



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

05/30/03

**CERTIFIED MAIL**

**RE: Final Title V Chapter 3745-77 permit**

08-57-04-1124  
Cargill, Inc. - Dayton  
Angie Duvall  
3201 Needmore Road  
Dayton, OH 45414-8001

Dear Angie Duvall:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street  
Room 300  
Columbus, Ohio 43215

If you have any questions, please contact RAPCA.

Very truly yours,

  
Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: RAPCA  
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 05/30/03

Effective Date: 06/20/03

Expiration Date: 06/20/08

This document constitutes issuance of a Title V permit for Facility ID: 08-57-04-1124 to:

Cargill, Inc. - Dayton
3201 Needmore Road
P.O. Box 1400 A
Dayton, OH 45413-8001

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like B004 (CB Coal Boiler), B005 (CB Package Boiler 3), B006 (CB Package Boiler 4), B009 (CB Thermal Oxidizer), P004 (MH Starch Modification Process), P008 (FH Fiber Cooler), P014 (MH Starch Dryer 1), P024 (NM Steep Tanks Aspiration), P025 (NM Mill Aspiration), P030 (FH Fiber Hammermils), P031 (NM Germ STD 3), P032 (FH Fiber STD 1), P033 (FH Fiber STD 2), P034 (FH Fiber STD 3), P037 (FH Fiber Predryer 1), P038 (MH Starch Dryer 2), P040 (FH Fiber Predryer 2), P052 (NM Germ STD 2), P053 (FH Stedman Mill 1), P057 (NM Gluten Flash Dryer), P058 (FH Fiber Predryer 3), P059 (FH Stedman Mill 2), P066 (NM Germ Cooler), P067 (RF Carbon Regeneration Furnace), P074 (FH Fiber Water Tube Cooler), P075 (FH Pellet Cooler 1), P076 (FH Pellet Cooler 2), P086 (NM Steep Aspiration #2), P089 (Sugar Process), and P580 (FX Precoat Bag Dumping).

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

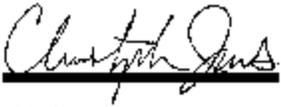
RAPCA

117 South Main Street

Dayton, OH 45422-1280

(937) 225-4435

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", is written over a solid black horizontal line.

Christopher Jones

Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **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:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- c. The permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*
  - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
    - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six

months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. 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.

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the

report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."  
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

**2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).  
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

**3. Risk Management Plans**

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

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.  
(Authority for term: OAC rule 3745-77-07(A)(5))

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.  
(Authority for term: OAC rule 3745-77-07(A)(6))

**6. General Requirements**

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

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

**8. Marketable Permit Programs**

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

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

**9. Reasonably Anticipated Operating Scenarios**

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

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

**10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement.

No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

#### **11. Federal and State Enforceability**

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

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

#### **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. 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.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification

under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

## **15. Emergencies**

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

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

## **16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

**17. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

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

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

**19. Permit to Install Requirement**

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

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

**20. Air Pollution Nuisance**

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

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

**B. *State Only Enforceable Section***

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., 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.)

**2. Records Retention Requirements**

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

**3. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**4. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with

paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

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

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

1. Operational Restrictions:

- a. The maximum daily plant operation or grind capacity shall not exceed 260,000 bushels (7,280 tons).
- b. The maximum annual plant operation or grind capacity shall not exceed 87,600,000 bushels (2,452,800 tons), based upon a rolling, 12-month summation of the monthly plant grinding rates.

2. Monitoring and/or Record Keeping Requirements:

- a. The permittee shall maintain daily records of the plant grind rate, in bushels or pounds.
- b. The permittee shall maintain monthly records of the following:
  - i. the plant grind rate, in bushels or tons [summation of the daily grind rates (from section 2.a) for the calendar month]; and
  - ii. the rolling, 12-month summation of the monthly plant grinding rates, in bushels or tons.

3. Reporting Requirements:

The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily plant grind rate and the rolling, 12-month plant grind rate restrictions of 260,000 and 87,600,000 bushels, respectively. These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

4. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers, 40 CFR Part 63, Subpart DDDDD. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.

5. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:

- a. for a new affected source, the anticipated date of startup of operation;
- b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
- c. any existing federal, State, or local limitations or requirements applicable to the affected source;
- d. for each affected emission point or group of affected emission points, an identification of control technology in place;
- e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
- f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

**A. State and Federally Enforcable Section (continued)**

The Part II application for a MACT determination may, but is not required to, contain the following information:

- a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
- b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
- c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

6. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:

a. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):

- i. the name and mailing address of the permittee;
- ii. the physical location of the source if it is different from the mailing address;
- iii. identification of the relevant MACT standard and the source's compliance date;
- iv. a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
- v. a statement confirming the facility is a major source for HAPs.

b. Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:

- i. the methods used to determine compliance;
- ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
- iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
- iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;
- v. an analysis demonstrating whether the affected source is a major source or an area source;
- vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
- vii. a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

**A. State and Federally Enforcable Section (continued)**

**7. Nitrogen Oxides (NOx) Budget Trading Program**

OAC Chapter 3745-14

**7.a** In restating the applicable requirements of this Chapter, it is not the Agency's intent to make these requirements, in any way, more stringent than the rules.

**7.b** The following regulated non-electric generating units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:

Annual NOx Allowance for the Control Periods in Years 2004 through 2007

Emissions Unit

B004 - Coal boiler	131
B006 - Boiler #4	1

**7.c** Each emissions unit identified in Section A.7.b above is a NOx budget unit under OAC rule 3745-14-01(C)(1). [OAC rule 3745-14-01(C)(1)(b)(i)]

**7.d** The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit. [OAC rules 3745-14-01(E)(1)(a)(i), 3745-14-01(E)(1)(a)(ii), and 3745-14-03(B)(1)]

**7.e** Beginning 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account combined in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period. [OAC rules 3745-14-01(E)(3)(a) and 3745-14-01(E)(3)(c)]

**7.f** NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09. [OAC rule 3745-14-01(E)(3)(d)]

**7.g** A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a) of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated. [OAC rule 3745-14-01(E)(3)(e)]

**7.h** Each ton of NOx emitted in excess of the NOx budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06. [OAC rules 3745-14-01(E)(3)(b), 3745-14-01(E)(4)(a) and 3745-14-01(E)(4)(b)]

**7.i** When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review. [OAC rule 3745-14-01(E)(3)(h)]

**A. State and Federally Enforcable Section (continued)**

- 7.j** Except as provided below, the Director shall revise the NOx budget permit, as necessary, in accordance with OAC rule 3745-77-08.

Each NOx budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx budget units covered by the permit or the overdraft account of the NOx budget source covered by the permit.

[OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]

- 7.k** The owner or operator of a NOx budget unit shall comply with the following prohibitions under OAC rule 3745-14-08(A)(5):

i. No owner or operator of a NOx budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with OAC rule 3745-14-08(F).

ii. No owner or operator of a NOx budget unit shall operate the unit so as to discharge, or allow to be discharged, NOx emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this rule and 40 CFR Part 75 except as provided in 40 CFR 75.74.

iii. No owner or operator of a NOx budget unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this rule and 40 CFR Part 75 except as provided in 40 CFR 75.74.

iv. No owner or operator of a NOx budget unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system, except under any one of the following circumstances:

A. during the period that the unit is covered by an exemption under paragraphs (C)(2) and (D) of OAC rule 3745-14-01 of this Chapter that is in effect;

B. the owner or operator is monitoring emissions from the unit with another certified monitoring system approved by the Director, in accordance with the applicable provisions of this rule and 40 CFR Part 75, for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

C. the NOx authorized account representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with OAC 3745-14-08(B)(2)(b).

[OAC rule 3745-14-08(A)(5)]

**A. State and Federally Enforcable Section (continued)**

- 7.l** The owners and operators of the NOx budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)
- i. the account certificate of representation for the NOx authorized account representative for the NOx budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NOx authorized account representative;
  - ii. all emission monitoring information, in accordance with OAC rule 3745-14-08(E);
  - iii. copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and
  - iv. copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.  
[OAC rule 3745-14-01(E)(5)(a)(i) through (iv)]

- 7.m** The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from these emissions units in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software. This includes all systems required to monitor the NOx emission rate, NOx concentration, heat input rate, and stack flow rate, in accordance with 40 CFR Parts 75.71 and 75.72.

The permittee shall comply with the initial and re-certification procedures of 40 CFR Part 75. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis, emissions of nitrogen oxides in lbs/hr, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

Whenever the monitoring system fails to meet the quality assurance or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[OAC rules 3745-14-01(E)(2)(a), 3745-14-01(E)(5)(a)(ii), 3745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(1), and 3745-14-08(C)(1)]

- 7.n** The owner or operator of a unit that is not subject to an Acid Rain emissions limitation shall comply with the requirements of 40 CFR 75.62, except that the monitoring plan is only required to include the information required by Subpart H of 40 CFR Part 75.  
[OAC rule 3745-14-08(E)(2)(b)]
- 7.o** The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.  
[OAC rule 3745-14-01(E)(5)(b)]

**A. State and Federally Enforcable Section (continued)**

**7.p** Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."  
[OAC rules 3745-14-02(A)(5)]

**7.q** The NOx authorized account representative shall submit quarterly reports that include all of the data and information required in Subpart H of 40 CFR Part 75 for each NOx budget unit (or group of units using a common stack). These quarterly excess emission reports shall be submitted within one month following the end of a calendar quarter covered by the report [by July 31 and October 31 for ozone season reporting in accordance with OAC rule 3745-14-08(E)(4)(b)(ii)] and shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR Part 75.64.  
[OAC rules 3745-14-08(E)(4)(b) and 3745-14-08(E)(4)(c)(ii)]

**7.r** The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:

i. the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications; and

ii. for a unit with add-on NOx emission controls and for all hours where data are substituted in accordance with 40 CFR Part 75.34(a)(1), the add-on emission control were operating within the range of parameters listed in the quality assurance program under Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NOx emissions.  
[OAC rule 3745-14-08(E)(4)(d)(i) and (ii)]

**7.s** The NOx authorized account representative for a NOx budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director in accordance with 40 CFR Part 75.61. The NOx authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.  
[OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]

**A. State and Federally Enforcable Section (continued)**

**7.t** For each control period in which one or more NOx budget units at a source are subject to the NOx budget emission limitation, the NOx authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.

The NOx authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx budget emission limitation for the control period covered by the report:

- i. identification of each NOx budget unit;
- ii. at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;
- iii. at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and
- iv. the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.  
[OAC rules 3745-14-04(A)(1) and 3745-14-04(A)(2)]

**7.u** In the compliance certification report under Section A.1.t.iv above, the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

- i. whether the unit was operated in compliance with the NOx budget emission limitation;
- ii. whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;
- iii. whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made; and
- iv. whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.

**7.v** The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.  
[OAC rule 3745-14-03(B)(3)(a)]

**7.w** The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NOx budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.  
[OAC rule 3745-14-01(E)(2)(b)]

**A. State and Federally Enforcable Section (continued)**

- 7.x** The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on-site and available for inspection during regular office hours.  
[OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]
- 7.y** The NOx authorized account representative of the NOx budget units at this facility may submit a petition under 40 CFR 75.66 to the Director and the Administrator requesting approval to apply an alternative to any requirement of the NOx Budget Trading Program.  
[OAC rule 3745-14-08(F)(2)]
- 8.** Emissions units P002, P003, P011 and P072 are currently inactive and, therefore, are not included in this Title V operating permit. If the emissions units remain shut down for more than 2 years, before they recommence operation, the permittee may be required to comply with all federal and Ohio EPA new source review requirements and federal New Source Performance Standards that are applicable, and demonstrate compliance with all applicable emission limitations and control requirements by performing emission testing in accordance with the approved U.S. EPA methods and procedures. The permittee shall notify RAPCA at least 60 days prior to recommencing operation of the emissions units.

**B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility.

T001: CB Fuel Oil Storage Tank, T-28  
T003: RF HCl Storage Tank, T-30  
T504: FX Sulfuric Acid Storage Tank, T-17  
Z001: MH Reinveld Filtrate Tank Aspiration  
Z002: SW Bag Sealing  
Z003: CP Shotblast Cabinet  
Z004: CP Parts Washer  
Z005: CP Parts Washer  
Z006: CP Immersion Cleaner  
Z007: CP Parts Washer  
Z008: CP Immersion Cleaner  
Z009: FX Parts Washer  
Z010: FX Parts Washer  
Z011: CP Fuel Dispensing  
Z012: FX Fuel Dispensing  
Z026: FX Tank C-304  
Z028: FX Tank C-306  
Z039: CP/FX Analytical and QA/QC Laboratory  
Z040: CP/FX WWTP  
P001: EL Corn Receiving Aspiration  
P013: FH Gluten Cooling and Conveying  
P015: SW Starch Bulk Loading 1  
P016: SW Starch Conveying and Storage  
P017: SW Starch Bag Packing  
P018: SW Warehouse Vacuum System  
P020: RF Precoat Unloading  
P021: FH Rail Feed Loadout  
P027: NM Germ Conveying and Storage  
P028: NM GLuten Conveying and Storage  
P039: SW Germ Loadout  
P043: CB Coal Receiving  
P044: FH Truck Pellet Loadout  
P045: FH Pellet/Fiber Storage Bins  
P046: FH Fiber Storage Bins  
P047: FH Gluten Storage Bins  
P048: CB Ash Handling System  
P049: CB Ash Loadout System  
P050: FH Cracked Corn Hammermill  
P051: SW Starch Bulk Loading 2  
P054: FH Cracked Corn and Dust Conveying  
P055: FH Feed Loadout Legs Aspiration  
P060: SM Wet Germ Conveying  
P061: NM Wet Germ Conveying  
P062: NM Germ Conveying  
P063: NM Germ Conveying 2 to 3  
P065: EL Vacuum Cleaning  
P069: NM FBGD Recycle Conveyor  
P070: FH Gluten Loadout Receiver

**B. State Only Enforceable Section (continued)**

- P071: FH Gluten Loadout Aspiration
- P077: EL Corn Storage and Handling
- P084: RF Precoat Conveying
- P085: RF Soda Ash Aspiration
- P578: FX Precoat Unloading and Conveying
- P579: FX Lime Bag Dumping
- P581: FX Process HCl Fume Control
- P583: FX Spent Precoat Loadout Station

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitation and/or control requirements contained within a Permit to Install for the emissions unit.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** CB Coal Boiler (B004)

**Activity Description:** Emissions from fuel combustion in boiler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
567 mmBtu/hour, pulverized dry bottom coal, natural gas, and No. 2 fuel oil-fired boiler, with baghouse	OAC rule 3745-31-05(A)(3) PTI 08-4215	0.035 lb particulate emissions (PE)/mmBtu of actual heat input (from this emissions unit)  Visible PE shall not exceed 10 percent opacity, as a six-minute average [from the main stack (see A.1.2.a)].  11 lbs/hour and 48.2 TPY carbon monoxide (CO)  1.32 lbs/hour and 5.78 TPY volatile organic compounds (VOC)  2980.2 TPY sulfur dioxide (SO <sub>2</sub> )  The requirements of this rule also include compliance with the requirements of 40 CFR, Part 60, Subpart D and OAC rules 3745-31-05(D), 3745-21-08(B) and 3745-23-06(B).
	NSPS 40 CFR, Part 60, Subpart D	1.2 lbs sulfur dioxide (SO <sub>2</sub> )/mmBtu of actual heat input [from this emissions unit, when burning only coal] (See A.1.2.b.)  0.70 lb nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input, as a 3-hour average [from this emissions unit, when burning only coal] (See A.1.2.c.)

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(D) PTI 08-4215	1037.3 TPY NO <sub>x</sub> , as a rolling, 365-day summation [from this emissions unit]
	OAC rule 3745-17-07(A) OAC rule 3745-17-10(C)(1) OAC rule 3745-18-63(A)	14.5 lbs/hour PE and 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.) The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.e.

