice standard . . .	you must demonstrate continuous compliance by . . .
1. the sum of all viscose process vents	a. each existing or new viscose process affected source	i. reduce total uncontrolled sulfide emissions (reported as carbon disulfide) by at least the specified percentage based on a 6-month rolling	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions;

		average; ii. for each vent stream that you control using a control device (except for retractable hoods over sulfuric acid baths at a cellophane operation), route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems (except for retractable hoods over sulfuric acid baths at a cellophane operation)	(2) documenting the percent reduction of total sulfide emissions using the pertinent data from the material balance; and (3) complying with the continuous compliance requirements for closed-vent systems.
2. the sum of all solvent coating process vents	a. each existing or new cellophane operation	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of toluene emissions; (2) documenting the percent reduction of toluene emissions using the pertinent data from the material balance; and (3) complying with the continuous compliance requirements for closed-vent systems.
3. the sum of all cellulose ether process vents	a. each existing or new cellulose ether operation using a performance test to demonstrate initial compliance; or	i. reduce total uncontrolled organic HAP emissions by at least 99%; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and, iii. comply with the work practice standard for closed-vent systems; or	(1) complying with the continuous compliance requirements for closed-vent systems; or (2) if using extended cookout to comply, monitoring reactor charges and keeping records to show that extended cookout was employed.
	b. each existing or new cellulose ether operation using a material balance compliance demonstration to demonstrate initial compliance	i. reduce total uncontrolled organic HAP emissions by at least 99% based on a 6-month rolling average; ii. for each vent stream that you control using a control device, route the vent stream through a closed-vent system to control device; and iii. comply with the work practice standard for closed-vent systems	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of total organic HAP emissions; (2) documenting the percent reduction of total organic HAP emissions using the pertinent data from the material balance; (3) if using extended cookout to comply, monitoring reactor charges and keeping records to show that extended cookout was employed; (4) complying with the continuous compliance requirements for closed-vent systems.
4. closed-loop systems	each existing or new cellulose either operation	operate and maintain a closed-loop system	keeping a record certifying that a closed-loop system is in use for cellulose ether operations.
5. each carbon disulfide unloading and storage operation	a. each existing or new viscose process affected source	i. reduce uncontrolled carbon disulfide emissions by at least 83% based on a 6-month rolling average if you use an alternative control technique not listed in this table for carbon disulfide unloading and storage operations; if using a control device to reduce emissions, route emissions through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems;	(1) keeping a record documenting the 83% reduction in carbon disulfide emissions; and (2) if venting to a control device to reduce emissions, complying with the continuous compliance requirements for closed-vent systems;
		ii. reduce total uncontrolled sulfide	(1) maintaining a material balance that

		emissions by at least 0.14% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems;	includes the pertinent data used to determine the percent reduction of total sulfide emissions; (2) documenting the percent reduction of total sulfide emissions using the pertinent data from the material balance; and (3) complying with the continuous compliance requirements for closed-vent systems;
		iii. install a nitrogen unloading and storage system; or	Keeping a record certifying that a nitrogen unloading and storage system is in use; or
		iv. install a nitrogen unloading system; reduce total uncontrolled sulfide emissions by at least 0.045% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems	(1) keeping a record certifying that a nitrogen unloading system is in use; (2) maintaining a material balance that includes the pertinent data used to determine the percent reduction of total sulfide emissions; (3) documenting the percent reduction of total sulfide emissions using the pertinent data from the material balance; and (4) complying with the continuous compliance requirements for closed-vent systems.
6. each toluene storage vessel	a. each existing or new cellophane operation	i. reduce uncontrolled toluene emissions by at least 95% based on a 6-month rolling average; ii. if using a control device to reduce emissions, route the emissions through a closed-vent system to the control device; and iii. comply with the work practice standard for closed-vent systems	(1) maintaining a material balance that includes the pertinent data used to determine the percent reduction of toluene emissions; (2) documenting the percent reduction of toluene emissions using the pertinent data from the material balance; and (3) if venting to a control device to reduce emissions, complying with the continuous compliance requirements for closed-vent systems.
7. equipment leaks	a. each existing or new cellulose ether operation	i. applicable equipment leak standards of §§63.162 through 63.179; or ii. applicable equipment leak standards of §§63.1021 through 63.1037	complying with the applicable equipment leak continuous compliance provisions of §§63.162 through 63.179; or complying with the applicable equipment leak continuous compliance provisions of §§63.1021 through 63.1037.
8. all sources of wastewater emissions	each existing or new cellulose either operation	applicable wastewater provisions of §63.105 and §§63.132 through 63.140.	complying with the applicable wastewater continuous compliance provisions of §§63.105, 63.143, and 63.148.
9. liquid streams in open systems	each existing or new cellulose ether operation	comply with the applicable provisions of §63.149, except that references to "chemical manufacturing process unit" mean "cellulose ether process unit" for the purposes of this subpart	conducting inspections, repairing failures, documenting delay of repair, and maintaining records of failures and corrective actions according to §§63.133 through 63.137.
10. closed-vent system used to route emissions to a control device	each existing or new affected source	conduct annual inspections, repair leaks, maintain records as specified in §63.148	conducting the inspections, repairing leaks, and maintaining records according to §63.148.
11. closed-vent system containing a bypass line that could divert a vent	a. each existing or new affected source	i. install, calibrate, maintain, and operate a flow indicator as specified in §63.148(f)(1); or	(1) taking readings from the flow indicator at least once every 15 minutes; (2) maintaining hourly records of flow

stream away from a control device, except for equipment needed for safety purposes (described in §63.148(f)(3)			indicator operation and detection of any diversion during the hour, and (3) recording all periods when the vent stream is diverted from the control stream or the flow indicator is not operating; or
		ii. secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration and inspect the seal or mechanism at least once per month as specified in §63.148(f)(2)	(1) maintaining a record of the monthly visual inspection of the seal or closure mechanism for the bypass line; and (2) recording all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out.
12. heat exchanger system that cools process equipment or materials in the process unit	a. each existing or new affected source	i. monitor and repair the heat exchanger system according to §63.104(a) through (e), except that references to "chemical manufacturing process unit" mean "cellulose food casing, rayon, cellulosic sponge, cellophane, or cellulose ether process unit" for the purposes of this subpart	(1) monitoring for HAP compounds, other substances, or surrogate indicators at the frequency specified in §63.104(b) or (c); (2) repairing leaks within the time period specified in §63.104(d)(1); (3) confirming that the repair is successful as specified in §63.104(d)(2); (4) following the procedures in §63.104(e) if you implement delay of repair; and (5) recording the results of inspections and repair according to §63.104(f)(1).

b) The permittee must comply with but is not limited to the continuous compliance requirements for the appropriate emission limits and work practice standards identified in the following item nos. of Table 5 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments: 1.a.i through iii, 5, 10 and 11.ii.

c) As required in 40 CFR §63.5555(a), the permittee must demonstrate continuous compliance with the appropriate operating limits according to the requirements in Table 6 to 40 CFR Part 63, Subpart UUUU:

For the following control technique . . .	**for the following operating limit . . .**	**you must demonstrate continuous compliance by . . .**
1. condenser	maintain the daily average condenser outlet gas or condensed liquid temperature no higher than the value established during the compliance demonstration	collecting the condenser outlet gas or condensed liquid temperature data according to §63.5545; reducing the condenser outlet gas temperature data to daily averages; and maintaining the daily average condenser outlet gas or condensed liquid temperature no higher than the value established during the compliance demonstration.
2. thermal oxidizer	maintain the daily average thermal oxidizer firebox temperature no lower than the value established during the compliance demonstration	collecting the thermal oxidizer firebox temperature data according to §63.5545; reducing the thermal oxidizer firebox temperature data to daily averages; and maintaining the daily average thermal oxidizer firebox temperature no lower than the value established during the compliance demonstration.
3. water scrubber	maintain the daily average scrubber pressure drop and scrubber liquid flow rate within the range of values established during the compliance demonstration	collecting the scrubber pressure drop and scrubber liquid flow rate data according to §63.5545; reducing the scrubber parameter data to daily averages; and maintaining the daily scrubber parameter values within the range of values established during the compliance demonstration.

