



Environmental Protection Agency

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

9/19/2012

Certified Mail

Mr. Ryne Stefanacci, P.E.  
Cargill, Inc. - Dayton  
3201 Needmore Road  
Dayton, OH 45414

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0857041124  
Permit Number: P0109668  
Permit Type: OAC Chapter 3745-31 Modification  
County: Montgomery

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Dayton Daily News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

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

and Regional Air Pollution Control Agency  
117 South Main Street  
Dayton, OH 45422-1280

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification  
RAPCA; Indiana; Kentucky





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

X  Other

2. Source Description: Cargill Inc., 0857041124, is engaged in the production of sweeteners and animal feed products in both the national and international markets. The purpose of this Chapter 31 modification is to allow operational flexibility for gluten production. With this modification, the North Mill will be able to produce 100% of the gluten at 70,620 tons per year, while the Feed House will be able to produce 35,310 tons per year. The project will not cause an overall increase in production or emissions. This permit will also incorporate Consent Decree provisions into this PTI for P072 and modify or add emissions limits that were already permitted for P011 and P092 that are identified below. The previous effective permits for these sources are 08-4215, P0104787, P0105256, and the latest Title V permit.

The permit is for the three following emissions units:

**P011 – Feed House Gluten Filter Aspiration**

**P072 -- Feed House Gluten Flash Dryer**

**P092 – Feed House Gluten Vacuum Pumps**

- Paragraph 39 of the Consent Decree required 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. For P011 & P092, the VOC and HAP emissions were already in previous permits and were modified to reflect the requested limits in this permit.
- Paragraphs 23, 25 (VOC) & 26 (CO) and Appendices H (VOC) & K (CO) of the Consent Decree requires Cargill to seek modifications to permits to reflect the percent control limits for both VOC and CO and the outlet concentration limit for CO that were required pursuant to the Consent Decree. Specifically, for P072, paragraph 23 and 25 and Appendix H-Corn Processing VOC Emissions Control plan and paragraph 26 and Appendix K-Corn Processing CO Emissions Control plan require Cargill to seek modifications to permits to impose or modify the VOC and CO emission limits. This emissions factor multiplied by the rolling, 12-month carbon production rate will be used, in part, to determine compliance with the ozone cap. The control limits were added to this permit.



- Appendix M established the initial performance testing requirements for P072. Initial testing was required to be completed within 5 years of Consent Decree lodging. Thus the latest compliant test date was September 1, 2010. However, it has been worked out between RAPCA and Cargill that the emissions testing will occur in the Fall of 2012 in accordance with the Paragraph 76 agreement (Agreement).

P072 will be venting to the common RTO.

3. Facility Emissions and Attainment Status:

Cargill is located in Montgomery County, which is attainment for all criteria pollutants except PM<sub>2.5</sub>, which is classified as basic nonattainment. The Cargill facility is classified as a Title V facility and a major facility for major NSR (particulate, NO<sub>x</sub>, and VOC). Emissions from these three sources combined are in the table below.

4. Source Emissions:

Emissions Unit	VOC	HAP	SO2	CO	NOx	PE
P011	34.67	1.01	7.33	NA	NA	NA
P072	98% control	NA	TBD	90% control or <=100 ppm & TBD	TBD	TBD
P092	3.53	0.126	NA	NA	NA	NA
Total	TBD	1.136	TBD	TBD	TBD	TBD

TBD = To Be Determined during the RTO common control testing in Fall of 2012, per the "Agreement".

5. Conclusion: This permit modification is a change in the method of operation and is associated with an increase in permitted emissions. Therefore it is a Chapter 31 modification. The permit is neither a synthetic minor or a netting permit and will be issued draft based on the company's request.

Cargill is modifying the gluten filtration system at the Dayton plant. The project involves the removal of one gluten drum filter from the North Mill and its associated vacuum pump and vacuum receiver tank and relocating them to the Feedhouse side of the plant. Cargill will also install 4 50,000 gallon process tanks for heavy gluten slurry storage at the Feedhouse. The tanks are considered to be de minimis. After relocation is complete, the Feedhouse will operate 5 drum filters and 3 vacuum pumps and vacuum receiver tanks (P011 and P092) and the North Mill will operate 3 drum filters and two vacuum pumps and vacuum receiver tanks (P086 and P093).

