



2/4/2015

Certified Mail

Mr. Chad Strahler  
CARGILL INC - BLOOMINGBURG  
4201 STATE RTE 238 N E  
Bloomington, OH 43106

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0124000088  
Permit Number: P0117437  
Permit Type: Renewal  
County: Fayette

Dear Permit Holder:

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

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

**How to appeal this permit**

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

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

## **How to save money, reduce pollution and reduce energy consumption**

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

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

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

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-CDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
CARGILL INC - BLOOMINGBURG**

Facility ID:	0124000088
Permit Number:	P0117437
Permit Type:	Renewal
Issued:	2/4/2015
Effective:	2/4/2015
Expiration:	2/4/2020





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
CARGILL INC - BLOOMINGBURG

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## Authorization

Facility ID: 0124000088  
Application Number(s): A0051376  
Permit Number: P0117437  
Permit Description: Renewal FEPTIO for a grain elevator including roadways, loading, receiving, grain handling, grain drying, and storage.  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 2/4/2015  
Effective Date: 2/4/2015  
Expiration Date: 2/4/2020  
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

CARGILL INC - BLOOMINGBURG  
4201 STATE RTE 238 N E  
BLOOMINGBURG, OH 43106

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

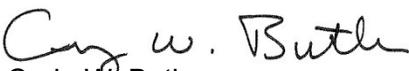
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0117437  
 Permit Description: Renewal FEPTIO for a grain elevator including roadways, loading, receiving, grain handling, grain drying, and storage.

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

- Emissions Unit ID: F009**  
 Company Equipment ID: Load-out 2-Tr  
 Superseded Permit Number: P0108564  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: F011**  
 Company Equipment ID: Grain pile  
 Superseded Permit Number: P0108564  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: F013**  
 Company Equipment ID: Roads  
 Superseded Permit Number: P0108564  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: F020**  
 Company Equipment ID: Handling 1  
 Superseded Permit Number: P0108564  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: F021**  
 Company Equipment ID: Load-out 3-TR/3-RL  
 Superseded Permit Number: P0108564  
 General Permit Category and Type: Not Applicable

**Group Name: Grain Dryers**

<b>Emissions Unit ID:</b>	<b>F008</b>
Company Equipment ID:	Dryer 1
Superseded Permit Number:	P0108564
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F010</b>
Company Equipment ID:	Dryer 2
Superseded Permit Number:	P0108564
General Permit Category and Type:	Not Applicable

**Group Name: Rail Receiving**

<b>Emissions Unit ID:</b>	<b>F018</b>
Company Equipment ID:	Dump Pit #3-RL
Superseded Permit Number:	P0108564
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F019</b>
Company Equipment ID:	Dump Pit #4-RL
Superseded Permit Number:	P0108729
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
CARGILL INC - BLOOMINGBURG  
**Permit Number:** P0117437  
**Facility ID:** 0124000088  
**Effective Date:** 2/4/2015

**Group Name: Truck Receiving**

<b>Emissions Unit ID:</b>	<b>F005</b>
Company Equipment ID:	Dump Pit #1-Tr
Superseded Permit Number:	P0108564
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F016</b>
Company Equipment ID:	Dump Pit #2-Tr
Superseded Permit Number:	P0108564
General Permit Category andType:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F017</b>
Company Equipment ID:	Dump Pit #3-Tr
Superseded Permit Number:	P0108564
General Permit Category andType:	Not Applicable



**Final Permit-to-Install and Operate**  
CARGILL INC - BLOOMINGBURG  
**Permit Number:** P0117437  
**Facility ID:** 0124000088  
**Effective Date:** 2/4/2015

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



**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the



change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



**Final Permit-to-Install and Operate**  
CARGILL INC - BLOOMINGBURG  
**Permit Number:** P0117437  
**Facility ID:** 0124000088  
**Effective Date:** 2/4/2015

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



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.



**Final Permit-to-Install and Operate**  
CARGILL INC - BLOOMINGBURG  
**Permit Number:** P0117437  
**Facility ID:** 0124000088  
**Effective Date:** 2/4/2015

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



**1. F009, Load-out 2-Tr**

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

Grain shipping and load-out, truck loading

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a., c)(1), d)(1) and e)(3).

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(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  30.10 tons per rolling, 12-month period of fugitive particulate emissions (PE) from truck load-out operations for F009 and F021, combined.  10.15 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) from truck load-out operations for F009 and F021, combined.  1.73 tons per rolling, 12-month period of particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> ) from truck load-out operations for F009 and F021, combined.  See c)(1)



b.	OAC rule 3745-17-07(B)	See b)(2)a.
c.	OAC rule 3745-17-08(A)(1)	See b)(2)b.
d.	40 CFR Part 60, Subpart DD	Visible emissions of fugitive dust from truck load-out operations shall not exceed 10 percent opacity.
e.	40 CFR Part 60, Subpart A	See b)(2)c.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- b. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- c. The permittee shall demonstrate compliance with the applicable limitations identified in 40 CFR Part 60, Subpart DD in accordance with the General Provisions of the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart A (60.1-60.19).

c) Operational Restrictions

- (1) The maximum, combined, grain load-out to trucks for emission units F009 and F021 shall not exceed 25,000,000 bushels (700,000 tons) per rolling, 12-month period.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the grain loaded-out to truck for emissions unit F009, in bushels;
  - b. the grain loaded-out to truck for emissions unit F021, in bushels;
  - c. the combined, rolling, 12-month summation of grain loaded-out to truck for emissions units F009 and F021, in bushels;
  - d. the combined, rolling, 12-month summation of grain loaded-out to truck for emissions units F009 and F021, in tons [the product of d)(1)c. and the conversion factor of 0.028 tons per bushel];
  - e. the combined, rolling, 12-month PE from grain loaded-out to truck for emissions units F009 and F021, in tons, calculated in accordance with f)(1)a.;
  - f. the combined, rolling, 12-month PM<sub>10</sub> emissions from grain loaded-out to truck for emissions units F009 and F021, in tons, calculated in accordance with f)(1)b.; and





- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the combined limitation for grain loaded-out to trucks for emissions unit F009 and F021 of 25,000,000 bushels was exceeded;
    - ii. each rolling, 12-month period when the combined PE limitation of 30.10tons from truck load-out operations for emissions units F009 and F021 was exceeded;
    - iii. each rolling, 12-month period when the combined PM<sub>10</sub> emissions limitation of 10.15tons from truck load-out operations for emissions units F009 and F021 was exceeded; and
    - iv. each rolling, 12-month period when the combined PM<sub>2.5</sub> emissions limitation of 1.73 tons from truck load-out operations for emission units F009 and F021 was exceeded.
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Central District Office).

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: 30.10 tons per rolling, 12-month period of fugitive particulate emissions (PE) from truck load-out operations for F009 and F021, combined.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following calculations:

$$\text{Fugitive PE} = \text{tons grain throughput} * E_f$$

where,

tons grain throughput = combined grain loaded-out to trucks for emissions units F009 and F021

$$E_f = \text{AP-42}^\# \text{ emissions factor (0.086 lb PE/ton grain)}$$

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- b. Emission Limitation: 10.15 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) from truck load-out operations for F009 and F021, combined.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following calculations:

$$\text{Fugitive PM}_{10} = \text{tons grain throughput} * E_f$$

where,

tons grain throughput = combined grain loaded-out to trucks for emissions units F009 and F021

$$E_f = \text{AP-42}^\# \text{ emissions factor (0.029 lbPM}_{10}\text{/ton grain)}$$

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003.

- c. Emission Limitation: 1.73 tons per rolling, 12-month period of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) from truck load-out operations for F009 and F021, combined.

Applicable Compliance Method: Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003 emission factor which states that PM<sub>2.5</sub> is approximately 17% of PM<sub>10</sub> emissions. Therefore, if compliance is demonstrated with PM<sub>10</sub> in f)(1)b., compliance with the PM<sub>2.5</sub> emission limitation can be assumed.

$$10.15 \text{ tons PM}_{10} * 0.17 = 1.73 \text{ tons PM}_{2.5}$$

- d. Emissions Limitation: Visible emissions of fugitive dust from truck load-out operations shall not exceed 10 percent opacity.