4. caustic scrubber	maintain the daily average scrubber pressure drop, scrubber liquid flow rate, and scrubber liquid pH, conductivity, or alkalinity within the range of values established during the compliance demonstration	collecting the scrubber pressure drop, scrubber liquid flow rate, and scrubber liquid pH, conductivity, or alkalinity data according to §63.5545; reducing the scrubber parameter data to daily averages; and maintaining the daily scrubber parameter values within the range of values established during the compliance demonstration.
5. flare	maintain the presence of a pilot flame	collecting the pilot flame data according to §63.5545; and maintaining the presence of the pilot flame.
6. biofilter	maintain the daily average biofilter inlet gas temperature, biofilter effluent pH, and pressure drop within the values established during the compliance demonstration	collecting the biofilter inlet gas temperature, biofilter effluent pH, and biofilter pressure drop data according to §63.5545; reducing the biofilter parameter data to daily averages; and maintaining the daily biofilter parameter values within the values established during the compliance demonstration.
7. carbon absorber	maintain the regeneration frequency, total regeneration stream mass or volumetric flow during carbon bed regeneration and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)) for each regeneration cycle within the values established during the compliance demonstration	collecting the data on regeneration frequency, total regeneration stream mass or volumetric flow during carbon bed regeneration and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)) for each regeneration cycle according to §63.5545; and maintaining carbon absorber parameter values for each regeneration cycle within the values established during the compliance demonstration.
8. oil absorber	maintain the daily average absorption liquid flow, absorption liquid temperature, and steam flow within the values established during the compliance demonstration	collecting the absorption liquid flow, absorption liquid temperature, and steam flow data according to §63.5545; reducing the oil absorber parameter data to daily averages; and maintaining the daily oil absorber parameter values within the values established during the compliance demonstration.
9. any of the control techniques specified in this table	if using a CEMS, maintain the daily average control efficiency for each control device no lower than the value established during the compliance demonstration	collecting CEMS emissions data at the inlet and outlet of each control device according to §63.5545; determining the control efficiency values for each control device using the inlet and outlet CEMS emissions data; reducing the control efficiency values for each control device to daily averages; and maintaining the daily average control efficiency for each control device no lower than the value established during the compliance demonstration.

d) The permittee must comply with but is not limited to the continuous compliance requirements for the appropriate operating limits identified in the following item nos. of Table 6 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments: 6. See B.9.h).

e) The permittee must report each instance in which the permittee was not in continuous compliance (as specified in Tables 5 and 6 to this subpart) with each emission limit, each operating limit, and each work practice standard that are applicable. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limits, operating limits, and work practice standards in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.5580.

f) Consistent with 40 CFR §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Administrator's satisfaction that the permittee was operating in accordance with 40 CFR §63.6(e)(1). The Administrator will determine whether deviations that occur during a period the permittee identifies as a startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR §63.6(e).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

13. 40 CFR Part 63, Subpart UUUU – Notifications and Record Keeping Requirements

a) As required in 40 CFR §§63.5490(c)(4), 63.5530(c), 63.5575, and 63.5595(b), the permittee must submit the appropriate notifications specified in Table 7 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

b) As required in 40 CFR §63.5585, the permittee must keep the appropriate records specified in Table 9 to 40 CFR Part 63, Subpart UUUU.

If you operate . . .	then you must keep . . .	and the record(s) must contain . . .
1. an existing or new affected source	a copy of each notification and report that you submitted to comply with this subpart	all documentation supporting any Initial Notification or Notification of Compliance Status Report that you submitted, according to the requirements in §63.10(b)(2)(xiv), and any compliance report required under this subpart.
2. an existing or new affected source	a. the records in §63.6(e)(3)(iii) through (iv) related to startup, shutdown, and malfunction	i. SSM plan; ii. when actions taken during a startup, shutdown, or malfunction are consistent with the procedures specified in the SSM plan, records demonstrating that the procedures specified in the plan were followed; iii. records of the occurrence and duration of each startup, shutdown, or malfunction; and iv. when actions taken during a startup, shutdown, or malfunction are not consistent with the procedures specified in the SSM plan, records of the actions taken for that event.
3. an existing or new affected source	a. a site-specific monitoring plan	i. information regarding the installation of the CMS sampling source probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device); ii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; iii. performance evaluation procedures and acceptance criteria (e.g., calibrations); iv. ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (3), and (4)(ii) and 63.5580(c)(6); v. ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(2); and vi. ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i) and 63.5585.
4. an existing or new affected source	records of performance tests and CEMS performance evaluations, as required in §63.10(b)(2)(viii) and any other initial compliance demonstrations	all results of performance tests, CEMS performance evaluations, and any other initial compliance demonstrations, including analysis of samples, determination of emissions, and raw data.
5. an existing or new affected source	a. records for each CEMS	i. records described in §63.10(b)(2)(vi) through (xi); ii. previous (superseded) versions of the performance evaluation plan as required in §63.8(d)(3); iii. request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i); iv. records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period; and v. records required in Table 6 to Subpart UUUU to show continuous compliance with the operating limit.
6. an existing or new affected source	a. records for each CPMS	i. records required in Table 6 to Subpart UUUU to show continuous compliance with each operating limit that applies to you; and ii. results of each CPMS calibration, validation check, and inspection required by §63.5545(b)(4).

7. an existing or new cellulose ether affected ether source	records of closed-loop systems	records certifying that a closed-loop system is in use for cellulose ether operations.
8. an existing or new viscose process affected source	records of nitrogen unloading and storage systems or nitrogen unloading systems	records certifying that a nitrogen unloading and storage system or nitrogen unloading system is in use.
9. an existing or new viscose process affected source	records of material balances	all pertinent data from the material balances used to estimate the 6-month rolling average percent reduction in HAP emissions.
10. an existing or new viscose process affected source	records of calculations	documenting the percent reduction in HAP emissions using pertinent data from the material balances.
11. an existing or new cellulose ether affected source	a. extended cookout records	i. the amount of HAP charged to the reactor; ii. the grade of product produced; iii. the calculated amount of HAP remaining before extended cookout; and iv. information showing that extended cookout was employed.
12. an existing or new cellulose ether affected source	a. equipment leak records	i. the records specified in §63.181 for equipment leaks; or ii. the records specified in 63.1038 for equipment leaks.
13. an existing or new cellulose ether affected source	wastewater records	the records specified in §§63.105, 63.147, and 63.152(f) and (g) for wastewater.
14. an existing or new affected source	closed-vent system records	the records specified in §63.148(i).
15. an existing or new affected source	a. bypass line records	i. hourly records of flow indicator operation and detection of any diversion during the hour and records of all periods when the vent stream is diverted from the control stream or the flow indicator is not operating; or ii. the records of the monthly visual inspection of the seal or closure mechanism and of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out and records of any car-seal that has broken.
16. an existing or new affected source	heat exchanger system records	records of the results of inspections and repair according to source §63.104(f)(1).
17. an existing or new affected source	control device maintenance records	records of planned routine maintenance for control devices used to comply with the percent reduction emission limit for storage vessels in Table 1 to Subpart UUUU.
18. an existing or new affected source	safety device records	a record of each time a safety device is opened to avoid unsafe conditions

c) The permittee must comply with but is not limited to the record keeping requirements identified in the following item nos. of Table 9 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments: 1, 2, 3, 4, 6, 8, 9, 10, 14, 15.a.ii, 17 and 18.

d) The records must be in a form suitable and readily available for expeditious review, according to 40 CFR §63.10(b)(1).

(1) As specified in 40 CFR §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(2) The permittee must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1). You can keep the records offsite for the remaining 3 years.

The permittee may keep records in hard copy or computer-readable form including, but not limited to, paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

14. 40 CFR Part 63, Subpart UUUU – Reporting Requirements

a) As required in 40 CFR §63.5580, the permittee must submit the appropriate reports specified in Table 8 to 40 CFR Part 63, Subpart UUUU:

You must submit a compliance report, which must contain the following information . . .	and you must submit the report . . .
1. if there are no deviations from any emission limit, operating limit, or work practice standard during the reporting period, then the report must contain the information specified in §63.5580(c);	semiannually as specified in §63.5580(b).
2. if there were no periods during which the CMS was out-of-control, then the report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period; you must develop and include specifications for out-of-control operation in the CMS quality control plan required under §63.8(d)(2);	
3. if there is a deviation from any emission limit, operating limit, or work practice standard during the reporting period, then the report must contain the information specified in §63.5580(c) and (d);	
4. if there were periods during which the CMS was out-of-control, then the report must contain the information specified in §63.5580(e);	
5. if you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSM plan, then the report must contain the information specified in §63.10(d)(5)(i);	
6. if you had a startup, shutdown, or malfunction during the reporting period and you took actions that are not consistent with your SSM plan, then the report must contain the information specified in §63.10(d)(5)(ii);	
7. the report must contain any change in information already provided, as specified in §63.9(j);	
8. for cellulose ether affected sources complying with the equipment leak requirements of subpart H of this part, the report must contain the information specified in §63.182(a)(3) and (6) and (d)(2) through (4);	
9. for cellulose ether affected sources complying with the equipment leak requirements of subpart UU of this part, the report must contain the information specified in §63.1039(b);	
10. for cellulose ether affected sources complying with the wastewater requirements of subparts F and G of this part, the report must contain the information specified in §§63.146(c) through (e) and 63.152(a)(4) and (5) and (c) through (e);	
11. for affected sources complying with the closed-vent system provisions in §63.148, the report must contain the information specified in §63.148(j)(1);	
12. for affected sources complying with the bypass line provisions in §63.148(f), the report must contain the information specified in §63.148(j)(2) and (3);	
13. for affected sources invoking the delay of repair provisions in §63.104(e) for heat exchanger systems, the next compliance report must contain the information in §63.104(f)(2)(i) through (iv); if the leak remains unrepaired, the information must also be submitted in each subsequent compliance report until the repair of the leak is reported; and	
14. for storage vessels subject to the emission limits and work practice standards in Table 1 to Subpart UUUU, the report must contain the periods of planned routine maintenance during which the control device does not comply with the emission limits or work practice standards in Table 1 to this subpart.	

b) The permittee must comply with but is not limited to the reporting requirements identified in the following item nos. of Table 8 to 40 CFR Part 63, Subpart UUUU including any revisions or amendments: 1, 2, 3, 4, 5, 6, 7, 11, 12 and 14.

c) Per 40 CFR §63.5580(b)(5) for each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or 40 CFR Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of 40 CFR §63.5580. See Standard Term and Condition A.4.c).

d) The compliance report must contain the information in paragraphs (c)(1) through (6) of 40 CFR §63.5580.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in 40 CFR §63.10(d)(5)(i).