The maximum gluten production rate for the plant will not change as a result of the project. Based on a maximum annual grind rate of 64,200,000 bushels of corn, overall plant wide gluten production will remain at a maximum of 70,620 ton per year. Following the relocation of the drum filter and ancillary equipment to the Feedhouse, Cargill will have the capability to process 100 percent of the gluten production through the Feedhouse operations. To preserve operational flexibility Cargill will not



permanently shut down and remove the gluten processing equipment from the North Mill, but will maintain the equipment and the current North Mill gluten production capacity of 35,310 tons per year.

The project will not cause a change in the overall allowable emission rates from the affected emissions units. Cargill proposes an increase in allowable emissions for individual emissions units; however, the total annual emissions from all sources will not change owing to the project not increasing the permitted annual gluten production rate. Cargill is correcting emissions estimates for several sources that were provided in prior applications and issued permits. The changes in emissions are negligible.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC, SO <sub>2</sub> , CO, NO <sub>x</sub> , & PE	TBD
HAP	1.14



PUBLIC NOTICE  
9/19/2012 Issuance of Draft Air Pollution Permit-To-Install

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

FACILITY DESC.: Wet Corn Milling

PERMIT #: P0109668

PERMIT TYPE: OAC Chapter 3745-31 Modification

PERMIT DESC: This is a Chapter 31 modification due to the facilities request for the removal of one gluten drum filter from the North Mill and its associated vacuum pump and vacuum receiver tank and relocating them to the Feedhouse side of the plant. Cargill will also install 4- 50,000 gallon process tanks for heavy gluten slurry storage at the Feedhouse. The tanks are considered to be de minimis. After relocation is complete, the Feedhouse will operate 5 drum filters and 3 vacuum pumps and vacuum receiver tanks (P011 and P092) and the North Mill will operate 3 drum filters and two vacuum pumps and vacuum receiver tanks (P086 and P093). The maximum gluten production rate for the plant will not change as a result of the project. Based on a maximum annual grind rate of 64,200,000 bushels of corn, overall plant wide gluten production will remain at a maximum of 70,620 ton per year. Following the relocation of the drum filter and ancillary equipment to the Feedhouse, Cargill will have the capability to process 100 percent of the gluten production through the Feedhouse operations. To preserve operational flexibility Cargill will not permanently shut down and remove the gluten processing equipment from the North Mill, but will maintain the equipment and the current North Mill gluten production capacity of 35,310 tons per year. The project will not cause a change in the overall allowable emission rates from the affected emissions units. Cargill proposes an increase in allowable emissions for individual emissions units; however, the total annual emissions from all sources will not change owing to the project not increasing the permitted annual gluten production rate. Cargill is correcting emissions estimates for several sources that were provided in prior applications and issued permits. The changes in emissions are negligible.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Christopher Clinefelter, Regional Air Pollution Control Agency, 117 South Main Street, Dayton, OH 45422-1280. Ph: (937)225-4435





**DRAFT**

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

Facility ID:	0857041124
Permit Number:	P0109668
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	9/19/2012
Effective:	To be entered upon final issuance





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

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. Federally Enforceable Standard Terms and Conditions ..... 4
2. Severability Clause ..... 4
3. General Requirements ..... 4
4. Monitoring and Related Record Keeping and Reporting Requirements ..... 5
5. Scheduled Maintenance/Malfunction Reporting ..... 6
6. Compliance Requirements ..... 6
7. Best Available Technology ..... 7
8. Air Pollution Nuisance ..... 7
9. Reporting Requirements ..... 7
10. Applicability ..... 8
11. Construction of New Sources(s) and Authorization to Install ..... 8
12. Permit-To-Operate Application ..... 9
13. Construction Compliance Certification ..... 9
14. Public Disclosure ..... 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations ..... 10
16. Fees ..... 10
17. Permit Transfers ..... 10
18. Risk Management Plans ..... 10
19. Title IV Provisions ..... 10
B. Facility-Wide Terms and Conditions ..... 11
C. Emissions Unit Terms and Conditions ..... 13
1. P011, FH Gluten Filter Aspiration ..... 14
2. P072, FH Gluten Flash Dryer ..... 23
3. P092, FH Gluten Vacuum pump ..... 34





