



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

12/30/2015

Certified Mail

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 0857041124
 Permit Number: P0112206
 Permit Type: OAC Chapter 3745-31 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
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

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 Environmental Protection Agency (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 by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. 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 E. Hopkins, P.E.
 Assistant Chief, Permitting 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

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 modification is to incorporate Consent Decree provisions into this PTI that are identified below. The previous effective permits for these sources are identified below.

This permit to install (PTI) includes the following six emissions units:

- P032 (Fiber Steam Tube Dryer #1) – PTI P0108440 effective 7/14/11
- P104 (Fiber Steam Tube Dryer #2) – PTI P0108283 effective 7/14/11
- P105 (Fiber Steam Tube Dryer #3) – PTI P0108283 effective 7/14/11
- P052 (Germ Steam Tube Dryer #2) – PTI 08-3290 effective 9/2/98
- P066 (Germ Cooler) – PTI 08-3290 effective 9/2/98
- P088 (Germ Steam Tube Dryer #1) – PTI 08-04725 effective 10/25/05

The Consent Decree contained the following paragraphs and appendices that apply to this group of emissions units:

- Paragraph 23 – Corn Processing VOC emissions control for process VOC sources and the associated Appendix H;
- Paragraph 24 – Corn Processing VOC emission control plan for integrated feed/bran Drying Systems and the associated Appendix I;
- Paragraph 25 – Corn Processing VOC emission control Plan – Dayton Facility and the associated Appendix J; and,
- Paragraph 26 – Corn Processing CO Emission Control Plan and the associated Appendix K.

The corn processing VOC emission control plan for process VOC sources resulted in the installation of an RTO which was required to meet a 98 percent VOC reduction for the process units identified in Appendix J of the consent decree. The Appendix J sources include the follow emissions units: P032, P104, P105, P052, P066, P088, P057 and P072 and are referred to as the RTO sources. Emissions units P057 and P072 are part of the RTO source group. However, they are not included in this permit.

3. Facility Emissions and Attainment Status:

Cargill is located in Montgomery County, which is attainment for all criteria pollutants. The Cargill facility is classified as a Title V facility and a major facility for major NSR (particulate, NOX, CO, SO2 and VOC). Emissions from the RTO sources are in the table below.

4. Source Emissions:

The emissions for the RTO sources are listed in Section 7, below.

5. Conclusion:

This permit is being processed as a Chapter 31 Modification due to the addition of the VOC emissions to these sources and a change in the method of operation that caused an increase in allowable emissions (allowable increase in opacity during bake-out of the RTO). The permit is neither a synthetic minor, nor a netting permit, and was issued draft based on the company's request.

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>
Particulate Emissions	1.51
Volatile Organic Compounds	42.47
Nitrogen Oxides	33.95
Carbon Monoxide	108.8
Sulfur Dioxide	80.25
Highest Single HAP (Acetaldehyde)	2.02
Combined HAP	11.75

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install OAC Chapter 3745-31 Modification
Cargill, Inc. - Dayton

3201 Needmore Road, P.O. Box 1400 A, Dayton, OH 45413-8001
ID#: P0112206

Date of Action: 12/30/2015

Permit Desc: Permit to Install (PTI) Chapter 31 Modification to allow an increase in allowable opacity emissions during bakeout of the RTO (due to change in method of operation), and to address unpermitted VOC emissions. The PTI is pursuant to the terms of the Consent Decree entered by the U.S. District Court on March 3, 2006 in United States v. Cargill, Inc., No. 05-2037 (D. Minn.) and the Dispute Resolution Agreement. The CD addresses the existence of unpermitted VOC emissions at its Dayton corn processing facility through establishing a corn processing ozone cap that limits VOC and NOx emissions from all process operations tied to the RTO - P032, P052, P057, P066, P072, P088, P104, and P105..