(5) If there are no deviations from any emission limits, operating limits, or work practice standards that apply to you (see Tables 5 and 6 to this subpart), the compliance report must contain a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(6) If there were no periods during which the CMS was out-of-control, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period. You must include specifications for out-of-control operation in the quality control plan required under 40 CFR §63.8(d)(2).

e) For each deviation from an emission limit or work practice standard that occurs at an affected source where the permittee is not using a CMS to demonstrate continuous compliance with the emission limits or work practice standards in 40 CFR Part 63, Subpart UUUU (see Table 5 to 40 CFR Part 63, Subpart UUUU), the compliance report must contain the information in paragraphs (c)(1) through (4) and (d)(1) and (2) of 40 CFR §63.5580. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

f) For each deviation from an emission limit or operating limit occurring at an affected source where the permittee is using a CMS to demonstrate continuous compliance with the emission limit or operating limit in this subpart (see Tables 5 and 6 to this subpart), the permittee must include the information in paragraphs (c)(1) through (4) and (e)(1) through (13) of 40 CFR §63.5580. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control.

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each HAP that is known to be in the emission stream at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CMS.

(11) The date of the latest continuous emission monitoring system (CEMS) certification or audit or CPMS inspection, calibration, or validation check.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(13) The operating day average values of monitored parameters.

g) If the permittee has obtained a title V operating permit according to 40 CFR Part 70 or 40 CFR Part 71, the permittee must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report according to Table 8 to 40 CFR Part 63, Subpart UUUU along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice standard in this subpart, then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect

any obligation the permittee may have to report deviations from permit requirements to the permit authority.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

15. 40 CFR Part 63 Subpart UUUU - Applicability of General Provisions to Subpart UUUU

a) As required in 40 CFR §§63.5515(h) and 63.5600, the permittee must comply with the appropriate General Provisions requirements specified in Table 10 to 40 CFR Part 63, Subpart UUUU.

b) For the purposes of 40 CFR Part 63, Subpart UUUU, the applicable 40 CFR Part 63, Subpart A requirements in Table 10 to Subpart UUUU supersede the applicable Subpart A requirements in Subparts G and U of 40 CFR Part 63.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

16. Compliance Methods - Compliance with the Emissions Limitations and/or Control Requirements specified in sections B.2., B.3., B.5., B.8 and B.9. of these terms and conditions shall be determined in accordance with the following methods:

a) Emission Limitation:

The permittee shall capture VOC and H_2S emissions from the facility at a minimum of 85% and route them to the biofiltration control system.

Applicable Compliance Method:

The VOC emissions capture efficiency and H_2S emissions capture efficiency may be determined by the following equation:

TCE = (BI x QI)/[(BI x QI) + (V x QV)] x 100

where:

TCE = total bio-filtration system capture efficiency of VOC emissions, in percent;

BI = the daily average VOC concentration or H_2S concentration, in ppm, at the inlet to bio-filtration units;

QI = the average daily airflow rate at the inlet to the bio-filtration system, in acfm;

V = the daily average VOC concentration or H_2S concentration, in ppm, at the inlet to plant ventilation stack; and

QV = the average daily airflow rate in the plant ventilation stack, in acfm.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b) Emission Limitation:

For each vent stream that the permittee controls using a control device, the vent stream must be routed through a closed-vent system to the control device.

For each closed-vent system used to route emissions to a control device at each existing or new affected source (except for retractable hoods over sulfuric acid baths at a cellophane operation) the permittee must conduct annual inspections, repair leaks, and maintain records as specified in 40 CFR §63.148.

For each closed-vent system containing a bypass line that could divert a vent stream away from a control device, except for equipment needed for safety purposes (described in 40 CFR §63.148(f)(3)) at each existing or new affected source (except for retractable hoods over sulfuric acid baths at a cellophane operation) the permittee must do the following:

(1) install, calibrate, maintain, and operate a flow indicator as specified in 40 CFR §63.148(f)(1); or

(2) secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration and inspect the seal or closure mechanism at least once per month as specified in 40 CFR §63.148(f)(2).

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring requirements in 40 CFR § 63.5545 (see B.11.), the continuous compliance requirements in 40 CFR § 63.5555(a) (see B.12.), and the record keeping requirements in Table 9 to 40 CFR Part 63, Subpart UUUU (see B.13.b), rows 14 and 15)a.i and ii.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

c) Emission Limitation:

The biofiltration system shall remove a minimum of 80% of VOC emissions vented to it and the control efficiency determination shall be based on the arithmetic average of the preceding sixty (60) consecutive days' average removal efficiency.

Applicable Compliance Method:

The VOC emissions control efficiency may be determined by the following equation:

$$EF = \sum_{i=1}^{60} [1 - (BO/BI)] \, x \, 100$$

where:

EF = VOC emissions removal efficiency of biofiltration units, in percent, as a 60-day average;

BO = VOC outlet concentration from biofiltration units, in ppm; and

BI = VOC inlet concentration to biofiltration units, in ppm.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d) Emission Limitation:

The emissions of VOC shall not exceed 222.5 tons/year from the facility.

The emissions of H_2S shall not exceed 9.95 tons/year from the facility.

Applicable Compliance Method:

Compliance shall be demonstrated based on the record keeping requirements specified in B.6. The permittee shall maintain a material balance that includes the pertinent data used to determine the VOC and H_2S emissions from the facility.

[Authority for term: OAC rule 3745-31-05(F)]

e) Emission Limitation:

Total uncontrolled sulfide emissions (reported as carbon disulfide) shall be reduced by at least 75% based on a 6-month rolling average from the emissions units specified in B.2.a), combined.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring requirements in 40 CFR § 63.5545 (see B.11.), the continuous compliance requirements in 40 CFR § 63.5555(a) (see B.12.), and the record keeping requirements in Table 9 to 40 CFR Part 63, Subpart UUUU (see B.13.b), rows 9 and 10).

The sulfide emissions reduction efficiency (overall control efficiency) may be determined by the following equation(s):

(1) The total emissions rate of sulfide, as carbon disulfide, in each sulfide emissions vent stream, as specified in equation 2 in 40 CFR 63.5535(e)(2) may be determined as follows for each sample set:

$$ER_{total\ sulf} = ER_{CS2} + \left(ER_{H2S} \times \frac{M_{CS2}}{M_{H2S}}\right) + \left(ER_{COS} \times \frac{M_{CS2}}{M_{COS}}\right)$$

where:

$ER_{totalsulfi}$ = total emission rate of sulfide in vent stream i (the biofiltration system inlet and outlet and the vent stack outlet), kg/hr (lb/hr), as carbon disulfide;

ER_{CS2} = emission rate of carbon disulfide in vent stream, kg/hr (lb/hr);

ER_{H2S} = emission rate of hydrogen sulfide in vent stream, kg/hr (lb/hr);

M_{CS2} = mass of carbon disulfide per mole of carbon disulfide, 76 kilograms per kilogram-mole (kg/kg-mol) (76 pounds per pound-mole (lb/lb-mol));

M_{H2S} = mass of hydrogen sulfide per mole of carbon disulfide, 68 kg/kg-mol (68 lb/lb-mol);

ER_{COS} = emission rate of carbonyl sulfide in vent stream, kg/hr (lb/hr); and

M_{COS} = mass of carbonyl sulfide per mole of carbon disulfide, 120 kg/kg-mol (120 lb/lb-mol).

(2) The sulfide emissions overall control efficiency, as carbon disulfide, based on equation 3 in 40 CFR 63.5535(e)(3) may be determined as follows as a daily average of the sample sets collected each day:

$$CE = \left(ER_i - ER_{o\ biofilter}\right)/ER_i \times 100$$

where:

CE = overall control efficiency, in percent;

ER_i = total emission rate of organic HAP (ER_{HAPt}) or sulfide (ER_{sulft}) in the inlet vent stream of the control device (biofilter system inlet), kg/hr (lb/hr); and

$ER_{obiofilter}$= total emission rate of organic HAP (ER_{HAPt}) or sulfide (ER_{sulft}) in the outlet vent stream of the control device (biofilter system outlet), kg/hr (lb/hr).

