



State of Ohio Environmental Protection Agency

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8/3/2009

Certified Mail

Mr. Delin Johnson
CARGILL INC - BLOOMINGBURG
4201 State Route 238 NE
PO Box A
Bloomington, OH 43106

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0124000088
Permit Number: P0104588
Permit Type: OAC Chapter 3745-31 Modification
County: Fayette

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Record Herald. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install and operate will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,


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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-CDO; Kentucky

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
CARGILL INC - BLOOMINGBURG

Issue Date: 8/3/2009
Permit Number: P0104588
Permit Type: OAC Chapter 3745-31 Modification
Permit Description: Chapter 31 permit modification to increase throughput from 47.6 million bushels per year to 51 million bushels per year and include synthetic minor operational restrictions in order to avoid the Title V permitting program.
Facility ID: 0124000088
Facility Location: CARGILL INC - BLOOMINGBURG
4201 STATE RTE 238 N E,
BLOOMINGBURG, OH 43106
Facility Description: Grain and Field Bean Merchant Wholesalers

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Benjamin Halton at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049 or (614)728-3778. The permit can be downloaded from the Web page: www.epa.state.oh.us/dapc



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Cargill Inc. – Bloomingburg (Cargill) is a grain terminal elevator located within Fayette County. The facility consists of equipment used to receive, transfer, convey, handle and load-out grain (primarily corn and soybeans), two column dryers, a grain storage pile and paved roadways and parking areas.

3. Facility Emissions and Attainment Status:

Cargill was originally permitted as a combined facility with the adjacent ethanol production facility and both facilities received permits-to-install with synthetic minor restrictions that limited the combined emissions from both facilities below major-source thresholds. Cargill has subsequently received a determination from Ohio EPA that acknowledges that each facility can be evaluated separately for Title V and New Source Review applicability. Cargill has submitted a chapter 31 modification to increase the synthetic minor operational restrictions to reflect the independent source determination and allow the facility the flexibility to load-out grain via truck and rail when the ethanol facility is not accepting grain. Because Cargill is subject to 40 CFR Part 60, Subpart DD, fugitive emissions are considered when evaluating potential emissions for major source considerations. Fayette County is designated as ‘attainment’ for each of the National Ambient Air Quality Standards (NAAQS) pollutants. The facility has requested federally enforceable synthetic minor restrictions to limit potential emissions from the facility to less than 100 tons per year of particulate emissions (PE) in order to avoid triggering Title V and Prevention of Significant Deterioration (PSD) permitting requirements.

The potential emissions from the facility without synthetic minor limitations are as follows (tons per year):

EU	PE	PM ₁₀	NO _x	SO ₂	VOC	CO
F005	220.14	50.7	--	--	--	--
F008						
combustion	1.05	--	14.06	0.09	0.79	11.83
process	38.28	9.57	--	--	--	--
F009	257.55	61.45	--	--	--	--
F010						
combustion	1.05	--	14.06	0.09	0.79	11.83
process	38.28	9.57	--	--	--	--
F011	30.44	30.44	--	--	--	--
F013	83.57	16.47	--	--	--	--
Total	670.36	178.20	28.12	0.18	1.58	23.66

The potential emissions from the facility taking into account the synthetic minor emissions limitations and operational restrictions are as follows (tons per rolling, 12-month period):

EU	PE	PM ₁₀	NO _x	SO ₂	VOC	CO
F005	5.64	1.39	--	--	--	--
F008 & F010 combined						
combustion	0.82	--	10.75	0.06	0.59	9.03



Emissions unit F005 is subject to the following rules:

OAC 3745-31-05(A)(3)(a)(ii) – BAT does not apply to the PE or PM₁₀ emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the federally enforceable rule limits established under 3745-31-05(D).

OAC rule 3745-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 5.64 tons PE per rolling, 12-month period, 1.39 tons PM₁₀ per rolling, 12-month period and 51,000,000 bushels of grain throughput per rolling, 12-month period.

OAC rules 3745-17-07(A)(1) – The emissions limitation specified by this rule is less stringent than the limitation established pursuant to 40 CFR Part60, Subpart DD.

OAC rules 3745-17-07(B) and 3745-17-08(A)(1) – The limitations established by these rules do not apply to emissions unit F005 because the facility is not located within an area identified in “appendix A” of OAC rule 3745-17-08.