**2. Additional Terms and Conditions**

- 2.a** The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The total emissions from the main stack shall not exceed 14.5 lbs PE/hour, 63.51 TPY PE, and 10 percent opacity, as a six-minute average.
- 2.b** When burning coal with natural gas and/or No. 2 fuel oil simultaneously, the allowable SO<sub>2</sub> emission rate shall be determined by prorating using the following equation:

$$PS(SO_2) = \{[y * (0.80) + z * (1.2)] / (y + z)\}^{**}$$

where:

PS(SO<sub>2</sub>) = the prorated SO<sub>2</sub> allowable emission rate when burning different fuels simultaneously, in pounds per mmBtu of heat input [derived from all fuels fired]

y = the percentage of total heat input derived from No. 2 fuel oil

z = the percentage of total heat input derived from coal

\* the natural gas contribution to SO<sub>2</sub> emissions is assumed to be negligible

\*\* taken from 40 CFR 60.43 (Standard for sulfur dioxide)

## 2. Additional Terms and Conditions (continued)

- 2.c** When burning coal with natural gas and/or No. 2 fuel oil simultaneously, the allowable NOx emission rate shall be determined by proration using the following equation:

$$PS(NO_x) = \{[x * (0.20) + y * (0.30) + z * (0.70)] / (x + y + z)\}^{**}$$

where:

PS(NO<sub>x</sub>) = the prorated NO<sub>x</sub> allowable emission rate, as a 3-hour average, when burning different fuels simultaneously, in pounds per mmBtu of heat input [derived from all fuels fired]

x = the percentage of total heat input derived from natural gas

y = the percentage of total heat input derived from No. 2 fuel oil

z = the percentage of total heat input derived from coal

\*\* taken from 40 CFR 60.44 (Standard for nitrogen oxides)

- 2.d** The 11 lbs CO/hour, 48.2 TPY CO, 1.32 lbs VOC/hour, 5.78 TPY VOC and 2980.2 TPY SO<sub>2</sub> emission limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.e** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4215.

## II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.
2. The coal and No. 2 fuel oil burned in this emissions unit shall have sulfur contents that are sufficient to comply with the allowable emission limits in Section A.I. above.

## III. Monitoring and/or Record Keeping Requirements

1. To obtain an exemption from the visible PE limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of two hundred eighty (280) degrees Fahrenheit and (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of two hundred eighty (280) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
4. The permittee shall collect a representative sample of each shipment of coal which is received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA or Local Air Agency.

The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for ash content, sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu) for the composite sample.

5. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

### III. Monitoring and/or Record Keeping Requirements (continued)

6. The permittee shall maintain monthly records of the following information for all shipments of coal and oil received for burning in this emissions unit during the calendar month:
- The total quantity of coal received, in tons.
  - The results of the analyses for ash content (percent), sulfur content (percent) and heat content (Btu/pound) of the coal received.
  - The total quantity of oil received, in gallons.
  - The results of the analyses for sulfur content (percent) and heat content (Btu/gallon) of the oil received .
  - The calculated prorated allowable SO<sub>2</sub> emission rate, in lbs/mmBtu (see A.I.2.b).
  - The calculated average SO<sub>2</sub> emission rate, in lbs/mmBtu of actual heat input, for all the fuels received for this emissions unit (see calculation methodology in A.V.1.d).
7. The permittee shall operate and maintain existing equipment to continuously monitor and record the NO<sub>x</sub> emissions from this emissions unit in lb/mmBtu. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain records of all data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to, parts per million NO<sub>x</sub> on an instantaneous (one-minute) basis, emissions of NO<sub>x</sub> in lb/mmBtu, as a 3-hour average, results of daily zero/span calibration checks and magnitude of manual calibration adjustments.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.

8. The permittee shall maintain daily records of the following for this emissions unit:
- The calculated prorated allowable NO<sub>x</sub> emission rate, in lbs/mmBtu (see A.I.2.c).
  - The NO<sub>x</sub> emission rate, in pounds, calculated as follows:

$ER = \text{summation of } [(X) * (Y) * (Z)] \text{ for fuel oil, natural gas and coal}$

where:

ER = the calculated NO<sub>x</sub> emission rate, in lbs/day

X = the NO<sub>x</sub> emission factor, in lbs/mmBtu, as a daily average from the continuous NO<sub>x</sub> monitoring system

Y = the fuel usage, in tons/day of coal, gallons of fuel oil and cubic feet of natural gas

Z = the fuel heat content, using the results of the fuel analysis for heat content of coal and oil, and 1,020 Btu/cu.ft of natural gas

- The rolling, 365-day summation of the monthly NO<sub>x</sub> emission rates, in tons.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.1.
  - b. All exceedances of the rolling, 365-day NO<sub>x</sub> emission limitation of 1037.3 tons.
  - c. All exceedances of the lbs/mmBtu SO<sub>2</sub> emission limitation of 1.2.

These reports shall be due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit reports within 30 days following the end of each calendar quarter to the the RAPCA documenting all instances of opacity values in excess of the limitations established pursuant to OAC rule 3745-31-05, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known) and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

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

The permittee shall submit a summary of the excess emission report pursuant to 40 CFR, Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

#### IV. Reporting Requirements (continued)

3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any), of all instances of NO<sub>x</sub> values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NO<sub>x</sub> emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO<sub>x</sub> monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation-  
0.035 lb PE/mmBtu of actual heat input

Applicable Compliance Method-

Compliance with the limitation above shall be based on the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A. (Compliance with this limit was last demonstrated during a stack test conducted on August 23, 2000. The tested PE rate was 0.0313 lb PE/mmBtu of actual heat input.)

- 1.b Emission Limitation -  
14.5 lbs/hour PE (from the main stack)

Applicable Compliance Method -

Compliance with the limitation above shall be based on the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.c Emission Limitation -  
Visible PE shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method -

If required, compliance shall be determined by visible emissions evaluations performed in accordance with USEPA Reference Method 9 of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

- 1.d** Emission Limitation -  
11 lbs CO/hour

Applicable Compliance Method -

Compliance with the hourly allowable CO emission limitation may be determined by multiplying the maximum hourly coal burning capacity of this emissions unit (22 tons/hour) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 0.5 lb CO/ton coal.

If required, compliance shall be based upon stack testing in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.e** Emission Limitation -  
48.2 TPY CO

Applicable Compliance Method -

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.f** Emission Limitation -  
1.32 lbs VOC/hour

Applicable Compliance Method -

Compliance with the hourly allowable VOC emissions limitation may be determined by multiplying the maximum hourly coal burning capacity of this emissions unit (22 tons/hour) by the AP-42, Table 1.1-19 (revised 9/98) emission factor of 0.06 lb VOC/ton coal.

If required, compliance shall be based upon 40 CFR, Part 60, Appendix A, Methods 18, 25 or 25A, as appropriate.

- 1.g** Emission Limitation -  
5.78 TPY VOC

Applicable Compliance Method -

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.h** Emission Limitation -  
2980.2 TPY SO<sub>2</sub>

Applicable Compliance Method -

As long as compliance with the 1.2 lbs SO<sub>2</sub>/mmBtu emission limitation is maintained, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the maximum hourly heat input (mmBtu/hr) by the maximum allowable limitation of 1.2 lbs SO<sub>2</sub>/mmBtu and by 8,760, and then dividing by 2,000).

**V. Testing Requirements (continued)**

- 1.i** Emission Limitation -  
1.2 lbs SO<sub>2</sub>/mmBtu of actual heat input, when burning only coal  
(prorated SO<sub>2</sub> emission rate, in lbs/mmBtu, when burning coal and No. 2 fuel oil, simultaneously)

Applicable Compliance Method -

Compliance shall be determined based on the record keeping and analysis requirements specified in section A.III of this permit, and the use of the equation contained in OAC rule 3745-18-04(F)(1).

If required, compliance shall be based upon stack testing in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

- 1.j** Emission Limitation -  
0.70 lb NO<sub>x</sub>/mmBtu actual heat input, as a 3-hour average, when burning only coal (prorated NO<sub>x</sub> allowable emission rate, in lbs/mmBtu as a 3-hour average, when burning coal and natural gas, No. 2 fuel oil and natural gas, or coal, natural gas and No. 2 fuel oil, simultaneously)

Applicable Compliance Method -

Compliance shall be based upon the continuous NO<sub>x</sub> monitoring system as specified in section A.III.7 of this permit, and the calculated allowable emission rate recorded in section A.III.8 of this permit.

If required, compliance shall be based upon stack testing in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

- 1.k** Emission Limitation -  
1037.3 TPY NO<sub>x</sub>, as a rolling, 365-day summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.8 of this permit.

- 1.l** Emission Limitation -  
63.51 TPY PE, as a rolling, 12-month summation (from the main stack)

Applicable Compliance Method -

As long as compliance with the hourly emission limitation is maintained, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 0.035 lb/mmBtu (from this emissions unit), the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) for the 0.035 lb PE/mmBtu shall be conducted while this emissions unit is operating at its maximum capacity/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office.
  - e. The test(s) for the 14.5 lbs PE/hr shall be conducted while all the emissions units venting to the main stack are operating at their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

Facility Name: **Cargill, Incorporated**

Facility ID: **08-57-04-1124**

Emissions Unit: **CB Coal Boiler (B004)**

## **VI. Miscellaneous Requirements (continued)**

2. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F and Part 75. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** CB Package Boiler 3 (B005)  
**Activity Description:** Emissions from fuel combustion in boiler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
189.6 mmBtu/hour, natural gas- fired boiler #3	OAC rule 3745-31-05(A)(3) PTI 08-4215	0.11 lb/hour sulfur dioxide (SO <sub>2</sub> )  0.30 lb nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input  15.62 lbs/hour carbon monoxide (CO)  1.02 lb/hour volatile organic compounds (VOC)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1), 3745-17-07(A), 3745-31-05(D), 3745-18-06(A), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-4215	0.45 TPY particulate emissions (PE), as a rolling, 12-month summation  0.14 TPY SO <sub>2</sub> , as a rolling, 12-month summation  71.91 TPY NO <sub>x</sub> , as a rolling, 12-month summation  19.74 TPY CO, as a rolling, 12-month summation  1.29 TPY VOC, as a rolling, 12-month summation
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.
	OAC rule 3745-18-06	See A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a** The hourly emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b** OAC rule 3745-18-06 does not establish a sulfur dioxide emission limitation for this "fuel burning equipment" because it only employs natural gas as fuel.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4215.

**II. Operational Restrictions**

- 1. The maximum annual natural gas usage for this emissions unit shall not exceed 470 mm cu. ft, based upon a rolling, 12-month summation of the monthly natural gas usage rates.
- 2. The permittee shall burn only natural gas in this emissions unit.

**III. Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall maintain monthly records of the following for this emissions unit:
  - a. The natural gas usage rate, in mm cu.ft.
  - b. The rolling, 12-month summation of natural gas usage, in mm cu.ft.
  - c. The rolling, 12-month summation of the PE, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emission rates, in tons (see calculation methodologies in section A. V.1.e for PE, section A. V.1.f for SO<sub>2</sub>, section A. V.1.g for NO<sub>x</sub>, section A. V.1.h for CO and section A. V.1.i for VOC).
- 2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month emission limitations for PE, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC of 0.45, 0.14, 71.91, 19.74 and 1.29 tons, respectively.
  - b. All exceedances of the rolling, 12-month natural gas usage restriction of 470 mm cu.ft.
  - c. Each day when a fuel other than natural gas was burned in this emissions unit.

These reports shall be due by the dates prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
0.11 lb/hour SO<sub>2</sub>  
  
Applicable Compliance Method -  
Compliance with the hourly SO<sub>2</sub> allowable emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.186 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm cu.ft.  
  
If required, compliance shall be based upon emission testing in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 6.
  - 1.b Emission Limitation -  
0.30 lb NO<sub>x</sub>/mmBtu of actual heat input  
  
Applicable Compliance Method -  
Compliance may be based upon the manufacturer's guaranteed emission rate of 0.30 lb NO<sub>x</sub>/mmBtu.  
  
If required, compliance shall be based upon emission testing in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.
  - 1.c Emission Limitation -  
15.62 lbs/hour CO  
  
Applicable Compliance Method -  
Compliance with the hourly allowable CO emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.186 mm cu.ft/hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu.ft.  
  
If required, compliance shall be based upon emission testing in accordance with 40 CFR, Part 60, Appendix A, Method 1 through 4 and 10.

**V. Testing Requirements (continued)**

- 1.d** Emission Limitation -  
1.02 lb/hour VOC

Applicable Compliance Method -

Compliance with the hourly allowable VOC emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.186 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu.ft.

If required, compliance shall be based upon emission testing in accordance with 40 CFR, Part 60, Appendix A, Methods 18 or 25, as appropriate.

- 1.e** Emission Limitation -  
0.45 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs PE/mm cu.ft, and dividing by 2000.

- 1.f** Emission Limitation -  
0.14 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm cu.ft, and dividing by 2000.

- 1.g** Emission Limitation -  
71.91 TPY NO<sub>x</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the allowable emission rate of 0.30 lb NO<sub>x</sub>/mmBtu and the heat content of natural gas, and dividing by 2,000.

- 1.h** Emission Limitation -  
19.74 TPY CO, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu.ft, and dividing by 2000.

- 1.i** Emission Limitation -  
1.29 TPY VOC, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu.ft, and dividing by 2000.

**V. Testing Requirements (continued)**

- 1.j** Emission Limitation -  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method -

Compliance with the limitation above may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.186 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs PE (filterable)/mm cu.ft, and dividing by the maximum hourly heat input capacity of the emissions unit (189.6 mmBtu/hour).

If required, compliance shall be based upon the methods specified in OAC rule 3745-17-03(B)(9).

- 1.k** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

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

- 1.l** Operational Limitation -  
470 mm cu.ft natural gas usage, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** CB Package Boiler 4 (B006)  
**Activity Description:** Emissions from fuel combustion in boiler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
318.5 mmBtu/hour, natural gas and No. 2 oil-fired package boiler #4	OAC rule 3745-31-05(A)(3) PTI 08-4215	0.10 lb SO <sub>2</sub> /mmBtu of actual heat input  26.21 lbs/hour carbon monoxide (CO)  1.72 lbs/hour volatile organic compounds (VOC)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-10(B)(1) and 3745-21-08(B) and 3745-23-06(B), and 40 CFR, Part 60, Subpart Db.
	OAC rule 3745-31-05(D) PTI 08-4215	1.15 TPY particulate emissions (PE), as a rolling, 12-month summation  124.3 TPY NO <sub>x</sub> , as a rolling, 12-month summation  9.03 TPY SO <sub>2</sub> , as a rolling, 12-month summation  50.7 TPY CO, as a rolling, 12-month summation  3.32 TPY VOC, as a rolling, 12-month summation
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR, Part 60, Subpart Db	0.20 lb nitrogen oxides (NOx)/mmBtu of actual heat input, as a 30-day rolling average
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20 percent, as a six-minute average, except for one six-minute period per hour of no more than 27 percent opacity. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR, Part 60, Subpart Db.
	OAC rule 3745-18-06(D) (when firing No. 2 fuel oil)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a** The 26.21 lbs/hour CO and 1.72 lbs/hour VOC limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4215.