# Authorization

Facility ID: 0857041124

Facility Description: wet corn milling

Application Number(s): A0043751, A0044390, A0045158

Permit Number: P0109668

Permit Description: This is a Chapter 31 modification due to the facilities request for the removal of one gluten drum filter from the North Mill and its associated vacuum pump and vacuum receiver tank and relocating them to the Feedhouse side of the plant. Cargill will also install 4- 50,000 gallon process tanks for heavy gluten slurry storage at the Feedhouse. The tanks are considered to be de minimis. After relocation is complete, the Feedhouse will operate 5 drum filters and 3 vacuum pumps and vacuum receiver tanks (P011 and P092) and the North Mill will operate 3 drum filters and two vacuum pumps and vacuum receiver tanks (P086 and P093). The maximum gluten production rate for the plant will not change as a result of the project. Based on a maximum annual grind rate of 64,200,000 bushels of corn, overall plant wide gluten production will remain at a maximum of 70,620 ton per year. Following the relocation of the drum filter and ancillary equipment to the Feedhouse, Cargill will have the capability to process 100 percent of the gluten production through the Feedhouse operations. To preserve operational flexibility Cargill will not permanently shut down and remove the gluten processing equipment from the North Mill, but will maintain the equipment and the current North Mill gluten production capacity of 35,310 tons per year. The project will not cause a change in the overall allowable emission rates from the affected emissions units. Cargill proposes an increase in allowable emissions for individual emissions units; however, the total annual emissions from all sources will not change owing to the project not increasing the permitted annual gluten production rate. Cargill is correcting emissions estimates for several sources that were provided in prior applications and issued permits. The changes in emissions are negligible.

Permit Type: OAC Chapter 3745-31 Modification

Permit Fee: \$3,000.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 9/19/2012

Effective Date: To be entered upon final issuance

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: P0109668

Permit Description: This is a Chapter 31 modification due to the facilities request for the removal of one gluten drum filter from the North Mill and its associated vacuum pump and vacuum receiver tank and relocating them to the Feedhouse side of the plant. Cargill will also install 4- 50,000 gallon process tanks for heavy gluten slurry storage at the Feedhouse. The tanks are considered to be de minimis. After relocation is complete, the Feedhouse will operate 5 drum filters and 3 vacuum pumps and vacuum receiver tanks (P011 and P092) and the North Mill will operate 3 drum filters and two vacuum pumps and vacuum receiver tanks (P086 and P093). The maximum gluten production rate for the plant will not change as a result of the project. Based on a maximum annual grind rate of 64,200,000 bushels of corn, overall plant wide gluten production will remain at a maximum of 70,620 ton per year. Following the relocation of the drum filter and ancillary equipment to the Feedhouse, Cargill will have the capability to process 100 percent of the gluten production through the Feedhouse operations. To preserve operational flexibility Cargill will not permanently shut down and remove the gluten processing equipment from the North Mill, but will maintain the equipment and the current North Mill gluten production capacity of 35,310 tons per year. The project will not cause a change in the overall allowable emission rates from the affected emissions units. Cargill proposes an increase in allowable emissions for individual emissions units; however, the total annual emissions from all sources will not change owing to the project not increasing the permitted annual gluten production rate. Cargill is correcting emissions estimates for several sources that were provided in prior applications and issued permits. The changes in emissions are negligible.

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>P011</b>
Company Equipment ID:	FH Gluten Filter Aspiration
Superseded Permit Number:	P0105256
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P072</b>
Company Equipment ID:	FH Gluten Flash Dryer
Superseded Permit Number:	08-04215
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P092</b>
Company Equipment ID:	FH Gluten Vacuum pump
Superseded Permit Number:	P0104787
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**

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

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.

