



Environmental Protection Agency

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

4/22/2011

Certified Mail

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 0857041124  
Permit Number: P0105256  
Permit Type: Administrative Modification  
County: Montgomery

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Regional Air Pollution Control Agency. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: U.S. EPA  
RAPCA; Indiana; Kentucky





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Cargill, Inc. - Dayton**

Facility ID:	0857041124
Permit Number:	P0105256
Permit Type:	Administrative Modification
Issued:	4/22/2011
Effective:	4/22/2011





Division of Air Pollution Control
Permit-to-Install
for
Cargill, Inc. - Dayton

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## Authorization

Facility ID: 0857041124  
Facility Description: wet corn milling  
Application Number(s): M0000527, M0000530, A0038058  
Permit Number: P0105256  
Permit Description: Cargill, Incorporated is submitting this application pursuant to the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission units which did not warrant an emissions control plan in the consent decree, Cargill is required to seek permit modifications to impose or modify emission limits.  
Permit Type: Administrative Modification  
Permit Fee: \$6,875.00  
Issue Date: 4/22/2011  
Effective Date: 4/22/2011

This document constitutes issuance to:

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

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

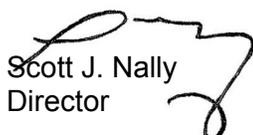
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency  
117 South Main Street  
Dayton, OH 45422-1280  
(937)225-4435

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0105256

Permit Description: Cargill, Incorporated is submitting this application pursuant to the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission units which did not warrant an emissions control plan in the consent decree, Cargill is required to seek permit modifications to impose or modify emission limits.

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

<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	SM Steep Tank Aspiration
Superseded Permit Number:	08-04464
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	SM Mill Aspiration
Superseded Permit Number:	08-04464
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P011</b>
Company Equipment ID:	FH Gluten Filter Aspiration
Superseded Permit Number:	08-3290
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P021</b>
Company Equipment ID:	FH Rail Feed Loadout
Superseded Permit Number:	08-3290
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P024</b>
Company Equipment ID:	NM Steep Tanks Aspiration
Superseded Permit Number:	08-04464
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P025</b>
Company Equipment ID:	NM Mill Aspiration
Superseded Permit Number:	08-04464
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P044</b>
Company Equipment ID:	FH Truck Pellet Loadout
Superseded Permit Number:	08-3290
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P060</b>
Company Equipment ID:	SM Wet Germ Conveying
Superseded Permit Number:	08-3290
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P061</b>
Company Equipment ID:	NM Wet Germ Conveying
Superseded Permit Number:	08-3290
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P063</b>
Company Equipment ID:	Wet Germ Conveying to Germ STD 2

Superseded Permit Number: 08-3290  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: P071**  
Company Equipment ID: FH Gluten Loadout Aspiration  
Superseded Permit Number: 08-3290  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: P086**  
Company Equipment ID: NM Steep Aspiration #2  
Superseded Permit Number: 08-04464  
General Permit Category and Type: Not Applicable



## **A. Standard Terms and Conditions**



**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

**2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

**3. General Requirements**

- a) 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 re-issuance, or modification.

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

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Regional Air Pollution Control Agency.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Regional Air Pollution Control Agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Regional Air Pollution Control Agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## 5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Regional Air Pollution Control Agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## 6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Regional Air Pollution Control Agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

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

## **8. Air Pollution Nuisance**

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

## **9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Regional Air Pollution Control Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Regional Air Pollution Control Agency. If no deviations occurred during a calendar quarter, the permittee shall submit

a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

## 10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in Ohio EPA's "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All

records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

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

## 12. Permit-To-Operate Application

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

## 13. Construction Compliance Certification

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

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

## 14. Public Disclosure

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

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

**17. Permit Transfers**

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

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. Title IV Provisions**

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

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

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. Perform monthly operational status inspections of process and control equipment that is important to the performance of the capture system (i.e., pressure sensors, dampers and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and appropriate action taken. Records shall be maintained of the results of each monthly inspection and shall include any corrective actions taken by the permittee. Records shall be kept on site for at least five years and shall be available for inspection by the Regional Air Pollution Control Agency.

## **C. Emissions Unit Terms and Conditions**



**1. P002, SM Steep Tank Aspiration**

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

South Mill Steep Aspiration with scrubbing control

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Sulfur dioxide (SO<sub>2</sub>) emissions from this emissions unit shall not exceed 1.04 lbs/hr.</p> <p>Particulate emissions (PE) from this emissions unit shall not exceed 0.466 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 15.25 lbs/hr and 53.96 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.21 lb/hr and 0.76 TPY. See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements OAC rules 3745-17-07(A) and 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	SO <sub>2</sub> emissions from this emissions unit shall not exceed 4.56 TPY, as a rolling 12-month summation.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		PE from this emissions unit shall not exceed 0.68 TPY, as a rolling 12-month summation.
c.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B) OAC rule 3745-18-06(E)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the scrubber at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual corn production for this emissions unit shall not exceed 817,600 tons, based upon a rolling, 12-month summation of the monthly corn production rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The corn production, in tons;
  - b. The rolling, 12-month summation of the monthly corn production, in tons;
  - c. The PE and SO<sub>2</sub> emissions, in tons; and
  - d. The rolling, 12-month summation of PE and SO<sub>2</sub> emissions, in tons.