**Final Permit-to-Install and Operate**  
CARGILL INC - BLOOMINGBURG  
**Permit Number:** P0117437  
**Facility ID:** 0124000088  
**Effective Date:** 2/4/2015

Applicable Compliance Method: If required, compliance with the visible emission limitation for the fugitive dust from truck load-out operations shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

- g) Miscellaneous Requirements
  - (1) None.



**2. F011, Grain pile**

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

Storage piles, including load-in, load-out and wind erosion

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(1)c., c)(1), d)(1), and e)(3).
- 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	The requirements for OAC rule 3745-31-05(A)(3) have been determined to be equivalent to those established under OAC rule 3745-31-05(D).  See b)(1)c., b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  8.10 tons per rolling, 12-month period of particulate emissions (PE) from storage piles.  5.84 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) from storage piles.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.99 ton per rolling, 12-month period of particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> ) from storage piles.  See c)(1).
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(A)(1)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.
- b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source because the calculated annual emission rate for PE is less than 10 tons/year, taking into consideration the federally enforceable rule limit of 8.10 tons per rolling, 12-month period under OAC rule 3745-31-05(D). See c)(1); and
  - ii. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of particulate matter less than ten microns in diameter (PM<sub>10</sub>), or emissions of particulates less than 2.5 microns in diameter (PM<sub>2.5</sub>) from this air contaminant source because the calculated annual emission rate for PM<sub>10</sub> and PM<sub>2.5</sub> is less than 10 tons/year, taking into consideration the federally enforceable rule limit of 5.84 tons per rolling, 12-month period under OAC rule 3745-31-05(D) for PM<sub>10</sub> and 0.99 tons per rolling, 12-month period for PM<sub>2.5</sub>. See c)(1).
- c. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).



- d. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- c) Operational Restrictions
  - (1) The maximum grain throughput for this emissions unit shall not exceed 75,000,000 bushels (2,100,000 tons) per rolling, 12-month period.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall maintain monthly records of the following information:
    - a. the grain throughput, in bushels;
    - b. the rolling, 12-month summation of the grain throughput, in bushels;
    - c. the rolling, 12-month PE, in tons, calculated in accordance with f)(1)a.;
    - d. the rolling, 12-month PM<sub>10</sub> emissions, in tons, calculated in accordance with f)(1)b; and
    - e. the rolling, 12-month PM<sub>2.5</sub> emissions, in tons, calculated in accordance with f)(1)c.
  - (2) The permittee shall maintain daily records that indicate whether the storage pile was or was not covered for the purpose of calculating emissions from wind erosion across the storage pile.
- e) Reporting Requirements
  - (1) 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 District Office or 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.



- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the grain throughput limitation of 75,000,000 bushels was exceeded;
    - ii. each rolling, 12-month period when the PE limitation of 8.10 tons was exceeded; and
    - iii. each rolling, 12-month period when the PM<sub>10</sub> emissions limitation of 5.84tons was exceeded; and
    - iv. each rolling, 12-month period when the PM<sub>2.5</sub> emissions limitation of 0.99 ton was exceeded.
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Central District Office).

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:8.10 tons per rolling, 12-month period of particulate emissions (PE) from storage piles.



Applicable Compliance Method: Compliance with this limitation may be determined through the recordkeeping required in d)(1) and d)(2) and the following calculations:

Load-in:

$PE = (\text{Grain throughput} * CF * EF) / 2000$ ; where,

PE = Actual particulate emissions, in tons per rolling, 12-month period

CF = Conversion factor from bushels to tons (0.028 ton per bushel)

EF = AP-42 emissions factor (0.00205 lb PE/ton) (AP-42, Volume I, Fifth Edition, Section 13.2.4, "Aggregate Handling and Storage Piles", November 2006)

Load-out:

$PE = (\text{Grain throughput} * CF * EF) / 2000$ ; where,

PE = Actual particulate emissions, in tons per rolling, 12-month period

CF = Conversion factor from bushels to tons (0.028 ton per bushel)

EF = AP-42 emissions factor (0.00205 lb PE/ton) (AP-42, Volume I, Fifth Edition, Section 13.2.4, "Aggregate Handling and Storage Piles", November 2006)

Wind erosion:

$PE = (SA * \text{days of use} * EF) / 2000$ ; where,

PE = Actual particulate emissions, in tons per rolling, 12-month period

SA = Surface area, in acres (2)

EF = 10.42 lbsPM<sub>10</sub>/day/acre (EPA-450-2/92-004, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, September 1992)

For the purpose of determining emissions from wind erosion across the storage pile, 'days of use' shall only include those days when the storage pile was not covered as determined by recordkeeping requirement d)(3).

- b. Emission Limitation: 5.84 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) from storage piles.

Applicable Compliance Method: Compliance with this limitation may be determined through the recordkeeping required in d)(1) and d)(2) and the following calculations:

Load-in:

$PM_{10} = (\text{Grain throughput} * CF * EF) / 2000$ ; where,

PM<sub>10</sub> = Actual PM<sub>10</sub> emissions, in tons per rolling, 12-month period

CF = Conversion factor from bushels to tons (0.028 ton per bushel)

EF = AP-42 emissions factor (0.000969 lbPM<sub>10</sub>/ton) (AP-42, Volume I, Fifth Edition, Section 13.2.4, "Aggregate Handling and Storage Piles", November 2006)

Load-out:



$PM_{10} = (\text{Grain throughput} * CF * EF)/2000$ ; where,

$PM_{10}$  = Actual  $PM_{10}$  emissions, in tons per rolling, 12-month period  
CF = Conversion factor from bushels to tons (0.028 ton per bushel)  
EF = AP-42 emissions factor (0.000969 lb $PM_{10}$ /ton) (AP-42, Volume I, Fifth Edition, Section 13.2.4, "Aggregate Handling and Storage Piles", November 2006)

Wind erosion:

$PM_{10} = (SA * \text{days of use} * EF)/2000$ ; where,

$PM_{10}$  = Actual  $PM_{10}$  emissions, in tons per rolling, 12-month period  
SA = Surface area, in acres (2)  
EF = 10.42 lbs $PM_{10}$ /day/acre (EPA-450-2/92-004, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, September 1992)

For the purpose of determining emissions from wind erosion across the storage pile, 'days of use' shall only include those days when the storage pile was not covered as determined by recordkeeping requirement d)(2).

- c. Emission Limitation: 0.99 ton per rolling, 12-month period of particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ) from storage piles.

Applicable Compliance Method: Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003 emission factor which states that  $PM_{2.5}$  is approximately 17% of  $PM_{10}$  emissions. Therefore, if compliance is demonstrated with  $PM_{10}$  in f)(1)b., compliance with the  $PM_{2.5}$  emission limitation can be assumed.

$$5.84 \text{ tons } PM_{10} * 0.17 = 0.99 \text{ tons } PM_{2.5}$$

- d. Emissions Limitation: There shall be no visible PE from this emissions unit except for one minute during any sixty minute period (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method: If required, compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with U.S. EPA Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 (Standards of Performance for New Stationary Sources).

- g) Miscellaneous Requirements

- (1) None.



**3. F013, Roads**

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

Paved roadways and parking areas

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(1)c., d)(1), and e)(3).
- 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	The permittee shall treat the paved roadways and parking areas with water at sufficient frequencies to prevent visible emissions of fugitive dust.  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  5.88 tons per rolling, 12-month period of particulate emissions (PE).  1.18 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) from roadways and parking areas.  0.28 ton per rolling, 12-month period of



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> ) from roadways and parking areas.  See b)(2)c.
d.	OAC rule 3745-17-07(B)	See b)(2)d.
e.	OAC rule 3745-17-08(A)(1)	See b)(2)e.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.
- b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source because the calculated annual emission rate for PE is less than 10 tons per year, taking into consideration the federally enforceable rule limit of 5.88 tons per rolling, 12-month period under OAC rule 3745-31-05(D); and
  - ii. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from this air contaminant source because the calculated annual emission rate for PM<sub>10</sub>/ PM<sub>2.5</sub> is less than 10 tons/year, taking into consideration the federally enforceable rule limit of 1.18 tons per rolling, 12-month period under OAC rule 3745-31-05(D) for PM<sub>10</sub> and 0.28 ton per rolling, 12-month period for PM<sub>2.5</sub>.
- c. The rolling, 12-month PE, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions limitations were established to reflect the potential to emit taking into consideration the synthetic minor operational restrictions established for emissions units F005, F016, F017, F009 and F021. The monitoring, recordkeeping, reporting, and testing requirements, established in the following terms and conditions in conjunction with the requirements established for emissions units F005, F016, F017, F009 and F021 are sufficient to demonstrate compliance with these limitations.