## C. Emissions Unit Terms and Conditions



1. 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), (P0105256, issued 4/22/11)	The sulfur dioxide (SO <sub>2</sub> ) emissions from this emissions unit shall not exceed 1.88 lbs/hr.  The total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.27 lb/hr and 1.01 TPY. See b)(2)a.  The requirements of this rule also include compliance with the requirements OAC rule 3745-31-05(D) [Synthetic minor to avoid PSD rule requirements].
b.	ORC 3704.03(T)	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.98 lb/ton of gluten produced, as a rolling 12 month summation. See b)(2)a.
c.	OAC rule 3745-31-05(F) (Voluntary restrictions to allow for operational flexibility)	The combined VOC emissions from emissions unit P011 and P086 (Permit # P0110052) shall not exceed 49.27 TPY. See b)(2)b.  The combined total HAP emissions from emissions units P011 and P086 shall not



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 1.49 TPY. See b)(2)b.</p> <p>The individual VOC emissions from this emissions unit shall not exceed 34.67 TPY. See b)(2)c.</p>
e.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD rule requirements)	The SO <sub>2</sub> emissions from this emissions unit shall not exceed 7.33 TPY, as a rolling 12-month summation.
f.	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 emissions unit was previously permitted in Permit P0105256 (issued 4/22/11). P0105256 was 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 permittee has requested combined annual emissions limits and production limits for P011 & P086, to allow for operational flexibility between the North Mill and the Feedhouse without increasing the overall annual emissions or production at the facility.
- c. The annual VOC limit for this emissions unit was retained in this permit due to the voluntarily requested combined VOC limits for P011 and P086. Without the requested limits, the annual VOC limit would not be required to be in the permit based on the latest Ohio EPA BAT guidance.
- d. 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 70,620 tons, based upon a rolling, 12-month summation of the monthly gluten production rates.
- (2) The combined annual gluten production from both P011 & P086 (Permit # P0110052) shall not exceed 70,620, based on a rolling 12-month summation of the monthly combined 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 combined rolling, 12-month summation of the monthly gluten production for both P011 and P086, in tons
  - d. The SO<sub>2</sub> emissions, in tons; and,
  - e. 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 not less than 2 inches, which is the same as the TV permit.
- (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 shall not be less than 22 gallons per minute, which is the same as the TV permit.
- (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 shall be maintained at or above 7.0, which is the same as the TV permit.
- (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 and the scrubber liquid's recirculation liquid flow rate on a once per day basis. The permittee shall record the pH of the scrubber liquid as an average for each 8-hour shift. 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:

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop, flow rate, and pH 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.

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.

- (6) The permittee shall perform monthly operational status inspections of process and air pollution control equipment that is important to the performance of the emissions capture system for this emissions unit (e.g., 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.

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 70,620 tons;
  - b. all exceedances of the combined rolling, 12-month gluten production restriction of 70,620 tons, from both P011 and P086;
  - c. all exceedances of the rolling, 12-month SO<sub>2</sub> emission limitation of 7.33 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. each 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The 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. Emission Limitation:

The 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 facility derived emission factor of 0.174 lb/ton, based on emissions testing conducted in 12/06, multiplied by the annual gluten production 70,620 tons/yr and divided by 2000 lbs/ton.

c. Emissions Limitation:

The VOC emissions from this emissions unit shall not exceed 0.98 lb/ton of gluten produced.

Applicable Compliance Method:

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

d. Emissions Limitation:

The VOC emissions from this emissions unit shall not exceed 34.67 TPY

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1).

Compliance with the annual emissions limitation shall be determined by multiplying the 2/19/08 facility derived emission factor for VOC of 0.00108 lb

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

VOC/bushel by the annual gluten production of 64,200,000 tons per year and dividing by 2,000 lbs/ton.

The current emissions factor of 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)

e. Emissions Limitation:

The total HAP emissions from this emissions unit shall not exceed 0.27 lb/hr.

Applicable Compliance Method:

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

f. Emissions Limitation:

The total HAP emissions from this emission unit shall not exceed 1.01 TPY.