(3) The sulfide emissions overall control efficiency, as carbon disulfide, shall be determined each month as a 6-month rolling, average of the daily average values and may be calculated as follows:

$$CE_{6-month} = \left(\sum_{i=1}^{N_{days}} CE_i\right)\Big/N_{days}$$

where:

$CE_{6\text{-}month}$ = The sulfide emissions overall control efficiency, as carbon disulfide, as a 6-month rolling average, in percent;

CE_i = the daily average overall control efficiency, in percent, as determined in B.16.e)(2); and

N_{DAYS} = the number of days of actual operation of any of the emissions units specified in B.2.b) during a 6-month period.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

f) Emission Limitation:

For each carbon disulfide unloading and storage operation at each existing or new viscose process affected source the permittee must:

i. reduce uncontrolled carbon disulfide emissions by at least 83% from unloading and storage operations based on a 6-month rolling average if you use an alternative control technique not listed in this table source for carbon disulfide unloading and storage operations; if using a control device to reduce emissions, route emissions through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems;

ii. reduce uncontrolled carbon disulfide emissions by at least 0.14% from viscose process vents based on a 6-month rolling average; for each vent stream that you control using a control device, route the vent stream through a closed-vent system to the control device; and comply with the work practice standard for closed-vent systems;

iii. install a nitrogen unloading and storage system (as defined in 40 CFR §63.5610); or

iv. install a nitrogen unloading system (as defined in 40 CFR §63.5610); reduce uncontrolled carbon disulfide emissions by at least 0.045% from viscose process vents based on a 6-month rolling average; for each vent stream that you control, route the vent stream through a closed-vent to the control device; and comply with the work practice standard for closed-vent systems.

Applicable Compliance Method:

Compliance shall be demonstrated based on the monitoring requirements in 40 CFR § 63.5545 (see B.11), the continuous compliance requirements in 40 CFR § 63.5555(a) (see B.12), and the record keeping requirements in Table 9 to 40 CFR Part 63, Subpart UUUU (see B.13.b), row 8.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

17. Testing Requirements - The permittee shall conduct, or have conducted, emission testing for the emissions units specified in B.2.b) in accordance with the following requirements:

a) The emission testing shall be conducted within 4.5 years after the most recent performance test(s) that demonstrated compliance. Compliance was recently demonstrated with test(s) performed on 6/10/2014, 6/11/2014 and 6/12/2014.

b) The emission testing shall be conducted to demonstrate compliance with the following limits:

(1) A negative pressure of the building enclosure serving the emissions unit(s) specified in B.2.a);

(2) A minimum of 85% capture efficiency for VOC emissions;

(3) A minimum of 85% capture efficiency for H_2S emissions;

(4) A minimum of 80% control efficiency for VOC emissions of the biofilter system and/or backup scrubber; and

(5) A minimum of 75% reduction of total, uncontrolled sulfide emissions (reported as carbon disulfide).

c) The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) and other requirements specified in B.17.b).

(1) Method 1, 40 CFR Part 60, Appendix A - test port and traverse point locations,

(2) Method 2, 40 CFR Part 60, Appendix A – volumetric flow;

(3) Method 3, 40 CFR Part 60, Appendix A – gas composition;

(4) Method 4, 40 CFR Part 60, Appendix A – moisture content;

(5) Method 15 (ALT-074 modification), 40 CFR Part 60, Appendix A – low concentrations of H_2S in biofilter system outlet and vent stack outlet;

(6) Method 204, 40 CFR Part 51, Appendix M – enclosure; and

(7) Method 320, 40 CFR Part 63, Appendix A – CS_2, COS in all exhaust streams and high concentrations of H_2S in biofilter system inlet.

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

The ALT-074 modification to Method 15 from 40 CFR Part 60, Appendix A for low concentrations of H_2S was approved by U.S. EPA in a April 29, 2010 letter and allows composite exhaust gas sample collection while maintaining the samples at a temperature 10 degrees warmer than the exhaust gas stack temperature and analysis within 24 hours of collection. This ALT-074 modification to Method 15 was approved for all similar facilities in the cellulose products manufacturing source category subject to 40 CFR Part 63, Subpart UUUU.

d) The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Ohio EPA Northeast District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

e) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast 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 Northeast District Office's refusal to accept the results of the emission test(s).

f) Personnel from the appropriate Ohio EPA Northeast 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.

g) 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 Northeast 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 Northeast District Office.

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.

[Authority for term: OAC rule 3745-31-05(A)(3) and 40 CFR Part 63, Subpart UUUU]

18. Miscellaneous Requirements

a) Emission units P020 and P021, trickling tower nos. 1 & 2, respectively, meet the specifications of paragraph (M)(3)(a) of OAC rule 3745-21-07, and shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions from the article, machine, equipment or other contrivance by an overall control efficiency of at least eighty-five per cent (85%), by weight.

The emission limitation specified by OAC rule 3745-21-07(M)(2) is more stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) for the following emission units: P001, P002, P003, P004, P007, P008, P009 and P010.

[Authority for term: OAC rule 3745-21-07]

C. Emissions Unit Terms and Conditions

1. P011

Operations, Property and/or Equipment Description:

Viscose blending system: a series of four blenders with a bio-filtration system to control volatile organic compound (VOC) emissions.

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

(1) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)(3)(c)(ii)	This emissions unit is not subject to the requirements of paragraphs (M)(3)(a) and (M)(3)(b) of this rule because it has an uncontrolled potential to emit for organic compound emissions that does not exceed forty pounds per day.
b.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 0.235 lb/hr and 1.03 tons/yr. See B.2.b) through B.2.e) and B.3.a) through B.3.c).
c.	OAC rule 3745-31-05(F) Voluntary Restriction to Limit Potential Emissions	VOC emissions shall not exceed 222.5 tons/yr from the facility. See B.5.a). Hydrogen sulfide (H_2S) emissions shall not exceed 9.95 tons/yr from the facility. See B.5.b).
d.	40 CFR Part 63, Subpart UUUU (40 CFR 63.5480 – 63.5610)	See b)(2)a and b)(2)b.
e.	40 CFR 63.1 – 63.15	Table 10 of Subpart UUUU of 40 CFR Part 63 - General Provisions Applicability to Subpart UUUU which shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. As required in 40 CFR §63.5505(a), the permittee must meet the appropriate emission limits and work practice standards in Table 1 to 40 CFR Part 63, Subpart UUUU. See B.9.a) through B.9.e).

b. As required in 40 CFR §63.5505(b), the permittee must meet the appropriate operating limits in Table 2 to 40 CFR Part 63, Subpart UUUU. See B.9.f) through B.9.h).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

c) Operational Restrictions

(1) The capture and control systems for VOC and H_2S emissions shall be operated in accordance with the requirements specified in B.3.a) through B.3.c).

[Authority for term: OAC rule 3745-31-05(A)(3)]

d) Monitoring and/or Recordkeeping Requirements

(1) See B.4.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.6.

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.10, B.11 and B.13.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

(4) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, is subject to a federal Maximum Achievable Control Technology standard (e.g. 40 CFR Part 63, Subpart UUUU) that restricts the amounts of pollutants that could be released. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: ORC 3704.03(F)(4)(b) and (e)]

e) Reporting Requirements

(1) See B.7.a) and B.7.a)(1) through (7).

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.7.a), B.7.a)(8) and B.7.a)(8) and a)(9).

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.14.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 0.235 lb/hr.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly VOC emissions from the viscose blending system:

$VOC_{UNCTRL} = [(CS_2 + COS)_{CAPT}]/CAPE \times 1.15$

where:

VOC_{UNCTRL} = the maximum, uncontrolled hourly VOC emissions which was estimated to be 1.176lbs VOC_{UNCTRL}/hr;

CS_{2CAPT} = the uncontrolled hourly carbon disulfide emissions which were determined to be 1.02 lbs $CS_{2\ UNCTRL}$/hr from exhaust gas testing of blender no. 1 a process equipment associated with (P011) viscose blending system via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 27, 2010;

COS_{CAPT} = the uncontrolled hourly carbonyl sulfide emissions which were determined to be 2.2×10^{-3}lb COS_{UNCTRL}/hr from exhaust gas testing of blender no. 1 a process equipment associated with (P011) viscose blending system via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 27, 2010;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, controlled hourly VOC emissions from the viscose blending system:

$VOC(lb/hr) = VOC_{CAPT\&CONTRL} + VOC_{UNCTRL\ VENT}$

$= [VOC_{UNCTRL} \times CAPE \times (1 - CE)] + [VOC_{UNCTRL} \times (1 - CAPE)]$

where:

VOC(lb/hr) = the maximum, controlled hourly VOC emissions, which were estimated to be 0.235 lb VOC/hr; and

CE = the minimum efficiency of the control device (e.g. biofilter system) which must be at least 80% or 0.80, as stated in the application(s) for PTI P0109808.

If required, the permittee shall demonstrate compliance with the emissions limitation(s) through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, 15 and Method 204, specified in 40 CFR Part 51, Appendix M. Method 320, 40 CFR Part 63, Appendix A may be employed as an alternative to Method 15. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b. Emission Limitation:

VOC emissions shall not exceed 1.03 tons/yr.

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.235 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) P011 was installed circa 6/01/1990 and is not eligible for the Ohio Best Available Technology exemption (the less than 10 tons per year BAT exemption) per OAC paragraph 3745-31-05(A)(3)(a)(ii).

2. P018, Anhydrous Sodium Sulfate Silo

Operations, Property and/or Equipment Description:

6,750 cubic feet silo for storage of anhydrous sodium sulfate: pneumatic unloading from a tanker truck into the silo with a baghouse to control particulate emissions.