- d. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the number of truck shipments received at emissions units F005, F016, and F017;
  - b. the number of trucks loaded out at emissions unit F009 and F021;
  - c. the rolling, 12-month summation of truck shipments received at emissions units F005, F016, and F017;
  - d. the rolling, 12-month summation of trucks loaded out at emissions unit F009 and F021;
  - e. the rolling, 12-month PE, in tons, calculated in accordance with f)(1)a.;
  - f. the rolling, 12-month PM<sub>10</sub> emissions, in tons, calculated in accordance with f)(1)b; and
  - g. the rolling, 12-month PM<sub>2.5</sub> emissions, in tons, calculated in accordance with f)(1)c.

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies(as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP):

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all roads and parking areas	daily

- (3) The purpose of the inspections is to determine the need for implementing the control measures identified in b)(2)a. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.



Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

- (4) The permittee shall maintain records of the following information(as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP):
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar year basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

e) Reporting Requirements

- (1) 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 District Office or 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:



- i. each rolling, 12-month period when the PE limitation of 5.88 tons was exceeded;
  - ii. each rolling, 12-month period when the PM<sub>10</sub> emissions limitation of 1.18 tons was exceeded; and
  - iii. each rolling, 12-month period when the PM<sub>2.5</sub> emissions limitation of 0.28 ton was exceeded.
- b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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: 5.88 tons per rolling, 12-month period of particulate emissions (PE).

Applicable Compliance Method: Compliance with this limitation may be determined through the record keeping requirements identified in d)(1) and the following equations provided in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/2011):

$$E = [k(sL)^{0.91}(W)^{1.02}]; \text{ where,}$$

E= size-specific emissions factor [lb PE/vehicle mile traveled (VMT)]

k= particle size multiplier (0.011)

sL= silt content of road surface material (0.40 g/m<sup>2</sup>)

W = mean vehicle weight (27 tons)

Rolling, 12-month particulate emissions are determined by multiplying the size-specific emissions factor determined above (0.14 lb PE/ VMT) by the actual VMT. In accordance with the information provided in the permit application, VMT is 0.75 miles per truck.



- b. Emission Limitation: 1.18 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) from roadways and parking areas.

Applicable Compliance Method: Compliance with this limitation may be determined through the record keeping requirements identified in d)(1) and the following equations provided in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/2011):

$$E = [k(sL)^{0.91}(W)^{1.02}]; \text{ where,}$$

E= size-specific emissions factor [lb PM<sub>10</sub>/vehicle mile traveled (VMT)]

k= particle size multiplier (0.0022)

sL= silt content of road surface material (0.40 g/m<sup>2</sup>)

W = mean vehicle weight (27 tons)

Rolling, 12-month PM<sub>10</sub> emissions are determined by multiplying the size-specific emissions factor determined above (0.028 lb PM<sub>10</sub>/ VMT) by the actual VMT. In accordance with the information provided in the permit application, VMT is 0.75 miles per truck.

- c. Emission Limitation: 0.28 ton per rolling, 12-month period of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) from roadways and parking areas.

Applicable Compliance Method: Compliance with this limitation may be determined through the record keeping requirements identified in d)(1) and the following equations provided in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/2011):

$$E = [k(sL)^{0.91}(W)^{1.02}]; \text{ where,}$$

E= size-specific emissions factor [lb PM<sub>2.5</sub>/vehicle mile traveled (VMT)]

k= particle size multiplier (0.00054)

sL= silt content of road surface material (0.40 g/m<sup>2</sup>)

W = mean vehicle weight (27 tons)

Rolling, 12-month PM<sub>2.5</sub> emissions are determined by multiplying the size-specific emissions factor determined above (0.068 lb PM<sub>2.5</sub>/ VMT) by the actual VMT. In accordance with the information provided in the permit application, VMT is 0.75 miles per truck.

- g) Miscellaneous Requirements

- (1) None.



4. F020, Handling 1

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

Grain handling, transferring, and conveying including conveyors, elevators and bins (FKA F005)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., d)(1), d)(2) and e)(3).

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	The requirements for OAC rule 3745-31-05(A)(3) have been determined to be equivalent to those established under OAC rule 3745-31-05(D).  See b)(2)a. and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  8.49 tons per rolling, 12-month period of particulate emissions (stack and fugitive).  8.21 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> )(stack and fugitive).  1.40 tons per rolling, 12-month period of



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> )(stack and fugitive).  Particulate emissions from the stack of the baghouse serving this emission unit shall not exceed 0.005 grains per dry standard cubic feet (gr/dscf).  See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60 Subpart DD.
e.	OAC rule 3745-17-07(B)	See b)(2)d.
f.	OAC rule 3745-17-08(A)(1)	See b)(2)e.
g.	OAC rule 3745-17-11(B)(3)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
h.	40 CFR Part 60, Subpart DD	The grain loading limitation specified by this rule is less stringent than the grain loading limitation established pursuant to OAC rule 3745-31-05(D).  Visible emissions from the stack(s) of each baghouse serving this emission unit shall not exceed 0 percent opacity.  Visible emissions of fugitive dust from grain handling operations associated with this emissions unit shall not exceed 0 percent opacity.
i.	40 CFR Part 60, Subpart A	See b)(2)f.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT



still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

- b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source because the calculated annual emission rate for PE is less than 10 tons/year, taking into consideration the federally enforceable rule limit of 8.49 tons per rolling, 12-month period under OAC rule 3745-31-05(D); and
  - ii. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from this air contaminant source because the calculated annual emission rate for PM<sub>10</sub> and PM<sub>2.5</sub> is less than 10 tons/year, taking into consideration the federally enforceable rule limit of 8.21 tons per rolling, 12-month period under OAC rule 3745-31-05(D) for PM<sub>10</sub> and 1.40 tons per rolling, 12-month period for PM<sub>2.5</sub>.
- c. The rolling, 12-month PE, PM<sub>10</sub> and PM<sub>2.5</sub> emission limitations were established to reflect the potential to emit, taking into consideration the synthetic minor operational restrictions established for emission units F005, F016, F017, F018, F019, F009, and F021. The monitoring, recordkeeping, reporting and testing requirements established in the following terms and conditions, in conjunction with the requirements established for emission units F005, F016, F017, F018, F019, F009 and F021 are sufficient to demonstrate compliance with these limitations.
- d. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- f. The permittee shall demonstrate compliance with the applicable limitations identified in 40 CFR Part 60, Subpart DD in accordance with the General Provisions of the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart A (60.1-60.19).

c) Operational Restrictions

- (1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the amount of grain received, in tons, at emissions units F005, F016, F017, F018 and F019;
  - b. the amount of grain loaded-out, in tons, from emissions units F009 and F021;
  - c. the rolling, 12-month summation of grain received, in tons, at emissions units F005, F016, F017, F018 and F019;
  - d. the rolling, 12-month summation of grain loaded-out, in tons, from emissions units F009 and F021;
  - e. the rolling, 12-month PE, in tons, calculated in accordance with f)(1)a.;
  - f. the rolling, 12-month PM<sub>10</sub> emissions, in tons, calculated in accordance with f)(1)b; and
  - g. the rolling, 12-month PM<sub>2.5</sub> emissions, in tons, calculated in accordance with f)(1)c.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable ranges established for the pressure drop across the baghouses are identified below:
  - a. for dust system 1, the acceptable range is between 0.5 and 6 inches of water;
  - b. for dust system 2, the acceptable range is between 0.5 and 6 inches of water; and
  - c. for dust system 3, the acceptable range is between 0.5 and 6 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse(s) when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse(s) on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

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

- a. the date and time the deviation began;



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

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

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

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

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

- (4) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible particulate emissions from the stack(s) of each baghouse serving this emission 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. the total duration of any visible emission incident; and



- c. any corrective actions taken to eliminate the visible emissions.
- (5) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible fugitive particulate emissions from the grain handling operations. 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. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
- e) Reporting Requirements
  - (1) 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 District Office or 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
  - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
    - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
      - i. each rolling, 12-month period when the PE limitation of 8.49tons was exceeded;
      - ii. each rolling, 12-month period when the PM<sub>10</sub> emissions limitation of 8.21tons was exceeded; and



- iii. each rolling, 12-month period when the PM<sub>2.5</sub> emission limitation of 1.40 tons was exceeded.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Central District Office).