**II. Operational Restrictions**

1. The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 1,150,000 gallons, based upon a rolling, 12-month summation of the No. 2 fuel oil usage rates.
2. The maximum annual natural gas usage rate for this emissions unit shall not exceed 1,207 mm cu.ft, based upon a rolling, 12-month summation of the monthly natural gas usage rates.
3. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.1%, by weight.
4. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following for this emissions unit:
  - a. An identification of each type of fuel burned.
  - b. The amount of each fuel type burned, in gallons for No. 2 fuel oil, and in mm cu.ft for natural gas.
  - c. The rolling, 12-month summation of the monthly natural gas usage rates, in mm cu. ft.
  - d. The rolling, 12-month summation of the monthly No. 2 fuel oil usage rates, in gallons.
  - e. The rolling, 12-month summation of the PE, NO<sub>x</sub>, SO<sub>2</sub>, CO and VOC emission rates, in tons (see calculation methodologies in section A. V.1.d for PE, section A. V.1.e for SO<sub>2</sub>, section A. V.1.f for NO<sub>x</sub>, section A. V.1.g for CO and section A. V.1.h for VOC).
2. The permittee shall operate and maintain existing equipment to continuously monitor and record NO<sub>x</sub> from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain records of all data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to, parts per million NO<sub>x</sub> on an instantaneous (one-minute) basis, emissions of NO<sub>x</sub>, in lb/mmBtu, as a daily average and a 30-day rolling average, results of daily zero/span calibration checks and magnitude of manual calibration adjustments.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 60 and Part 75. The letter of certification shall be made available to the Director upon request.

3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
5. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO<sub>x</sub> monitoring system designed to ensure continuous valid and representative readings of NO<sub>x</sub> emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR, Part 60, Appendix F and Part 75. The quality assurance/quality control plan and a logbook dedicated to the continuous NO<sub>x</sub> monitoring system must be kept on site and available for inspection during regular office hours.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month natural gas usage restriction of 1,207 mm cu. ft.
  - b. All exceedances of the rolling, 12-month No. 2 fuel oil usage restriction of 1,150,000 gallons.
  - c. All exceedances of the fuel oil sulfur content limitation of 0.1%, by weight.
  - d. All exceedances of the rolling, 12-month emission limitations for PE, NO<sub>x</sub>, SO<sub>2</sub>, CO and VOC of 1.15, 124.3, 9.03, 50.7, 3.32 tons, respectively.
  - e. Each day when a fuel other than natural gas and/or No. 2 fuel oil was burned in this emissions unit.

These reports shall be due by the dates prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any), of all instances of NO<sub>x</sub> values in excess of the applicable limits specified in 40 CFR, Part 75 or any limitations specified in the terms and conditions of this permit. These reports shall also contain the total NO<sub>x</sub> emissions for the calendar quarter (in tons).
3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NO<sub>x</sub> monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
4. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit, control equipment and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar quarter.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

- 1.a** Emission Limitation -  
0.10 lb SO<sub>2</sub>/mmBtu of actual heat input

Applicable Compliance Method -

When firing natural gas, compliance with the limitation above may be determined by multiplying the maximum hourly natural gas burning capacity of the emissions unit (0.312 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm cu.ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (318.5 mmBtu/hour).

When firing No. 2 fuel oil, compliance may be determined by the record keeping and analysis requirements specified in A.III.4 of this permit, and the use of the equation contained in OAC rule 3745-18-04(F)(2).

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

- 1.b** Emission Limitation -  
26.21 lbs CO/hour

Applicable Compliance Method -

When firing natural gas, compliance with the maximum hourly allowable CO emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.312 mm cu.ft/hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu.ft.

When firing No. 2 fuel oil, compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (2325 gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons.

If required, the permittee may demonstrate compliance with the hourly allowable CO emission limitation in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 10.

- 1.c** Emission Limitation -  
1.72 lbs VOC/hour

Applicable Compliance Method -

When firing natural gas, compliance with the hourly allowable VOC emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.312 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu.ft.

When firing No. 2 fuel oil, compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (2325 gallons/hour) by the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb VOC/1000 gallons.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25, or 25A, as appropriate.

## V. Testing Requirements (continued)

**1.d** Emission Limitation -  
1.15 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit and shall be determined by:

- i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs PE /mm cu.ft, and then dividing by 2000;
- ii. multiplying the rolling, 12-month No. 2 fuel oil usage rate (from section A.III.1) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 2 lbs PE /1000 gallons, and then dividing by 2000; and
- iii. summing i and ii above.

**1.e** Emission Limitation -  
124.3 TPY NO<sub>x</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable NO<sub>x</sub> emission limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

- i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the manufacturer's emission factor of 0.20 lb NO<sub>x</sub>/mmBtu and by the heat content of natural gas, and then dividing by 2000;
- ii. multiplying the rolling, 12-month No. 2 fuel oil usage rate (from section A.III.1) by the manufacturer's emission factor of 0.20 lb NO<sub>x</sub>/mmBtu and by the heat content of fuel oil, and then dividing by 2000; and
- iii. summing i and ii above.

**1.f** Emission Limitation -  
9.03 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable SO<sub>2</sub> emission limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

- i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm cu.ft, and then dividing by 2000;
- ii. In accordance with the calculation stated in OAC rule 3745-18-04(F)(2), calculate the emission rate in lbs/mmBtu; then multiply the calculated lbs/mmBtu by the rated capacity of the emissions unit in mmBtu/hr, multiply by 8,760 hrs/yr and divide by 2000lbs/ton.

$ER = (1,000,000) / H \times S \times 1.974$ , where;

ER = the emission rate in pounds of sulfur dioxide per mmBtu.

H = the heat content of the liquid fuel in Btu per gallon

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel

- iii. summing i and ii above.

## V. Testing Requirements (continued)

- 1.g** Emission Limitation -  
50.7 TPY CO, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable CO emission limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

- i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu.ft, and then dividing by 2000;
- ii. multiplying the rolling, 12-month No. 2 fuel oil usage rate (from section A.III.1) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons, and then dividing by 2000; and
- iii. summing i and ii above.

- 1.h** Emission Limitation -  
3.32 TPY VOC, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable VOC emission limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

- i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu.ft, and then dividing by 2000;
- ii. multiplying the rolling, 12-month No. 2 fuel oil usage rate (from section A.III.1) by the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb VOC/1000 gallons, and then dividing by 2000; and
- iii. summing i and ii above.

- 1.i** Emission Limitation -  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method -

When burning natural gas, compliance with the limitation above may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.312 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs PE/mm cu.ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (318.5 mmBtu/hour).

When firing No. 2 fuel oil, compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (2325 gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 2 lbs particulates/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (318.5 mmBtu/hour).

If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

- 1.j** Emission Limitation -  
0.20 lb NOx/mmBtu of actual heat input, as a 30-day rolling average

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in sections A.III.1. and A.III.3 of this permit.

## **V. Testing Requirements (continued)**

**1.k** Emission Limitation-

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method-

If required, compliance shall be determined by visible emissions evaluations performed in accordance with USEPA Reference Method 9, 40 CFR, Part 60, Appendix A

**1.l** Operational Limitation -

1,150,000 gallons No. 2 fuel oil usage, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.m** Operational Limitation -

1207 mm cu.ft natural gas usage as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.n** Operational Limitation -

fuel oil sulfur content of 0.1% by weight

Applicable Compliance Method -

Compliance shall be based upon the fuel oil supplier's analysis pursuant to section A.III.4 of this permit.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** CB Thermal Oxidizer (B009)

**Activity Description:** Emissions from fuel combustion in process heater unit.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
95 mmBtu/hour, natural gas and No. 2 fuel oil-fired thermal oxidizer	OAC rule 3745-31-05(A)(3) PTI 08-4215	0.10 lb SO <sub>2</sub> /mmBtu of actual heat input  16.6 lbs/hour nitrogen oxides (NO <sub>x</sub> )  7.82 lbs/hour and 34.25 TPY carbon monoxide (CO)  0.51 lb/hour and 2.24 TPY volatile organic compounds (VOC)  Opacity shall not exceed 10 percent, as a six-minute average [from the main stack (see A.I.2.a)].  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1), 3745-31-05(D), 3745-21-08(B), 3745-18-06(E) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-4215	2.24 TPY particulate emissions (PE), as a rolling, 12-month summation  6.20 TPY SO <sub>2</sub> , as a rolling, 12-month summation  40.73 TPY NO <sub>x</sub> , as a rolling, 12-month summation  14.5 lbs/hour PE and 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-11(B)(1)	0.551 lbs/hr PE

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.
	OAC rule 3745-18-06(E)	Exempt, pursuant to OAC rule 3745-18-06(C) (the process weight rate for this emissions unit is less than 1,000 lbs/hr).

**2. Additional Terms and Conditions**

- 2.a** The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The total emissions from the main stack shall not exceed 14.5 lbs PE/hour, 63.51 TPY PE, and 10 percent opacity, as a six-minute average.
- 2.b** The 9.3 lbs/hour NOx, 7.82 lbs/hour CO and 0.51 lb/hour VOC emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4215.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

**II. Operational Restrictions**

- 1.** The average combustion temperature within the thermal oxidizer for any 3-hour block of time when the emissions unit is in operation, shall not be less than 800 degrees Fahrenheit.
- 2.** The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 790,000 gallons, based upon a rolling, 12-month summation of the monthly No. 2 fuel oil usage rates.
- 3.** The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.1%, by weight.
- 4.** The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following for this emissions unit:
  - a. An identification of each type of fuel burned.
  - b. The amount of each fuel type burned, in gallons for No. 2 fuel oil, and in mm cu.ft for natural gas.
  - c. The rolling, 12-month summation of the monthly natural gas usage rates, in mm cu. ft.
  - d. The rolling, 12-month summation of the monthly No. 2 fuel oil usage rates, in gallons.
  - e. The rolling, 12-month summation of the PE, NO<sub>x</sub> and SO<sub>2</sub> emission rates, in tons (see calculation methodologies in section A.V.1.i for SO<sub>2</sub>, section A. V.1.j for NO<sub>x</sub>, and section A. V.1.k for PE).
2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was less than 800 degrees Fahrenheit.
  - b. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
3. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content and heat content. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer did not comply with the temperature limitation specified above.
  - b. All exceedances of the rolling, 12-month No. 2 fuel oil usage restriction of 790,000 gallons.
  - c. All exceedances of the fuel oil sulfur content limitation of 0.1%, by weight.
  - e. All exceedances of the rolling, 12-month limitations for PE, SO<sub>2</sub> and NO<sub>x</sub> of 0.79, 6.20 and 40.73 tons, respectively.
  - f. Each day when a fuel other than natural gas and/or No. 2 fuel oil was burned in this emissions unit.

These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).

2. The permittee shall submit quarterly summary reports that include a log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.1 lb SO<sub>2</sub>/mmBtu of actual heat input

Applicable Compliance Method -

When firing natural gas, compliance with the limitation above may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.093 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm cu.ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (95 mmBtu/hour).

When firing No. 2 fuel oil, compliance may be based upon the record keeping and analysis requirements specified in section A.III.3. of this permit, and the use of the equation contained in OAC rule 3745-18-04(F)(2).

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

- 1.b Emission Limitation -  
16.6 lbs NO<sub>x</sub>/hour

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (693 gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for fuel oil, of 24 lbs NO<sub>x</sub>/1000 gallons.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

**V. Testing Requirements (continued)**

- 1.c** Emission Limitation -  
14.5 lbs/hour PE (from the main stack)

Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

- 1.d** Emission Limitation -  
7.82 lbs CO/hour

Applicable Compliance Method -  
When firing natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.093 mm cu.ft/hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu.ft.

When firing No. 2 fuel oil, compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (693 gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5 lbs CO/1000 gallons.

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

- 1.e** Emission Limitation -  
34.25 TPY CO

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2000).

- 1.f** Emission Limitation -  
0.51 lb VOC/hour

Applicable Compliance Method -  
When firing natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.093 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu.ft.

When firing No. 2 fuel oil, compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (693 gallons/hour) by the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb VOC/1000 gallons.

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

- 1.g** Emission Limitation -  
2.24 TPY VOC

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2000).

**V. Testing Requirements (continued)**

- 1.h** Emission Limitation -  
10% opacity, as a six-minute average (from the main stack)

Applicable Compliance Method -

If required, compliance shall be determined by visible emissions evaluations performed in accordance with USEPA Reference Method 9, 40 CFR, Part 60, Appendix A.

- 1.i** Emission Limitation -  
6.20 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable SO<sub>2</sub> emission limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm cu.ft, and then dividing by 2000;

ii. In accordance with the calculation stated in OAC rule 3745-18-04(F)(2), calculate the emission rate in lbs/mmBtu; then multiply the calculated lbs/mmBtu by the rated capacity of the emissions unit in mmBtu/hr, multiply by 8,760 hrs/yr and divide by 2000lbs/ton.

$ER = (1,000,000) / H \times S \times 1.974$ , where;

ER = the emission rate in pounds of sulfur dioxide per mmBtu.

H = the heat content of the liquid fuel in Btu per gallon

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel

iii. summing i and ii above.

- 1.j** Emission Limitation -  
40.73 TPY NO<sub>x</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

i. multiplying the rolling, 12-month natural gas usage rate (from section A.III.1) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 100 lbs NO<sub>x</sub>/mm cu.ft, and then dividing by 2000;

ii. multiplying the rolling, 12-month No. 2 fuel oil usage rate (from section A.III.1) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 24 lbs NO<sub>x</sub>/1000 gallons, and then dividing by 2000; and

iii. summing i and ii above.

## V. Testing Requirements (continued)

**1.k** Emission Limitation -  
0.79 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit, and shall be determined by:

i. multiplying the rolling, 12-month natural gas usage rates (from section A.III.1) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs PE /mm cu.ft, and then dividing by 2000;

ii. multiplying the rolling, 12-month No. 2 fuel oil usage rates by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 2 lbs PE /1000 gallons, and then dividing by 2000; and

iii. summing i and ii above.

**1.l** Emission Limitation -  
63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8,760 and then dividing by 2,000).

**1.m** Emission Limitation -  
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method -

When firing natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (0.093 mm cu.ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs particulates/mm cu.ft, divided by the maximum hourly heat input capacity of the emissions unit (95 mmBtu/hour).

When firing No. 2 fuel oil, compliance may be determined by multiplying the hourly fuel burning capacity of the emissions unit (693 gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor of 2 lbs particulates/1000 gallons, divided by the maximum hourly heat input capacity of the emissions unit (95 mmBtu/hour).

If required, the permittee may demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

**1.n** Operational Limitation -  
790,000 gallons No. 2 fuel oil as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.o** Operational Limitation -  
fuel oil sulfur content of 0.1%, by weight

Applicable Compliance Method -

Compliance shall be based upon the fuel oil supplier's analysis as specified in section A.III.3 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) for the 14.5 lbs PE/hr shall be conducted while all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** MH Starch Modification Process (P004)

**Activity Description:** Emissions from aspiration of 9 starch modification tanks and related process equipment.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
modhouse starch modification tanks, with packed tower scrubber	OAC rule 3745-31-02(A)(2) PTI 08-4145	0.89 lb/hour sulfur dioxide (SO <sub>2</sub> )
		14.52 lbs/hour and 63.58 TPY volatile organic compounds (VOC) [from this emissions unit]
		15.86 lbs/hour and 69.48 TPY total combined hazardous air pollutants (HAPs) [from this emissions unit]
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-4145	3.90 TPY SO <sub>2</sub> , as a rolling, 12-month summation
		14.52 lbs/hour and 63.58 TPY* VOC [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]
		15.86 lbs/hour and 69.48 TPY* total HAPs [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]
		* based on a rolling, 12-month summation

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** The 14.52 lbs/hour VOC, 63.58 TPY VOC, 15.86 lbs/hour total combined HAPs, 69.48 TPY total combined HAPs (for this emissions unit) and 0.89 lb SO<sub>2</sub>/hr, 3.90 TPY SO<sub>2</sub> emission limitation were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b** This emissions unit is currently inactive. If this emissions unit remains shut down for more than 2 years, before it recommences operation, the permittee may be required to comply with all federal and Ohio EPA new source review requirements and federal New Source Performance Standards that are applicable, and demonstrate compliance with all applicable emission limitations and control requirements by performing emission testing in accordance with the approved U.S. EPA methods and procedures. The permittee shall notify RAPCA at least 60 days prior to recommencing operation of this emissions unit.