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 ID # or: Heather Kawecki, 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:	P0112206
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	12/30/2015
Effective:	To be entered upon final issuance



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

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Draft Permit-to-Install
Cargill, Inc. - Dayton
Permit Number: P0112206
Facility ID: 0857041124

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0857041124
Facility Description: wet corn milling
Application Number(s): A0045461
Permit Number: P0112206
Permit Description: Permit to Install (PTI) Chapter 31 Modification to allow an increase in allowable opacity emissions during bakeout of the RTO (due to change in method of operation), and to address unpermitted VOC emissions. The PTI is pursuant to the terms of the Consent Decree entered by the U.S. District Court on March 3, 2006 in *United States v. Cargill, Inc.*, No. 05-2037 (D. Minn.) and the Dispute Resolution Agreement. The CD addresses the existence of unpermitted VOC emissions at its Dayton corn processing facility through establishing a corn processing ozone cap that limits VOC and NOx emissions from all process operations tied to the RTO - P032, P052, P057, P066, P072, P088, P104, and P105.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$6,750.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 12/30/2015
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 Environmental Protection Agency (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

Craig W. Butler
Director



Authorization (continued)

Permit Number: P0112206

Permit Description: Permit to Install (PTI) Chapter 31 Modification to allow an increase in allowable opacity emissions during bakeout of the RTO (due to change in method of operation), and to address unpermitted VOC emissions. The PTI is pursuant to the terms of the Consent Decree entered by the U.S. District Court on March 3, 2006 in United Sates v. Cargill, Inc., No. 05-2037 (D. Minn.) and the Dispute Resolution Agreement. The CD addresses the existence of unpermitted VOC emissions at its Dayton corn processing facility through establishing a corn processing ozone cap that limits VOC and NOx emissions from all process operations tied to the RTO - P032, P052, P057, P066, P072, P088, P104, and P105.

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

Group Name: Germ & Fiber Steam Tube Dryers

Emissions Unit ID:	P032
Company Equipment ID:	FH Fiber STD 1
Superseded Permit Number:	P0108440
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P052
Company Equipment ID:	NM Germ STD 2
Superseded Permit Number:	08-3290
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P066
Company Equipment ID:	NM Germ Cooler
Superseded Permit Number:	08-3290
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P088
Company Equipment ID:	NM Germ Steam Tube Dryer #1
Superseded Permit Number:	08-04725
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P104
Company Equipment ID:	Fiber STD #2
Superseded Permit Number:	P0108283
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P105
Company Equipment ID:	Fiber STD #3
Superseded Permit Number:	P0108283
General Permit Category andType:	Not Applicable



Draft Permit-to-Install
Cargill, Inc. - Dayton
Permit Number: P0112206
Facility ID: 0857041124
Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

2. Severability Clause

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

3. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the 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 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 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) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

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

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the 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 quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

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

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

- a) Completion of initial installation date shall be 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 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.



Draft Permit-to-Install
Cargill, Inc. - Dayton
Permit Number: P0112206
Facility ID: 0857041124
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



Draft Permit-to-Install
Cargill, Inc. - Dayton
Permit Number: P0112206
Facility ID: 0857041124

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.



Draft Permit-to-Install
Cargill, Inc. - Dayton
Permit Number: P0112206
Facility ID: 0857041124
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group -Germ & Fiber Steam Tube Dryers: P032,P052,P066,P088,P104 and P105