Applicable Compliance Method:

Compliance with the emissions limitation shall be based upon the record keeping specified in d)(1):

The annual emissions limitation was determined by multiplying the 2/19/08 facility derived HAP emissions factor of 0.0000313 lb HAP/bushel of corn (VOC emission factor of 0.00108 x VOC to HAP ratio 0.029 = 0.0000313) by the annual gluten production in bushel/yr of 64,200,000 and dividing by 2,000 lbs/ton.

Compliance shall be determined by using the most recent performance test that demonstrated that the emissions unit was in compliance. The current emission 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).

g. Emissions Limitation:

The combined emissions from both P011 and P086 (Permit # P0110052) shall not exceed 49.27 TPY for VOC and 1.49 TPY for HAPs.

Applicable Compliance Method:

Compliance for the combined annuals shall be determined summing the annual VOC emissions from f)(1)d. in this permit and f)(1)f. in P0110052 and the annual HAP emissions from f)(1)f. in this permit and f)(1)h. in P0110052.

- (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 6 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) 0.98 lb VOC/ton of gluten produced; and
      - (c) 0.27 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 Method 207 from 40 CFR Part 51, Appendix M 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.



2. P072, FH Gluten Flash Dryer

Operations, Property and/or Equipment Description:

Feedhouse gluten flash dryer, with venturi scrubber control and RTO

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.	B. ORC 3704.03(T)	See b)(2)a. and b)(2)b.i.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01  OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)a. and b)(2)b.ii.  See b)(2)a. and b)(2)b.ii.
c.	OAC rule 3745-31-05(A)(3)	The opacity shall not exceed 10 percent, as a six-minute average from the RTO.

d.	OAC rule 3745-31-05(D) (Limitations pursuant to Consent Decree, United States v. Cargill, Incorporated, (Civil Action No. 05-2037 JMR/FLN), which was lodged with the United States District Court for the District of Minnesota on September 1, 2005.)	Combined Nitrogen Oxides (NO <sub>x</sub> ) emissions from emissions units B004 and B006 and combined Volatile Organic Compounds (VOC) emissions from emissions units B004, B006, P037, P040, P058, P067, and P582, along with the emission units that vent to the RTO, P032, P104 (replaced P033), P105 (replaced P034), P052, P088, P057, and P072 shall not exceed 854 TPY as a rolling, 12-month summation (Appendix J, Dayton, Ohio Corn Processing Ozone Cap). Those sources venting to the RTO will have combined limits.  See b)(2)c. through b)(2)e. regarding VOC and carbon monoxide (CO) emissions.
e.	OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11(B)(1) OAC rule 3745-18-06(E)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. Nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), hazardous air pollutant (HAP) and particulate emissions (PE) limitations and control requirements will be established 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.) and the Dispute Resolution Agreement between the United States, the State of Ohio, the Ohio County of Montgomery and Cargill, Inc. that was entered April 15, 2011 United States, et al v. Cargill, Inc. File No. 05-2037. Monitoring, record keeping, reporting and testing requirements will be developed when compliance with the Consent Decree and Dispute Resolution Agreement has been demonstrated.
- b. In accordance with the testing requirements in f)(2), and depending on the individual pollutants annual emissions rate, the appropriate Best Available Technology citation will be cited in a future modification of this permit.
  - i. If the individual pollutants annual emissions of NO<sub>x</sub>, PE, or SO<sub>2</sub> are equal to or greater than 10 tons, ORC 3704.03(T) will be cited for those pollutants.
  - ii. If the individual pollutants annual emissions of NO<sub>x</sub>, PE, or SO<sub>2</sub> are less than 10 tons, the dual BAT language will be cited for those pollutants, citing, OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06 and OAC rule 3745-31-05(A)(3), as effective 11/30/01.