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: 8.49 tons per rolling, 12-month period of particulate emissions (stack and fugitive).

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following equations:

Total PE = Stack PE + Fugitive PE; where,

Stack PE = Dust System1 PE + Dust System2 PE + Dust System3 PE; where,

Dust System PE for each system = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8760 hrs/2000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

Fugitive PE = (G<sub>T</sub> \* E<sub>f</sub>) \* (1-CapE); where,

G<sub>T</sub> = actual grain throughput for emissions units F005, F016, F017, F018, F019, F009 and F021;

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.061 lb PE/ton grain);

CapE = capture efficiency (99%); and



# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- b. Emission Limitation: 8.21 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>)(stack and fugitive).

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following equations:

Total PM<sub>10</sub> = Stack PM<sub>10</sub> + Fugitive PM<sub>10</sub>; where,

Stack PM<sub>10</sub> = Dust System1 PM<sub>10</sub> + Dust System2 PM<sub>10</sub> + Dust System3 PM<sub>10</sub>;  
where,

Dust System PM<sub>10</sub> for each system = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8760 hrs/2000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

Fugitive PM<sub>10</sub> = (G<sub>T</sub> \* E<sub>f</sub>) \* (1-CapE); where,

G<sub>T</sub> = actual grain throughput for emissions units F005, F016, F017, F018, F019, F009 and F021;

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.034 lb PE/ton grain);

CapE = capture efficiency (99%); and

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- c. Emission Limitation: 1.40 tons per rolling, 12-month period of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>)(stack and fugitive).

Applicable Compliance Method: Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003 emission factor which states that PM<sub>2.5</sub> is approximately 17% of PM<sub>10</sub> emissions. Therefore, if compliance is demonstrated with PM<sub>10</sub> in f)(1)c., compliance with the PM<sub>2.5</sub> emission limitation can be assumed.

8.21 tons PM<sub>10</sub> \* 0.17 = 1.40 tons PM<sub>2.5</sub>

- d. Emission Limitation: PE from the stack of the baghouse serving this emissions unit shall not exceed 0.005 gr/dscf.

Applicable Compliance Method: If required, compliance with the grain loading limitation shall be demonstrated according to 40 CFR Part 60, Appendix A, method 5.



- e. Emission Limitation: Visible emissions from the stack(s) of each baghouse serving this emission unit shall not exceed 0 percent opacity.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the fugitive dust from receiving operations associated with this emissions unit shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

- f. Emission Limitation: Visible emissions of fugitive dust from grain handling operations shall not exceed 0 percent opacity.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the fugitive dust from receiving operations associated with this emissions unit shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

- (1) None.



5. F021, Load-out 3-TR/3-RL

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

Grain shipping and load-out, truck and rail loading (FKA F009)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)a., c)(1), d)(1), d)(2), and e)(3).

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(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  28.35 tons per rolling, 12-month period of fugitive particulate emissions (PE) from rail load-out operations.  2.31 tons per rolling, 12-month period of fugitive particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) from rail load-out for F021.  0.39 tons per rolling, 12-month period of fugitive particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> ) from rail load-out for F021.  30.10 tons per rolling, 12-month period of fugitive particulate emissions (PE) from truck load-out operations for emission



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		units F009 and F021, combined.  10.15 tons per rolling, 12-month period of fugitive particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) from truck load-out operations for emission units F009 and F021, combined.  1.73 tons per rolling, 12-month period of fugitive particulate matter less than 2.5 microns in diameter (PM <sub>2.5</sub> ) from truck load-out operations for emission units F009 and F021, combined.  See c)(1)
b	ORC 3704.03(T)	The requirements of ORC 3704.03(T) have been determined to be equivalent to those established under OAC rule 3745-31-05(D).
c.	OAC rule 3745-17-07(B)	See b)(2)a.
d.	OAC rule 3745-17-08(A)(1)	See b)(2)b.
e.	40 CFR Part 60, Subpart DD	Visible emissions of fugitive dust from rail load-out operations shall not exceed 5 percent opacity.  Visible emissions of fugitive dust from truck load-out operations shall not exceed 10 percent opacity.
f.	40 CFR Part 60, Subpart A	See b)(2)c.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- b. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- c. The permittee shall demonstrate compliance with the applicable limitations identified in 40 CFR Part 60, Subpart DD in accordance with the General Provisions of the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart A (60.1-60.19).



c) Operational Restrictions

- (1) The maximum grain loaded-out to rail for emission unit F021 shall not exceed 75,000,000 bushels (2,100,000 tons) per rolling, 12-month period.

The maximum, combined grain loaded out to trucks from emission units F009 and F021 shall not exceed 25,000,000 bushels (700,000 tons) per rolling, 12-month period.

d) Monitoring and/or Recordkeeping Requirements

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

- a. the grain loaded-out to rail for emissions unit F021, in bushels;
- b. the rolling, 12-month summation of the grain loaded-out to rail for emissions unit F021, in bushels;
- c. the rolling, 12-month summation of the grain loaded-out to rail for emissions unit F021, in tons [the product of d)(1)b. and the conversion factor of 0.028 tons per bushel];
- d. the rolling, 12-month PE from grain loaded-out to rail for emissions unit F021, in tons, calculated in accordance with f)(1)a.;
- e. the rolling, 12-month PM<sub>10</sub> emissions from grain loaded-out to rail for emissions unit F021, in tons, calculated in accordance with f)(1)b.; and
- f. the rolling, 12-month PM<sub>2.5</sub> emissions from grain loaded-out to rail for emission unit F021, in tons, calculated in accordance with f)(1)c.

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

- a. the grain loaded-out to truck for emissions unit F009, in bushels;
- b. the grain loaded-out to truck for emissions unit F021, in bushels;
- c. the combined, rolling, 12-month summation of grain loaded-out to truck for emissions units F009 and F021, in bushels;
- d. the combined, rolling, 12-month summation of grain loaded-out to truck for emissions units F009 and F021, in tons [the product of d)(2)c. and the conversion factor of 0.028 tons per bushel];
- e. the combined, rolling, 12-month PE from grain loaded-out to truck for emissions units F009 and F021, in tons, calculated in accordance with f)(1)d.;
- f. the combined, rolling, 12-month PM<sub>10</sub> emissions from grain loaded-out to truck for emissions units F009 and F021, in tons, calculated in accordance with f)(1)e.; and





- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the grain loaded-out to rail limitation of 75,000,000 bushels for emissions unit F021 was exceeded;
    - ii. each rolling, 12-month period when the PE limitation of 28.35tons from rail load-out operations for emissions unit F021 was exceeded;
    - iii. each rolling, 12-month period when the PM<sub>10</sub> emissions limitation of 2.31tons from rail load-out operations for emissions unit F021 was exceeded;
    - iv. each rolling, 12-month period when the PM<sub>2.5</sub>emissions limitation of 0.39 tons from rail load-out operations for emission unit F021 was exceeded;
    - v. each rolling, 12-month period when the combined limitation for grain loaded-out to trucks for emissions unit F009 and F021 of 25,000,000 bushels was exceeded;
    - vi. each rolling, 12-month period when the combined PE limitation of 30.10tons from truck load-out operations for emissions units F009 and F021 was exceeded;
    - vii. each rolling, 12-month period when the combined PM<sub>10</sub> emissions limitation of 10.15tons from truck load-out operations for emissions units F009 and F021 was exceeded; and
    - viii. each rolling, 12-month period when the combined PM<sub>2.5</sub> emission limitation of 1.73 tons from truck load-out operations for emission units F009 and F021 was exceeded.
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.