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

(1) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)a.
b.	OAC rule 3745-17-11(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)a.
c.	OAC rule 3745-31-05(A)(3)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 5% opacity as a 6-minute average. See b)(2)a. Particulate emissions (PE) from this emissions unit shall not exceed 0.016 lb/hr and 0.0031 ton/yr. See b)(2)a.

(2) Additional Terms and Conditions

a. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform checks during **each** tanker unloading 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 emissions incident; and

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

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications, until such time as any required performance testing is conducted and an alternative pressure drop range and/or limit is established.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily 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. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range 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 operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

j. the pressure drop readings immediately after the corrective action was implemented; and

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

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or 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.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(4) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified Permit to Install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the

composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4)]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that identify:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to eliminate the visible particulate emissions.

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

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.

[Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), OAC rule 3745-31-05(A)(3)]

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

a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer or outside of the acceptable range following any required compliance demonstration;

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 baghouse;

c. each incident of deviation described in e)(2)a where a prompt investigation was not conducted;

d. each incident of deviation described in e)(2)a where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in e)(2)a 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.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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.

[Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), OAC rule 3745-31-05(A)(3)]

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 5% opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b. Emission Limitation:

PE from this emissions unit shall not exceed 0.016 lb/hr.

Applicable Compliance Method:

Compliance may be based on the following equation(s):

$PE(HR) = lbs_{FEED}/delivery \times delivery/hrs \times deliveries/week \times 52\ weeks/yr$

$x ton_{FEED}/2000\ lbs_{FEED} \times EF \times (1 - CE)$

where:

PE(HR) = the maximum, controlled PE rate from the anhydrous sodium sulfate unloading of the tanker truck and was estimated to be 0.016 lb PE/hr;

$lbs._{FEED}$/delivery = the maximum tanker load, in lbs of feed per delivery, as stated in the application(s) for PTI P0109808;

Delivery/hrs = the inverse of the time to unload the maximum load, in units of $(hours/delivery)^{-1}$ as stated in the application(s) for PTI P0109808;

deliveries/week = the maximum deliveries per week, as stated in the application(s) for PTI P0109808;

EF_{PE} = the factor for uncontrolled pollutant emissions, which is 5.2 lbs PM_{UNCTRL}/ton_{FEED} from Table 8.12-3, AP42 Chap. 8.12 (7/1993) for an unloading operation at a sodium carbonate production plant [Values for uncontrolled total particulate matter can be assumed to include filterable particulate and both organic and inorganic condensable particulate. The factors for uncontrolled pollutant PM_{10} emissions and $PM_{2.5}$ emissions are assumed to be the same as for total particulate matter emissions.]; and

CE = control efficiency of the baghouse control device, which is 0.9998 (99.98%) as specified in the application for PTI P0109808.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c. Emission Limitation:

PE from this emissions unit shall not exceed 0.0031 ton/yr.

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.016 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) P018 was installed circa 1/01/1993 and is not eligible for the Ohio Best Available Technology exemption (the less than 10 tons per year BAT exemption) per OAC paragraph 3745-31-05(A)(3)(a)(ii).

3. P022

Operations, Property and/or Equipment Description:

Wastewater pit: a sump for the collection of wastewater from the rinse stations associated with the sponge cooking lines and other miscellaneous sources. Captured emissions are sent to a bio-filtration system to control volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions. Uncaptured emissions are exhausted through the ventilation stack.

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) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)(3)(c)(ii)	This emissions unit is not subject to the requirements of paragraphs (M)(3)(a) and (M)(3)(b) of this rule because it has an uncontrolled potential to emit for organic compound emissions that does not exceed forty pounds per day.
b.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 0.22 lb/hr and 0.96 ton/yr. See B.2.b) through B.2.e) and B.3.a) through B.3.c). Hydrogen sulfide (H_2S) emissions shall not exceed 0.015 lb/hr and 0.066 ton/yr. See B.2.b) through B.2.e) and B.3.a) through B.3.c).
c.	OAC rule 3745-31-05(F) Voluntary Restrictions to Limit Potential Emissions	VOC emissions shall not exceed 222.5 tons/yr from the facility. See B.5.a). H_2S emissions shall not exceed 9.95 tons/yr from the facility. See B.5.b).
d.	40 CFR Part 63, Subpart UUUU (40 CFR 63.5480 – 63.5610)	See b)(2)a and b)(2)b.

e.	40 CFR 63.1 – 63.15	Table 10 of Subpart UUUU of 40 CFR Part 63 - General Provisions Applicability to Subpart UUUU which shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. As required in 40 CFR §63.5505(a), the permittee must meet the appropriate emission limits and work practice standards in Table 1 to 40 CFR Part 63, Subpart UUUU. See B.9.a) through B.9.e).

b. As required in 40 CFR §63.5505(b), the permittee must meet the appropriate operating limits in Table 2 to 40 CFR Part 63, Subpart UUUU. See B.9.f) through B.9.h).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

c) Operational Restrictions

(1) The capture and control systems for VOC and H_2S emissions shall be operated in accordance with the requirements specified in B.3.a) through B.3.c).

[Authority for term: OAC rule 3745-31-05(A)(3)]

d) Monitoring and/or Recordkeeping Requirements

(1) See B.4.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.6.

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.10, B.11 and B.13.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

(4) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year and is subject to a federal Maximum Achievable Control Technology standard (e.g. 40 CFR Part 63, Subpart UUUU) that restricts the amounts of pollutants that could be released. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in

the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: ORC 3704.03(F)(4)(b) and (e)]

e) Reporting Requirements

(1) See B.7.a) and B.7.a)(1) through (7).

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.7.a), B.7.a)(8) and B.7.a)(8) and a)(9).

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.14.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 0.22 lb/hr.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly VOC emissions from the wastewater pit:

$VOC_{UNCTRL} = [(CS_2 + COS)_{CAPT}]/CAPE \times 1.15$

where:

VOC_{UNCTRL} = the maximum, uncontrolled hourly VOC emissions which was estimated to be 0.298lb VOC_{UNCTRL}/hr;

CS_{2CAPT} = the uncontrolled hourly carbon disulfide emissions which were determined to be 8.38×10^{-2}lb $CS_{2\ UNCTRL}$/hr from exhaust gas testing of the wastewater pit (P022) via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

COS_{CAPT} = the uncontrolled hourly carbonyl sulfide emissions which were determined to be 1.6 x 10^{-3}lb COS_{UNCTRL}/hr from exhaust gas testing of wastewater pit (P022) viscose blending system via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 33% or 0.33 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, controlled hourly VOC emissions from the wastewater pit:

$VOC(lb/hr) = VOC_{CAPT\&CONTRL} + VOC_{UNCTRL\ VENT}$

$= [VOC_{UNCTRL} \times CAPE \times (1 - CE)] + [VOC_{UNCTRL} \times (1 - CAPE)]$

where:

VOC(lb/hr) = the maximum, controlled hourly VOC emissions, which were estimated to be 0.22 lb VOC/hr; and

CE = the minimum efficiency of the control device (e.g. biofilter system) which must be at least 80% or 0.80, as stated in the application(s) for PTI P0109808.

If required, the permittee shall demonstrate compliance with the emissions limitation(s) through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, 15 and Method 204, specified in 40 CFR Part 51, Appendix M. Method 320, 40 CFR Part 63, Appendix A may be employed as an alternative to Method 15. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b. Emission Limitation

H_2S emissions shall not exceed 0.015 lb/hr.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly H_2S emissions from the wastewater pit:

$H_2S_{UNCTRL} = H_2S_{CAPT}/CAPE \times 1.15$

where:

H_2S_{UNCTRL} = the maximum, uncontrolled hourly H_2S emissions which was estimated to be 2.16 x 10^{-2}lbs H_2S/hr;

H_2S_{CAPT} = the uncontrolled hourly H_2S emissions which was determined to be 6.2 x 10^{-3}lbs H_2S/hr from exhaust gas testing of (P022) wastewater pit via U.S. EPA Methods 1 through 4 and Method 15 (ALT-074) modification from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 33% or 0.33 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, controlled hourly H_2S emissions from the cooking station and acid wash and rinse (water wash) stations:

$H_2S(lb/hr) = H_2S_{CAPT\&CONTRL} + H_2S_{UNCTRL\ VENT}$

$= [H_2S_{UNCTRL} \times CAPE \times (1 - CE)]_{CAPT\&CONTRL}$

$+ [H_2S_{UNCTRL} \times (1 - CAPE)]_{UNCTRL\ VENT}$

where:

$H_2S(lb/hr)$ = the maximum, controlled hourly H_2S emissions, which was estimated to be 1.5 x 10^{-2}lb H_2S/hr; and

CE = the minimum efficiency of the control device (e.g. biofilter system) which must be at least 95% or 0.95, as stated in the application(s) for PTI P0109808.

If required, the permittee shall demonstrate compliance with the emission limitation(s) through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 15 (ALT-074) modification; and Method 204, specified in 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The ALT-074 modification to Method 15 from 40 CFR Part 60, Appendix A for low concentrations of H_2S was approved by U.S. EPA in a April 29, 2010 letter and allows composite exhaust gas sample collection while maintaining the samples at a temperature 10 degrees warmer than the exhaust gas stack temperature and

analysis within 24 hours of collection. This ALT-074 modification to Method 15 was approved for all similar facilities in the cellulose products manufacturing source category subject to 40 CFR Part 63, Subpart UUUU.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c. Emission Limitation:

VOC emissions shall not exceed 0.96 ton/yr.