## II. Operational Restrictions

1. The pH of the scrubber liquor shall be maintained at or above 7.0, as an average for each 8-hour shift.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 10 gallons per minute at all times while the emissions unit is in operation.
4. The maximum annual oxidized starch production rate for emissions units P004, P014, P015, P016, P017, P038 and P051, combined, shall not exceed 98,550 tons, as a rolling, 12-month summation of the monthly oxidized starch production rates.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect and record the following information each day while the emissions unit is in operation:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The scrubber water flow rate, in gallons per minute, on a once per day basis.
  - c. The pH of the scrubber liquor, as an average for each 8-hour shift.
  - d. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment.
4. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The oxidized starch production rate, in tons.
  - b. The number of hours the emissions unit was in operation.
  - c. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons.
  - d. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average), calculated as follows:
    - i. for VOC, multiply the oxidized starch production rate (from section A.III.4.a, tons/month) by the most recent facility-derived VOC emission factor (lbs VOC/ton oxidized starch produced), and then divide by the number of hours of operation, from section A.III.4.b; and
    - ii. for HAPs, multiply the oxidized starch production rate (from section A.III.4.a, tons/month) by the most recent facility-derived HAPs emission factor (lbs HAPs/ton oxidized starch produced), and then divide by the number of hours of operation, from section A.III.4.b.
  - e. The rolling, 12-month summations of the monthly VOC and total combined HAPs emission rates, in tons, calculated as follows:
    - i. for VOC, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.4.c, tons) by the most recent facility-derived VOC emission factor (lbs VOC/ton oxidized starch produced); and
    - ii. for HAPs, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.4.c, tons) by the most recent facility-derived HAPs emission factor (lbs HAPs/ton oxidized starch produced).
5. The permittee shall maintain monthly records of the following information for emissions units P004, P014, P015, P016, P017, P038 and P051, combined:
  - a. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons (calculated by summing the rolling, 12-month summation of the monthly starch production rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
  - b. The rolling, 12-month summation of the VOC and total combined HAPs emission rates, in tons (calculated by summing the rolling, 12-month VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
  - c. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average) (calculated by summing the average hourly VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All periods of time during which the scrubber liquor pH did not comply with the pH level specified above.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required level.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required level.
  - d. All exceedances of the rolling, 12-month oxidized starch production rate restriction of 98,550 tons (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined).
  - e. All exceedances of the rolling, 12-month VOC and total HAP emission limitations (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 63.58 and 69.48 tons, respectively.
  - f. All exceedances of the hourly VOC and total HAPs emission limitations (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 14.52 and 15.86 pounds, respectively.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under (A)(1).

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

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.89 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance with the hourly allowable SO<sub>2</sub> emission limitation may be determined by multiplying the permittee's estimated maximum concentration of SO<sub>2</sub> in the air stream (0.000000757 lb SO<sub>2</sub>/cu.ft of air flow) by the maximum air flow rate of this emissions unit (cu. ft/hr), and by 60.

If required, compliance shall be demonstrated in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

- 1.b Emission Limitation -  
14.52 lbs/hour VOC (from this emissions unit)

Applicable Compliance Method -

Compliance with the hourly allowable VOC emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the hourly allowable VOC emission limitation shall also be determined based on the record keeping requirements established in section A.III.4 of this permit.

**V. Testing Requirements (continued)**

- 1.c** Emission Limitation -  
63.58 TPY VOC (from this emissions unit)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.d** Emission Limitation -  
15.86 lbs/hour (total combined HAPs from this emissions unit)

Applicable Compliance Method -

Compliance with the hourly allowable HAPs emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the hourly allowable HAPs emission limitation shall also be determined based on the record keeping requirements established in section A.III.4 of this permit.

- 1.e** Emission Limitation -  
69.48 TPY total combined HAPs (from this emissions unit)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.f** Emission Limitation -  
3.90 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the hourly SO<sub>2</sub> emission limitation is maintained, compliance with the annual SO<sub>2</sub> emission limitation shall be assumed (the annual limitation was determined by multiplying the hourly limitation by 8760, and then dividing by 2000).

- 1.g** Emission Limitation -  
14.52 lbs/hour VOC (from emissions units P004, P014, P015, P016, P017, P038 and P051, combined)

Applicable Compliance Method -

Compliance with the hourly allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.

If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- 1.h** Emission Limitation -  
63.58 TPY VOC, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]

Applicable Compliance Method -

Compliance with the annual allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.

**V. Testing Requirements (continued)**

- 1.i** Emission Limitation -  
15.86 lbs/hour (total combined HAPs from emissions units P004, P014, P015, P016, P017, P038 and P051, combined)
- Applicable Compliance Method -  
Compliance with the hourly allowable HAPs emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.
- If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.
- 1.j** Emission Limitation -  
69.48 TPY, as a rolling, 12-month summation (total combined HAPs from emissions units P004, P014, P015, P016, P017, P038 and P051, combined)
- Applicable Compliance Method -  
Compliance with the annual allowable HAPs emission limitation shall be determined based on the record keeping requirements established in sections A.III.4 and 5 of this permit.
- 1.k** Operational Limitation -  
98,550 tons oxidized starch production, as a rolling, 12-month summation
- Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.4 and 5 of this permit.
- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within six months following final issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the hourly limitations for VOC and HAPs. The permittee shall also determine the emission factors for VOC and HAPs, in lbs/ton of oxidized starch.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. for VOCs, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A; and
    - ii. for HAPs, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.
- Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity/worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
modhouse starch modification tanks, with packed tower scrubber	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit (P004) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: formaldehyde

TLV STEL/C (mg/m3): 0.368

Maximum Hourly Emission Rate (lbs/hr): 0.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.014

MAGLC (ug/m3): 6.46

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber Cooler (P008)

**Activity Description:** Emissions from processing of fiber through rotary cooler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber cooler, with cyclone control, venting to B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)
	OAC rule 3745-31-05(D) PTI 08-3290	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).  14.5 lbs/hour particulate emissions (PE), 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The total emissions from the main stack shall not exceed 14.5 lbs PE/hour, 63.51 TPY PE, and 10 percent opacity, as a six-minute average.
- All the emissions from this emissions unit are vented through a cyclone and into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.

##### II. Operational Restrictions

- The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons. These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under (A)(1).

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance with the hourly allowable PE limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
10% opacity, as a six-minute average (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** MH Starch Dryer 1 (P014)

**Activity Description:** Emissions from flash drying of starch in a gas-fired dryer and 4 associated product recovery cyclones.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
modhouse starch dryer #1, with cyclone and tray scrubber	OAC rule 3745-31-05(A)(3) PTI 08-4145	5.0 lbs/hour particulate emissions (PE)  0.01 lb/hour sulfur dioxide (SO <sub>2</sub> )  3.4 lbs/hour nitrogen oxides (NO <sub>x</sub> )  1.31 lbs/hour carbon monoxide (CO)  8.14 lbs/hour and 35.65 TPY volatile organic compounds (VOC) [from this emissions unit]  8.81 lbs/hour and 38.59 TPY total combined hazardous air pollutants (HAPs) [from this emissions unit]  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-21-08(B), 3745-23-06(B) and 3745-31-05(D).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(D) PTI 08-4145	21.9 TPY PE, as a rolling, 12-month summation  0.04 TPY SO <sub>2</sub> , as a rolling, 12-month summation  14.93 TPY NO <sub>x</sub> , as a rolling, 12-month summation  5.74 TPY CO, as a rolling, 12-month summation  14.52 lbs/hour VOC and 63.58 TPY VOC, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]  15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY total combined HAPs, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20%, as a six-minute average, except as otherwise provided by rule.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation specified pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation specified pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The 0.01 lb/hour SO<sub>2</sub>, 3.4 lbs/hour NO<sub>x</sub>, 1.31 lbs/hour CO, 8.14 lbs/hour VOC, 35.65 TPY VOC, 8.81 lbs/hour total combined HAPs, and 38.59 TPY total combined HAPs limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

## **2. Additional Terms and Conditions (continued)**

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4145.
- 2.c** This emissions unit is currently inactive. If this emissions unit remains shut down for more than 2 years, before it recommences operation, the permittee may be required to comply with all federal and Ohio EPA new source review requirements and federal New Source Performance Standards that are applicable, and demonstrate compliance with all applicable emission limitations and control requirements by performing emission testing in accordance with the approved U.S. EPA methods and procedures. The permittee shall notify RAPCA at least 60 days prior to recommencing operation of this emissions unit.

## **II. Operational Restrictions**

1. The maximum annual process throughput rate for this emissions unit shall not exceed 100,740 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 5 inches of water at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 250 gallons per minute at all times while the emissions unit is in operation.
4. The maximum annual oxidized starch production rate for emissions units P004, P014, P015, P016, P017, P038 and P051, combined, shall not exceed 98,550 tons, as a rolling, 12-month summation of the monthly oxidized starch production rates.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
  - c. The amount of natural gas combusted, in mm cu. ft

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The oxidized starch production rate, in tons.
  - b. The number of hours the emissions unit was in operation.
  - c. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons.
  - d. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average), calculated as follows:
    - i. for VOC:
      - (a) multiply the oxidized starch production rate (from section A.III.2.a, tons/month) by the most recent facility-derived emission factor (lb VOC/ton of oxidized starch produced) [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance], and then divide by the number of hours of operation, from section A.III.2.b;
      - (b) multiply the natural gas consumption (from section A.III.1.c above) for this emissions unit by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu ft, and then divide by the number of hours of operation, from section A.III.2.b ;
      - (c) sum (a) + (b); and
    - ii. for HAPs:
      - (a) multiply the oxidized starch production rate (from section A.III.2.a, tons/month) by the most recent facility-derived HAPs emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lbs HAPs/ton oxidized starch produced), and then divide by the number of hours of operation, from section A.III.2.b;
      - (b) multiply the natural gas consumption (from section A.III.1.c above) for this emissions unit by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu ft, and then divide by the number of hours of operation, from section A.III.2.b ; and
      - (c) sum (a) + (b).
  - e. The rolling, 12-month summations of the monthly VOC and total combined HAPs emission rates, in tons, calculated as follows:
    - i. for VOC, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.2.c, tons) by the most recent facility-derived VOC emission factor of (lbs VOC/ton oxidized starch produced); and
    - ii. for HAPs, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.2.c, tons) by the most recent facility-derived HAPs emission factor (lbs HAPs/ton oxidized starch produced).

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain monthly records of the following information for emissions units P004, P014, P015, P016, P017, P038 and P051, combined:
  - a. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons (calculated by summing the rolling, 12-month summation of the monthly starch production rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
  - b. The rolling, 12-month summation of the VOC and total combined HAPs emission rates, in tons (calculated by summing the rolling, 12-month VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
  - c. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average) (calculated by summing the average hourly VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
- b. The scrubber water flow rate, in gallons per minute, on a continuous basis.
- c. A log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 108,740 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required level.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.
  - d. All exceedances of the rolling, 12-month oxidized starch production rate restriction of 98,550 tons (for emission units P004, P014, P015, P016, P017, P038 and P051, combined).
  - e. All exceedances of the rolling, 12-month VOC and total HAP emission limitations (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 63.58 and 69.48 tons, respectively.
  - f. All exceedances of the hourly VOC and total HAPs emission limitations (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 14.52 and 15.86 pounds, respectively.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under (A)(1).

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

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation -  
5.0 lbs/hour PE

Applicable Compliance Method -

Compliance with the hourly allowable PE may be determined by multiplying the maximum hourly starch capacity of this emissions unit (cu. ft/hr) by the facility-derived emission factor of 0.14 lb PE/ton of starch (as determined during a stack test conducted on April 5, 1995).

If required, compliance shall be based upon Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

1.b Emission Limitation -  
0.01 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance with the hourly allowable SO<sub>2</sub> emissions may be determined by multiplying the maximum hourly natural gas burning capacity of this emissions unit (0.0156 mm cu ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/mm (cu. ft).

If required, compliance shall be based upon Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

1.c Emission Limitation -  
3.4 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

Compliance with the hourly allowable NO<sub>x</sub> emissions may be determined by multiplying the maximum hourly starch capacity of this emissions unit (tons/hr) by the facility-derived emission factor of 0.3 lb NO<sub>x</sub>/ton of starch.

If required, compliance with the hourly allowable NO<sub>x</sub> emissions shall be determined based upon Methods 1 through 4 and 7 of CFR, Part 60, Appendix A.

1.d Emission Limitation -  
1.31 lbs/hour CO

Applicable Compliance Method -

Compliance with the hourly allowable CO emissions may be determined by multiplying the maximum hourly natural gas burning capacity of this emissions unit (0.0156 mm cu ft/hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu ft.

If required, compliance shall be determined based upon Method 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

- 1.e** Emission Limitation -  
8.14 lbs/hour VOC (for this emissions unit)

Applicable Compliance Method -

Compliance with the hourly allowable VOC emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the hourly allowable VOC emission limitation shall also be determined based on the record keeping requirements established in section A.III.2 of this permit.

Compliance with the hourly allowable VOC emissions may also be determined by the following:

- i. multiply the maximum hourly natural gas burning capacity of this emissions unit (0.0156 mm cu ft/hour) by the AP-42, Table 1.4-2 (7/98) emission factor of 5.5 lbs VOC/mm cu ft;
- ii. multiply the maximum hourly oxidized starch production rate from this emissions unit by the facility-derived VOC emission factor of 1.29 lbs VOC/ton oxidized starch produced; and
- iii. sum i. and ii. above.

- 1.f** Emission Limitation -  
35.65 TPY VOC (for this emissions unit)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing 2000).

- 1.g** Emission Limitation -  
8.81 lbs/hour total combined HAPs (for this emissions unit)

Applicable Compliance Method -

Compliance with the hourly allowable HAPs emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the hourly allowable HAPs emission limitation shall also be determined based on the record keeping requirements established in section A.III.2 of this permit.

- 1.h** Emission Limitation -  
38.59 TPY (total combined HAPs for this emissions unit)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.i** Emission Limitation -  
21.9 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

**V. Testing Requirements (continued)**

- 1.j** Emission Limitation -  
0.04 TPY SO<sub>2</sub>

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.k** Emission Limitation -  
14.93 TPY NO<sub>x</sub>

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.l** Emission Limitation -  
5.74 TPY CO

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.m** Emission Limitation -  
14.52 lbs/hour VOC (for emissions units P004, P014, P015, P016, P017, P038, and P051, combined)

Applicable Compliance Method -

Compliance with the hourly allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- 1.n** Emission Limitation -  
63.58 TPY VOC, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]

Applicable Compliance Method -

Compliance with the annual allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

- 1.o** Emission Limitation -  
15.86 lbs/hour (total combined HAPs for emissions units P004, P014, P015, P016, P017, P038 and P051, combined)

Applicable Compliance Method -

Compliance with the hourly allowable HAPS emission limitation shall be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

**1.p** Emission Limitation -  
69.48 TPY total combined HAPs (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined)

Applicable Compliance Method -  
Compliance with the annual allowable HAP emission limitation may be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

**1.q** Emission Limitation -  
Opacity shall not exceed 20%, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

**1.r** Operational Limitation -  
100,740 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.s** Operational Limitation -  
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.2 of this permit.

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

- a. The emission testing shall be conducted within six months following final issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the hourly limitations for VOC and HAPs. The permittee shall also determine the emission factors for VOC and HAPs, in lbs/ton of oxidized starch.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
  - i. for VOCs, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A; and
  - ii. for HAPs, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity/worst-case representative conditions, unless otherwise specified or approved by the RAPCA.