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than the average pressure drop measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pressure drop across the scrubber is 3.7 inches of water based on emissions testing conducted on 7/07.
- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber recirculation liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the average scrubber recirculation liquid flow rate measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable scrubber recirculation liquid flow rate is 176 gallons per minute based on emissions testing conducted on 7/07.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pH of the scrubber liquor, that shall be maintained in order to demonstrate compliance, shall not be less than the average pH of the scrubber liquor measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pH of the scrubber liquor is 9.0 based on emissions testing conducted on 7/07.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), the scrubber recirculation liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's flow and the scrubber liquid's pH on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters at or above the minimum limits specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination

and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

These minimum limits for the pressure drop, recirculation liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month corn production restriction of 817,600 tons;
  - b. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 4.56 tons;
  - c. all exceedances of the rolling, 12-month PE limitation of 0.68 tons;
  - d. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the recirculation liquid flow rate, or the liquid pH deviated below the applicable limit contained in this permit;
  - e. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
  - f. each incident of deviation described in e)(1)d (above) where a prompt investigation was not conducted;

- g. each incident of deviation described in e)(1)d where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate, and/or scrubber liquid pH into compliance with the minimum limit, was determined to be necessary and was not taken; and
- h. each incident of deviation described in e)(1)d where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 1.04 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

b. Emission Limitation:

PE from this emissions unit shall not exceed 0.466 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 15.25 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

d. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 53.96 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

VOC emissions = (VOC emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

VOC emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00370 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.21 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

f. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.76 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

HAP emissions = (HAP emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

HAP emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000052 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

g. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 4.56 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

SO<sub>2</sub> emissions = (SO<sub>2</sub> emissions factor in lbs/ton corn) \* (annual corn production in tons/yr) / (2,000 lbs/ton)

where:

SO<sub>2</sub> emissions factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.0021 lb/ton corn derived from emissions testing conducted on 11/06.

h. Emission Limitation:

PE from this emissions unit shall not exceed 0.68 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$PE = (\text{PE factor in lbs/ton corn}) * (\text{annual corn production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

PE factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00105 lb/ton corn derived from emissions testing conducted on 7/07.

i. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

- (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 12 months after issuance of this permit.
  - b. The emissions testing shall be conducted to:
    - i. demonstrate compliance with the following allowable emissions rates for this emissions unit:
      - (a) 1.04 lbs/hr of SO<sub>2</sub>;
      - (b) 0.466 lb/hr of PE;
      - (c) 15.25 lbs/hr of VOC; and

- (d) 0.21 lb/hr of total HAP.
  - ii. establish the acceptable pressure drop across the scrubber in d)(2) above;
  - iii. establish the acceptable scrubber recirculation liquid flow rate in d)(3) above; and
  - iv. establish the acceptable pH of the scrubber liquor in d)(4) above.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
- i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
  - ii. Method 5 of 40 CFR Part 60, Appendix A for filterable PE;
  - iii. Method 6 from 40 CFR Part 60, Appendix A for SO<sub>2</sub>;
  - iv. Method 18 from 40 CFR Part 60, Appendix A and OTM-11 for VOC; and
  - v. Method 18 from 40 CFR Part 60, Appendix A for total HAP.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate 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's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate 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.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate 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 appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.

**2. P003, SM Mill Aspiration**

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

South Mill Aspiration with packed tower scrubbers

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Sulfur dioxide (SO<sub>2</sub>) emissions from this emissions unit shall not exceed 2.61 lbs/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 7.53 lbs/hr and 26.65 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.23 lb/hr and 0.82 TPY. See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	SO <sub>2</sub> emissions from this emissions unit shall not exceed 11.43 TPY, as a rolling 12-month summation.
c.	OAC rule 3745-18-06(E)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

- (2) Additional Terms and Conditions
- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the scrubber at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) The annual corn production for this emissions unit shall not exceed 817,600 tons, based upon a rolling, 12-month summation of the monthly corn production rates.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The corn production, in tons;
- b. The rolling, 12-month summation of the monthly corn production, in tons;
- c. The SO<sub>2</sub> emissions, in tons; and,
- d. The rolling, 12-month summation of SO<sub>2</sub> emissions, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than the average pressure drop measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pressure drop across the scrubber is 7.8 inches of water based on emissions testing conducted on 11/06.
- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber recirculation liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the average scrubber recirculation liquid flow rate measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable scrubber recirculation liquid flow rate is 159 gallons per minute based on emissions testing conducted on 11/06.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pH of the scrubber liquor, that shall be maintained in order to demonstrate compliance, shall not be less than the average pH of the scrubber liquor

measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pH of the scrubber liquor is 9.0 based on emissions testing conducted on 11/06.

- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), the scrubber recirculation liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's flow and the scrubber liquid's pH on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

These minimum limits for the pressure drop, recirculation liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month corn production restriction of 817,600 tons;
  - b. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 11.43 tons;
  - c. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the recirculation liquid flow rate, or the liquid pH deviated below the applicable limit contained in this permit;
  - d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
  - e. each incident of deviation described in e)(1)c (above) where a prompt investigation was not conducted;
  - f. each incident of deviation described in e)(1)c where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate, and/or scrubber liquid pH into compliance with the minimum limit, was determined to be necessary and was not taken; and
  - g. each incident of deviation described in e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
SO<sub>2</sub> emissions from this emissions unit shall not exceed 2.61 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 7.53 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 26.65 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

VOC emissions = (VOC emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

VOC emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00183 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.23 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.82 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

HAP emissions = (HAP emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

HAP emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000056 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

f. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 11.43 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

SO<sub>2</sub> emissions = (SO<sub>2</sub> emissions factor in lbs/ton corn) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

SO<sub>2</sub> emissions factor in lbs/ton corn derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.0000666 lb/ton corn derived from emissions testing conducted on 11/06.