H_2S emissions shall not exceed 0.066 ton/yr.

Applicable Compliance Method:

The VOC tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.22 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

The H_2S tpy emission limitation was developed by multiplying the short-term allowable H_2S emission limitation (0.015 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

a. P022 was installed circa 6/01/1990 and is not eligible for the Ohio Best Available Technology exemption (the less than 10 tons per year BAT exemption) per OAC paragraph 3745-31-05(A)(3)(a)(ii).

4. P023

Operations, Property and/or Equipment Description:

Reclaim salt pit: a sump for the collection of wastewater from the treatment stations associated with the sponge cooking lines. Captured emissions are sent to a bio-filtration system to control volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions. Uncaptured emissions are exhausted through the ventilation stack.

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) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)(3)(c)(ii)	This emissions unit is not subject to the requirements of paragraphs (M)(3)(a) and (M)(3)(b) of this rule because it has an uncontrolled potential to emit for organic compound emissions that does not exceed forty pounds per day.
b.	OAC rule 3745-31-05(A)(3)	Volatile organic compounds (VOC) emissions shall not exceed 0.40 lb/hr and 1.74 tons/yr. See B.2.b) through B.2.e) and B.3.a) through B.3.c). Hydrogen sulfide (H_2S) emissions shall not exceed 0.028 lb/hr and 0.12 ton/yr. See B.2.b) through B.2.e) and B.3.a) through B.3.c).
c.	OAC rule 3745-31-05(F) Voluntary Restrictions to Limit Potential Emissions	VOC emissions shall not exceed 222.5 tons/yr from the facility. See B.5.a) H_2S emissions shall not exceed 9.95 tons/yr from the facility. See B.5.b).
d.	40 CFR Part 63, Subpart UUUU (40 CFR 63.5480 – 63.5610)	See b)(2)a and b)(2)b.
e.	40 CFR 63.1 – 63.15	Table 10 of Subpart UUUU of 40 CFR Part 63 - General Provisions Applicability to Subpart UUUU which shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. As required in 40 CFR §63.5505(a), the permittee must meet the appropriate emission limits and work practice standards in Table 1 to 40 CFR Part 63, Subpart UUUU. See B.9.a) through B.9.e).

b. As required in 40 CFR §63.5505(b), the permittee must meet the appropriate operating limits in Table 2 to 40 CFR Part 63, Subpart UUUU. See B.9.f) through B.9.h).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

c) Operational Restrictions

(1) The capture and control systems for VOC and H_2S emissions shall be operated in accordance with the requirements specified in B.3.a) through B.3.c).

[Authority for term: OAC rule 3745-31-05(A)(3)]

d) Monitoring and/or Recordkeeping Requirements

(1) See B.4.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.6.

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.10, B.11 and B.13.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

(4) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions increase for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year and/or is subject to a federal Maximum Achievable Control Technology standard (e.g. 40 CFR Part 63, Subpart UUUU) that restricts the amounts of pollutants that could be released. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: ORC 3704.03(F)(4)(b) and (e)]

e) Reporting Requirements

(1) See B.7.a) and B.7.a)(1) through (7).

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.7.a), B.7.a)(8) and B.7.a)(8) and a)(9).

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.14.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 0.40 lb/hr.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly VOC emissions from the reclaim pit:

$VOC_{UNCTRL} = [(CS_2 + COS)_{CAPT\ PIT}]/CAPE \times 1.15$

where:

VOC_{UNCTRL} = the maximum, uncontrolled hourly VOC emissions which was estimated to be 0.458lb VOC_{UNCTRL}/hr;

CS_{2CAPT} = the uncontrolled hourly carbon disulfide emissions which were determined to be 0.130 lb $CS_{2\ UNCTRL}$/hr from exhaust gas testing of the reclaim pit process associated with P023 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

COS_{CAPT} = the uncontrolled hourly carbonyl sulfide emissions which were determined to be 1.4×10^{-3}lb COS_{UNCTRL}/hr from exhaust gas testing of the reclaim pit process associated with P023 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

$CAPE_{PIT}$ = the efficiency of the capture device as specified for the enclosure system, which is 33% or 0.33 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, uncontrolled hourly VOC emissions from the floor drain:

$VOC_{UNCTRL} = [(CS_2 + COS)_{CAPT\ DRAIN}]/CAPE \times 1.15$

where:

VOC_{UNCTRL} = the maximum, uncontrolled hourly VOC emissions which was estimated to be 0.303 lb VOC_{UNCTRL}/hr;

CS_{2CAPT} = the uncontrolled hourly carbon disulfide emissions which were determined to be 0.263 lb $CS_{2\ UNCTRL}$/hr from exhaust gas testing of the floor drain process associated with P023 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

COS_{CAPT} = the uncontrolled hourly carbonyl sulfide emissions which were determined to be 8.0×10^{-4}lb COS_{UNCTRL}/hr from exhaust gas testing of the floor drain process associated with P023 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

$CAPE_{DRAIN}$ = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

iii. Determination of the total maximum, uncontrolled hourly VOC emissions:

$VOC_{UNCTRL\ TOTAL} = VOC_{UNCTRL\ RECLAIM\ PIT} + VOC_{UNCTRL\ FLOOR\ DRAIN}$

where:

$VOC_{UNCTRL\ TOTAL}$ = the maximum, uncontrolled hourly VOC emissions which was estimated to be 0.76lb VOC_{UNCTRL}/hr.

iv. Determination of the maximum, controlled hourly VOC emissions from the wastewater pit:

$VOC(lb/hr) = [VOC_{UNCTRL\ PIT} \times CAPE_{PIT} \times (1 - CE)]$

$+ [VOC_{UNCTRL\ PIT} \times (1 - CAPE_{PIT})]$

+ [$VOC_{UNCTRL\ DRAIN}$ x $CAPE_{DRAIN}$ x (1- CE)]

where:

VOC(lb/hr) = the maximum, controlled hourly VOC emissions, which were estimated to be 0.40 lb VOC/hr; and

CE = the minimum efficiency of the control device (e.g. biofilter system) which must be at least 80% or 0.80, as stated in the application(s) for PTI P0109808.

If required, the permittee shall demonstrate compliance with the emission limitation(s) through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, 15 and Method 204, specified in 40 CFR Part 51, Appendix M. Method 320, 40 CFR Part 63, Appendix A may be employed as an alternative to Method 15. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b. Emission Limitation

H_2S emissions shall not exceed 0.028 lb/hr.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly H_2S emissions from the reclaim pit:

$H_2S_{UNCTRL} = H_2S_{CAPT}/CAPE_{PIT}$ x 1.15

where:

H_2S_{UNCTRL} = the maximum, uncontrolled hourly H_2S emissions which was estimated to be 3.73 x 10^{-2}lbs H_2S/hr;

H_2S_{CAPT} = the uncontrolled hourly H_2S emissions which was determined to be 1.07 x 10^{-2}lbs H_2S/hr from exhaust gas testing of the reclaim pit process associated with P023 via U.S. EPA Methods 1 through 4 and Method 15 (ALT-074) from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

$CAPE_{PIT}$ = the efficiency of the capture device as specified for the enclosure system, which is 33% or 0.33 as stated in the application for PTI P0109808; and

1.15 = the “safety” factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, uncontrolled hourly H_2S emissions from the floor drain:

$H_2S_{UNCTRL} = H_2S_{CAPT}/CAPE \times 1.15$

where:

H_2S_{UNCTRL} = the maximum, uncontrolled hourly H_2S emissions which was estimated to be 4.18×10^{-2}lbs H_2S/hr;

H_2S_{CAPT} = the uncontrolled hourly H_2S emissions which was determined to be 3.63×10^{-2}lbs H_2S/hr from exhaust gas testing of the floor drain process associated with P023 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

$CAPE_{DRAIN}$ = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

iii. Determination of the total maximum, uncontrolled hourly H_2S emissions:

$H_2S_{UNCTRL\ TOTAL} = H_2S_{UNCTRL\ RECLAIM\ PIT} + H_2S_{UNCTRL\ FLOOR\ DRAIN}$

where:

$H_2S_{UNCTRL\ TOTAL}$ = the maximum, uncontrolled hourly H_2S emissions which was estimated to be 0.0791lb H_2S_{UNCTRL}/hr.

iv. Determination of the maximum, controlled hourly H_2S emissions:

$H_2S(lb/hr) = [H_2S_{UNCTRL\ PIT} \times CAPE_{PIT} \times (1 - CE)]$

$+ [H_2S_{UNCTRL\ PIT} \times (1 - CAPE_{PIT})]$

$+ [H_2S_{UNCTRL\ DRAIN} \times CAPE_{DRAIN} \times (1- CE)]$

where:

$H_2S(lb/hr)$ = the maximum, controlled hourly H_2S emissions, which was estimated to be 2.77×10^{-2}lb H_2S/hr; and

CE = the minimum efficiency of the control device (e.g. biofilter system) which is at least 95% or 0.95, as stated in the application(s) for PTI P0109808.