EU ID	Operations, Property and/or Equipment Description
P032	Fiber Steam Tube Dryer No #1 with venturi scrubber and RTO
P052	North Mill Steam Tube Dryer No. 2 with wet scrubber and RTO
P066	North Mill Germ Cooler with wet scrubber and RTO
P088	North Mill Germ Steam Tube Dryer No. 1 with wet scrubber and RTO
P104	Fiber Steam Tube Dryer #2 with venturi scrubber and RTO
P105	Fiber Steam Tube Dryer #3 with venturi scrubber 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.	OAC rule 3745-31-05(A)(3) June 30, 2008	<p>The particulate emissions (PE) from the group of emissions units that vent to the regenerative thermal oxidizer (RTO) shall not exceed 0.000047 lb/bushel corn ground.</p> <p>The sulfur dioxide (SO₂) emissions from the group of emissions units that vent to the RTO shall not exceed 0.0025 lb/bushel corn ground.</p> <p>The nitrogen oxide (NO_x) emissions from the group of emissions units that vent to the RTO shall not exceed 0.10 lb/MMbtu actual heat input.</p> <p>The hazardous air pollutant (HAP) emissions from the group of emissions units that vent to the RTO shall not exceed 3.19 lbs/hr.</p> <p>Compliance with this rule also includes compliance with the volatile organic</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>compound (VOC) emission limitation specified in b)(1)d.</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-17-07(A)	The opacity shall not exceed 20 percent, as a six minute average from the group of emissions units that vent to the RTO when the RTO unit is in bake out mode.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid major new source review)	<p>The PE from the group of emissions units that vent to the RTO shall not exceed 1.51 tons per year (TPY) as a rolling, 12-month summation.</p> <p>See b)(2)c.</p>
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.)	<p>mbined NO_x emissions from emissions units B004 and B006 and volatile organic compound (VOC) emissions from emissions units, P037, P040, P058, P067, P582, and the group of emissions units that vent to the RTO; P032, P104 (replaced P033), P105 (replaced P034), P052, P066, 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 a combined VOC emission rate.</p> <p>The carbon monoxide (CO) emissions from the group of emissions units that vent to the RTO shall be reduced by 90% or achieve an outlet concentration of less than or equal to 100 ppm.</p> <p>The volatile organic compound (VOC) emissions from the group of emissions units that vent to the RTO shall not exceed 9.40 lbs/hr.</p> <p>The SO₂ emissions from the group of emissions units that vent to the RTO shall not exceed 80.25 TPY as a rolling, 12-month summation.</p> <p>The NOX emissions from the group of emissions units that vent to the RTO shall not exceed 33.95 TPY as a rolling, 12-</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>month summation.</p> <p>The CO emission from the group of emissions units that vent to the RTO shall not exceed 108.8 TPY as a rolling, 12-month summation.</p> <p>The hazardous air pollutant (HAP) emissions from the group of emissions units that vent to the RTO shall not exceed 11.75 TPY, as a rolling 12-month summation.</p> <p>The opacity shall not exceed 10 percent, as a six-minute average from the group of emissions units that vent to the RTO, except when the RTO unit is in bake out mode during which time the opacity may not exceed 20 percent, as a six minute average.</p> <p>See b)(2)a. through b)(2)d.</p>
e.	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).
f.	OAC rules 3745-31-11 through 3745-31-20 (PSD rule requirements)	See b)(2)e.

(2) Additional Terms and Conditions

- a. This permit reflects specific emission reduction requirements, emission limits, operating parameters, performance testing, and monitoring and recordkeeping requirements 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). Per Paragraph 88 of the Consent Decree, Paragraph 39 and 78 shall survive the termination of the Consent Decree. As stated in Paragraph 39 of the Consent Decree, the intent of the parties is that the requirements established per Paragraphs 15-27 and associated appendices will survive the termination of the Consent Decree and are deemed “applicable requirements” under Title V of the Clean Air Act and state and local operating permit programs that implement the requirements of Title V.

- b. The RTO is a common VOC control device for emissions units P032, P104 (replaced P033), P105 (replaced P034), P052, P066, P088, P057, and P072. All of the VOC emissions from this group of emissions units shall be vented to the RTO and shall meet the operational, monitoring, and record keeping requirements of this permit, when one or more of the emissions units are in operation.
 - c. The emissions from the emissions units listed above shall be vented to a wet scrubber when one or more of the emissions units are in operation. (Emissions units P052, P066 and P088 share a common wet scrubber associated with P057 prior to venting through the RTO. Emissions unit P032, P104 and P105 share a common venturi scrubber prior to venting to the RTO.)
 - d. Compliance with the ozone cap and short term VOC emission limit satisfies the requirement to meet LAER of 98%.
 - e. The requirements of Prevention of Significant Deterioration (PSD) are applicable but non-compliance with PSD prior to the Consent Decree was resolved through the Consent Decree, United States v. Cargill, Inc., (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 and entered on March 3, 2006.
- c) Operational Restrictions
- (1) The facility wide annual corn ground production rate shall not exceed 64,200,000 bushels, based upon a rolling, 12-month summation of the monthly corn ground production rates.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information for the group of emissions units that vent to the RTO:
 - a. The total facility wide corn ground production rate, in bushels;
 - b. the total quantity of natural gas used in the RTO burner, P057 and P072, combined, each month, in MMscf
 - c. the average heat content, in Btu per cubic foot, of the natural gas combusted in each emissions unit;
 - d. the actual heat input, in MMBtu, for each emissions unit [(d)(1)b. multiplied by d)(1)c. divided by one million];
 - e. the total PE emissions for each month from the group of emissions units that vent to the RTO, in tons (determined by multiplying the total combined corn ground production rate, in bushels for each month (as determined in d)(1)a.) by the emission rate, in pound PE/bushel of corn ground as determined in the last stack test that showed each emissions unit was in compliance, divided by 2,000 pounds per ton);