40 CFR Part 60, Subpart DD - The PE from the stack(s) of each baghouse serving this emissions unit shall not exceed 0.01 grains per dry standard cubic feet (gr/dscf). Visible emissions of fugitive dust from grain handling operations associated with this emissions unit shall not exceed 0 percent opacity. 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 receiving operations associated with this emissions unit shall not exceed 5 percent opacity.

F008 and F010 – Zimmermann grain dryers no. 1 and 2.

Emissions from these emissions units include the fugitive particulate emissions generated from the process of drying grain as well as the products of combustion from the consumption of natural gas in each dryer. These emissions units are limited to a combined 10,000,000 bushels per rolling 12-month period and they are limited to a combined natural gas usage of 215 million cubic ft (MMcf) per rolling, 12-month period.

Combustion emissions are calculated according to the following tables:

	MMcf per year	Emissions factor (lb/MMcf)	lbs/yr	tons per rolling, 12-month period
PE	215	7.6	1,634	0.82
NO _x	215	100	21,500	10.75
SO ₂	215	0.6	129	0.06
CO	215	84	18,060	9.03
VOC	215	5.5	1,182.5	0.59

	MMBtu/hr	Emissions factor (lb/MMBtu)	lbs/hr
PE	32.8	0.00745	0.24
NO _x	32.8	0.980	3.21

Process emissions are calculated according to the following tables:

	bushels per year	tons per bushel	Emissions factor (lb/ton)	lbs/yr	tons per rolling, 12-month period
PE	10,000,000	0.028	0.104	29,120	14.56
PM ₁₀	10,000,000	0.028	0.026	7,280	3.64

	Process weight rate (tons per hour)	Emissions factor (lb/ton)	lbs/hr
PE	84	0.104	8.74

Emissions unit F008 and F010 are subject to the following rules:



OAC 3745-31-05(A)(3)(a)(ii) – BAT does not apply to the CO, VOC, PM₁₀, or SO₂ emissions from the combustion of natural gas or to the PM₁₀ emissions from the grain drying process because the potential to emit for each pollutant is less than ten tons per year taking into account the federally enforceable rule limits established under 3745-31-05(D).

OAC 3745-31-05(A) – NO_x emission shall not exceed 3.21 lbs/hr and PE emissions shall not exceed 0.24 lb/hr from the combustion of natural gas. PE emissions shall not exceed 8.74 lb/hr from the grain drying process. These limits were established to reflect the potential-to-emit for this source.

OAC rule 3745-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 0.82 tons PE per rolling, 12-month period, 10.75 tons NO_x per rolling, 12-month period, 0.06 tons SO₂ per rolling, 12-month period, 9.03 tons CO per rolling, 12-month period and 0.59 tons VOC per rolling, 12-month period for the combustion of natural gas emissions, 14.56 tons PE per rolling, 12-month period and 3.64 tons PM₁₀ per rolling 12-month period for the grain drying process emissions, 10,000,000 bushels of grain throughput per rolling, 12-month period and 215 MMcf per rolling, 12-month period.

OAC rules 3745-17-07(B) and 3745-17-08(A)(1) – The limitations established by these rules do not apply to emissions unit F008 and F010 because the facility is not located within an area identified in “appendix A” of OAC rule 3745-17-08.

40 CFR Part 60, Subpart DD - These emissions unit are exempt from Subpart DD because the column plate perforations are smaller than 2.4 mm in diameter.

F009 – Shipping and load-out spouts to truck and rail.
 Emissions from this emission unit include the fugitive particulate emissions generated from the load-out of grain into trucks and railcars. This emissions unit is limited to 51,000,000 bushels per rolling, 12-month period.

PE and PM₁₀ emissions are calculated according to the following table:

	bushels per year	tons per bushel	Emissions factor (lb/ton)	lbs/yr	tons per rolling, 12-month period
PE	51,000,000	0.028	0.086	122,808	61.40
PM ₁₀	51,000,000	0.028	0.029	41,412	20.71

Emissions unit F009 is subject to the following rules:

OAC 3745-31-05(A)(3)(a)(ii) – BAT does not apply to the PE or PM₁₀ emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the federally enforceable rule limits established under 3745-31-05(D).