The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Central District Office).

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:28.35 tons per rolling, 12-month period of fugitive particulate emissions (PE) from rail load-out operations.

Applicable Compliance Method:Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following calculations:

$$\text{Fugitive PE} = \text{tons grain throughput} * E_f$$

where,

tons grain throughput = grain loaded out to rail for emissions unit F021

$E_f$  = AP-42<sup>#</sup> emissions factor (0.027 lb PE/ton grain);

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

b. Emission Limitation:2.31 tons per rolling, 12-month period of fugitive particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) from rail load-out for F021.

Applicable Compliance Method:Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following calculations:

$$\text{Fugitive PM}_{10} = \text{tons grain throughput} * E_f$$

where,

tons grain throughput = grain loaded out to rail for emissions unit F021

$E_f$  = AP-42<sup>#</sup> emissions factor (0.0022 lbPM<sub>10</sub>/ton grain);

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003.

c. Emission Limitation:0.39 tons per rolling, 12-month period of fugitive particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) from rail load-out for F021.

Applicable Compliance Method:Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1,



May 2003 emission factor which states that  $PM_{2.5}$  is approximately 17% of  $PM_{10}$  emissions. Therefore, if compliance is demonstrated with  $PM_{10}$  in f)(1)c., compliance with the  $PM_{2.5}$  emission limitation can be assumed.

$$2.31 \text{ tons } PM_{10} * 0.17 = 0.39 \text{ tons } PM_{2.5}$$

- d. Emission Limitation: 30.10 tons per rolling, 12-month period of fugitive particulate emissions (PE) from truck load-out operations for emission units F009 and F021, combined.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(2) and the following calculations:

$$\text{Fugitive PE} = \text{tons grain throughput} * E_f$$

where,

tons grain throughput = combined grain loaded-out to trucks for emissions units F009 and F021

$$E_f = \text{AP-42}^\# \text{ emissions factor (0.086 lb PE/ton grain)}$$

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- e. Emission Limitation: 10.15 tons per rolling, 12-month period of fugitive particulate matter less than ten (10) microns in diameter ( $PM_{10}$ ) from truck load-out operations for emission units F009 and F021, combined.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(2) and the following calculations:

$$\text{Fugitive } PM_{10} = \text{tons grain throughput} * E_f$$

where,

tons grain throughput = combined grain loaded-out to trucks for emissions units F009 and F021

$$E_f = \text{AP-42}^\# \text{ emissions factor (0.029 lb } PM_{10} / \text{ton grain)}$$

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003.

- f. Emission Limitation: 1.73 tons per rolling, 12-month period of fugitive particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ) from truck load-out operations for emission units F009 and F021, combined.

Applicable Compliance Method: Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003 emission factor which states that  $PM_{2.5}$  is approximately 17% of  $PM_{10}$



emissions. Therefore, if compliance is demonstrated with PM<sub>10</sub> in f)(1)c., compliance with the PM<sub>2.5</sub> emission limitation can be assumed.

$$10.15 \text{ tons PM}_{10} * 0.17 = 1.73 \text{ tons PM}_{2.5}$$

- g. Emissions Limitations: Visible emissions of fugitive dust from rail load-out operations shall not exceed 5 percent opacity and visible emissions of fugitive dust from truck load-out operations shall not exceed 10 percent opacity.

Applicable Compliance Method: If required, compliance with the visible emission limitations for the fugitive dust from rail load-out operations shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

- (1) None.



6. Emissions Unit Group -Grain Dryers: F008,F010,

EU ID	Operations, Property and/or Equipment Description
F008	Zimmerman grain dryer no. 1
F010	Zimmerman grain dryer no. 2

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)d., b)(2)d., c)(1) through c)(3), d)(1), d)(2), and e)(3)

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	The requirements for OAC rule 3745-31-05(A)(3) have been determined to be equivalent to those established under OAC rule 3745-31-05(D).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	ORC 3704.03(T)	Emissions shall not exceed:  0.03 pounds carbon monoxide (CO) per ton of grain processed.  0.04 pounds nitrogen oxide (NO <sub>x</sub> ) per ton of grain processed.  0.11 pound of particulate emissions (PE) per ton of grain processed.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)c.
d.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V and PSD)	See b)(2)d., c)(1), c)(2), and c)(3).
e.	OAC rule 3745-17-07(B)	See b)(2)e. below.
f.	OAC rule 3745-17-08(A)(1)	See b)(2)f. below.
g.	40 CFR Part 60, Subpart DD	This emissions unit is exempt from Subpart DD because the column plate perforations are smaller than 2.4 mm in diameter.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.
- b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from the combustion of natural gas in this air contaminant source since the calculated annual emission rate for these pollutants is less than 10 tons/year, taking into consideration the federally enforceable rule limits established under OAC rule 3745-31-05(D) identified in b)(2)e. below; and
  - ii. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the grain drying process associated with this air contaminant source since the calculated annual emission rate for PM<sub>10</sub> and PM<sub>2.5</sub> are less than 10 tons/year, taking into consideration the federally enforceable rule limits established under OAC rule 3745-31-05(D) identified in b)(2)e. below.



- c. The lb/ton of grain processed emissions limitations for CO, NO<sub>x</sub> and PE were established to reflect the potential to emit for this emissions unit. The monitoring, recordkeeping, reporting, and testing requirements, established in the following terms and conditions are sufficient to demonstrate compliance with these limitations.
- d. The following federally enforceable emissions limitations apply to the combustion of natural gas in emissions units F008 and F010 combined:
  - i. CO emissions shall not exceed 16.25 tons per rolling, 12-month period;
  - ii. NO<sub>x</sub> emissions shall not exceed 19.35 tons per rolling, 12-month period;
  - iii. VOC emissions shall not exceed 1.06 ton per rolling, 12-month period;
  - iv. SO<sub>2</sub> emissions shall not exceed 0.12 ton per rolling, 12-month period;
  - v. PE shall not exceed 1.47 ton per rolling, 12-month period;
  - vi. PM<sub>10</sub> emissions shall not exceed 1.47 tons per rolling, 12-month period; and
  - vii. PM<sub>2.5</sub> emissions shall not exceed 1.47 tons per rolling, 12-month period.

The following federally enforceable emissions limitations apply to the emissions from the grain drying process associated with emissions units F008 and F010 combined:

- i. PE shall not exceed 26.21 tons per rolling, 12-month period;
  - ii. PM<sub>10</sub> shall not exceed 6.55 tons per rolling, 12-month period; and
  - iii. PM<sub>2.5</sub> shall not exceed 1.11 tons per rolling, 12-month period.
- e. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- f. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c) Operational Restrictions

- (1) This emissions unit shall burn only natural gas.
- (2) The maximum natural gas usage for grain dryers F008 and F010 combined shall not exceed 387 million cubic feet (MMcf) per rolling, 12-month period. The permittee has



existing records of the natural gas usage for this emissions unit, therefore, the first year of accumulating monthly natural gas usage limitations is not necessary.