- (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 12 months after issuance of this permit.
  - b. The emissions testing shall be conducted to:
    - i. demonstrate compliance with the following allowable emissions rates for this emissions unit:
      - (a) 2.61 lbs/hr of SO<sub>2</sub>;
      - (b) 7.53 lbs/hr of VOC; and
      - (c) 0.23 lb/hr of total HAP.
    - ii. establish the acceptable pressure drop across the scrubber in d)(2) above;
    - iii. establish the acceptable scrubber recirculation liquid flow rate in d)(3) above; and
    - iv. establish the acceptable pH of the scrubber liquor in d)(4) above.

- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
- i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
  - ii. Method 6 from 40 CFR Part 60, Appendix A for SO<sub>2</sub>;
  - iii. Method 18 from 40 CFR Part 60, Appendix A and OTM-11 for VOC; and
  - iv. Method 18 from 40 CFR Part 60, Appendix A for total HAP.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate 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's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate 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.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate 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 appropriate Ohio EPA District Office or local air agency.

g) **Miscellaneous Requirements**

- (1) None.

**3. P011, FH Gluten Filter Aspiration**

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

Feed House Filter Aspiration

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Sulfur dioxide (SO<sub>2</sub>) emissions from this emissions unit shall not exceed 1.88 lbs/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 4.46 lbs/hr and 17.33 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.11 lb/hr and 0.43 TPY. See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	SO <sub>2</sub> emissions from this emissions unit shall not exceed 7.33 TPY, as a rolling 12-month summation.
c.	OAC rule 3745-18-06(E)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

- (2) Additional Terms and Conditions
- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the scrubber at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) The annual gluten production for this emissions unit shall not exceed 35,310 tons, based upon a rolling, 12-month summation of the monthly gluten production rates.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The gluten production, in tons;
- b. The rolling, 12-month summation of the monthly gluten production, in tons;
- c. The SO<sub>2</sub> emissions, in tons; and,
- d. The rolling, 12-month summation of SO<sub>2</sub> emissions, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than the average pressure drop measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pressure drop across the scrubber is 8.5 inches of water based on emissions testing conducted on 12/06.
- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber recirculation liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the average scrubber recirculation liquid flow rate measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable scrubber recirculation liquid flow rate is 164 gallons per minute based on emissions testing conducted on 12/06.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pH of the scrubber liquor, that shall be maintained in order to demonstrate compliance, shall not be less than the average pH of the scrubber liquor

measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pH of the scrubber liquor is 9.5 based on emissions testing conducted on 12/06.

- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), the scrubber recirculation liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's flow and the scrubber liquid's pH on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

These minimum limits for the pressure drop, recirculation liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month gluten production restriction of 35,310 tons;
  - b. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 7.33 tons;
  - c. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the recirculation liquid flow rate, or the liquid pH deviated below the applicable limit contained in this permit;
  - d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
  - e. each incident of deviation described in e)(1)c (above) where a prompt investigation was not conducted;
  - f. each incident of deviation described in e)(1)c where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate, and/or scrubber liquid pH into compliance with the minimum limit, was determined to be necessary and was not taken; and
  - g. each incident of deviation described in e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
SO<sub>2</sub> emissions from this emissions unit shall not exceed 1.88 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 4.46 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 17.33 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$\text{VOC emissions} = (\text{VOC emissions factor in lbs/bushel corn grind}) * (\text{Gluten Yield}) * (\text{annual gluten production in bushel/yr}) / (2,000 \text{ lbs/ton})$$

where:

VOC emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00108 lb/bushel corn grind derived from Method OTM-11 emissions testing conducted on 2/19/08.

Gluten Yield is the most recent gluten yield. The current yield is (2.2 lbs gluten/bushel corn) / (56 lbs corn/bushel corn)

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.11 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.43 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

HAP emissions = (HAP emissions factor in lbs/bushel corn grind) \* (Gluten Yield)  
\* (annual gluten production in bushel/yr) / (2,000 lbs/ton)

where:

HAP emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000027 lb/bushel corn grind derived from Method 18 emissions testing conducted on 2/19/08.

Gluten Yield is the most recent gluten yield. The current yield is (2.2 lbs gluten/bushel corn) / (56 lbs corn/bushel corn)

f. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 7.33 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

SO<sub>2</sub> emissions = (SO<sub>2</sub> emissions factor in lbs/ton gluten) \* (annual gluten production in bushel/yr) / (2,000 lbs/ton)

where:

SO<sub>2</sub> emissions factor in lbs/ton gluten derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.174 lb/ton gluten derived from emissions testing conducted on 12/06.

- (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 12 months after issuance of this permit.
  - b. The emissions testing shall be conducted to:
    - i. demonstrate compliance with the following allowable emissions rates for this emissions unit:
      - (a) 1.88 lbs/hr of SO<sub>2</sub>;
      - (b) 4.46 lbs/hr of VOC; and
      - (c) 0.11 lb/hr of total HAP.
    - ii. establish the acceptable pressure drop across the scrubber in d)(2) above;

- iii. establish the acceptable scrubber recirculation liquid flow rate in d)(3) above; and
  - iv. establish the acceptable pH of the scrubber liquor in d)(4) above.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
- i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
  - ii. Method 6 from 40 CFR Part 60, Appendix A for SO<sub>2</sub>;
  - iii. Method 18 from 40 CFR Part 60, Appendix A and OTM-11 for VOC; and
  - iv. Method 18 from 40 CFR Part 60, Appendix A for total HAP.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate 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's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate 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.
  - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate 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 appropriate Ohio EPA District Office or local air agency.
- g) Miscellaneous Requirements
- (1) None.