OAC rule 3745-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 61.40 tons PE per rolling, 12-month period, 20.71 tons PM₁₀ per rolling, 12-month period and 51,000,000 bushels of grain throughput per rolling, 12-month period.

OAC rules 3745-17-07(B) and 3745-17-08(A)(1) – The limitations established by these rules do not apply to emissions unit F009 because the facility is not located within an area identified in “appendix A” of OAC rule 3745-17-08.

40 CFR Part 60, Subpart DD - Visible emissions of fugitive dust from truck load-out operations associated with this emissions unit shall not exceed 10 percent opacity. Visible emissions of fugitive dust from rail load-out operations associated with this emissions unit shall not exceed 5 percent opacity.



F011 – Storage piles including load-in, load-out and wind erosion.

Emissions from this emissions unit include the fugitive particulate emissions generated from the process of conveying grain onto a concrete pad used to store excess grain, load-out of the grain when excess storage is no longer needed, and the fugitive emissions created by wind moving across the storage pile. The storage pile at Cargill is equipped with a canvas cover that can significantly reduce the production of particulate emissions during load-in operations and can protect against fugitive emission generated by wind erosion. However, for the purpose of evaluating applicable rules and establishing limitations, the canvas cover was not considered. This emissions unit is limited to 51,000,000 bushels per rolling, 12-month period.

Emissions factors for load-in and load-out operations for PE and PM10 were calculated according to AP-42, Section 13.2.4.3, using a particle size multiplier of 0.74 for PE and of 0.35 for PM10. PE and PM10 emissions are calculated according to the following tables and formulas:

$$E_f = [k(0.0032)(u/5)^{1.3}]/(m/2)^{1.4} \text{ where,}$$

- k = particle size multiplier
- u = mean wind speed (12 mph)
- m = material moisture content (5.0%)

Load-in

	bushels per year	tons per bushel	Emissions factor (lb/ton)	lbs/yr	tons per rolling, 12-month period
PE	51,000,000	0.028	0.00205	2,927.4	1.46
PM10	51,000,000	0.028	0.000969	1,383.73	0.69

Load-out

	bushels per year	tons per bushel	Emissions factor (lb/ton)	lbs/yr	tons per rolling, 12-month period
PE	51,000,000	0.028	0.00205	2,927.4	1.46
PM10	51,000,000	0.028	0.000969	1,383.73	0.69

Wind Erosion

The emissions factor for wind erosion was determined according to USEPA reference document EPA-450/2-92-004, "Fugitive Dust Background Document and Technical Information Document for Best Available Measures", section 2.3.1.3.3 for wind emissions from continuously active piles. The formula below was used to produce an emissions factor in pounds per day per acre for a 2.0 acre (footprint) storage pile.

$$E_f = (1.7)(s/1.5)[(365-p)/235](f/15) \text{ where,}$$

- s = silt content of stored material (10.0%)
- p = number of days with > 0.01 in. of precipitation per year (165)
- f = percentage of time that the unobstructed wind speed exceeds 12 mph (16.2%)

$$E_f = 10.42 \text{ lb/day/acre}$$

Total F011 PE and PM10 emissions (tons per rolling, 12-month period)

	PE	PM10
Load-in	1.46	0.69
Load-out	1.46	0.69
Wind erosion*	3.80	3.80
Total	6.72	5.18

* PM10 emissions assumed to be equal to PE for wind erosion



Emissions unit F011 is subject to the following rules:

OAC 3745-31-05(A)(3)(a)(ii) – BAT does not apply to the PE or PM₁₀ emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the federally enforceable rule limits established under 3745-31-05(D).

OAC rule 3745-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 6.72 tons PE per rolling, 12-month period, 5.18 tons PM₁₀ per rolling, 12-month period and 51,000,000 bushels of grain throughput per rolling, 12-month period.

OAC rules 3745-17-07(B) and 3745-17-08(A)(1) – The limitations established by these rules do not apply to emissions unit F011 because the facility is not located within an area identified in “appendix A” of OAC rule 3745-17-08.

F013 – Paved roadways and parking areas

Emissions from this emissions unit include the fugitive particulate emissions generated from vehicles shipping and receiving grain. It is not necessary to apply synthetic minor operational restrictions to this emissions unit because vehicle traffic is essentially limited by operational restrictions applied to EUs F005 and F009.