- (3) The maximum grain throughput for F008 and F010 combined shall not exceed 18,000,000 bushels (504,000 tons) per rolling, 12-month period.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of the fuel burned in this emissions unit.
  - (2) The permittee shall maintain monthly records of the following information for emissions units F008 and F010:
    - a. the natural gas usage, in MMcf;
    - b. the rolling, 12-month natural gas usage, in MMcf;
    - c. the grain throughput, in bushels;
    - d. the rolling, 12-month summation of the grain throughput, in tons [the product of d)(1)c. and the conversion factor of 0.028 tons per bushel]
    - e. the rolling, 12-month summation of the grain throughput for emissions units F008 and F010 combined, in bushels;
    - f. the rolling, 12-month summation of the grain throughput for emissions units F008 and F010 combined, in tons [the product of d)(1)e. and the conversion factor of 0.028 tons per bushel];
    - g. the rolling, 12-month CO, NO<sub>x</sub>, PE, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from the combustion of natural gas from emissions units F008 and F010 combined, in tons, calculated in accordance with f)(1)c.;
    - h. the rolling, 12-month PE from the grain drying process from emissions units F008 and F010 combined, in tons, calculated in accordance with f)(1)d.;
    - i. the rolling, 12-month PM<sub>10</sub> emissions from the grain drying process from emissions units F008 and F010 combined, in tons, calculated in accordance with f)(1)d.; and
    - j. the rolling, 12-month PM<sub>2.5</sub> emissions from the grain drying process from emission units F008 and F010, in tons, combined, calculated in accordance with f)(1)e.
- e) **Reporting Requirements**
- (1) 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 District Office or 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each day when a fuel other than natural gas was burned in this emissions unit;
    - ii. each rolling, 12-month period when the combined natural gas usage limitation of 387 MMcf for F008 and F010 was exceeded;
    - iii. each rolling, 12-month period when the combined grain throughput limitation of 18,000,000 bushels for F008 and F010 was exceeded;
    - iv. each rolling, 12-month period when the combined PE limitation of 26.21tons from the grain drying process for emissions units F008 and F010 was exceeded;
    - v. each rolling, 12-month period when the combined PM<sub>10</sub> emissions limitation of 6.55tons from the grain drying process for emissions units F008 and F010 was exceeded;
    - vi. each rolling, 12-month period when the combined PM<sub>2.5</sub> emission limitation of 1.11 tons from the grain drying process for emission units F008 and F010 was exceeded;
    - vii. each rolling, 12-month period when the combined CO limitation of 16.25tons from the combustion of natural gas in emissions units F008 and F010 was exceeded;



- viii. each rolling, 12-month period when the combined NO<sub>x</sub> limitation of 19.35tons from the combustion of natural gas in emissions units F008 and F010 was exceeded;
  - ix. each rolling, 12-month period when the combined VOC limitation of 1.06tons from the combustion of natural gas in emissions units F008 and F010 was exceeded;
  - x. each rolling, 12-month period when the combined SO<sub>2</sub> limitation of 0.12ton from the combustion of natural gas in emissions units F008 and F010 was exceeded;
  - xi. each rolling, 12-month period when the combined PE limitation of 1.47tons from the combustion of natural gas in emissions units F008 and F010 was exceeded;
  - xii. each rolling, 12-month period when the combined PM<sub>10</sub> limitation of 1.47tons from the combustion of natural gas in emissions units F008 and F010 was exceeded; and
  - xiii. each rolling, 12-month period when the combined PM<sub>2.5</sub> limitation of 1.47 tons from the combustion of natural gas in emission units F008 and F010 was exceeded.
- b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Central District Office).

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 Limitations:

CO emissions shall not exceed 0.03 lb/ton of grain processed.  
NO<sub>x</sub> emissions shall not exceed 0.04 lb/ton grain processed.  
PE shall not exceed 0.11 lb/ton of grain processed.



Applicable Compliance Method: Compliance with these limitations may be determined by dividing the following maximum hourly emissions rates for each pollutant by the maximum hourly operating rate (84 ton/hr):

<u>Pollutant</u>	<u>Hourly emissions rate</u>
CO	2.70 lbs/hr
NO <sub>x</sub>	3.21 lbs/hr
PE	0.24 lb/hr

For PE, the results of the calculation above for combustion emissions (0.24 lb PE/hr divided by 84 tons grain processed per hr = 0.003 lb PE/ton grain processed) is added to the manufacturer's supplied performance testing data for process emissions of 0.104 lb PE/ton grain processed (0.003 lb PE/ton grain processed + 0.104 lb PE/ton grain processed = 0.11 lb PE/ton grain processed).

- b. Emissions Limitation: Combined emissions from the combustion of natural gas in grain dryers F008 and F010 shall not exceed the following limitations:

CO emissions shall not exceed 16.25 tons per rolling, 12-month period;  
 NO<sub>x</sub> emissions shall not exceed 19.35 tons per rolling, 12-month period;  
 VOC emissions shall not exceed 1.06 ton per rolling, 12-month period;  
 SO<sub>2</sub> emissions shall not exceed 0.12 ton per rolling, 12-month period;  
 PE shall not exceed 1.47 ton per rolling, 12-month period; and  
 PM<sub>10</sub> emissions shall not exceed 1.47 ton per rolling, 12-month period.  
 PM<sub>2.5</sub> emissions shall not exceed 1.47 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the rolling, 12-month limitations may be determined by multiplying the actual natural gas usage required in d)(2) by the following emissions factors:

<u>Pollutant</u>	<u>Emissions Factor*</u>
CO	84 lbs/MMcf
NO <sub>x</sub>	100lbs/MMcf
VOC	5.5 lbs/MMcf
SO <sub>2</sub>	0.6lb/MMcf
PE	5.7 lbs/MMcf
PM <sub>10</sub>	5.7 lbs/MMcf
PM <sub>2.5</sub>	5.7 lbs/MMcf

\*AP-42, Volume I, Fifth Edition, Section 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, July 1998.

- c. Emissions Limitation: Combined emissions from the grain drying process associated with emissions units F008 and F010 shall not exceed the following limitations:

PE shall not exceed 26.21 tons per rolling, 12-month period;  
 PM<sub>10</sub> shall not exceed 6.55 tons per rolling, 12-month period; and



PM<sub>2.5</sub> shall not exceed 1.11 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the rolling, 12-month limitations may be determined by multiplying the actual grain throughput required in d)(2) by the following emissions factors:

<u>Pollutant</u>	<u>Emissions Factor</u>
PE	0.104lbs PE/ton*
PM <sub>10</sub>	0.026lbsPM <sub>10</sub> /ton**
PM <sub>2.5</sub>	17% of PM <sub>10</sub> ***

\*Manufacturer's supplied performance testing data.

\*\*Assumes PM<sub>10</sub> represents 25% of PE, consistent with AP-42 guidance.

\*\*\*Assumes PM<sub>2.5</sub> is 17% of PM<sub>10</sub> emissions, consistent with AP-42.

g) Miscellaneous Requirements

- (1) None.



**7. Emissions Unit Group -Rail Receiving: F018, F019**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
F018	Grain receiving by rail, dump pit #3 (FKA F005)
F019	Grain receiving by rail, dump pit #4

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., c)(1), d)(1), and e)(3)

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	The requirements for OAC rule 3745-31-05(A)(3) have been determined to be equivalent to those established under OAC rule 3745-31-05(D).  See b)(2)a. and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  13.85 tons per rolling, 12-month period of particulate emissions (PE) from emission units F018 and F019, combined (stack and fugitive).  6.06 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) from emission