If required, the permittee shall demonstrate compliance with the emission limitation(s) through emission tests performed in accordance with the methods

and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 15 (ALT-074) modification; and Method 204, specified in 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The ALT-074 modification to Method 15 from 40 CFR Part 60, Appendix A for low concentrations of H_2S was approved by U.S. EPA in a April 29, 2010 letter and allows composite exhaust gas sample collection while maintaining the samples at a temperature 10 degrees warmer than the exhaust gas stack temperature and analysis within 24 hours of collection. This ALT-074 modification to Method 15 was approved for all similar facilities in the cellulose products manufacturing source category subject to 40 CFR Part 63, Subpart UUUU.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c. Emission Limitations:

VOC emissions shall not exceed 1.74 tons/yr.

H_2S emissions shall not exceed 0.12 ton/yr.

Applicable Compliance Method:

The VOC tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.40 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

The H_2S tpy emission limitation was developed by multiplying the short-term allowable H_2S emission limitation (0.028 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

a. P023 was installed circa 6/01/1990 and is not eligible for the Ohio Best Available Technology exemption (the less than 10 tons per year BAT exemption) per OAC paragraph 3745-31-05(A)(3)(a)(ii).

5. Emissions Unit Group - Mixers: P012,P013,P014,P015,P016& P017

EU ID	Operations, Property and/or Equipment Description
P012	Mixer no. 2 for production of sponge mass from viscose and other materials. Volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions exhaust through the ventilation stack.
P013	Mixer no. 3 for production of sponge mass from viscose and other materials. Volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions exhaust through the ventilation stack.
P014	Mixer no. 4 for production of sponge mass from viscose and other materials. Volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions exhaust through the ventilation stack.
P015	Mixer no. 5 for production of sponge mass from viscose and other materials. Volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions exhaust through the ventilation stack.
P016	Mixer no. 6 for production of sponge mass from viscose and other materials. Volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions exhaust through the ventilation stack.
P017	Mixer no. 7 for production of sponge mass from viscose and other materials. Volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions exhaust through the ventilation stack.

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) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)(3)(c)(ii)	Each of these emissions units are not subject to the requirements of paragraphs (M)(3)(a) and (M)(3)(b) of this rule because they have an uncontrolled potential to emit for organic compound emissions that does not exceed forty pounds per day.
b.	OAC rule 3745-31-05(A)(3)	See b)(2)a. See B.2.b) through B.2.e) and B.3.a) through B.3.c).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(F) Voluntary Restrictions to Limit Potential Emissions	VOC emissions shall not exceed 222.5 tons/yr from the facility. See B.5.a). H_2S emissions shall not exceed 9.95 tons/yr from the facility. See B.5.b).
d.	40 CFR Part 63, Subpart UUUU (40 CFR 63.5480 – 63.5610)	See b)(2)b and b)(2)c.
e.	40 CFR 63.1 – 63.15	Table 10 of Subpart UUUU of 40 CFR Part 63 - General Provisions Applicability to Subpart UUUU which shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. VOC emissions and H_2S emissions shall not exceed the following as specified for each emissions unit:

		VOC		H_2S	
EU ID	Equipment Description	lb/hr	tons/yr	lb/hr	ton/yr
P012	Mixer no. 2	0.30	1.33	3.2×10^{-3}	1.4×10^{-2}
P013	Mixer no. 3	0.40	1.73	4.1×10^{-3}	1.8×10^{-2}
P014	Mixer no. 4	0.40	1.73	4.1×10^{-3}	1.8×10^{-2}
P015	Mixer no. 5	0.44	1.92	4.6×10^{-3}	2.0×10^{-2}
P016	Mixer no. 6	0.44	1.92	4.6×10^{-3}	2.0×10^{-2}
P017	Mixer no. 7	0.44	1.92	4.6×10^{-3}	2.0×10^{-2}

b. As required in 40 CFR §63.5505(a), the permittee must meet the appropriate emission limits and work practice standards in Table 1 to 40 CFR Part 63, Subpart UUUU. See B.9.a) through B.9.e).

c. As required in 40 CFR §63.5505(b), the permittee must meet the appropriate operating limits in Table 2 to 40 CFR Part 63, Subpart UUUU. See B.9.f) through B.9.h).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) See B.4.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.6.

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.10, B.11 and B.13.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

(4) Modeling to demonstrate compliance with, the “Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit’s maximum annual emissions increase for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year and/or is subject to a federal Maximum Achievable Control Technology standard (e.g. 40 CFR Part 63, Subpart UUUU) that restricts the amounts of pollutants that could be released. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: ORC 3704.03(F)(4)(b) and (e)]

e) Reporting Requirements

(1) See B.7.a) and B.7.a)(1) through (7).

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.7.a), B.7.a)(8) and B.7.a)(8) and a)(9).

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.14.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

f) Testing Requirements

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

a. Emission Limitations:

VOC emissions shall not exceed the hourly emission limitations specified in b)(2)a for each emissions unit.

Applicable Compliance Method:

Compliance may be based on the following equation(s):

$VOC_{UNCTRL\ i} = (CS_2 + COS)_{UNCTRL\ MEASURED}$ x min $_{MEASURED}$/batch x batch/B_i min x 1.15

where:

$VOC_{UNCTRL\ i}$ = the maximum, uncontrolled hourly VOC emissions from mixer i, which was estimated to be the emission rates specified in b)(2)a;

$CS_{2UNCTRL\ MEASURED}$ = the uncontrolled hourly carbon disulfide emissions which were determined to be 0.263 lb $CS_{2\ UNCTRL}$/hr from exhaust gas testing of the of mixer no. 7 (P017) via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

$COS_{\ UNCTRL\ MEASURED}$ = the uncontrolled hourly carbonyl sulfide emissions which were determined to be 2.8 x 10^{-3}lb COS_{UNCTRL}/hr from exhaust gas testing of mixer no. 7 (P017) via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

Min $_{MEASURED}$/batch = the measured batch time, in minutes, of mixer no. 7 (P017) during the exhaust gas testing conducted on September 29, 2010;

batch/B_i min = the inverse of the minimum batch time in minutes for mixer I; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

b. Emission Limitation(s):

H_2S emissions shall not exceed the hourly emission limitations specified in b)(2)a for each emissions unit.

Applicable Compliance Method:

Compliance may be based on the following equation(s):

$H_2S_{UNCTRL\ i} = H_2S_{UNCTRL\ MEASURED}$ x min $_{MEASURED}$/batch x batch/B_i min x 1.15

where:

$H_2S_{UNCTRL\ i}$ = the maximum, uncontrolled hourly H_2S emissions from mixer i, which was estimated to be the emission rates specified in b)(2)a;

$H_2S_{\ UNCTRL\ MEASURED}$ = the uncontrolled hourly H_2S emissions which were determined to be 2.5 x 10^{-3}lb $H_2S_{\ UNCTRL}$/hr from exhaust gas testing of the of mixer no. 7 (P017) via U.S. EPA Methods 1 through 4 and ALT-074 modification

to Method 15 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 29, 2010;

Min $_{MEASURED}$/batch = the measured batch time, in minutes, of mixer no. 7 (P017) during the exhaust gas testing conducted on September 29, 2010;

batch/B_i min = the inverse of the minimum batch time in minutes for mixer I; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

c. Emission Limitations:

VOC emissions shall not exceed the annual emission limitations specified in b)(2)a for each emissions unit.

H_2S emissions shall not exceed the annual emission limitations specified in b)(2)a for each emissions unit.

Applicable Compliance Method:

The VOC tpy emission limitations specified in b)(2)a were developed by multiplying the short-term allowable VOC emission limitations specified in b)(2)a by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitations, compliance is demonstrated with the annual emission limitations.

The H_2S tpy emission limitations specified in b)(2)a were developed by multiplying the short-term allowable H_2S emission limitations specified in b)(2)a by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitations, compliance is demonstrated with the annual emission limitations.

[Authority for term: OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) P012 was installed circa 6/01/1999, P013 and P014 were installed circa 6/01/1990, P016 was installed circa 11/01/1999 and P017 was installed circa 6/01/2005. These emissions units are not eligible for the Ohio Best Available Technology exemption (the less than 10 tons per year BAT exemption) per OAC paragraph 3745-31-05(A)(3)(a)(ii).

6. Emissions Unit Group - Trickling Towers: P020 & P021

EU ID	Operations, Property and/or Equipment Description
P020	Trickling tower no. 1: pre-treatment of wastewater streams as a liquid/gas separation step with a bio-filtration system to control volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions.
P021	Trickling tower no. 2: pre-treatment of wastewater streams as a liquid/gas separation step with a bio-filtration system to control volatile organic compound (VOC) and hydrogen sulfide (H_2S) emissions.