- c. This permit reflects the percent control limits for both VOC and carbon monoxide (CO) and the outlet concentration limit for CO that were required 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.). The sources in the Consent Decree set out a process for Cargill and permitting authorities to update permit limits for certain emissions units. Specifically, paragraph 23 and 25 and Appendix H-Corn Processing VOC Emissions Control plan and paragraph 26 and Appendix K-Corn Processing CO Emissions Control plan require Cargill to seek modifications to permits to impose or modify the VOC and CO emission limits.
  - d. The VOC control plan includes the use of the Regenerative Thermal Oxidizer (RTO) to control and reduce VOC emissions by 98% from the stack serving this emissions unit (RTO).
  - e. The CO control plan includes the use of the RTO to control and reduce CO emissions by 90% or the outlet concentration of CO emissions shall be less than or equal to 100 ppm from the stack serving this emissions unit (RTO).
- b) Operational Restrictions
- (1) The maximum annual gluten production for this emissions unit shall not exceed 70,620 tons, based upon a rolling, 12-month summation of the gluten production rates.
  - (2) The combined annual gluten production from both P057 (Permit # P0110052) and P072 shall not exceed 70,620, based on a rolling 12-month summation of the monthly combined gluten production rates.
  - (3) The maximum annual fuel oil usage for this emissions unit shall not exceed 192,414 gallons, based upon a rolling, 12-month summation of the fuel oil usage figures.
  - (4) The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.1%, by weight.
- c) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
    - a. The gluten production, in tons.
    - b. The rolling, 12-month summation of the monthly gluten production, in tons.
    - c. The rolling, 12-month summation of VOC and NOx emissions, in tons.
    - d. The fuel oil usage for each month, in gallons.
    - e. The rolling, 12-month summation of the fuel oil usage figures, in gallons.

- (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 2 inches of water until the emissions testing required in f)(2) is conducted and the appropriate pressure drop value is established.
- (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 21 gallons per minute until the emissions testing required in f)(2) is conducted and the appropriate scrubber recirculation liquid flow rate value is established. After the emissions testing required in f)(2) is conducted, 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.
- (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 6 as an average for each 8-hour shift until the emissions testing required in f)(2) is conducted and the appropriate pH of the scrubber liquor value is established. After the emissions testing required in f)(2) is conducted, the acceptable pH of the scrubber liquor, as an average for each 8-hour shift, 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.
- (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 (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 scrubber pressure drop and recirculation liquid flow rate on a once per day basis and record the liquid's pH as an average for each 8-hour shift. 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:

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop, flow rate, and pH 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.

These minimum limits for the pressure drop, recirculation liquid flow rate, and the 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, recirculation liquid flow rate, and pH based upon information obtained during future performance tests that demonstrate compliance with the allowable SO<sub>2</sub> emission rate from the stack serving this emissions unit (RTO). 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.

- (6) The permittee shall perform monthly operational status inspections of process and air pollution control equipment that is important to the performance of the emissions capture system for this emissions unit (e.g., 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.

- (7) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the oil supplier's analysis for sulfur content. The record keeping shall document that the fuel was sampled and analyzed in accordance with approved ASTM procedures. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

d) 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 70,620 tons;
  - b. all exceedances of the combined rolling, 12-month gluten production restriction of 70,620 tons, from both P057 and P072;
  - c. all exceedances of the rolling fuel oil usage limitation of 192,414;
  - d. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, recirculation liquid flow rate, and the liquid pH deviated below the applicable limit contained in this permit;
  - e. each 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 Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emissions shall be controlled and reduced by 98% from the stack serving this emissions unit (RTO).

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(3).

b. Emission Limitation:

The CO emissions shall be controlled and reduced by at least 90%, or the outlet concentration of CO emissions shall be less than or equal to 100ppm, from the stack serving this emissions unit (RTO).

Applicable Compliance Method:

Compliance shall be demonstrated through performance testing as described in f)(3).

c. Emission Limitation:

The visible PE shall not exceed 10 percent opacity as a six-minute average, from the stack serving this emissions unit (RTO), except as provided by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation serving this emissions unit (RTO) shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

d. Emission Limitations:

Combined NO<sub>x</sub> emissions from emissions units B004 and B006 and combined VOC emissions from emissions units B004, B006, P037, P040, P058, P067, and P582, along with the emission units that vent to the RTO, P032, P104 (replaced P033), P105 (replaced P034), P052, P088, P057, and P072 shall not exceed 854 TPY as a rolling, 12-month summation (Appendix J, Dayton, Ohio Corn Processing Ozone Cap). Those sources venting to the RTO will have combined limits.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements in d)(1) and emissions testing as described in f)(3) for the emissions units listed above.