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>units F018 and F019, combined (stack and fugitive).</p> <p>1.03 tons per rolling, 12-month period of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) from emission units F018 and F019, combined (stack and fugitive).</p> <p>PE from the stack of the baghouse serving this emissions unit shall not exceed 0.005 grains per dry standard cubic feet (gr/dscf).</p> <p>See b)(2)f.</p>
d.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart DD.
e.	OAC rule 3745-17-07(B)	See b)(2)c.
f.	OAC rule 3745-17-08(A)(1)	See b)(2)d.
g.	OAC rule 3745-17-11(B)(3)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
h.	40 CFR Part 60, Subpart DD	<p>Visible emissions of fugitive dust from receiving operations associated with these emissions units (F018 and F019) shall not exceed 5 percent opacity.</p> <p>The grain loading limitation specified by this rule is less stringent than the grain loading limitation established pursuant to OAC rule 3745-31-05(D).</p> <p>Visible emissions from the stack(s) of each baghouse serving this emission unit shall not exceed 0 percent opacity.</p>
i.	40 CFR Part 60, Subpart A	See b)(2)e.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 (Senate Bill 265



changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

- b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from these air contaminant sources because the calculated annual emission rate for PM<sub>10</sub> and PM<sub>2.5</sub> is less than 10 tons/year, taking into consideration the combined synthetic minor limitation of 75,000,000 bushels per rolling, 12-month period established for emission units F018 and F019 and the synthetic minor limitation of 10,000,000 bushels per rolling, 12-month period established for emission unit F019.
  - c. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
  - d. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
  - e. The permittee shall demonstrate compliance with the applicable limitations identified in 40 CFR Part 60, Subpart DD in accordance with the General Provisions of the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart A (60.1-60.19).
  - f. The emissions from the receiving operations associated with these emission units shall be vented to a baghouse at all times when the emission unit is in operation.
- c) Operational Restrictions
  - (1) The maximum, combined, grain throughput for emission units F018 and F019 shall not exceed 75,000,000 bushels (2,100,000 tons) per rolling, 12-month period and the grain throughput for emission unit F019 shall not exceed 10,000,000 bushels (280,000 tons) per rolling, 12-month period.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the grain throughput, in bushels;
  - b. the rolling, 12-month summation of the grain received by emissions unit F018, in bushels;
  - c. the rolling, 12-month summation of the grain received by emissions unit F019, in bushels;
  - d. the rolling, 12-month summation of the grain received by emissions units F018 and F019 combined, in bushels;
  - e. the rolling, 12-month summation of the grain received by emissions units F018 and F019 combined, in tons [the product of d)(1)d. and the conversion factor of 0.028 tons per bushel];
  - f. the rolling, 12-month PE from emissions units F018 and F019 combined, in tons, calculated in accordance with f)(1)a.;
  - g. the rolling, 12-month  $PM_{10}$  emissions from emissions units F018 and F019 combined, in tons, calculated in accordance with f)(1)b.; and
  - h. the rolling, 12-month  $PM_{2.5}$  emissions from emission units F018 and F019 combined, in tons, calculated in accordance with f)(1)c.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable ranges established for the pressure drop across the baghouseis identified below:
  - a. for dust system 3, the acceptable range is between 0.5 and 6 inches of water.
- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving the receiving operations associated with 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 location and 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 emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission 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.

- (4) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible particulate emissions from the stack(s) of each baghouse serving this emission 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. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse(s) when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse(s) on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

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

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control



equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

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

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

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

e) Reporting Requirements

- (1) 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 District Office or 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.



- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the combined grain throughput limitation of 75,000,000 bushels for grain received by emissions units F018 and F019 was exceeded;
    - ii. each rolling, 12-month period when the grain throughput limitation of 10,000,000 bushels for grain received by emissions units F019 was exceeded;
    - iii. each rolling, 12-month period when the combined PE limitation of 13.85tons for emissions units F018 and F019 was exceeded;
    - iv. each rolling, 12-month period when the combined PM<sub>10</sub> emissions limitation of 6.06tons for emissions units F018 and F019 was exceeded;
    - v. each rolling, 12-month period when the combined PM<sub>2.5</sub> emissions limitation of 1.03 tons for emission units F018 and F019 was exceeded;
    - vi. each period of time (start time and date, and end time and date)when the pressure drop across the baghouse(s) was outside of the acceptable range; and
    - vii. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse(s).
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September),



unless an alternative schedule has been established and approved by the Director (Central District Office).

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: 13.85 tons per rolling, 12-month period of particulate emissions (PE) from emission units F018 and F019, combined (stack and fugitive).

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following equations:

Total PE = F018 fugitive PE + F019 fugitive PE + F018 stack PE; where,

F018 stack PE = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

F018 fugitive PE = (Tons grain received by F018 \* E<sub>f</sub>) \* (1-CapE); where,

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.032 lb PE/ton grain);

CapE = capture efficiency (80%); and

F019 fugitive PE = (Tons grain received by F019 \* E<sub>f</sub>); where,

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.032 lb PE/ton grain);

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

b. Emission Limitation: 6.06 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) from emission units F018 and F019, combined (stack and fugitive).

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following equations:

Total PM<sub>10</sub> = F018 fugitive PM<sub>10</sub> + F019 fugitive PM<sub>10</sub> + F018 stack PM<sub>10</sub>; where,

F018 stack PM<sub>10</sub> = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,



AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

F018 fugitive  $PM_{10}$  = (Tons grain received by F018 \*  $E_f$ ) \* (1-CapE); where,

$E_f$  = AP-42<sup>#</sup> emissions factor (0.0078 lb $PM_{10}$ /ton grain);

CapE = capture efficiency (80%); and

F019 fugitive  $PM_{10}$  = (Tons grain received by F019 \*  $E_f$ ); where,

$E_f$  = AP-42<sup>#</sup> emissions factor (0.0078 lb $PM_{10}$ /ton grain);

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- c. Emission Limitation: 1.03 tons per rolling, 12-month period of particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ) from emission units F018 and F019, combined (stack and fugitive).

Applicable Compliance Method: Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003 emission factor which states that  $PM_{2.5}$  is approximately 17% of  $PM_{10}$  emissions. Therefore, if compliance is demonstrated with  $PM_{10}$  in f)(1)c., compliance with the  $PM_{2.5}$  emission limitation can be assumed.

$$6.06 \text{ tons } PM_{10} * 0.17 = 1.03 \text{ tons } PM_{2.5}$$

- d. Emission Limitation: Visible emissions of fugitive dust from receiving operations associated with this emissions unit shall not exceed 5 percent opacity.

Applicable Compliance Method: **F019**: The initial compliance demonstration for this emissions unit shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated but no later than 180 days after initial startup of the emissions unit.

**F018 and F019**: If required, continuous compliance with the visible emission limitation for the fugitive dust from receiving operations associated with this emissions unit shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

- e. Emissions Limitation: PE from the stack of the baghouse serving this emissions unit shall not exceed 0.005 gr/dscf.

Applicable Compliance Method: If required, compliance with the grain loading limitation shall be demonstrated according to 40 CFR Part 60, Appendix A, method 5.



- f. Emissions Limitation: Visible emissions from the stack(s) of each baghouse serving this emission unit shall not exceed 0 percent opacity.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the fugitive dust from receiving operations associated with this emissions unit shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

- g) Miscellaneous Requirements

- (1) None.



8. Emissions Unit Group -Truck Receiving: F005,F016,F017,

EU ID	Operations, Property and/or Equipment Description
F005	Grain receiving by truck, dump pit #1
F016	Grain receiving by truck, dump pit #2 (FKA F005)
F017	Grain receiving by truck, dump pit #3 (FKA F005)

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)d., c)(1), d)(1), and e)(3).

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	The requirements for OAC rule 3745-31-05(A)(3) have been determined to be equivalent to those established under OAC rule 3745-31-05(D).  See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V and PSD)	Emissions shall not exceed:  15.20 tons of particulate matter (PE) per rolling, 12-month period for emission units F005, F016 and F017, combined (stack and fugitive).  9.49 tons of particulate matter less than ten (10) microns in diameter (PM <sub>10</sub> ) per