- f. the total SO₂ emissions for each month from the group of emissions units that vent to the RTO, in tons (determined by multiplying the total combined corn ground production rate, in bushels for each month (as determined in d)(1)a.) by the emission rate, in pound SO₂/bushel of corn ground as determined in the last stack test that showed each emissions unit was in compliance, divided by 2,000 pounds per ton);
- g. the total NO_x emissions for each month, in tons (determined by multiplying the total heat input for each month (as determined in d)(1)d.) by the emission rate, in pound NO_x/MMBtu heat input determined in the last stack test that showed each emissions unit was in compliance divided by 2,000 pounds per ton);
- h. the total CO emissions for each month from the group of emissions units that vent to the RTO, in tons (determined by multiplying the total combined corn ground production rate, in bushels for each month (as determined in d)(1)a.) by the emission rate, in pound CO/bushel of corn ground as determined in the last stack test that showed each emissions unit was in compliance, divided by 2,000 pounds per ton);
- i. the total VOC emissions for each month from the group of emissions units that vent to the RTO, in tons (determined by multiplying the total combined corn ground production rate, in bushels for each month (as determined in d)(1)a.) by the emission rate, in pound VOC/bushel of corn ground as determined in the last stack test that showed each emissions unit was in compliance, divided by 2,000 pounds per ton);
- j. the total HAP emissions for each month from the group of emissions units that vent to the RTO, in tons (determined by multiplying the total combined corn ground production rate, in bushels for each month (as determined in d)(1)a.) by the emission rate, 0.000366 pound HAP/bushel of corn ground as determined in the November 14, 2012 Engineering Study (or until such time as any required performance testing is conducted), divided by 2,000 pounds per ton);
- k. the rolling, 12-month summation of the facility wide corn ground production rate, in bushels (i.e., the sum of the monthly facility wide corn ground production rate in d)(1)a. above for the previous 12 months);
- l. the rolling, 12-month summation of PE emissions from the group of emissions units that vent to the RTO, in tons (i.e., the sum of the monthly emissions rates calculated in d)(1)e. above for the previous 12-months);
- m. the rolling, 12-month summation of SO₂ emissions from the group of emissions units that vent to the RTO, in tons (i.e., the sum of the monthly emissions rates calculated in d)(1)f. above for the previous 12-months); .
- n. the rolling, 12-month summation of NO_x emissions from the group of emissions units that vent to the RTO, in tons (i.e., the sum of the monthly emissions rates calculated in d)(1)g. above for the previous 12-months);