- (2) The permittee shall conduct, or have conducted, emission testing for the stack serving this emissions unit (RTO) in accordance with the following requirements:
- a. The emissions testing shall be conducted within 12 months after issuance of this permit.
  - b. Compliant testing demonstrated in accordance with the Dispute Resolution, term II. F. "Within 120 days of Cargill's successful demonstration that the visible emission opacity that occurs during bakeout of the RTO..." may fulfill the testing requirements for VOC and CO in f)(2)a. and f)(2)c.
  - c. The emissions testing shall be conducted to:
    - i. Establish the allowable emissions rates for the stack serving this emissions unit (RTO), for;
      - (a) PE;
      - (b) SO<sub>2</sub>;
      - (c) NO<sub>x</sub>; and
      - (d) for VOC and CO, see f)(4).
    - ii. establish the acceptable compliant values for the following control operating parameters:
      - (a) scrubber pressure drop;
      - (b) scrubber recirculation liquid flow rate; and
      - (c) scrubber pH of the scrubber liquor;
  - d. 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 7 from 40 CFR Part 60, Appendix A for NO<sub>x</sub>;
    - v. Method 10 from 40 CFR Part 60, Appendix A for CO; and,
    - vi. Method 25A from 40 CFR Part 60, Appendix A for VOC.

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

- e. 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.
  - f. 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).
  - g. 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.
  - h. 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.
- (3) The permittee shall conduct, or have conducted, emissions testing for the stack serving this emissions unit (RTO) in accordance with the following requirements:
- a. The emissions testing shall be conducted annually by September of each calendar year.
    - i. Following the expiration/termination of the Consent Decree, [specifically Appendix J, Dayton, Ohio Corn Processing Ozone Cap, Comment (2) which requires annual VOC performance testing for the stack serving this emissions unit (RTO) and depending on the results of the previous tests and configuration of the facility], the testing schedule for the Ozone Cap sources may be revisited.
  - b. The emissions testing shall be conducted to:
    - i. Determine the emissions factor, in lbs VOC/ton carbon, that will be used to demonstrate compliance with the following allowable emissions rates for the stack serving this emissions unit (RTO):

- (a) Combined NO<sub>x</sub> emissions from emissions units B004 and B006 and combined VOC emissions from emissions units B004, B006, P037, P040, P058, P067, and P582, along with the emission units that vent to the RTO, P032, P104 (replaced P033), P105 (replaced P034), P052, P088, P057, and P072 shall not exceed 854 TPY as a rolling, 12-month summation (Appendix J, Dayton, Ohio Corn Processing Ozone Cap). Those sources venting to the RTO will have combined limits.
  - c. The following test methods shall be employed to develop the emissions factor used to demonstrate compliance with the above emissions limitation:
    - 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; and
    - ii. Method 25A from 40 CFR Part 60, Appendix A for VOC (include scaling factor of 2.2 as appropriate).

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.
  - d. See f)(2)d. through f)(2)h. for emissions test requirements regarding operating capacity, ITT, witnesses, and test report.
- (4) The permittee shall conduct, or have conducted, emission testing at the stack serving this emissions unit (RTO) in accordance with the following requirements:
- a. The emissions testing shall be conducted in accordance with the Dispute Resolution, term II. F. Alternatively, the emissions testing required by this term f)(4) can be conducted in conjunction with the emissions testing required by term f)(2).
  - b. The emissions testing shall be conducted to:
    - i. demonstrate compliance with the following allowable emissions rates from the stack serving this emissions unit (RTO):
      - (a) VOC emissions reduced by 98%; and
      - (b) CO emissions reduced by 90%, or the CO emissions outlet concentration shall be less than or equal to 100 ppm.
    - ii. establish or verify the acceptable afterburner temperature.
  - 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;



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

- ii. Method 10 from 40 CFR Part 60, Appendix A for CO; and
- iii. Method 25A from 40 CFR Part 60, Appendix A for VOC.