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>rolling, 12-month period for emission units F005, F016 and F017, combined (stack and fugitive).</p> <p>1.61 tons of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) per rolling, 12-month period for emission units F005, F016 and F017, combined (stack and fugitive).</p> <p>PE from the stack of the baghouse serving this emissions unit shall not exceed 0.005 grains per dry standard cubic feet (gr/dscf).</p> <p>See b)(2)d. and c)(1)</p>
d.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60 Subpart DD.
e.	OAC rule 3745-17-07(B)	See b)(2)e.
f.	OAC rule 3745-17-08(A)(1)	See b)(2)f.
g.	40 CFR Part 60, Subpart DD  ORC 3704.03(T)	<p>The grain loading limitation specified by this rule is less stringent than the grain loading limitation established pursuant to OAC rule 3745-31-05(D).</p> <p>Visible emissions from the stack(s) of each baghouse serving this emission unit shall not exceed 0 percent opacity.</p> <p>Visible emissions of fugitive dust from receiving operations associated with this emissions unit shall not exceed 5 percent opacity.</p>
h.	40 CFR Part 60, Subpart A	See b)(2)g.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that



rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

- b. The PM<sub>10</sub> and PM<sub>2.5</sub> emissions limitations for emissions units **F005, F016 and F017** were established to reflect the potential to emit. The monitoring, recordkeeping, reporting, and testing requirements, established in the following terms and conditions are sufficient to demonstrate compliance with these limitations.
- c. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from emissions unit **F005, F016 and F017** because the calculated annual emission rate for PM<sub>10</sub> and PM<sub>2.5</sub> is less than 10 tons/year taking into consideration the combined synthetic minor limitation of 75,000,000 bushels per rolling, 12-month period established for emissions units F005, F016, and F017.
  - d. The emissions from the receiving operations associated with this emissions unit shall be vented to a baghouse(s) at all times when the emissions unit is in operation.
  - e. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
  - f. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
  - g. The permittee shall demonstrate compliance with the applicable limitations identified in 40 CFR Part 60, Subpart DD in accordance with the General Provisions of the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart A (60.1-60.19).
- c) Operational Restrictions
  - (1) The maximum, combined grain throughput for emission units F005, F016, and F017 shall not exceed 75,000,000 bushels (2,100,000 tons) per rolling, 12-month period.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for emissions units F005, F016, and F017:
  - a. the grain received, in bushels;
  - b. the rolling, 12-month summation of the grain received, in bushels;
  - c. the rolling, 12-month summation of the grain received by emissions units F005, F016, and F017 combined, in bushels;
  - d. the rolling, 12-month summation of the grain received by emissions units F005, F016, and F017 combined, in tons [the product of d)(1)c. and the conversion factor of 0.028 tons per bushel];
  - e. the rolling, 12-month PE from emissions units F005, F016, and F017 combined, in tons, calculated in accordance with f)(1)a.;
  - f. the rolling, 12-month PM<sub>10</sub> emissions from emissions units F005, F016, and F017 combined, in tons, calculated in accordance with f)(1)b.; and
  - g. the rolling, 12-month PM<sub>2.5</sub> emissions from emission units F005, F016 and F017 combined, in tons, calculated in accordance with f)(1)c.
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable ranges established for the pressure drop across the baghouses are identified below:
  - a. for dust system 1, the acceptable range is between 0.5 and 6 inches of water;
  - b. for dust system 2, the acceptable range is between 0.5 and 6 inches of water; and
  - c. for dust system 3, the acceptable range is between 0.5 and 6 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse(s) when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse(s) on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

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



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

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

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

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

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

- (4) The permittee shall perform daily checks, when the emissions unit is in operation, for any visible particulate emissions from the stack(s) of each baghouse serving this emission 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. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
- (5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving the receiving operations associated with 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 location and 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 emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission 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.

e) Reporting Requirements

- (1) 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 District Office or 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.



- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the combined grain throughput limitation of 75,000,000 bushels for grain received by emissions units F005, F016, and F017 was exceeded;
    - ii. each rolling, 12-month period when the combined PE limitation of 15.20tons for emissions units F005, F016, and F017 was exceeded;
    - iii. each rolling, 12-month period when the combined PM<sub>10</sub> emissions limitation of 9.49tons for emissions units F005, F016, and F017 was exceeded;
    - iv. each rolling, 12-month period when the combined PM<sub>2.5</sub> emissions limitation of 1.61 tons for emission units F005, F016 and F017 was exceeded;
    - v. each period of time (start time and date, and end time and date)when the pressure drop across the baghouse(s) was outside of the acceptable range; and
    - vi. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse(s).
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (Central District Office).



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: 15.20 tons per rolling, 12-month period of stack and fugitive particulate matter (PE) for emission units F005, F016 and F017, combined.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following equations:

Total PE = F005 fugitive PE + F016 fugitive PE + F017 fugitive PE + F005 stack PE + F016 stack PE + F017 stack PE; where,

F005 fugitive PE = (Tons grain received by F005 \*  $E_f$ ) \* (1-CapE); where,

$E_f$  = AP-42<sup>#</sup> emissions factor (0.035 lb PE/ton grain);  
CapE = capture efficiency (80%); and

F016 fugitive PE = (Tons grain received by F016 \*  $E_f$ ) \* (1-CapE); where,

$E_f$  = AP-42<sup>#</sup> emissions factor (0.035 lb PE/ton grain);  
CapE = capture efficiency (80%); and

F017 fugitive PE = (Tons grain received by F017 \*  $E_f$ ) \* (1-CapE); where,

$E_f$  = AP-42<sup>#</sup> emissions factor (0.035 lb PE/ton grain);  
CapE = capture efficiency (80%); and

F005 stack PE = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

F016 stack PE = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

F017 stack PE = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,



AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- b. Emission Limitation: 9.49 tons per rolling, 12-month period of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>)(stack and fugitive) from F005, F016 and F017, combined.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements identified in d)(1) and the following equations:

Total PM<sub>10</sub> = F005 fugitive PM<sub>10</sub> + F016 fugitive PM<sub>10</sub> + F017 fugitive PM<sub>10</sub> + F005 stack PM<sub>10</sub> + F016 stack PM<sub>10</sub> + F017 stack PM<sub>10</sub>; where,

F005 fugitive PM<sub>10</sub> = (Tons grain received by F005 \* E<sub>f</sub>) \* (1-CapE); where,

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.0078 lbPM<sub>10</sub>/ton grain);

CapE = capture efficiency (80%); and

F016 fugitive PM<sub>10</sub> = (Tons grain received by F016 \* E<sub>f</sub>) \* (1-CapE); where,

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.0078 lbPM<sub>10</sub>/ton grain);

CapE = capture efficiency (80%); and

F017 fugitive PM<sub>10</sub> = (Tons grain received by F017 \* E<sub>f</sub>) \* (1-CapE); where,

E<sub>f</sub> = AP-42<sup>#</sup> emissions factor (0.0078 lbPM<sub>10</sub>/ton grain);

CapE = capture efficiency (80%); and

F005 stack PM<sub>10</sub> = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

F016 stack PM<sub>10</sub> = AOC \* EV \* 60 \* (1 lb/7000 gr) \* (8,760 hrs/2,000 lbs); where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;



EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

$F017 \text{ stack } PM_{10} = AOC * EV * 60 * (1 \text{ lb}/7000 \text{ gr}) * (8,760 \text{ hrs}/2,000 \text{ lbs});$  where,

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

# - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

- c. Emissions Limitation: 1.61 tons of particulate matter less than 2.5 microns in diameter ( $PM_{2.5}$ ) per rolling, 12-month period for emission units F005, F016 and F017, combined (stack and fugitive).

Applicable Compliance Method: Compliance is demonstrated through the use of AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, May 2003 emission factor which states that  $PM_{2.5}$  is approximately 17% of  $PM_{10}$  emissions. Therefore, if compliance is demonstrated with  $PM_{10}$  in f)(1)c., compliance with the  $PM_{2.5}$  emission limitation can be assumed.

$$9.49 \text{ tons } PM_{10} * 0.17 = 1.61 \text{ tons } PM_{2.5}$$

- d. Emissions Limitation: PE from the stack of the baghouse serving this emissions unit shall not exceed 0.005 gr/dscf.

Applicable Compliance Method: If required, compliance with the grain loading limitation shall be demonstrated according to 40 CFR Part 60, Appendix A, method 5.

- e. Emissions Limitation: Visible emissions from the stack(s) of each baghouse serving this emission unit shall not exceed 0 percent opacity.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the fugitive dust from receiving operations associated with this emissions unit shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

- f. Emissions Limitation: Visible emissions of fugitive dust from receiving operations associated with this emissions unit shall not exceed 5 percent opacity.

Applicable Compliance Method: If required, compliance with the visible emission limitation for the fugitive dust from receiving operations associated with this emissions unit shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.



**Final Permit-to-Install and Operate**  
CARGILL INC - BLOOMINGBURG  
**Permit Number:** P0117437  
**Facility ID:** 0124000088  
**Effective Date:** 2/4/2015

g) Miscellaneous Requirements

(1) None.