- o. the rolling, 12-month summation of CO emissions from the group of emissions units that vent to the RTO, in tons (i.e., the sum of the monthly emissions rates calculated in d)(1)h. above for the previous 12-months);
 - p. the rolling, 12-month summation of HAP emissions from the group of emissions units that vent to the RTO, in tons (i.e., the sum of the monthly emissions rates calculated in d)(1)j. above for the previous 12-months);and
 - q. The rolling, 12 month summation of the Ozone Cap, in tons (i.e., the sum of the monthly VOC emissions rates calculated in d)(1)i. above plus the sum of the monthly VOC emissions rates from emissions units P037, P040, P058, P067, and P582 plus the sum of the monthly NOx emissions rates from B004 and B006 for the previous 12-months).
- (2) For emissions units P032, P104 and P105, the permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water column) and the scrubber recirculation liquid flow rate (in gallons per minute) during operation of this/these emissions unit(s), including periods of startup and shutdown. The permittee shall record the recirculation liquid flow rate, as a three hour block average. The permittee shall record the pressure drop on a once per day basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable range or limit for the pressure drop across the scrubber and the scrubber recirculation liquid flow rate shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.
- (3) For emissions units P052, P066, and P088, the permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water column), 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 on a once per day basis. The permittee shall record the recirculation liquid flow rate, as a three hour block average. The permittee shall record the 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.
- (4) For emissions units P052, P066, and P088, in order to maintain compliance with the applicable emission limitation(s) contained in this permit, the pressure drop across the scrubber shall not be less than the average pressure drop measured during the most recent compliant performance test that demonstrated the emissions unit was in compliance. The current pressure drop across the scrubber is not less than 1.3 inches of water column as a three hour block average. This pressure drop was established in the February 26, 2014 test. This pressure drop shall be maintained unless the source can demonstrate (through performance testing) that the scrubber can meet the associated emissions limitations at a different differential pressure limit.

- (5) For emissions units P052, P066, and P088, in order to maintain compliance with the applicable emission limitation(s) contained in this permit, the scrubber recirculation liquid flow rate 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. The current recirculation liquid flow rate shall not be less than 537 gallons per minute, as a three hour block average. This liquid flow rate was established in the February 26, 2014 test. This recirculation liquid flow rate shall be maintained unless the source can demonstrate (through testing) that the scrubber can meet the associated emissions limitations at a different flow rate.
- (6) For emissions units P052, P066, and P088, in order to maintain compliance with the applicable emission limitation(s) contained in this permit, the pH of the scrubber liquor shall not be less than the average pH of the scrubber liquor during the most recent performance test that demonstrated the emissions unit was in compliance. The current pH of the scrubber liquor shall not be less than 7.0, as a three hour block average. This pH was established in the February 26, 2014 test. This scrubber liquor pH shall be maintained unless the source can demonstrate (through testing) that the scrubber can meet the associated emissions limitations at a different pH value.
- (7) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the temperature of the RTO shall not be less than the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance. The current RTO temperature shall not be less than 1599 degrees Fahrenheit, as a three hour block average. This temperature was established in the February 26, 2014 test for the sources that vent to the RTO. This RTO temperature shall be maintained unless the source can demonstrate (through testing) that the RTO can meet the associated emissions limitations at a different temperature.
- (8) Whenever the monitored parametric values for the scrubber(s) or RTO deviates from the range(s) or minimum (three hour block average) limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - 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 parameter(s) for the scrubber(s) and RTO within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- 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, pH, and/or the flow rate readings of the scrubber and the temperature of the RTO 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.

The minimum limit as defined in d)(7) for the temperature of the RTO is effective for the duration of this permit.

These range(s) and/or limit(s) for the pressure drop, pH, and recirculation liquid flow rate 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 range or limit for the pressure drop, pH or recirculation liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable particulate emission rate for this/these emissions unit(s).

In addition, approved revisions to the range or limits 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.

- (9) The permittee shall perform quarterly 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.
- (10) 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (11) The permittee shall maintain records of the following information in an operations log during each bakeout:
- a. The date and time the bakeout was conducted;
 - b. The total duration of the bakeout;
 - c. bakeout temperature of each ceramic wedge; and,
presence or absence of any visible emissions