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

See f)(2)d. through f)(2)h. for emissions test requirements regarding operating capacity, ITT, witnesses, and test report.

e) **Miscellaneous Requirements**

- (1) None.



**3. P092, FH Gluten Vacuum pump**

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

FH Gluten Vacuum Pump

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), as effective 11/30/01 (P0104787, issued 6/12/2009)	<p>Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.96 pound per hour (lb/hr) and 3.53 tons per year (TPY).</p> <p>See b)(2)a. and b)(2)b.</p> <p>Total hazardous air pollutant (HAP) emissions from this emissions unit shall not exceed 0.034 lb/hr and 0.126 TPY. See b)(2)a.</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)c.
c.	OAC rule 3745-31-05(F) (Voluntary restrictions to allow for operational flexibility)	<p>The combined VOC emissions from emissions unit P092 and P093 (Permit # P0110052) shall not exceed 3.53 TPY. See b)(2)a.</p> <p>The combined total HAP emissions from emissions units P092 and P093 shall not exceed 0.126 TPY. See b)(2)a.</p>

(2) Additional Terms and Conditions

a. This emissions unit was previously permitted in Permit P0104787 (issued 6/12/09). P0104787 was 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 permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not been yet approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT will exist as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC from this air contaminant source since the uncontrolled potential to emit for VOC is less than 10 tons/yr.

d. The permittee has requested combined annual emissions limits and production limits for P092 & P093 (Permit # P0110052) to allow for operational flexibility between the North Mill and the Feedhouse without increasing the overall annual emissions or production at the facility.

e. This emissions unit is permitted at its potential to emit, as defined in OAC rule 3745-31-01, for all pollutants.

c) Operational Restrictions

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

(2) The combined annual gluten production from both P092 and P093 (Permit # P0110052) shall not exceed 70,620, based on a rolling 12-month summation of the monthly combined gluten production rates.



d) Monitoring and/or Recordkeeping Requirements

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

- a. The gluten production, in tons; and
- b. The rolling, 12-month summation of the monthly gluten production, in tons.

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 70,620 tons; and
- b. all exceedances of the combined rolling, 12-month gluten production restriction of 70,620 tons, from both P092 and P093.

f) Testing Requirements

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

a. Emissions Limitation:

The VOC emissions from this emissions unit shall not exceed 0.96 lb/hr.

Applicable Compliance Method:

Compliance is based on the VOC emissions factor (0.00011 lb/bushel) derived from Method OTM-11 emissions testing at a similar source at another facility and the maximum corn grinding rate of 8,708 bushels/hr.

Compliance may also be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5, 18 and OTM-11.

b. Emissions Limitation:

The VOC emissions from this emissions unit shall not exceed 3.53 TPY.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum bushels/yr (64,200,000) by 0.00011 lb/bushel and dividing by 2,000 lbs/ton.

c. Emissions Limitation:

The total HAP emissions from this emissions unit shall not exceed 0.034 lb/hr.

Applicable Compliance Method:

Compliance is based on the VOC emissions factor (0.00011 lb/bushel) and HAP to VOC ratio (0.0357) both derived from Method OTM-11 emissions testing at a similar source at another facility and the maximum corn grinding rate of 8708 bushels/hr.

Compliance may also be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5, 18 and 40 CFR Part 51, Method 207.

d. Emissions Limitation:

The total HAP emissions this emissions unit shall not exceed 0.126 TPY.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum bushels/yr (64,200,000) by the VOC emission factor of 0.00011 lb/bushel, multiplied by the HAP to VOC ratio (0.0357) and dividing by 2,000 lbs/ton.

e. Emissions Limitation:

The combined emissions from both P092 and P093 (Permit # P0110052) shall not exceed 3.53 TPY for VOC and 0.126 TPY for HAPs.

Applicable Compliance Method:

Compliance for the combined annuals shall be determined by summing the annual VOC emissions from f)(1)b. in this permit and f)(1)b. in P0110052 and by summing the annual HAP emissions from f)(1)d. in this permit and f)(1)d. in P0110052.

g) **Miscellaneous Requirements**

- (1) None.