4. P021, FH Rail Feed Loadout

Operations, Property and/or Equipment Description:

Feed House Rail Feed Loadout

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) from this emissions unit shall not exceed 0.31 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.81 lb/hr and 3.55 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.20 lb/hr and 0.89 TPY. See b)(2)a.</p> <p>Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirement OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	PE from this emissions unit shall not exceed 0.74 TPY, as a rolling 12-month summation.
c.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual feed throughput for this emissions unit shall not exceed 340,260 tons, based upon a rolling, 12-month summation of the monthly feed throughput rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The feed throughput, in tons;
  - b. The rolling, 12-month summation of the monthly feed throughput, in tons;
  - c. The PE, in tons; and
  - d. The rolling, 12-month summation of PE, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.2 to 5.0 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

This range on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month feed throughput restriction of 340,260 tons;
  - b. all exceedances of the rolling, 12-month PE limitation of 0.74 tons;

- c. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
- e. each incident of deviation described in e)(1)c (above) where a prompt investigation was not conducted;
- f. each incident of deviation described in e)(1)c where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- g. each incident of deviation described in e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) **Testing Requirements**

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

a. Emission Limitation:

PE from this emissions unit shall not exceed 0.31 lb/hr.

Applicable Compliance Method:

If required, compliance may be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 0.81 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18 and OTM-11.

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 3.55 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{VOC} = (10 \text{ ppm VOC}) * (11,835 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{VOC} = 3.55 \text{ TPY}$$

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.20 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.89 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{HAP} = (2.5 \text{ ppm VOC}) * (11,835 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{HAP} = 0.89 \text{ TPY}$$

f. Emission Limitation:

PE from this emissions unit shall not exceed 0.74 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$\text{PE} = (0.00436 \text{ lb PE/ton feed}) * (\text{annual feed production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

0.00436 lb PE/ton feed is based on the allowable emissions rate (0.31 lb PE/hr) divided by the equipment capacity (70 tons/hr, based on 140,000 lbs/hr).

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.



Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

- (1) None.



**5. P024, NM Steep Tanks Aspiration**

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

North Mill Steep Tanks Aspiration

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Sulfur dioxide (SO<sub>2</sub>) emissions from this emissions unit shall not exceed 0.54 lb/hr.</p> <p>Particulate emissions (PE) from this emissions unit shall not exceed 0.22 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 16.94 lbs/hr and 64.68 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.24 lb/hr and 0.91 TPY. See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements OAC rules 3745-17-07(A) and 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	<p>SO<sub>2</sub> emissions from this emissions unit shall not exceed 1.78 TPY, as a rolling 12-month summation.</p> <p>PE from this emissions unit shall not exceed 0.34 TPY, as a rolling 12-month summation.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the scrubber at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual corn production for this emissions unit shall not exceed 980,000 tons, based upon a rolling, 12-month summation of the monthly corn production rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The corn production, in tons;
  - b. The rolling, 12-month summation of the monthly corn production, in tons;
  - c. The PE and SO<sub>2</sub> emissions, in tons;
  - d. The rolling, 12-month summation of PE and SO<sub>2</sub> emissions, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than the average pressure drop

measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pressure drop across the scrubber is 9.2 inches of water based on emissions testing conducted on 10/03.

- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber recirculation liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the average scrubber recirculation liquid flow rate measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable scrubber recirculation liquid flow rate is 215 gallons per minute based on emissions testing conducted on 10/03.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pH of the scrubber liquor, that shall be maintained in order to demonstrate compliance, shall not be less than the average pH of the scrubber liquor measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pH of the scrubber liquor is 7.8 based on emissions testing conducted on 10/03.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), the scrubber recirculation liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's flow and the scrubber liquid's pH on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

These minimum limits for the pressure drop, recirculation liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month corn production restriction of 980,000 tons;
  - b. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 1.78 tons;
  - c. all exceedances of the rolling, 12-month PE limitation of 0.34 tons;
  - d. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the recirculation liquid flow rate, or the liquid pH deviated below the applicable limit contained in this permit;
  - e. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
  - f. each incident of deviation described in e)(1)d (above) where a prompt investigation was not conducted;
  - g. each incident of deviation described in e)(1)d where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate, and/or scrubber

liquid pH into compliance with the minimum limit, was determined to be necessary and was not taken; and

- h. each incident of deviation described in e)(1)d where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

- a. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 0.54 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

- b. Emission Limitation:

PE from this emissions unit shall not exceed 0.22 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

- c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 16.94 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

- d. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 64.68 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

VOC emissions = (VOC emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

VOC emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00370 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.24 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

f. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.91 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

HAP emissions = (HAP emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

HAP emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000052 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

g. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 1.78 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

SO<sub>2</sub> emissions = (SO<sub>2</sub> emissions factor in lbs/ton corn) \* (annual corn production in tons/yr) / (2,000 lbs/ton)

where:

SO<sub>2</sub> emissions factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The

current emissions factor is 0.0000456 lb/ton corn derived from emissions testing conducted on 10/03.

h. Emission Limitation:

PE from this emissions unit shall not exceed 0.34 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$PE = (\text{PE factor in lbs/ton corn}) * (\text{annual corn production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

PE factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000485 lb/ton corn derived from emissions testing conducted on 10/03.

i. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

(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 12 months after issuance of this permit.
- b. The emissions testing shall be conducted to:
  - i. demonstrate compliance with the following allowable emissions rates for this emissions unit:
    - (a) 0.54 lbs/hr of SO<sub>2</sub>;
    - (b) 0.22 lb/hr of PE;
    - (c) 16.94 lbs/hr of VOC; and
    - (d) 0.24 lb/hr of total HAP.