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. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the facility wide rolling, 12-month corn grind production rate restriction of 64,200,000 bushels;
 - b. all exceedances of the rolling, 12-month combined PE emission limitation of 1.50 TPY from the group of emissions units that vent to the RTO;
 - c. all exceedances of the rolling, 12-month combined SO₂ emission limitation of 80.25 TPY from the group of emissions units that vent to the RTO;
 - d. all exceedances of the rolling, 12-month combined NO_x emission limitation of 33.95 TPY from the group of emissions units that vent to the RTO;
 - e. all exceedances of the rolling, 12-month combined CO emission limitation of 108.8 TPY from the group of emissions units that vent to the RTO;
 - f. all exceedances of the rolling, 12-month combined HAP emission limitation of 11.75 TPY from the group of emissions units that vent to the RTO;
 - g. all exceedances of the rolling, 12-month Ozone Cap emissions limitation of 854 tons;
 - h. for emissions units P032, P104, and P105, each period of time (start time and date, and end time and date) when the pressure drop across the scrubber and/or recirculation liquid flow rate was outside of the appropriate range or limit specified by the manufacturer and outside of the acceptable range for each parameter following any required compliance demonstration;
 - i. for emissions units P052, P066, and P088, 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;
 - j. each period of time (start time and date, and end time and date) when the temperature of the RTO deviated below the applicable limit contained in this permit;
 - k. 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 and/or the RTO;
 - l. each incident of deviation described in e)(1)h. through e)(1)j. (above) where a prompt investigation was not conducted;
 - m. each incident of deviation described in e)(1)h. through e)(1)j. where prompt corrective action, that would bring the pressure drop, recirculation liquid flow rate,

pH and/or RTO temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

- n. each incident of deviation described in e)(1)h. through e)(1)j. 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

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

- (3) The permittee shall submit annual reports that specify the total actual annual PE, SO₂, NO_x, CO, VOC, and HAP emissions for the group of emissions units that vent to the RTO for the previous calendar year. These reports shall be submitted by April 15th of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emissions Report.
- (4) The permittee shall submit an annual ozone cap report that specifies the total actual annual combined NO_x emissions from emissions units B004 and B006 and volatile organic compound (VOC) emissions from emissions units, P037, P040, P058, P067, P582, and the group of emissions units that vent to the RTO; P032, P104 (replaced P033), P105 (replaced P034), P052, P066, P088, P057, and P072, for the previous calendar year. This report shall be submitted by April 15th of each year. This reporting requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emissions Report.

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 PE from the group of emissions units that vent to the RTO shall not exceed 0.0000467 lb/bushel corn ground.



Applicable Compliance Method:

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

b. Emission Limitation:

The PE from the group of emissions units that vent to the RTO shall not exceed 1.50 ton per year (TPY) as a rolling, 12 month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the most recent lb/bushel corn ground emission factor from a compliant stack test by the maximum annual corn grind rate of 64.2 million bushels and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the short-term limit, compliance will be shown with the annual limitation.

c. Emission Limitation:

The SO₂ emissions from the group of emissions units that vent to the RTO shall not exceed 0.0025 lb/bushel corn ground.

Applicable Compliance Method:

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

d. Emission Limitation:

The SO₂ emissions from the group of emissions units that vent to the RTO shall not exceed 80.25 TPY as a rolling, 12 month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the most recent lb/bushel corn ground emission factor from a compliant stack test by the maximum annual corn grind rate of 64.2 million bushel and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the short-term limit, compliance will be shown with the annual limitation.

e. Emission Limitation:

The NO_x emissions from the group of emissions units that vent to the RTO shall not exceed 0.10 lb/MMbtu.

Applicable Compliance Method:

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

f. Emission Limitation:

The NO_x emissions from the group of emissions units that vent to the RTO shall not exceed 33.95 TPY as a rolling, 12 month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.076 mmcf/hr) by the NO_x emission factor (100 lbs NO_x /mmcf) from the "Compilation of Air Pollutant Emission Factors," AP-42, Fifth Edition, Table 1.4-1 (7/98).

The 0.076 mmcf/hr was derived from combining the maximum heat input values from the RTO burner, P057, and P072 (77.55 lb/MMBtu) and dividing this by the heat content of natural gas (1020 Btu/cf).

g. 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 100 ppm, from the group of emissions units that vent to the RTO.

Applicable Compliance Method:

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

h. Emission Limitation:

The CO emissions from the group of emissions units that vent to the RTO shall not exceed 108.8 TPY, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the most recent hourly emissions rate derived from a compliant stack test by 8,760 hours/yr and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the short term limit, compliance will be shown with the annual limitation.