## **V. Testing Requirements (continued)**

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
modhouse starch dryer #1, with cyclone and tray scrubber	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit (P014) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: chloroform

TLV (mg/m3): 48.83

Maximum Hourly Emission Rate (lbs/hr): 0.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.8434

MAGLC (ug/m3): 1163

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Steep Tanks Aspiration (P024)  
**Activity Description:** Emissions from aspiration of steep tanks and steep screens.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
north mill steep tanks aspiration, with tray wet scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	0.272 lb/hour particulate emissions (PE)  0.68 lb/hour sulfur dioxide (SO <sub>2</sub> )  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	0.567 TPY PE, as a rolling, 12-month summation  2.97 TPY SO <sub>2</sub> , as a rolling, 12-month summation
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The 0.68 lb/hour SO<sub>2</sub>, 2.97 TPY SO<sub>2</sub> and 0.272 lb/hour PE limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

## II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 1,635,200 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 8 gallons per minute at all times while the emissions unit is in operation.
4. The pH of the scrubber liquor shall be maintained at or above 7.0, as an average for each 8-hour shift.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
  - c. The rolling, 12-month summation of the monthly PE rates, in tons, calculated by multiplying the rolling, 12-month process throughput rate (from section A.III.1.b) by the most recent facility-derived emission factor in lbs PE/ton [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton), and then dividing by 2,000 lbs/ton.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The scrubber water flow rate, in gallons per minute, on a once per day basis.
  - c. The pH of the scrubber liquor, as an average for each 8-hour shift.
  - d. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following for this emission unit:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 1,635,200 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required level
  - d. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required levels.
  - e. All exceedances of the rolling, 12-month PE limitation of 0.567 ton.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.272 lb/hour PE

Applicable Compliance Method -

Compliance with the hourly allowable PE limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Also, the hourly allowable PE limitation was established by multiplying the maximum hourly capacity of the emissions unit (tons corn/hour) by the most recent facility-derived emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton).

- 1.b Emission Limitation -  
0.68 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance with the hourly allowable SO<sub>2</sub> emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

Also, Compliance with the hourly allowable SO<sub>2</sub> emission limitation may be determined by multiplying the permittee's estimated maximum concentration of SO<sub>2</sub> in the air stream (0.0000015 lb SO<sub>2</sub>/cu.ft of air flow) by the maximum air flow rate of this emissions unit (cu. ft/hr), and by 60.

- 1.c Emission Limitation -  
0.567 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable emission limitation may be based upon the record keeping requirements specified in section A.III.1 of this permit.

## V. Testing Requirements (continued)

- 1.d** Emission Limitation -  
2.97 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.e** Emission Limitation -  
Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

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

- 1.f** Operational Limitation -  
1,635,200 tons process throughput/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

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

- a. The emission testing shall be conducted within six months after final issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the 0.68 lb/hour SO<sub>2</sub> emission limitation and the 0.272 lb/hr PE limitation.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
  - i. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A; and
  - ii. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity/ worse-case representative conditions, unless otherwise specified or approved by the RAPCA.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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 RAPCA.

Facility Name: **Cargill, Incorporated**  
Facility ID: **08-57-04-1124**  
Emissions Unit: **NM Steep Tanks Aspiration (P024)**

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Mill Aspiration (P025)

**Activity Description:** Emissions from aspiration of various process equipment located in the North Mill.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
north mill aspiration, with packed tower scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	2.07 lbs/hour sulfur dioxide (SO <sub>2</sub> )  The requirements of this rule also include the compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	9.07 TPY SO <sub>2</sub> , as a rolling, 12-month summation
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

2. The 2.07 lbs/hour and 9.07 TPY SO<sub>2</sub> emission limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

##### II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 1,635,200 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 22 gallons per minute at all times while the emissions unit is in operation.
4. The pH of the scrubber liquor shall be maintained at or above 7.0, as an average for each 8-hour shift.

### **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the process throughput rates, in tons.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The scrubber water flow rate, in gallons per minute, on a once per day basis.
  - c. The pH of the scrubber liquor, as an average for each 8-hour shift.
  - d. A log of the downtime for the capture (collection) system, control device and/or monitoring equipment.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 1,635,200 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.
  - d. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required level.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

- 1.a** Emission Limitation -  
2.07 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance with the hourly allowable SO<sub>2</sub> emission limitation shall be based upon the results of emission testing conducted in accordance with methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

- 1.b** Emission Limitation -  
9.07 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.c** Operational Limitation -  
1,635,200 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within six months after final issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the 2.07 lbs/hour SO<sub>2</sub> emission limitation.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity/ worst-case representative conditions, unless otherwise specified or approved by the RAPCA.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber Hammermils (P030)  
**Activity Description:** Emissions from aspiration of six fiber hammermills.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber hammermills, with fabric filter, venting to B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack (See A.I.2.a.)]
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- All the emissions from this emissions unit are vented through a fabric filter and into emissions unit P008, and then into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004.

##### II. Operational Restrictions

- The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## II. Operational Restrictions (continued)

2. The pressure drop across the fabric filter shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

The permittee may petition to the Ohio EPA and RAPCA for reestablishment of the pressure drop range provided the permittee can demonstrate to the Ohio EPA and RAPCA's satisfaction that the new pressure drop range will ensure ongoing compliance and the operating conditions upon which the pressure drop range was previously established are no longer applicable.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the process throughput rates, in tons.
2. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a daily basis, unless a leak detection system is installed. If the permittee properly installs, operates and maintains a fabric filter leak detection system, the permittee may reduce the recording of the pressure drop across the fabric filter to a weekly basis.
3. If a leak detection system is installed, the permittee shall collect and record the following information each day:
  - a. All times during which the fabric filter leak detection system detects a leak.
  - b. The cause of the detected fabric filter leak.
  - c. The corrective measures taken to repair the fabric filter leak and prevent a recurrence.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons and all periods of time during which the pressure drop across the fabric filter did not comply with the allowable range specified above.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10 percent, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).

- 1.d** Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Germ STD 3 (P031)

**Activity Description:** Emissions from rotary steam tube dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
north mill germ steam tube dryer #3, with cyclone, venting to the gluten flash dryer (emissions unit P057)	OAC rule 3745-31-05(A)(3) PTI 08-3290	2.9 lbs/hour particulate emissions (PE) [from the NM gluten flash dryer stack] (See A.I.2.a.)  Opacity shall not exceed 10 percent, as a six-minute average [from the NM gluten flash dryer stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	8.77 TPY PE, as a rolling, 12-month summation, from the NM gluten flash dryer stack (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.d.)

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units P031, P052, P057 and P066, combined, are vented to a common egress point identified as the NM gluten flash dryer stack. The 2.9 lbs/hour and 8.77 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the NM gluten flash dryer stack).

## **2. Additional Terms and Conditions (continued)**

- 2.b** All the emissions from this emissions unit are vented to emissions unit P057, which vents through a scrubber control device and out of the NM gluten flash dryer stack. The scrubber monitoring requirements are contained in the terms and conditions for emissions unit P057. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.
- 2.d** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 179,580 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain monthly records of the following information for emissions units P031, P052, P057 and P066, combined (the NM gluten flash dryer stack):
  - a.** The process throughput (see emissions unit P057 terms and conditions, section A.III.1), in tons.
  - b.** The PE rate, in tons, calculated by multiplying the process throughput rate, from section A.III.1.a above, by the emission factor determined during the most recent performance test (lb PE/ton), and then dividing by 2,000.
  - c.** The rolling, 12-month summation of the monthly PE rates, in tons.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 179,580 tons and the rolling, 12-month PE limitation from the NM gluten flash dryer stack of 8.77 tons.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

## **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a** Emission Limitation -  
2.9 lbs/hour PE (from the NM gluten flash dryer stack)

Applicable Compliance Method -

Compliance with the hourly allowable PE limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

- 1.b** Emission Limitation -  
Opacity shall not exceed 10 percent, as a six-minute average (from the NM gluten flash dryer stack).

Applicable Compliance Method -

Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
8.77 TPY PE, as a rolling, 12-month summation (from the NM gluten flash dryer stack)

Applicable Compliance Method -

Compliance with the annual allowable emission limitation may be based upon the record keeping requirements specified in section A.III.1 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the 2.9 lbs/hour PE limitation and the allowable visible PE (for the NM gluten flash dryer stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the NM gluten flash dryer stack (see A.I.2.a) are operating at their maximum capacities/worst-case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber STD 1 (P032)  
**Activity Description:** Emissions from rotary steam tube dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber steam tube dryer #1, vents to B009, then to fiber predryer cyclones, then to predryer scrubbers to main stack	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour particulate emissions (PE), 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)  OAC rule 3745-18-06(E)	See A.I.2.b.  None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).

## **2. Additional Terms and Conditions (continued)**

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.
- 2.c** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.
- 2.d** All the emissions from this emissions unit are vented through a venturi scrubber and into emissions unit B009, which vents through emissions units P058, P037 and P040. The exhaust gases from emissions units P058, P037 and P040 are vented to two cyclones, and then to two tray scrubbers. The exhaust gases from the tray scrubbers are then vented into the main stack. Monitoring, record keeping, and reporting for the tray scrubbers are included in the specific terms and conditions for the Fiber house steam tube dryers, P037, P040, and P058.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall collect and record the following information each day:
  - a.** A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
- 2.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a.** The process throughput rate, in tons.
  - b.** The rolling, 12-month summation of the process throughput rates, in tons.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a.** All exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

## **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a** Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

**1.b** Emission Limitation -

Opacity shall not exceed 10%, as a six-minute average (from the main stack).

Applicable Compliance Method -

Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

**1.c** Emission Limitation -

63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

**1.d** Operating Limitation -

508,080 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

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

a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:

i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and

ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber STD 2 (P033)  
**Activity Description:** Emissions from rotary steam tube dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber steam tube dryer #2, vents to B009, then to fiber predryers, then to predryer scrubbers to main stack	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour particulate emissions (PE), 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)  OAC rule 3745-18-06(E)	See A.I.2.b.  None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).

## **2. Additional Terms and Conditions (continued)**

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.
- 2.c** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.
- 2.d** All the emissions from this emissions unit are vented through a venturi scrubber and into emissions unit B009, which vents through emissions units P058, P037 and P040. The exhaust gases from emissions units P058, P037 and P040 are vented to two cyclones, and then to two tray scrubbers. The exhaust gases from the tray scrubbers are then vented into the main stack. Monitoring, record keeping, and reporting for tray scrubbers are included in the specific terms and conditions for the Fiber house steam tube dryers, P037, P040, and P058.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall collect and record the following information each day:
  - a.** A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
- 2.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a.** The process throughput rate, in tons.
  - b.** The rolling, 12-month summation of the process throughput rates, in tons.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a.** All exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

## **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a** Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

**1.b** Emission Limitation -

Opacity shall not exceed 10%, as a six-minute average (from the main stack).

Applicable Compliance Method -

Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

**1.c** Emission Limitation -

63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

**1.d** Operating Limitation -

508,080 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

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

a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:

i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and

ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber STD 3 (P034)

**Activity Description:** Emissions from rotary steam tube dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber steam tube dryer #3, vents to B009, then to fiber predryers, then to predryer scrubbers to main stack	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour particulate emissions (PE), 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)  OAC rule 3745-18-06(E)	See A.I.2.b.  None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).

## **2. Additional Terms and Conditions (continued)**

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.
- 2.c** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.
- 2.d** All the emissions from this emissions unit are vented through a venturi scrubber and into emissions unit B009, which vents through emissions units P058, P037 and P040. The exhaust gases from emissions units P058, P037 and P040 are vented to two cyclones, and then to two tray scrubbers. The exhaust gases from the tray scrubbers are then vented into the main stack. Monitoring, record keeping, and reporting for tray scrubbers are included in the specific terms and conditions for the Fiber house steam tube dryers, P037, P040, and P058.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall collect and record the following information each day:
  - a.** A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
- 2.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a.** The process throughput rate, in tons.
  - b.** The rolling, 12-month summation of the process throughput rates, in tons.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a.** All exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

## **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a** Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

**1.b** Emission Limitation -

Opacity shall not exceed 10%, as a six-minute average (from the main stack).

Applicable Compliance Method -

Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

**1.c** Emission Limitation -

63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

**1.d** Operating Limitation -

508,080 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

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

a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:

i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and

ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber Predryer 1 (P037)  
**Activity Description:** Emissions from rotary dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber predryer #1, with cyclone and tray scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	none, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

##### 2. Additional Terms and Conditions

- 2.a The particulate emissions from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY particulate emission rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.

## **2. Additional Terms and Conditions (continued)**

- 2.c** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.
- 2.d** All the emissions from this emissions unit are vented to 6 cyclones, and then to a tray scrubber. The exhaust gases from the tray scrubber are then vented into the main stack.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
- 2.** The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
- 3.** The scrubber water flow rate shall be continuously maintained at a value of not less than 15 gallons per minute at all times while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
- 2.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 3.** The permittee shall collect and record the following information each day:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The water flow rate, in gallons per minute, on a once per day basis.
  - c. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required level

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** MH Starch Dryer 2 (P038)

**Activity Description:** Emissions from flash drying of starch in a steam-heated dryer and 4 associated product recovery cyclones.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
modhouse starch dryer #2, with cyclone and scrubber	OAC rule 3745-31-05(A)(3) PTI 08-4145	5 lbs/hour particulate emissions (PE)  Opacity shall not exceed 10%, as a six-minute average.  6.45 lbs/hour and 28.25 TPY volatile organic compounds (VOC) [from this emissions unit]  7.05 lbs/hour and 30.88 TPY total combined hazardous air pollutants[(HAPs) [from this emissions unit]  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(D) PTI 08-4145	21.9 TPY PE, as a rolling, 12-month summation  14.52 lbs/hour volatile organic compounds (VOC) and 63.58 TPY VOC, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]  15.86 lbs/hour total combined hazardous air pollutants (HAPs) and 69.48 TPY total combined HAPs, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation specified pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- 2.a** The 6.45 lbs/hour VOC, 28.25 TPY VOC, 7.05 lbs/hour total combined HAPs, and 30.88 TPY total combined HAPs limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4145.
- 2.c** This emissions unit is currently inactive. If this emissions unit remains shut down for more than 2 years, before it recommences operation, the permittee may be required to comply with all federal and Ohio EPA new source review requirements and federal New Source Performance Standards that are applicable, and demonstrate compliance with all applicable emission limitations and control requirements by performing emission testing in accordance with the approved U.S. EPA methods and procedures. The permittee shall notify RAPCA at least 60 days prior to recommencing operation of this emissions unit.

## **II. Operational Restrictions**

1. The maximum annual process throughput rate for this emissions unit shall not exceed 100,740 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 6 inches of water at all times while the emissions unit is in operation.
3. The scrubber water flow rate shall be continuously maintained at a value of not less than 350 gallons per minute at all times while the emissions unit is in operation.
4. The maximum annual oxidized starch production rate for emissions units P004, P014, P015, P016, P017, P038 and P051, combined, shall not exceed 98,550 tons, as a rolling, 12-month summation of the oxidized starch production rates.

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
  - c. The amount of natural gas combusted, in mm cu. ft

### III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The oxidized starch production rate, in tons.
  - b. The number of hours the emissions unit was in operation.
  - c. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons.
  - d. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average), calculated as follows:
    - i. for VOC:
      - (a) multiply the oxidized starch production rate (from section A.III.2.a, tons/month) by the most recent facility-derived emission factor (lb VOC/ton of oxidized starch produced) [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance], and then divide by the number of hours of operation, from section A.III.2.b;
      - (b) multiply the natural gas consumption (from section A.III.1.c above) for this emissions unit by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu ft, and then divide by the number of hours of operation, from section A.III.2.b ;
      - (c) sum (a) + (b); and
    - ii. for HAPs:
      - (a) multiply the oxidized starch production rate (from section A.III.2.a, tons/month) by the most recent facility-derived HAPs emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lbs HAPs/ton oxidized starch produced), and then divide by the number of hours of operation, from section A.III.2.b;
      - (b) multiply the natural gas consumption (from section A.III.1.c above) for this emissions unit by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu ft, and then divide by the number of hours of operation, from section A.III.2.b ; and
      - (c) sum (a) + (b).
  - e. The rolling, 12-month summations of the monthly VOC and total combined HAPs emission rates, in tons, calculated as follows:
    - i. for VOC, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.2.c, tons) by the most recent facility-derived emission factor (lb VOC/ton of oxidized starch produced) [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance]; and
    - ii. for HAPs, multiply the rolling, 12-month summation of the monthly oxidized starch production rates (from section A.III.2.c, tons) by the most recent facility-derived emission factor (lb HAPs/ton of oxidized starch produced) [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance].