- ii. establish the acceptable pressure drop across the scrubber in d)(2) above;
  - iii. establish the acceptable scrubber recirculation liquid flow rate in d)(3) above; and
  - iv. establish the acceptable pH of the scrubber liquor in d)(4) above.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
- i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
  - ii. Method 5 of 40 CFR Part 60, Appendix A for filterable PE;
  - iii. Method 6 from 40 CFR Part 60, Appendix A for SO<sub>2</sub>;
  - iv. Method 18 from 40 CFR Part 60, Appendix A and OTM-11 for VOC; and
  - v. Method 18 from 40 CFR Part 60, Appendix A for total HAP.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate 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's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate 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.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate 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 appropriate Ohio EPA District Office or local air agency.

- g) Miscellaneous Requirements
  - (1) None.



6. P025, NM Mill Aspiration

Operations, Property and/or Equipment Description:

North Mill Aspiration

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Sulfur dioxide (SO<sub>2</sub>) emissions from this emissions unit shall not exceed 1.24 lbs/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 8.37 lbs/hr and 31.94 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.26 lb/hr and 0.98 TPY. See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	SO <sub>2</sub> emissions from this emissions unit shall not exceed 5.44 TPY, as a rolling 12-month summation.
c.	OAC rule 3745-18-06(E)	The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

- (2) Additional Terms and Conditions
- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the scrubber at all times the emissions unit is in operation.
- c) Operational Restrictions
- (1) The annual corn production for this emissions unit shall not exceed 980,000 tons, based upon a rolling, 12-month summation of the monthly corn production rates.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The corn production, in tons;
- b. The rolling, 12-month summation of the monthly corn production, in tons;
- c. The SO<sub>2</sub> emissions, in tons; and,
- d. The rolling, 12-month summation of SO<sub>2</sub> emissions, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than the average pressure drop measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pressure drop across the scrubber is 5.1 inches of water based on emissions testing conducted on 10/03.
- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber recirculation liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the average scrubber recirculation liquid flow rate measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable scrubber recirculation liquid flow rate is 335 gallons per minute based on emissions testing conducted on 10/03.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pH of the scrubber liquor, that shall be maintained in order to demonstrate compliance, shall not be less than the average pH of the scrubber liquor

measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pH of the scrubber liquor is 8.3 based on emissions testing conducted on 10/03.

- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), the scrubber recirculation liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's flow and the scrubber liquid's pH on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

These minimum limits for the pressure drop, recirculation liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month corn production restriction of 980,000 tons;
  - b. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 5.44 tons;
  - c. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the recirculation liquid flow rate, or the liquid pH deviated below the applicable limit contained in this permit;
  - d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
  - e. each incident of deviation described in e)(1)c (above) where a prompt investigation was not conducted;
  - f. each incident of deviation described in e)(1)c where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate, and/or scrubber liquid pH into compliance with the minimum limit, was determined to be necessary and was not taken; and
  - g. each incident of deviation described in e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
SO<sub>2</sub> emissions from this emissions unit shall not exceed 1.24 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 8.37 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 31.94 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

VOC emissions = (VOC emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

VOC emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00183 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.26 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.98 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

HAP emissions = (HAP emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

HAP emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000056 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

f. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 5.44 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

SO<sub>2</sub> emissions = (SO<sub>2</sub> emissions factor in lbs/ton corn) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

SO<sub>2</sub> emissions factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000155 lb/ton corn derived from emissions testing conducted on 10/03.

- (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 12 months after issuance of this permit.
  - b. The emissions testing shall be conducted to:
    - i. demonstrate compliance with the following allowable emissions rates for this emissions unit:
      - (a) 1.24 lbs/hr of SO<sub>2</sub>;
      - (b) 8.37 lbs/hr of VOC; and
      - (c) 0.26 lb/hr of total HAP.
    - ii. establish the acceptable pressure drop across the scrubber in d)(2) above;
    - iii. establish the acceptable scrubber recirculation liquid flow rate in d)(3) above; and

- iv. establish the acceptable pH of the scrubber liquor in d)(4) above.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
  - i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
  - ii. Method 6 from 40 CFR Part 60, Appendix A for SO<sub>2</sub>;
  - iii. Method 18 from 40 CFR Part 60, Appendix A and OTM-11 for VOC; and
  - iv. Method 18 from 40 CFR Part 60, Appendix A for total HAP.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
  - e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate 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's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate 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.
  - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate 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 appropriate Ohio EPA District Office or local air agency.
- g) Miscellaneous Requirements
- (1) None.