CO concentration (100ft³ /10⁶ ft³ gas flow x 56,950 dscfm x 60 min/hr x (28.01 lb CO/lb-mol) x (1 lbmol/385.3 ft³).

i. Emission Limitation

The VOC emissions from the group of emissions unit that vent to the RTO shall not exceed 9.40 lb/hr. This limit was calculated by multiplying the February 26, 2014 stack test (lb/hr) by the following equation. The average of 3 test runs as a lb/hr, multiplied by 2.2, plus the standard deviation X 2.92 divided by the square root of the number of test runs.



Applicable Compliance Method:

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

j. Emission Limitations:

Combined NO_x emissions from emissions units B004 and B006 and VOC emissions from emissions units P037, P040, P058, P067, and P582, and the group of emission units that vent to the RTO; P032, P104 (replaced P033), P105 (replaced P034), P052, P066, 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 a combined VOC emission rate.

Applicable Compliance Method:

Compliance for the VOC portion of the Ozone cap limit shall be based upon the record keeping requirements in d)(1) and emissions testing as described in f)(3) for the group of emissions units that vent to the RTO as listed above.

k. Emission Limitations:

The total HAP emissions from the group of emissions units that vent to the RTO shall not exceed 3.14 lbs/hr and 11.75 tons per year.

Applicable Compliance Method

If requested, compliance shall be demonstrated through performance testing.

l. Emission Limitation:

The visible PE shall not exceed 10 percent opacity as a six-minute average, from the group of emissions units that vent to the RTO, except when the RTO unit is in bake out mode during which time the opacity may not exceed 20 percent as a six minute average based on OAC rule 3745-17-07(A).

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitations from the group of emissions units that vent to the RTO shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

m. Emission Limitations:

The visible PE shall not exceed 20 percent, as a six minute average, per OAC rule 3745-17-07(A), from the group of emissions units that vent to the RTO when the RTO unit is in bake out mode.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitations from the group of emissions units that vent to the RTO shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

- (2) The permittee shall conduct, or have conducted, emissions testing for the group of emissions units that vent to the RTO in accordance with the following requirements:
- a. The emissions testing shall be conducted on a recurring five year basis. The last emissions test that demonstrated compliance was completed on February 26, 2014.
 - i. demonstrate compliance with the PE, SO₂ and NO_x emissions limits listed in b)(1)a. and the CO emissions limits listed in b)(1)d., and;
 - ii. demonstrate compliance with the control operating parameter values listed in d)(2) through d)(8).
 - (a) The permitted parameters were established in the 2/26/14 emissions test for the group of emissions units that vent to the RTO.
 - b. The following test methods shall be employed to establish allowable emissions rates:
 - 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 or 6C from 40 CFR Part 60, Appendix A for SO₂;
 - iv. Method 7 or 7E from 40 CFR Part 60, Appendix A for NO_x; and
 - v. Method 10 from 40 CFR Part 60, Appendix A for CO.

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

- e. 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.
 - f. 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 group of emissions units that vent to the RTO in accordance with the following requirements:
- a. The emissions testing shall be conducted annually by the end of September to determine the emissions factor, in lbs VOC/bushel of corn ground that will be used to demonstrate compliance with the following allowable emissions rate for the group of emissions units that vent to the RTO:
 - i. Combined NO_x emissions from emissions units B004 and B006 and VOC emissions from emissions units P037, P040, P058, P067, and P582 and the group of emission units that vent to the RTO; P032, P104 (replaced P033), P105 (replaced P034), P052, P066, 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 a combined VOC emissions rate.
 - b. Show compliance with the 9.40 lbs/hr VOC emissions rate for the group of emissions units that vent to the RTO. See f)(1)i. above for calculating the lbs/hr for VOC.
 - c. The following test methods shall be employed to develop the emissions factor used for the group of emissions units that vent to the RTO 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 use of the VOC scaling factor of 2.2 as appropriate).

Alternative U.S. EPA approved test methods may be used in accordance with terms of Footnote 3, Appendix J of the referenced Consent Decree, File No. 05-2037.



Draft Permit-to-Install
Cargill, Inc. - Dayton
Permit Number: P0112206
Facility ID: 0857041124

Effective Date: To be entered upon final issuance

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

- g) Miscellaneous Requirements
 - (1) None.