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

(1) d)(4).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)(2)	Each of these emissions units are not subject to the requirements of paragraphs (M)(3)(a) and (M)(3)(b) of this rule and shall be equipped with a control system (i.e., capture and control equipment) that reduces the organic compound emissions from the article, machine, equipment or other contrivance by an overall control efficiency of at least eighty-five per cent (85%), by weight.
b.	OAC rule 3745-31-05(A)(3)	Volatile organic compounds (VOC) emissions shall not exceed 4.82 lbs/hr and 21.09 tons/yr from each emissions unit. See B.2.b) through B.2.e) and B.3.a) through B.3.c). Hydrogen sulfide (H_2S) emissions shall not exceed 0.69 lb/hr and 3.02 tons/yr from each emissions unit. See B.2.b) through B.2.e) and B.3.a) through B.3.c) .

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(F) Voluntary Restrictions to Limit Potential Emissions	VOC emissions shall not exceed 222.5 tons/yr from the facility. See B.5.a). H_2S emissions shall not exceed 9.95 tons/yr from the facility. See B.5.b).
d.	40 CFR Part 63, Subpart UUUU (40 CFR 63.5480 – 63.5610)	See b)(2)a and b)(2)b.
e.	40 CFR 63.1 – 63.15	Table 10 of Subpart UUUU of 40 CFR Part 63 - General Provisions Applicability to Subpart UUUU which shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. As required in 40 CFR §63.5505(a), the permittee must meet the appropriate emission limits and work practice standards in Table 1 to 40 CFR Part 63, Subpart UUUU. See B.9.a) through B.9.e).

b. As required in 40 CFR §63.5505(b), the permittee must meet the appropriate operating limits in Table 2 to 40 CFR Part 63, Subpart UUUU. See B.9.f) through B.9.h).

[Authority for term: 40 CFR Part 63, Subpart UUUU]

c) Operational Restrictions

(1) The capture and control systems for VOC and H_2S emissions shall be operated in accordance with the requirements specified in B.3.a) through B.3.c).

[Authority for term: OAC rule 3745-31-05(A)(3)]

d) Monitoring and/or Recordkeeping Requirements

(1) See B.4.

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.6.

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.10, B.11 and B.13.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

(4) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual

emissions increase for each toxic air contaminant, as defined in OAC rule 3745-114-01, is subject to a federal Maximum Achievable Control Technology standard (e.g. 40 CFR Part 63, Subpart UUUU) that restricts the amounts of pollutants that could be released. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: ORC 3704.03(F)(4)(b) and (e)]

e) Reporting Requirements

(1) See B.7.a) and B.7.a)(1) through (7).

[Authority for term: OAC rule 3745-31-05(A)(3)]

(2) See B.7.a), B.7.a)(8) and B.7.a)(8) and a)(9).

[Authority for term: OAC rule 3745-31-05(F)]

(3) See B.14.

[Authority for term: 40 CFR Part 63, Subpart UUUU]

f) Testing Requirements

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

a. Emission Limitation:

VOC emissions shall not exceed 4.82 lbs/hr from each emissions unit.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly VOC emissions from the wastewater treatment process:

$VOC_{UNCTRL\text{-}TT} = [(CS_2 + COS)_{CAPT}]_{2TOWERS}/CAPE \times 1.15$

where:

$VOC_{UNCTRL\text{-}TT}$ = the maximum, uncontrolled hourly VOC emissions which was estimated to be 41.93lb VOC_{UNCTRL}/hr from both emissions units, combined;

CS_{2CAPT} = the uncontrolled hourly carbon disulfide emissions which were determined to be 36.30 lb $CS_{2\ UNCTRL}$/hr from testing of the trickling towers process exhaust gases, combined, associated with P020 and P021 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 27, 2010;

COS_{CAPT} = the uncontrolled hourly carbonyl sulfide emissions which were determined to be 0.162 lb COS_{UNCTRL}/hr from testing of the trickling towers process combined exhaust gases associated with P020 and P021 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 27, 2010;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, uncontrolled hourly VOC emissions from the reactors off gases:

$VOC_{UNCTRL\text{-}REACTORS\text{-}OFF\text{-}GAS}$ = ($CS_{2UNCTRL\ MEASURED}$)/CAPE x min $_{MEASURED}$ per batch x batch/B_i min x 1.15 x 4 reactors

where:

$VOC_{UNCTRL\text{-}REACTORS\text{-}OFF\text{-}GAS}$ = the maximum, uncontrolled hourly VOC emissions which was estimated to be 6.20 lbs VOC_{UNCTRL}/hr from four reactors (P001, P002, P008 and P009) combined;

$CS_{2UNCTRL\ MEASURED}$ = the uncontrolled hourly carbon disulfide emissions which were determined to be 1.17 lbs $CS_{2\ UNCTRL}$/hr from exhaust gas testing of the off gases (formerly fugitive gases) associated with P009 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on April 20, 2010;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808;

min $_{MEASURED}$/batch = the measured batch time, in minutes, of reactor no. 4 (P009) during the exhaust gas testing conducted on April 20, 2010;

batch/B_i min. = the inverse of the minimum batch time in minutes for each reactor; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

iii. Determination of the total maximum, uncontrolled hourly VOC emissions:

$VOC_{UNCTRL\ TOTAL}$ = ($VOC_{UNCTRL\text{-}TT}$ + $VOC_{UNCTRL\text{-}REACTORS\text{-}OFF\text{-}GAS}$)/2 towers

where:

$VOC_{UNCTRL\ TOTAL}$ = the maximum, uncontrolled hourly VOC emissions which was estimated to be 24.07lbs VOC_{UNCTRL}/hr.

iv. Determination of the maximum, controlled hourly VOC emissions from each emission unit:

VOC(lb/hr) = $VOC_{UNCTRL\ TOTAL}$ x (1 – $CE_{OVERALL}$)

where:

VOC(lb/hr) = the maximum, controlled hourly VOC emissions, which were estimated to be 4.82 lbs VOC/hr from each emissions unit;

$CE_{OVERALL}$ = (CAPE x CE)/100 = overall control (reduction) efficiency (as a decimal) for VOC emissions of any capture and control equipment system;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808; and

CE = the efficiency of the control device (e.g. biofilter system), in percent by weight [During emission tests conducted on June 11, 2014, an average control efficiency of 86.7%, as organic compound emissions, was measured for the biofilter control system.].

If required, the permittee shall demonstrate compliance with the emission limitation(s) through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4, 15 and Method 204, specified in 40 CFR Part 51, Appendix M. Method 320, 40 CFR Part 63, Appendix A may be employed as an alternative to Method 15. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-31-05(A)(3)]

b. Emission Limitation:

H_2S emissions shall not exceed 0.69 lb/hr from each emissions unit.

Applicable Compliance Method:

Compliance may be based on the following equations:

i. Determination of the maximum, uncontrolled hourly H_2S emissions from the wastewater treatment process:

$H_2S_{UNCTRL\ TT} = H_2S_{CAPT\text{-}2TOWERS}/CAPE \times 1.15$

where:

$H_2S_{UNCTRL\ TT}$ = the maximum, uncontrolled hourly H_2S emissions which was estimated to be 27.60 lbs H_2S/hr from both emissions units, combined.

H_2S_{CAPT} = the uncontrolled hourly H_2S emissions which was determined to be 24.00 lbs H_2S/hr from testing of the trickling towers process exhaust gases, combined, associated with P020 and P021 via U.S. EPA Methods 1 through 4 from 40 CFR Part 60, Appendix A and Method 320 from 40 CFR Part 63, Appendix A conducted on September 27, 2010;

CAPE = the efficiency of the capture device as specified for the enclosure system, which is 100% or 1.0 as stated in the application for PTI P0109808; and

1.15 = the "safety" factor of 115% which is included for a conservative estimate.

ii. Determination of the maximum, controlled hourly H_2S emissions:

$H_2S(lb/hr) = H_2S_{UNCTRL\ TT} \times 1/2$ towers x CAPE x (1 – CE)

where:

H_2S(lb/hr) = the maximum, controlled hourly H_2S emissions, which was estimated to be 0.69 lb H_2S/hr from each emissions unit; and

CE = the minimum efficiency of the control device (e.g. biofilter control system) which is at least 95% or 0.95, as stated in the application(s) for PTI P0109808.

If required, the permittee shall demonstrate compliance with the emission limitation(s) through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 15 (ALT-074) modification; and Method 204, specified in 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The ALT-074 modification to Method 15 from 40 CFR Part 60, Appendix A for low concentrations of H_2S was approved by U.S. EPA in a April 29, 2010 letter and allows composite exhaust gas sample collection while maintaining the samples at

a temperature 10 degrees warmer than the exhaust gas stack temperature and analysis within 24 hours of collection. This ALT-074 modification to Method 15 was approved for all similar facilities in the cellulose products manufacturing source category subject to 40 CFR Part 63, Subpart UUUU.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c. Emission Limitations:

VOC emissions shall not exceed 21.09 tons/yr from each emissions unit.

H_2S emissions shall not exceed 3.02 tons/yr from each emissions unit.

Applicable Compliance Method:

The VOC tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (4.82 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

The H_2S tpy emission limitation was developed by multiplying the short-term allowable H_2S emission limitation (0.69 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

[Authority for term: OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

a. P020 and P021 were installed circa 1/01/2002 and are not eligible for the Ohio Best Available Technology exemption (the less than 10 tons per year BAT exemption) per OAC paragraph 3745-31-05(A)(3)(a)(ii).