7. P044, FH Truck Pellet Loadout

Operations, Property and/or Equipment Description:

Feed House Truck Pellet Loadout

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) from this emissions unit shall not exceed 0.80 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 2.04 lbs/hr and 8.92 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.51 lb/hr and 2.23 TPY. See b)(2)a.</p> <p>Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirement OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	PE from this emissions unit shall not exceed 1.52 TPY, as a rolling 12-month summation.
c.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual feed throughput for this emissions unit shall not exceed 340,260 tons, based upon a rolling, 12-month summation of the monthly feed throughput rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The feed throughput, in tons;
  - b. The rolling, 12-month summation of the monthly feed throughput, in tons;
  - c. The PE, in tons; and
  - d. The rolling, 12-month summation of PE, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.2 to 5.0 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

This range on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month feed throughput restriction of 340,260 tons;
  - b. all exceedances of the rolling, 12-month PE limitation of 1.52 tons;

- c. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
- e. each incident of deviation described in e)(1)c (above) where a prompt investigation was not conducted;
- f. each incident of deviation described in e)(1)c where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- g. each incident of deviation described in e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

PE from this emissions unit shall not exceed 0.80 lb/hr.

Applicable Compliance Method:

If required, compliance may be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 2.04 lbs/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18 and OTM-11.

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 8.92 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{VOC} = (10 \text{ ppm VOC}) * (29,700 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{VOC} = 8.92 \text{ TPY}$$

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.51 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 2.23 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{HAP} = (2.5 \text{ ppm VOC}) * (29,700 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{HAP} = 2.23 \text{ TPY}$$

f. Emission Limitation:

PE from this emissions unit shall not exceed 1.52 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$\text{PE} = (0.00889 \text{ lb PE/ton feed}) * (\text{annual feed production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

0.00889 lb PE/ton feed is based on the allowable emissions rate (0.80 lb PE/hr) divided by the equipment capacity (90 tons/hr, based on 180,000 lbs/hr).

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.



Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

- g) Miscellaneous Requirements
  - (1) None.



8. P060, SM Wet Germ Conveying

Operations, Property and/or Equipment Description:

South Mill Wet Germ Conveying

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) from this emissions unit shall not exceed 0.055 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.49 lb/hr and 2.15 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.12 lb/hr and 0.54 TPY. See b)(2)a.</p> <p>Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirement OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	PE from this emissions unit shall not exceed 0.20 TPY, as a rolling 12-month summation.

c.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
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(2) Additional Terms and Conditions

a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.

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

c) Operational Restrictions

(1) The annual germ throughput for this emissions unit shall not exceed 52,560 tons, based upon a rolling, 12-month summation of the monthly germ throughput rates.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. The germ throughput, in tons;
- b. The rolling, 12-month summation of the monthly germ throughput, in tons;
- c. The PE, in tons; and
- d. The rolling, 12-month summation of PE, in tons.

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month germ throughput restriction of 52,560 tons; and
  - b. all exceedances of the rolling, 12-month PE limitation of 0.20 tons.

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

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

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

f) Testing Requirements

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

- a. Emission Limitation:

PE from this emissions unit shall not exceed 0.055 lb/hr.

Applicable Compliance Method:

If required, compliance may be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 0.49 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18 and OTM-11.

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 2.15 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{VOC} = (50 \text{ ppm VOC}) * (1,433 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{VOC} = 2.15 \text{ TPY}$$

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.12 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.54 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{HAP} = (12.5 \text{ ppm VOC}) * (1,433 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{HAP} = 0.54 \text{ TPY}$$

f. Emission Limitation:

PE from this emissions unit shall not exceed 0.20 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$\text{PE} = (0.00741 \text{ lb PE/ton germ}) * (\text{annual germ production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

0.00741 lb PE/ton germ is based on the allowable emissions rate (0.055 lb PE/hr) divided by the equipment capacity (7.425 tons/hr, based on 14,850 lbs/hr).

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

**9. P061, NM Wet Germ Conveying**

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

North Mill Wet Germ Conveying

- h) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- i) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) from this emissions unit shall not exceed 0.076 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.49 lb/hr and 2.15 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.12 lb/hr and 0.54 TPY. See b)(2)a.</p> <p>Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirement OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	PE from this emissions unit shall not exceed 0.29 TPY, as a rolling 12-month summation.



c.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
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(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the cyclone at all times the emissions unit is in operation. Emissions from emissions units P061 and P062 are vented to a common cyclone and stack.

j) Operational Restrictions

- (1) The annual germ throughput for this emissions unit shall not exceed 63,000 tons, based upon a rolling, 12-month summation of the monthly germ throughput rates.

k) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The germ throughput, in tons;
  - b. The rolling, 12-month summation of the monthly germ throughput, in tons;
  - c. The PE, in tons; and
  - d. The rolling, 12-month summation of PE, in tons.
- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;



- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

l) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month germ throughput restriction of 63,000 tons; and
  - b. all exceedances of the rolling, 12-month PE limitation of 0.29 tons.

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

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

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

m) Testing Requirements

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

- a. Emission Limitation:

PE from this emissions unit shall not exceed 0.076 lb/hr.

- Applicable Compliance Method:

If required, compliance may be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 0.49 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18 and OTM-11.

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 2.15 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{VOC} = (50 \text{ ppm VOC}) * (1,433 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{VOC} = 2.15 \text{ TPY}$$

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.12 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.54 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{HAP} = (12.5 \text{ ppm VOC}) * (1,433 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{HAP} = 0.54 \text{ TPY}$$

f. Emission Limitation:

PE from this emissions unit shall not exceed 0.29 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$PE = (0.00921 \text{ lb PE/ton germ}) * (\text{annual germ production in tons/yr}) / (2,000 \text{ lbs/ton})$

where:

0.00921 lb PE/ton germ is based on the allowable emissions rate (0.076 lb PE/hr) divided by the equipment capacity (8.25 tons/hr, based on 16,500 lbs/hr).