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain monthly records of the following information for emissions units P004, P014, P015, P016, P017, P038 and P051, combined:
  - a. The rolling, 12-month summation of the monthly oxidized starch production rates, in tons (calculated by summing the rolling, 12-month summation of the monthly starch production rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
  - b. The rolling, 12-month summation of the VOC and total combined HAPs emission rates, in tons (calculated by summing the rolling, 12-month VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
  - c. The average hourly VOC and total combined HAP emission rates, in pounds/hr (average) (calculated by summing the average hourly VOC and total combined HAPs emission rates for emissions units P004, P014, P015, P016, P017, P038 and P051).
4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
- b. The scrubber water flow rate, in gallons per minute, on a continuous basis.
- c. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 100,740 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required level.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required levels.
  - d. All exceedances of the rolling, 12-month oxidized starch production rate restriction of 98,550 tons (for emission units P004, P014, P015, P016, P017, P038 and P051, combined).
  - e. All exceedances of the rolling, 12-month VOC and total HAP emission limitations (from emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 63.58 and 69.48 tons, respectively.
  - g. All exceedances of the hourly VOC and total HAPs emission limitations (from emissions units P004, P014, P015, P016, P017, P038 and P051, combined) of 14.52 and 15.86 pounds, respectively.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under (A)(1).

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

## V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
5 lbs/hour PE  
  
Applicable Compliance Method -  
Compliance with the hourly allowable PE may be determined by multiplying the maximum hourly starch capacity of this emissions unit (tons/hr) by the facility-derived emission factor of 0.14 lb PE/ton of starch (as determined during a stack test conducted on April 5, 1995).  
  
If required, compliance shall be based upon Methods 1 through 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average.  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
6.45 lbs/hour VOC (for this emissions unit)  
  
Applicable Compliance Method -  
Compliance with the hourly allowable VOC emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.  
  
Compliance with the hourly allowable VOC emission limitation shall also be determined based on the record keeping requirements established in section A.III.2 of this permit.
  - 1.d Emission Limitation -  
28.25 TPY VOC (for this emissions unit)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760, and then dividing by 2,000).
  - 1.e Emission Limitation -  
7.05 lbs/hour total combined HAPs (for this emissions unit)  
  
Applicable Compliance Method -  
Compliance with the hourly allowable HAPs emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.  
  
Compliance with the hourly allowable HAPs emission limitation shall also be determined based on the record keeping requirements established in section A.III.2 of this permit.
  - 1.f Emission Limitation -  
30.88 TPY total combined HAPs (for this emissions unit)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation will be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

**V. Testing Requirements (continued)**

**1.g** Emission Limitation -  
21.9 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance with the annual allowable PE limitation may be based upon record keeping requirements specified in section A.III.1 of this permit.

**1.h** Emission Limitation -  
14.52 lbs/hour VOC (from emissions units P004, P014, P015, P016, P017, P038 and P051, combined)

Applicable Compliance Method -  
Compliance with the hourly allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

**1.i** Emission Limitation -  
63.58 TPY VOC, as a rolling, 12-month summation [from emissions units P004, P014, P015, P016, P017, P038 and P051, combined]

Applicable Compliance Method -  
Compliance with the annual allowable VOC emission limitation shall be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

**1.j** Emission Limitation -  
15.86 lbs/hour (total combined HAPs for emissions units P004, P014, P015, P016, P017, P038 and P051, combined)

Applicable Compliance Method -  
Compliance with the hourly allowable HAPS emission limitation shall be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

**1.k** Emission Limitation -  
69.48 TPY total combined HAPs (for emissions units P004, P014, P015, P016, P017, P038 and P051, combined)

Applicable Compliance Method -  
Compliance with the annual allowable HAP emission limitation may be determined based on the record keeping requirements established in sections A.III.2 and 3 of this permit.

**1.l** Operational Limitation -  
100,740 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance with the limitation above shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.m** Operational Limitation -  
98,550 tons oxidized starch production, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within six months following final issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the hourly limitations for VOC and HAPs. The permittee shall also determine the emission factors for VOC and HAPs, in lbs/ton of oxidized starch.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. for VOCs, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A; and
    - ii. for HAPs, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity/worst-case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
modhouse starch dryer #2, with cyclone and scrubber	none	none

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit (P038) was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: chloroform

TLV (mg/m3): 48.83

Maximum Hourly Emission Rate (lbs/hr): 0.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.307

MAGLC (ug/m3): 1163

### III. Monitoring and/or Record Keeping Requirements (continued)

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber Predryer 2 (P040)  
**Activity Description:** Emissions from rotary dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber predryer #2, with cyclone and tray scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour particulate emissions (PE), 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	none, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE limitations and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).

## **2. Additional Terms and Conditions (continued)**

- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.
- 2.c** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.
- 2.d** All the emissions from this emissions unit are vented to 6 cyclones, and then to a tray scrubber. The exhaust gases from the tray scrubber are then vented into the main stack.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
- 2.** The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
- 3.** The scrubber water flow rate shall be continuously maintained at a value of not less than 15 gallons per minute at all times while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
- 2.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 3.** The permittee shall collect and record the following information each day:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The water flow rate, in gallons per minute, on a once per day basis.
  - c. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required level

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

#### **IV. Reporting Requirements (continued)**

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

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Germ STD 2 (P052)  
**Activity Description:** Emissions from rotary steam tube dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
north mill germ steam tube dryer #2, with cyclone, venting to the gluten flash dryer (emissions unit P057)	OAC rule 3745-31-05(A)(3) PTI 08-3290	2.9 lbs/hour particulate emissions (PE) [from the NM gluten flash dryer stack] (See A.I.2.a.)  Opacity shall not exceed 10 percent, as a six-minute average [from the NM gluten flash dryer stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	8.77 TPY PE, as a rolling, 12-month summation, from the NM gluten flash dryer stack (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.
	OAC rule 3745-18-06(E)	none, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.d.)

##### 2. Additional Terms and Conditions

- The PE from emissions units P031, P052, P057 and P066, combined, are vented to a common egress point identified as the NM gluten flash dryer stack. The 2.9 lbs/hour and 8.77 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the NM gluten flash dryer stack).

## **2. Additional Terms and Conditions (continued)**

- 2.b** All the emissions from this emissions unit are vented to emissions unit P057, which vents through a scrubber control device and out of the NM gluten flash dryer stack. The scrubber monitoring requirements are contained in the terms and conditions for emissions unit P057. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.
- 2.d** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 179,580 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a.** The process throughput rate, in tons.
  - b.** The rolling, 12-month summation of the monthly process throughput rates, in tons.
- 2.** The permittee shall maintain monthly records of the following information for emissions units P031, P052, P057 and P066, combined (the NM gluten flash dryer stack):
  - a.** The process throughput (see emissions unit P057 terms and conditions, section A.III.1), in tons.
  - b.** The PE rate, in tons, calculated by multiplying the process throughput rate, from section A.III.1.a above, by the emission factor determined during the most recent performance test (lb PE/ton), and then dividing by 2,000.
  - c.** The rolling, 12-month summation of the monthly PE rates, in tons.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 179,580 tons and the rolling, 12-month PE limitation (from the NM gluten flash dryer stack) of 8.77 tons.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

## **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a** Emission Limitation -  
2.9 lbs/hour PE (from the NM gluten flash dryer stack)

Applicable Compliance Method -

Compliance with the hourly allowable PE limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

### 1.b Emission Limitation -

Opacity shall not exceed 10%, as a six-minute average (from the NM gluten flash dryer stack).

#### Applicable Compliance Method -

Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

### 1.c Emission Limitation -

8.77 TPY PE, as a rolling, 12-month summation (from the NM gluten flash dryer stack)

#### Applicable Compliance Method -

Compliance with the annual allowable emission limitation may be based upon the record keeping requirements specified in section A.III.2 of this permit.

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

- a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the 2.9 lbs/hour PE limitation and the allowable visible PE (for the NM gluten flash dryer stack).
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
  - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
  - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the NM gluten flash dryer stack (see A.1.2.a) are operating at their maximum capacities/worst-case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Stedman Mill 1 (P053)  
**Activity Description:** Emissions from fiber milling equipment.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse stedman mill #1, with a fabric filter, venting to emissions unit B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour particulate emissions (PE), 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- All the emissions from this emissions unit are vented through a fabric filter and into emissions unit P008, and then into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004.

##### II. Operational Restrictions

- The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## II. Operational Restrictions (continued)

2. The pressure drop across the fabric filter shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

The permittee may petition to the Ohio EPA and RAPCA for reestablishment of the pressure drop range provided the permittee can demonstrate to the Ohio EPA and RAPCA's satisfaction that the new pressure drop range will ensure ongoing compliance and the operating conditions upon which the pressure drop range was previously established are no longer applicable.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the process throughput rates, in tons.
2. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a daily basis, unless a leak detection system is installed. If the permittee properly installs, operates and maintains a fabric filter leak detection system, the permittee may reduce the recording of the pressure drop across the fabric filter to a weekly basis.
3. If a leak detection system is installed, the permittee shall collect and record the following information each day:
  - a. All times during which the fabric filter leak detection system detects a leak.
  - b. The cause of the detected fabric filter leak.
  - c. The corrective measures taken to repair the fabric filter leak and prevent a recurrence.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons and all periods of time during which the pressure drop across the fabric filter did not comply with the allowable range specified above.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.d** Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Gluten Flash Dryer (P057)

**Activity Description:** Emissions from gas-fired flash dryer for gluten product, and 6 product recovery cyclones.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
NM gluten flash dryer, with venturi scrubber	OAC rule 3745-31-05(A)(3) PTI 08-4215	12.94 lbs/hour sulfur dioxide (SO <sub>2</sub> )  2.9 lbs/hour particulate emissions (PE) [from the NM gluten flash dryer stack] (See A.1.2.a.)  2.65 lbs/hour and 11.61 TPY nitrogen oxides (NO <sub>x</sub> )  2.18 lbs/hour and 9.55 TPY carbon monoxide (CO)  0.14 lb/hour and 0.63 TPY volatile organic compounds (VOC)  Opacity shall not exceed 10 percent, as a six-minute average [from the NM gluten flash dryer stack] (See A.1.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-4215	32.32 tons SO <sub>2</sub> , as a rolling, 12-month summation  8.77 tons PE, as a rolling, 12-month summation [from the NM gluten flash dryer stack] (See A.1.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.

## 2. Additional Terms and Conditions

- 2.a** The PE from emissions units P031, P052, P057 and P066, combined, are vented to a common egress point identified as the NM gluten flash dryer stack. The 2.9 lbs/hour and 8.77 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the NM gluten flash dryer stack).
- 2.b** The 12.94 lbs/hour SO<sub>2</sub>, 2.65 lbs/hour NO<sub>x</sub>, 2.18 lbs/hour CO, and 0.14 lb/hour VOC emission limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting to ensure compliance with these limits.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-4215.

## II. Operational Restrictions

- 1. The maximum annual process throughput rate for this emissions unit shall not exceed 63,510 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
- 2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
- 3. The pH of the scrubber liquor shall be maintained at or above 6.0, as an average for each 8-hour shift, while the emissions unit is in operation.
- 4. The scrubber water flow rate shall be continuously maintained at a value of not less than 21 gallons per minute at all times while the emissions unit is in operation.
- 5. The maximum annual no. 2 fuel oil usage for this emissions unit shall not exceed 174,535 gallons, based upon a rolling, 12-month summation of the fuel oil usage figures.
- 6. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.1%, by weight.
- 7. The permittee shall only burn natural gas and/or number two fuel oil as fuel in this emissions unit.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rate, in tons.
  - c. The no. 2 fuel oil usage rate, in gallons.
  - d. The rolling, 12-month summation of the monthly no. 2 fuel oil usage rates, in gallons.
  - e. The rolling, 12-month summations of the monthly SO<sub>2</sub> emission rates, in tons, calculated as follows:
    - i. multiply the rolling, 12-month process throughput rate (from section A.III.1.b) by the most recent facility-derived emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb SO<sub>2</sub>/ton);
    - ii. in accordance with the calculation stated in OAC rule 3745-18-04(F)(2), calculate the emission rate (in lbs SO<sub>2</sub>/mmBtu); then multiply the calculated lbs SO<sub>2</sub>/mmBtu by the maximum rated capacity of the emissions unit (mmBtu/hr) and by 8,760, and then divide by 2000;  
  
ER = (1,000,000) / H x S x 1.974, where;  
ER = the emission rate, in pounds of sulfur dioxide per mmBtu.  
H = the heat content of the liquid fuel in Btu per gallon  
D = the density of the liquid fuel in pounds per gallon; and  
S = the decimal fraction of sulfur in the liquid fuel
    - iii. sum i. and ii. above, and divide by 2,000.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
4. The permittee shall collect and record the following information each day:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The water flow rate, in gallons per minute, on a once per day basis.
  - c. The pH of the liquor, as an average for each 8-hour shift, while the emissions unit is in operation.
  - d. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
5. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).) A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

### III. Monitoring and/or Record Keeping Requirements (continued)

6. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR, Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.
7. For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
8. The permittee shall maintain monthly records of the following information for emissions units P031, P052, P057 and P066, combined (the NM gluten flash dryer stack):
  - a. The process throughput, in tons.
  - b. The PE rate, in tons, calculated by multiplying the process throughput rate, from section A.III.1.a above, by the emission factor determined during the most recent performance test (lb PE/ton), and then dividing by 2,000.
  - c. The rolling, 12-month summation of the monthly PE rates, in tons.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 63,510 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required level.
  - d. All exceedances of the rolling, 12-month No. 2 fuel oil usage restriction of 174,535 gallons.
  - e. All exceedances of the fuel oil sulfur content limitation of 0.1%, by weight.
  - f. All exceedances of the rolling, 12-month PE and SO<sub>2</sub> emission limitations of 8.77 tons, and 32.32 tons, respectively.
  - g. All periods of time during which the scrubber water flow rate was not maintained at or above the required level.
  - h. Each day when a fuel other than natural gas was burned in this emissions unit.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

**1.a** Emission Limitation -  
12.94 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

Compliance with the hourly allowable emission limitation may also be determined by the following:

i. multiply the maximum hourly capacity of the emissions unit (10.5 tons/hour) by the facility-derived emission factor of 0.98 lb SO<sub>2</sub>/ton;

ii. in accordance with the calculation stated in OAC rule 3745-18-04(F)(2), calculate the emission rate (in lbs SO<sub>2</sub>/mmBtu); then multiply the calculated lbs SO<sub>2</sub>/mmBtu by the maximum rated capacity of the emissions unit (mmBtu/hr);

$ER = (1,000,000) / H \times S \times 1.974$ , where;

ER = the emission rate in pounds of sulfur dioxide per mmBtu.

H = the heat content of the liquid fuel in Btu per gallon

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel

iii. sum i. and ii. above.

**1.b** Emission Limitation -  
2.9 lbs/hour PE (from the NM gluten flash dryer stack)

Applicable Compliance Method -

Compliance with the hourly allowable emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

**1.c** Emission Limitation -  
2.65 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

Compliance with the hourly allowable emission limitation shall be determined by multiplying the maximum heat input capacity (26.5 mmBtu/hour) of the emissions unit by the manufacturer's emission factor of 0.1 lb NO<sub>x</sub>/mmBtu.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 7.