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

n) Miscellaneous Requirements

(1) None.



10. P063, Wet Germ Conveying to Germ STD 2

Operations, Property and/or Equipment Description:

Wet Germ Conveying to Germ STD 2

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) from this emissions unit shall not exceed 0.032 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.98 lb/hr and 4.30 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.25 lb/hr and 1.08 TPY. See b)(2)a.</p> <p>Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirement OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	PE from this emissions unit shall not exceed 0.12 TPY, as a rolling 12-month summation.



c.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
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(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the cyclone at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual germ throughput for this emissions unit shall not exceed 115,560 tons, based upon a rolling, 12-month summation of the monthly germ throughput rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The germ throughput, in tons;
  - b. The rolling, 12-month summation of the monthly germ throughput, in tons;
  - c. The PE, in tons; and
  - d. The rolling, 12-month summation of PE, in tons.
- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month germ throughput restriction of 115,560 tons; and
  - b. all exceedances of the rolling, 12-month PE limitation of 0.12 tons.

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

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

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

f) Testing Requirements

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

- a. Emission Limitation:

PE from this emissions unit shall not exceed 0.032 lb/hr.

Applicable Compliance Method:

If required, compliance may be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 0.98 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18 and OTM-11.

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 4.30 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{VOC} = (50 \text{ ppm VOC}) * (2,866 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{VOC} = 4.30 \text{ TPY}$$

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.25 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 1.08 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{HAP} = (12.5 \text{ ppm VOC}) * (2,866 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{HAP} = 1.08 \text{ TPY}$$

f. Emission Limitation:

PE from this emissions unit shall not exceed 0.12 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$\text{PE} = (0.00204 \text{ lb PE/ton germ}) * (\text{annual germ production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

0.00204 lb PE/ton germ is based on the allowable emissions rate (0.032 lb PE/hr) divided by the equipment capacity (15.675 tons/hr, based on 31,350 lbs/hr).

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.

**11. P071, FH Gluten Loadout Aspiration**

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

Feed House Gluten Loadout Aspiration

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from this emissions unit shall not exceed 0.69 lb/hr.  Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 1.63 lbs/hr and 7.14 tons per year (TPY). See b)(2)a.  Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.41 lb/hr and 1.78 TPY. See b)(2)a.  Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.  The requirements of this rule also include compliance with the requirement OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	PE from this emissions unit shall not exceed 0.35 TPY, as a rolling 12-month summation.

c.	OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
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(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual gluten throughput for this emissions unit shall not exceed 70,620 tons, based upon a rolling, 12-month summation of the monthly gluten throughput rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The gluten throughput, in tons;
  - b. The rolling, 12-month summation of the monthly gluten throughput, in tons;
  - c. The PE, in tons; and
  - d. The rolling, 12-month summation of PE, in tons.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.2 to 5.0 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with

the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

This range on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

## e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month gluten throughput restriction of 70,620 tons;
  - b. all exceedances of the rolling, 12-month PE limitation of 0.35 tons;
  - c. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
  - d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
  - e. each incident of deviation described in e)(1)c (above) where a prompt investigation was not conducted;
  - f. each incident of deviation described in e)(1)c where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - g. each incident of deviation described in e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

## f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
PE from this emissions unit shall not exceed 0.69 lb/hr.  
Applicable Compliance Method:  
If required, compliance may be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.
  - b. Emissions Limitation:  
VOC emissions from this emissions unit shall not exceed 1.63 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18 and OTM-11.

c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 7.14 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{VOC} = (10 \text{ ppm VOC}) * (23,760 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{VOC} = 7.14 \text{ TPY}$$

d. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.41 lb/hr.

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Method 18.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 1.78 TPY.

Applicable Compliance Method:

Compliance shall be based upon the following calculation:

$$\text{HAP} = (2.5 \text{ ppm VOC}) * (23,760 \text{ dscfm}) * (44 \text{ lb propane / mole propane}) * (60 \text{ min/hr}) * (8760 \text{ hrs/yr}) / (385.3 \text{ ft}^3/\text{lb-mole}) / (1,000,000 \text{ parts/ppm}) / (2000 \text{ lbs/ton})$$

$$\text{HAP} = 1.78 \text{ TPY}$$

f. Emission Limitation:

PE from this emissions unit shall not exceed 0.35 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$PE = (0.00986 \text{ lb PE/ton gluten}) * (\text{annual gluten production in tons/yr}) / (2,000 \text{ lbs/ton})$

where:

0.00986 lb PE/ton gluten is based on the allowable emissions rate (0.69 lb PE/hr) divided by the equipment capacity (70 tons/hr, based on 140,000 lbs/hr).

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) None.



**12. P086, NM Steep Aspiration #2**

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

North Mill Steep Aspiration 2

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Sulfur dioxide (SO<sub>2</sub>) emissions from this emissions unit shall not exceed 1.69 lbs/hr.</p> <p>Particulate emissions (PE) from this emissions unit shall not exceed 0.052 lb/hr.</p> <p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 8.37 lbs/hr and 31.94 tons per year (TPY). See b)(2)a.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.26 lb/hr and 0.98 TPY. See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements OAC rules 3745-17-07(A) and 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].</p>
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	<p>SO<sub>2</sub> emissions from this emissions unit shall not exceed 7.40 TPY, as a rolling 12-month summation.</p> <p>PE from this emissions unit shall not exceed 0.20 TPY, as a rolling 12-month</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		summation.
c.	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This permit is issued pursuant to paragraph 39 of the Consent Decree that was entered by the United States District Court for the District of Minnesota on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D.Minn.). For emission sources whose emissions did not warrant an Emission Control Plan within the Consent Decree, the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 39 requires Cargill to seek modifications to permits to impose or modify the VOC, HAP or CO emission limits for all emission sources not addressed through the Emission Control Plans under paragraphs 15 - 27 of the Consent Decree.
- b. The emissions from this emissions unit shall be vented to the scrubber at all times the emissions unit is in operation.

c) Operational Restrictions

- (1) The annual corn production for this emissions unit shall not exceed 980,000 tons, based upon a rolling, 12-month summation of the monthly corn production rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The corn production, in tons;
  - b. The rolling, 12-month summation of the monthly corn production, in tons;
  - c. The PE and SO<sub>2</sub> emissions, in tons; and
  - d. The rolling, 12-month summation of PE and SO<sub>2</sub> emissions, in tons.

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the scrubber, that shall be maintained

in order to demonstrate compliance, shall not be less than the average pressure drop measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pressure drop across the scrubber is 5.1 inches of water based on emissions testing conducted on 10/03.

- (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber recirculation liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than the average scrubber recirculation liquid flow rate measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable scrubber recirculation liquid flow rate is 430 gallons per minute based on emissions testing conducted on 10/03.
- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pH of the scrubber liquor, that shall be maintained in order to demonstrate compliance, shall not be less than the average pH of the scrubber liquor measured during the most recent performance test that demonstrated the emissions unit was in compliance, as a 3-hour average. The current acceptable pH of the scrubber liquor is 7.8 based on emissions testing conducted on 10/03.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), the scrubber recirculation liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's flow and the scrubber liquid's pH on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop, flow rate, and pH readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

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

These minimum limits for the pressure drop, recirculation liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month corn production restriction of 980,000 tons;
  - b. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 7.40 tons;
  - c. all exceedances of the rolling, 12-month PE limitation of 0.20 tons;
  - d. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the recirculation liquid flow rate, or the liquid pH deviated below the applicable limit contained in this permit;
  - e. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;
  - f. each incident of deviation described in e)(1)d (above) where a prompt investigation was not conducted;
  - g. each incident of deviation described in e)(1)d where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate, and/or scrubber

liquid pH into compliance with the minimum limit, was determined to be necessary and was not taken; and

- h. each incident of deviation described in e)(1)d where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

f) Testing Requirements

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

- a. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 1.69 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

- b. Emission Limitation:

PE from this emissions unit shall not exceed 0.052 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

- c. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 8.37 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

- d. Emissions Limitation:

VOC emissions from this emissions unit shall not exceed 31.94 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

VOC emissions = (VOC emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

VOC emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.00183 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

e. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.26 lb/hr.

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(2).

f. Emissions Limitation:

Total HAP emissions from this emissions unit shall not exceed 0.98 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

HAP emissions = (HAP emissions factor in lbs/bushel corn grind) \* (annual corn production in bushel/yr) / (2,000 lbs/ton)

where:

HAP emissions factor in lbs/bushel corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000056 lb/bushel corn grind derived from Method 18 emissions testing conducted at the Blair, NE facility on 4/14/04.

g. Emission Limitation:

SO<sub>2</sub> emissions from this emissions unit shall not exceed 7.40 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

SO<sub>2</sub> emissions = (SO<sub>2</sub> emissions factor in lbs/ton corn) \* (annual corn production in tons/yr) / (2,000 lbs/ton)

where:

SO<sub>2</sub> emissions factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The

current emissions factor is 0.00136 lb/ton corn derived from emissions testing conducted on 10/03.

h. Emission Limitation:

PE from this emissions unit shall not exceed 0.20 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1) and shall be determined by using the following equation:

$$PE = (PE \text{ factor in lbs/ton corn}) * (\text{annual corn production in tons/yr}) / (2,000 \text{ lbs/ton})$$

where:

PE factor in lbs/ton corn grind derived from the most recent performance test that demonstrated the emissions unit was in compliance. The current emissions factor is 0.000970 lb/ton corn derived from emissions testing conducted on 10/03.

i. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

(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 12 months after issuance of this permit.
- b. The emissions testing shall be conducted to:
  - i. demonstrate compliance with the following allowable emissions rates for this emissions unit:
    - (a) 1.69 lbs/hr of SO<sub>2</sub>;
    - (b) 0.052 lb/hr of PE;
    - (c) 8.37 lbs/hr of VOC; and
    - (d) 0.26 lb/hr of total HAP.

- ii. establish the acceptable pressure drop across the scrubber in d)(2) above;
  - iii. establish the acceptable scrubber recirculation liquid flow rate in d)(3) above; and
  - iv. establish the acceptable pH of the scrubber liquor in d)(4) above.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
- i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
  - ii. Method 5 of 40 CFR Part 60, Appendix A for filterable PE;
  - iii. Method 6 from 40 CFR Part 60, Appendix A for SO<sub>2</sub>;
  - iv. Method 18 from 40 CFR Part 60, Appendix A and OTM-11 for VOC; and
  - v. Method 18 from 40 CFR Part 60, Appendix A for total HAP.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate 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's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate 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.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate 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 appropriate Ohio EPA District Office or local air agency.

- g) Miscellaneous Requirements
  - (1) None.