**1.d** Emission Limitation -  
11.61 TPY NO<sub>x</sub>

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

## V. Testing Requirements (continued)

- 1.e** Emission Limitation -  
2.18 lbs/hour CO

Applicable Compliance Method -

When burning only natural gas, compliance with the hourly CO emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.026 mm cu ft/hour) by the AP-42, Table 1.4-1 (revised 7/98) emission factor of 84 lbs CO/mm cu ft.

When burning only fuel oil, compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (193 gallons/hour) by the AP-42 Table 1.3-1 (9/98) emission factor of 5 lbs CO/1000 gallons.

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

- 1.f** Emission Limitation -  
9.55 TPY CO

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.g** Emission Limitation -  
0.14 lb/hour VOC

Applicable Compliance Method -

When burning only natural gas, compliance with the hourly allowable CO emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.026 mm cu ft/hour) by the AP-42, Table 1.4-2 (revised 7/98) emission factor of 5.5 lbs VOC/mm cu ft.

When burning fuel oil, compliance with the hourly allowable CO emission limitation may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (193 gallons/hour) by the AP-42 Table 1.3-3 (revised 9/98) emission factor of 0.34 lb VOC/1000 gallons.

If required, the permittee may demonstrate compliance with the hourly allowable CO emission limitation in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- 1.h** 0.63 TPY VOC

Applicable Compliance Method-

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.i** Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the NM gluten flash dryer stack).

Applicable Compliance Method -

Compliance shall be determined by visible emission evaluations performed in accordance with method 9 of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

**1.j** Emission Limitation -  
32.32 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance with the annual allowable emission limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.k** Emission Limitation -  
8.77 TPY PE, as a rolling, 12-month summation (from the NM gluten flash dryer stack)

Applicable Compliance Method -  
Compliance with the annual allowable PE limitation shall be based upon the record keeping requirements specified in section A.III.8 of this permit.

**1.l** Operational Limitation -  
63,510 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance with the limitation above shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.m** Operational Limitation -  
174,535 gallons fuel oil, as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**1.n** Operational Limitation -  
0.1% sulfur, by weight of the fuel oil

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in sections A.III.5 and 6 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months and within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of the permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the 2.9 lbs/hour PE limitation (for the NM gluten flash dryer stack) and 12.94 lbs/hour SO<sub>2</sub> emission limitation (for this emissions unit) .
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for SO<sub>2</sub>, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) for PE shall be conducted while this emissions unit and all emissions units venting to the NM gluten flash dryer stack (see A.I.2.a.) are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

The test(s) for SO<sub>2</sub> shall be conducted while this emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber Predryer 3 (P058)  
**Activity Description:** Emissions from rotary dryer.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber predryer #3, with cyclone and tray scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-18-06(E), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	none, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- 2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.

## **2. Additional Terms and Conditions (continued)**

- 2.c** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.
- 2.d** All the emissions from this emissions unit are vented to a cyclone, and then to a tray scrubber. The exhaust gases from the tray scrubber are then vented into the main stack.

## **II. Operational Restrictions**

- 1.** The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
- 2.** The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
- 3.** The scrubber water flow rate shall be continuously maintained at a value of not less than 19 gallons per minute at all times while the emissions unit is in operation.

## **III. Monitoring and/or Record Keeping Requirements**

- 1.** The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
- 2.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 3.** The permittee shall collect and record the following information each day:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The water flow rate, in gallons per minute, on a once per day basis.
  - c. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.

## **IV. Reporting Requirements**

- 1.** The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the scrubber water flow rate was not maintained at or above the required level

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Stedman Mill 2 (P059)  
**Activity Description:** Emissions from fiber milling equipment.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse stedman mill #2, with a fabric filter, venting to B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- 2.b All the emissions from this emissions unit are vented through a fabric filter and into emissions unit P008, and then into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004.

##### II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## II. Operational Restrictions (continued)

2. The pressure drop across the fabric filter shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

The permittee may petition to the Ohio EPA and RAPCA for reestablishment of the pressure drop range provided the permittee can demonstrate to the Ohio EPA and RAPCA's satisfaction that the new pressure drop range will ensure ongoing compliance and the operating conditions upon which the pressure drop range was previously established are no longer applicable.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emission unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the process throughput rates, in tons.
2. The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the fabric filter while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s). The permittee shall record the pressure drop across the fabric filter on a daily basis, unless a leak detection system is installed. If the permittee properly installs, operates and maintains a fabric filter leak detection system, the permittee may reduce the recording of the pressure drop across the fabric filter to a weekly basis.
3. If a leak detection system is installed, the permittee shall collect and record the following information each day:
  - a. All times during which the fabric filter leak detection system detects a leak.
  - b. The cause of the detected fabric filter leak.
  - c. The corrective measures taken to repair the fabric filter leak and prevent a recurrence.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons and all periods of time during which the pressure drop across the fabric filter did not comply with the allowable range specified above.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
63.51 TPY PE (from the main stack)

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.d** Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Germ Cooler (P066)  
**Activity Description:** Emissions from rotary water tube cooler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
north mill germ cooler, venting to the gluten flash dryer (emissions unit P057)	OAC rule 3745-31-05(A)(3) PTI 08-3290	2.9 lbs/hour particulate emissions (PE) [from the NM gluten flash dryer stack] (See A.I.2.a.)  Opacity shall not exceed 10 percent, as a six-minute average [from the NM gluten flash dryer stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	8.77 TPY PE, as a rolling, 12-month summation, from the NM gluten flash dryer stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units P031, P052, P057 and P066, combined, are vented to a common egress point identified as the NM gluten flash dryer stack. The 2.9 lbs/hour and 8.77 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the NM gluten flash dryer stack).
- 2.b All the emissions from this emissions unit are vented to emissions unit P057, which vents through a scrubber control device and out of the NM gluten flash dryer stack. The scrubber monitoring requirements are contained in the terms and conditions for emissions unit P057. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.

## II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 179,580 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
2. The permittee shall maintain monthly records of the following information for emissions units P031, P052, P057 and P066, combined (the NM gluten flash dryer stack):
  - a. The process throughput (see emissions unit P057 terms and conditions, section A.III.1), in tons.
  - b. The PE rate, in tons, calculated by multiplying the process throughput rate, from section A.III.1.a above, by the emission factor determined during the most recent performance test (lb PE/ton), and then dividing by 2,000.
  - c. The rolling, 12-month summation of the monthly PE rates, in tons.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 179,580 tons and the rolling, 12-month PE limitation from the NM gluten flash dryer stack of 8.77 tons.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
2.9 lbs/hour PE (from the NM gluten flash dryer stack)

Applicable Compliance Method -

Compliance with the hourly allowable PE limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

- 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the NM gluten flash dryer stack).

Applicable Compliance Method -

Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

- 1.c Emission Limitation -  
8.77 TPY PE, as a rolling, 12-month summation (from the NM gluten flash dryer stack)

Applicable Compliance Method -

Compliance with the annual allowable PE limitation shall be based upon the record keeping requirements specified in section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the 2.9 lbs/hour PE limitation and the allowable visible PE (for the NM gluten flash dryer stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the NM gluten flash dryer stack (see A.I.2.a) are operating at their maximum capacities/worst-case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** RF Carbon Regeneration Furnace (P067)

**Activity Description:** Emissions from gas-fired furnace used to regenerate and reactivate carbon.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
refinery carbon regeneration furnace, with afterburner, venturi and tray wet scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	1.26 lbs/hour particulate emissions (PE);  0.93 lb/hour sulfur dioxide (SO <sub>2</sub> );  2.67 lbs/hour organic compounds (OC);  7.85 lbs/hour nitrogen oxides (NO <sub>x</sub> );  6.28 lbs/hour carbon monoxide (CO)  Visible PE shall not exceed 10% opacity, as a six-minute average.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05-(D).
	OAC rule 3745-31-05(D) PTI 08-3290	5.5 TPY PE, as a rolling, 12-month summation  4.38 TPY SO <sub>2</sub> , as a rolling, 12-month summation  11.70 TPY OC, as a rolling, 12-month summation  34.40 TPY NO <sub>x</sub> , as a rolling, 12-month summation  27.52 TPY CO, as a rolling, 12-month summation

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** The 2.67 lbs/hour OC and 7.85 lbs/hour NO<sub>x</sub> limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

## II. Operational Restrictions

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 5 inches of water for the venturi scrubber and not less than 1 inch of water for the tray scrubber, at all times while the emissions unit is in operation.

The permittee may petition to the Ohio EPA and RAPCA for reestablishment of the pressure drop range provided the permittee can demonstrate to the Ohio EPA and RAPCA's satisfaction that the new pressure drop range will ensure ongoing compliance and the operating conditions upon which the pressure drop range was previously established are no longer applicable.

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 16 gallons per minute for the venturi scrubber and not less than 60 gallons per minute for the tray scrubber, at all times while the emissions unit is in operation.
3. The pH of the scrubber liquor shall be maintained at or above 4, as an average for each 8-hour shift, for both the venturi and tray scrubbers, while the emissions unit is in operation.
4. The temperature of the afterburner of the carbon regeneration furnace shall be kept at 1200 degrees Fahrenheit or greater.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and each scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of each scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

### III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall collect and record the following information each day:
  - a. The pressure drop across each scrubber, in inches of water, on a once per day basis.
  - b. The water flow rate of each scrubber, in gallons per minute, on a once per day basis.
  - c. The pH of the liquor of each scrubber, as an average for each 8-hour shift.
  - d. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
4. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature, in degrees Fahrenheit, of the afterburner of the carbon regeneration furnace. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations with any modifications deemed necessary by the permittee. The monitoring and recording devices shall be capable of accurately measuring the desired parameter.

The permittee shall maintain a log of all periods of time when the emissions unit was in operation and the afterburner temperature was less than 1200 degrees Fahrenheit.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following control equipment parameters were not maintained at or above the required levels:
  - a. The static pressure drop across either scrubber.
  - b. The water flow rate of either scrubber.
  - c. The liquor pH of either scrubber.
  - d. The afterburner temperature.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
1.26 lbs/hour PE

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable PE limitation based on the results of emission testing conducted in accordance with methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the hourly allowable PE limitation may also be determined by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the AP-42, Table 2.2-1 (revised 1/95) emission factor of 0.8 lb PE/ton.

**V. Testing Requirements (continued)**

- 1.b** Emission Limitation -  
0.93 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

Compliance with the hourly allowable SO<sub>2</sub> emission limitation may also be determined by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the AP-42, Table 2.2-1 (revised 1/95) emission factor of 28 lbs SO<sub>2</sub>/ton, and by a scrubber control factor of (1 - 0.99\*).

\* the scrubber control efficiency is assumed to be 99%

- 1.c** Emission Limitation -  
2.67 lbs/hour OC

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 25.

Compliance with the hourly allowable OC emission limitation may also be determined by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the AP-42, Table 2.2-1 (revised 1/95) emission factor of 1.7 lbs OC/ton.

- 1.d** Emission Limitation-  
7.85 lbs/hour NO<sub>x</sub>

Applicable Compliance Method-

The permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

Compliance with the hourly allowable emissions limitation may also be determined by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the AP-42, Table 2.2-1 (revised 1/95) emission factor of 5 lbs NO<sub>x</sub>/ton.

- 1.e** Emission Limitation -  
6.28 lbs/hour CO

Applicable Compliance Method -

Compliance with the hourly allowable CO emission limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4 and 10.

- 1.f** Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average.

Applicable Compliance Method -

If required, compliance shall be determined by visible emission evaluations performed in accordance with USEPA Reference Method 9, 40 CFR, Part 60, Appendix A.

- 1.g** Emission Limitation -  
5.5 TPY PE

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

**V. Testing Requirements (continued)**

**1.h** Emission Limitation -  
4.38 TPY SO<sub>2</sub>

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

**1.i** Emission Limitation -  
11.70 TPY OC

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

**1.j** Emission Limitation -  
34.40 TPY NO<sub>x</sub>

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

**1.k** Emission Limitation -  
27.52 TPY CO

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within six months following final issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the hourly particulates, SO<sub>2</sub>, OC, NO<sub>x</sub> and CO emission limitations.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
    - ii. for SO<sub>2</sub>, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A;
    - iii. for NO<sub>x</sub>, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A;
    - iv. for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; and
    - v. for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at maximum capacity/ worst-case representative conditions, unless otherwise specified or approved by the RAPCA.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Fiber Water Tube Cooler (P074)

**Activity Description:** Emissions from rotary cooler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse fiber water tube cooler with cyclone, venting to emissions unit B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- 2.b All the emissions from this emissions unit are vented through a cyclone and into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.

##### II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Pellet Cooler 1 (P075)  
**Activity Description:** Emissions from direct air contact pellet cooler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse pellet cooler #1, with cyclone, venting to emissions unit B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- 2.b All the emissions from this emissions unit are vented through a cyclone and into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.

##### II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FH Pellet Cooler 2 (P076)  
**Activity Description:** Emissions from direct air contact pellet cooler.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
feedhouse pellet cooler #2, with cyclone, venting to emissions unit B004	OAC rule 3745-31-05(A)(3) PTI 08-3290	Opacity shall not exceed 10 percent, as a six-minute average [from the main stack] (See A.I.2.a.)  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	14.5 lbs/hour PE, 63.51 TPY PE, as a rolling, 12-month summation [from the main stack] (See A.I.2.a.)
	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The PE from emissions units B004, B009, P008, P030, P032, P033, P034, P037, P040, P053, P058, P059, P074, P075 and P076, combined, are vented to a common egress point identified as the main stack. The 14.5 lbs/hour and 63.51 TPY PE rates and the 10 percent opacity limitation, as a six-minute average, apply to the common egress point (the main stack).
- 2.b All the emissions from this emissions unit are vented through a cyclone and into emissions unit B004, which vents through a baghouse and out of the main stack. The baghouse monitoring requirements are contained in the terms and conditions for emissions unit B004. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary for this emissions unit.

##### II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 508,080 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month process throughput restriction of 508,080 tons.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
14.5 lbs/hour PE (from the main stack)  
  
Applicable Compliance Method -  
Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
Opacity shall not exceed 10%, as a six-minute average (from the main stack).  
  
Applicable Compliance Method -  
Compliance shall be determined by visible emissions evaluations performed in accordance with Method 9 of 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
63.51 TPY PE (from the main stack)  
  
Applicable Compliance Method -  
As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).
  - 1.d Operating Limitation -  
508,080 tons process throughput, as a rolling, 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted within 2.5 years after final issuance of this permit and within 6 months prior to the expiration of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the PE limitation of 14.5 lbs/hr (from the main stack) and the allowable visible PE (from the main stack).
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate and the visible PE limitation:
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for visible PE, Method 9 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while this emissions unit and all the emissions units venting to the main stack are operating at their maximum capacities/ worst-case representative conditions, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** NM Steep Aspiration #2 (P086)

**Activity Description:** Emissions from aspiration of steep tanks and mill equipment.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
north mill steep aspiration #2, with packed tower scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	0.159 lb/hour particulate emissions (PE)  2.82 lbs/hour sulfur dioxide (SO <sub>2</sub> )  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	0.331 TPY PE, as a rolling, 12-month summation  12.35 TPY SO <sub>2</sub> , as a rolling, 12-month summation
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The and 2.82 lbs/hour, 12.35 TPY SO<sub>2</sub> and 0.159 lbs/hour PE emission limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

## II. Operational Restrictions

1. The maximum annual process throughput rate for this emissions unit shall not exceed 1,635,200 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
3. The pH of the scrubber liquor shall be maintained at or above 7.0, as an average for each 8-hour shift.
4. The scrubber water flow rate shall be continuously maintained at a value of not less than 22 gallons per minute at all times while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.
  - c. The rolling, 12-month summation of the monthly PE rates, in tons, calculated by multiplying the rolling, 12-month process throughput rate (from section A.III.1.b) by the most recent facility-derived emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton), and then dividing by 2,000.
2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals
3. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of the scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
4. The permittee shall collect and record the following information each day while the emissions unit is in operation:
  - a. The pressure drop across the scrubber, in inches of water, on a once per day basis.
  - b. The scrubber water flow rate, in gallons per minute, on a once per day basis.
  - c. The pH of the liquor, as an average for each 8-hour shift.
  - d. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. All exceedances of the rolling, 12-month process throughput restriction of 1,635,200 tons.
  - b. All periods of time during which the static pressure drop across the scrubber was not maintained at or above the required levels.
  - c. All periods of time during which the pH of the scrubber liquor was not maintained at or above the required level.
  - d. All exceedances of the rolling, 12-month PE limitation of 0.331 ton.
  - e. All periods of time during which the scrubber water flow rate was not maintained at or above the required level

These reports shall due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

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

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.159 lb/hour PE

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable PE limitation based on the results of emission testing conducted in accordance with methods 1 through 5 of 40 CFR, Part 60, Appendix A.

The hourly PE limitation was established by multiplying the maximum hourly capacity of the emissions unit (tons/hour) by the most recent facility-derived emission factor [based on the results of the most recent emission testing that demonstrated the emissions unit was in compliance] (lb PE/ton).

- 1.b Emission Limitation -  
2.82 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

Also, compliance with the hourly allowable SO<sub>2</sub> emission limitation may also be determined by multiplying the maximum concentration of SO<sub>2</sub> in the air stream (0.0000015 lb SO<sub>2</sub>/cu.ft of air flow) by the maximum volumetric air flow rate of this emissions unit (cu.ft/minute), and then multiplying by 60.

- 1.c Emission Limitation -  
0.331 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the annual allowable PE limitation shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

**V. Testing Requirements (continued)**

- 1.d** Emission Limitation -  
12.35 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation by 8,760 and then dividing by 2,000).

- 1.e** Emission Limitation -  
Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

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

- 1.f** Operational Limitation -  
1,635,200 tons process throughput as a rolling, 12-month summation

Applicable Compliance Method -

Compliance with the limitation above shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within six months following final issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the hourly limitations for SO<sub>2</sub> and PE.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity/ worst-case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.

## **V. Testing Requirements (continued)**

3. 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 District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office or local air agency's refusal to accept the results of the emission test(s).

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

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

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Sugar Process (P089)

**Activity Description:** Emissions from processing of liquid raw material by heating, water-washing, centrifuging, decolorizing and filtering.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P089 - Sugar Process	OAC rule 3745-31-05(A)(3)  PTI #08-04417  OAC rule 3745-21-07(G)(9)(f)	3.43 lbs/hr, 27.5 lbs/day, and 5.01 TPY of Organic Compounds   The emission limitations specified by this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

##### 2. Additional Terms and Conditions

- 2.a The 3.43 lbs/hr was established for the PTI to reflect the hourly and daily potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

##### II. Operational Restrictions

1. The maximum annual isopropyl alcohol usage for this emissions unit shall not exceed 1518.4 gallons.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information monthly for each day for this process:
  - a. The company identification of each OC material employed;
  - b. The isopropyl alcohol usage, in gallons;
  - c. The OC content of the isopropyl alcohol, in lbs/gallon;
  - d. The amount of isopropyl al, in pounds (b x c);
  - e. The number of days of operation;
  - f. The average daily OC emission rate, in pounds (d / e).

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include all exceedances of the daily OC emission limitation of 27.5 pounds. These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit annual summaries that include the actual annual isopropyl alcohol usage for the previous year for this emissions unit. These reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these Terms & Conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
3.43 lbs OC/hr

Applicable Compliance Method -

Compliance with the hourly emission limitation was established by multiplying the maximum amount of batches per hour (2) by the maximum gallons per batch (0.26) and then multiplying by the density of the solvent (Isopropyl alcohol, 6.6 lbs OC/gallon ).

If required, compliance shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- 1.b Emission Limitation -  
27.5 lbs OC/day

Applicable Compliance Method -

Compliance with the daily emission limitation shall be based on the record keeping requirements established in Section A.III of this permit.

- 1.c Emission Limitation -  
5.01 TPY of OC

Applicable Compliance Method -

Compliance with the annual emission limitation shall be assumed as long as compliance with the daily OC limitation is maintained (the annual limitation was calculated by multiplying the daily limitation by 365 and then dividing by 2000).

- 1.d Emission Limitation -  
1518.4 gallons of isopropyl alcohol/yr

Applicable Compliance Method -

Compliance with the daily emission limitation shall be based on the record keeping requirements established in Section A.III of this permit.

#### VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P089 - Sugar Process	None	None

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- This permit allows the use of materials specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit were established using the Ohio EPA's "Air Toxic Policy" and are based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Isopropyl alcohol

TLV (ug/m3): 983

Maximum hourly Emission Rate (lbs/hour): 3.50

Predicted 1-hour Maximum Ground-Level Concentration (ug/m3): 259.3

MAGLC (ug/m3): 23,405

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification".
  - a. Changes in the composition of materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
  - b. Changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
  - c. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of an air contaminant not previously permitted; and
  - d. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.
3. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
  - a. The change is not otherwise considered a "modification" under OAC Chapter 3745-31;
  - b. The permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
  - c. Prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.
4. For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FX Precoat Bag Dumping (P580)

**Activity Description:** Emissions from dumping of bags of precoat in mix tank, and mix tank.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P580 - FX Precoat Bag Dumping Station with Baghouse	OAC rule 3745-31-05 (A)(3) PTI # 08-04319	0.013 lb particulate emissions (PE)/hr  10 % opacity, as a 6-minute average  The requirements of this rule include compliance with the requirements established of OAC rule 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI #08-04319	< 0.01 ton/yr PE
	OAC rule 3745-17-07(A)	See Section A.II.1. The opacity limitation specified by this rule is less stringent than the opacity limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The hourly limitation for PE was established for PTI purpose to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

##### II. Operational Restrictions

1. The maximum annual throughput of all precoat shall not exceed 250 tons/yr, as a rolling, 12-month summation.

## II. Operational Restrictions (continued)

2. To ensure enforceability during the first 12 calendar months of operation following the issuance of PTI #08-04319, the permittee shall not exceed the following throughput:

Maximum Throughput Months	of Precoat, in tons
0-6	125
6-7	145.8
7-8	166.7
8-9	187.5
9-10	208.3
10-11	229.2
11-12	250

After the first 12 calendar months of operation following the effective date of PTI #08-04319, the permittee shall comply with the annual throughput precoat limitation based upon rolling, 12-month summations.

3. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 10 inches of water while the emissions unit is in operation.

The permittee may petition to the Ohio EPA and RAPCA for reestablishment of the pressure drop range provided the permittee can demonstrate to the Ohio EPA and RAPCA's satisfaction that the new pressure drop range will ensure ongoing compliance and the operating conditions upon which the pressure drop range was previously established are no longer applicable.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:
- The name and identification of each precoat material processed.
  - The amount, in tons, of precoat material processed.
  - The rolling, 12-month summation of precoat material processed, in tons.
  - The rolling, 12 month summation of PE rates, in tons, calculated by multiplying the rolling, 12-month summation of precoat material processed (from section A.III.1.d) by the facility-derived emission factor of 0.002143 lb PE/ton).
2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis, unless a leak detection system is installed. If the permittee properly installs, operates and maintains a baghouse leak detection system, the permittee may reduce the recording of the pressure drop across the baghouse to a weekly basis.
3. If a leak detection system is installed, the permittee shall collect and record the following information each day:
- All times during which the baghouse leak detection system detects a leak.
  - The cause of the detected baghouse leak.
  - The corrective measures taken to repair the baghouse leak and prevent a recurrence.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, that include the following information:
  - a. for the first 12 calendar months of operation following the issuance of PTI #08-04319, each month during which the cumulative process rates exceeded the maximum precoat throughput limitations specified above in Section A.II.2. and the actual precoat process rates;
  - b. after the first 12 calendar months of operation following the issuance of PTI #08-04319, each month during which the rolling, 12-month precoat process restriction of 250 tons and the actual 12-month rolling summation of precoat process rate;
  - c. after the first 12 calendar months of operation following the issuance of PTI #08-04319, each month during which the rolling, 12-month PE limitation was exceeded; and
  - c. Each day during which the pressure drop across the baghouse did not comply with the allowable range specified above, and the corrective actions taken for each such day.
  - d. All periods of time during which the leak is detected by the baghouse leak detection system as well as a description of the corrective measures taken.

#### **V. Testing Requirements**

1. Compliance with the emission limitations in Section A.1. of this permit shall be determined in accordance with the following methods:
  - 1.a Emission Limitation -  
0.013 lb PE/hr  
  
Applicable Compliance Method -  
Compliance may be based upon the maximum hourly process rate of 6 tons, multiplied by the facility-derived controlled emission factor of 0.002143 lb PE/ton precoat processed.  
  
If required, compliance shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - 1.b Emission Limitation -  
10 % opacity, as a 6-minute average  
  
Applicable Compliance Method -  
If required, compliance shall be determined by visible emission evaluations performed in accordance with USEPA Reference Method , 40 CFR, Part 60, Appendix A.
  - 1.c Emission Limitation -  
0.01 ton/yr PE  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements established in section A.III.1 of this permit.
  - 1.d Throughput Limitation -  
250 tons/yr precoat, as a rolling 12-month summation  
  
Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements established in section A.III.1 of this permit.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** FX Carbon Regeneration Furnace (P582)

**Activity Description:** Emissions from gas-fired furnace used to regenerate and reactivate carbon.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fructose carbon regeneration furnace with afterburner, venturi and impingement wet scrubber	OAC rule 3745-31-05(A)(3) PTI 08-3290	0.104 lb/hour particulate emissions (PE)  0.93 lb/hour sulfur dioxide (SO <sub>2</sub> )  1.56 lbs/hour organic compounds (OC)  2.27 lbs/hour nitrogen oxides (NO <sub>x</sub> )  1.63 lbs/hour carbon monoxide (CO)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-31-05(D).
	OAC rule 3745-31-05(D) PTI 08-3290	0.491 TPY PE, as a rolling, 12-month summation  4.38 TPY SO <sub>2</sub> , as a rolling, 12-month summation  6.83 TPY OC, as a rolling, 12-month summation  9.96 TPY NO <sub>x</sub> , as a rolling, 12-month summation  7.15 TPY CO, as a rolling, 12-month summation
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20 percent, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)(1) OAC rule 37445-18-06(E)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

## 2. Additional Terms and Conditions

- 2.a The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 08-3290.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

## II. Operational Restrictions

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 5 inches of water for the venturi scrubber and not less than 1 inch of water for the impingement scrubber, at all times while the emissions unit is in operation.

The permittee may petition to the Ohio EPA and RAPCA for reestablishment of the pressure drop range provided the permittee can demonstrate to the Ohio EPA and RAPCA's satisfaction that the new pressure drop range will ensure ongoing compliance and the operating conditions upon which the pressure drop range was previously established are no longer applicable.

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 29 gallons per minute for the venturi scrubber and not less than 37 gallons per minute for the impingement scrubber, at all times while the emissions unit is in operation.
3. The pH of the scrubber liquor shall be maintained at or above 4, as an average for each 8-hour shift, for both the venturi and impingement scrubbers, while the emissions unit is in operation.
4. The temperature of the afterburner of the carbon regeneration furnace shall be kept at 1200 degrees Fahrenheit or greater.
5. The maximum annual process throughput rate for this emissions unit shall not exceed 8030 tons, based upon a rolling, 12-month summation of the monthly process throughput rates.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and each scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

### **III. Monitoring and/or Record Keeping Requirements (continued)**

2. The permittee shall properly operate and maintain equipment to continuously monitor and record the pH of each scrubber liquor while the emissions unit is in operation. The pH monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall collect and record the following information each day:
  - a. The pressure drop across each scrubber, in inches of water, on a once per day basis.
  - b. The water flow rate, in gallons per minute, on a once per day basis.
  - c. The pH of the liquor of each scrubber, as an average for each 8-hour shift.
  - d. A log of the downtime for the capture (collection) system, control device, and/or monitoring equipment while the associated emissions unit is in operation.
4. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature, in degrees Fahrenheit, of the afterburner of the carbon regeneration furnace. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations with any modifications deemed necessary by the permittee. The monitoring and recording devices shall be capable of accurately measuring the desired parameter.

The permittee shall maintain a log of all periods of time when the emissions unit was in operation and the afterburner temperature was less than 1200 degrees Fahrenheit.
5. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The process throughput rate, in tons.
  - b. The rolling, 12-month summation of the monthly process throughput rates, in tons.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:
  - a. All periods of time during which the static pressure drop across either scrubber was not maintained at or above the required levels.
  - b. All periods of time during which either scrubber water flow rate was not maintained at or above the required levels.
  - c. All periods of time during which either scrubber liquor pH was not maintained within the specified range.
  - d. All periods of time during which the afterburner temperature was not maintained at or above the required level.
  - e. All exceedances of the rolling, 12-month process throughput restriction of 8030 tons.

These reports shall be due by the dates specified in Part I - General Terms and Conditions of this permit under section (A)(1).

### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**V. Testing Requirements (continued)**

- 1.a** Emission Limitation -  
0.104 lb/hour PE

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable PE limitation based on the results of emission testing conducted in accordance with methods 1 through 5 of 40 CFR, Part 60, Appendix A.

The hourly allowable PE limitation was established by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the emission factor of 0.122 lb PE/ton (determined during a stack test conducted in March 1993).

- 1.b** Emission Limitation -  
0.93 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 - 4 and 6.

The hourly allowable SO<sub>2</sub> emission limitation was established by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the facility-derived emission factor of 1.0895 lbs SO<sub>2</sub>/ton (determined during engineering tests conducted in January 1994).

- 1.c** Emission Limitation -  
1.56 lbs/hour OC

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Method 25.

The hourly allowable OC emission limitation was established by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the AP-42, Table 2.2-1 (revised 1/95) emission factor of 1.7 lbs OC/ton.

- 1.d** Emission Limitation -  
2.27 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation based on the results of emission testing conducted in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 4 and 7.

The hourly allowable NO<sub>x</sub> emission limitation was established by multiplying the maximum hourly feed rate of the furnace (tons/hr) by the facility-derived emission factor of 2.48 lbs NO<sub>x</sub>/ton (determined during engineering tests conducted in January 1994).

- 1.e** Emission Limitation -  
1.63 lbs/hour CO

Applicable Compliance Method -

Compliance with the hourly allowable CO emissions limitation shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
0.491 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

- 1.g** Emission Limitation -  
4.38 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

- 1.h** Emission Limitation -  
6.83 TPY OC, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

- 1.i** Emission Limitation -  
9.96 TPY NO<sub>x</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

- 1.j** Emission Limitation -  
7.15 TPY CO, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance is maintained with the hourly emission limitation, compliance with the annual emission limitation shall be shown (the annual emission limitation was calculated by multiplying the hourly limitation 8,760 and then dividing by 2,000).

- 1.k** Emission Limitation -  
Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

If required, compliance shall be determined by visible emission evaluations performed in accordance with USEPA Reference Method 9, 40 CFR, Part 60, Appendix A.

- 1.l** Operational Limitation -  
8,030 tons process throughput, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Section A.III.5. of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within six months following final issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the hourly particulates, SO<sub>2</sub>, OC, NO<sub>x</sub> and CO emission limitations.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 through 5 of 40 CFR, Part 60, Appendix A;
    - ii. for SO<sub>2</sub>, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A;
    - iii. for NO<sub>x</sub>, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A;
    - iv. for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; and
    - v. for OC, Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

- d. The test(s) shall be conducted while the emissions unit is operating at maximum capacity/ worst -case representative conditions, unless otherwise specified or approved by the Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the RAPCA. 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 RAPCA's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the RAPCA 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

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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