The emissions factor for paved roadways and parking areas for PE and PM₁₀ were calculated according to AP-42, Section 13.2.1-2, using a particle size multiplier of 0.082 for PE and of 0.016 for PM₁₀. PE and PM₁₀ emissions are calculated according to the following tables and formulas:

$$E_f = [k(sL/2)^{0.65}(W/3)^{1.5} - C](1 - P/4N) \text{ where,}$$

k = particle size multiplier

sL = road surface silt loading (0.40 g/m²)

W = average weight of vehicles (27 tons)

C = emissions factor for brake and tire wear (0.0005 lb/VMT)

P = number of days with > 0.01 in. of precipitation per year (120)

N = number of days in the averaging period (365)

Vehicle miles traveled (VMT) are calculated by the following:

$$\text{VMT (receiving)} = [(51,000,000 \text{ bushels} * 0.028 \text{ tons per bushel}) / 25 \text{ tons grain per truck}](0.25 \text{ miles}) = 14,280 \text{ VMT}$$

$$\text{VMT (loadout)} = [(51,000,000 \text{ bushels} * 0.028 \text{ tons per bushel}) / 25 \text{ tons grain per truck}](0.25 \text{ miles}) = 14,280 \text{ VMT}$$

	VMT/yr	Emissions factor (lb/VMT)	lbs/yr	tons per rolling, 12-month period
PE	28,560	0.71	20,277.6	10.14
PM ₁₀	28,560	0.14	3,998.4	2.00

Emissions unit F013 is subject to the following rules:

OAC 3745-31-05(A)(3)(a)(ii) – BAT does not apply to the PE because the potential to emit for this pollutant is less than ten tons per year taking into account the federally enforceable rule limit of 51,000,000 bushels per rolling, 12-month period operational restriction that applies to emissions units F005 and F009 and the following voluntary restrictions as proposed by the permittee for the purpose of avoiding BAT under OAC rule 3745-31-05(A)(3)(a)(ii):



State of Ohio Environmental Protection Agency
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Permit Strategy Write-Up
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Facility ID: 0124000088

- a) treatment of paved roadways and parking areas with water at sufficient treatment frequencies to prevent visible emissions of fugitive dust.

BAT does not apply to the PM₁₀ emissions because the potential to emit for this pollutant is less than ten tons per year taking into account the federally enforceable rule limit of 51,000,000 bushels per rolling, 12-month period operational restriction that applies to emissions units F005 and F009.

OAC rules 3745-17-07(B) and 3745-17-08(A)(1) – The limitations established by these rules do not apply to emissions unit F013 because the facility is not located within an area identified in “appendix A” of OAC rule 3745-17-08.

5. Conclusion:

Compliance with the terms and conditions of PTIO P0104588 will ensure that emissions from the facility do not exceed Title V or PSD thresholds. The permit should be issued draft to allow for USEPA review and public comment in order to ensure that the terms and conditions are federally enforceable.

6. Please provide additional notes or comments as necessary:

None

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	89.14
PM ₁₀	30.92
NO _x	10.75
SO ₂	0.06
VOC	0.59
CO	9.03



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

DRAFT

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

Facility ID: 0124000088
Permit Number: P0104588
Permit Type: OAC Chapter 3745-31 Modification
Issued: 8/3/2009
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance



Air Pollution Permit-to-Install and Operate
for
CARGILL INC - BLOOMINGBURG

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104588

Facility ID: 0124000088

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0124000088

Application Number(s): A0037041

Permit Number: P0104588

Permit Description: Chapter 31 permit modification to increase throughput from 47.6 million bushels per year to 51 million bushels per year and include synthetic minor operational restrictions in order to avoid the Title V permitting program.

Permit Type: OAC Chapter 3745-31 Modification

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

Issue Date: 8/3/2009

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

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 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

Chris Korleski
Director



Authorization (continued)

Permit Number: P0104588

Permit Description: Chapter 31 permit modification to increase throughput from 47.6 million bushels per year to 51 million bushels per year and include synthetic minor operational restrictions in order to avoid the Title V permitting program.

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

Emissions Unit ID:	F005
Company Equipment ID:	LEGS, SCREW, BELT AND ENMASS CONVEYORS
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F008
Company Equipment ID:	ZIMMERMAN GRAIN DRYER
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F009
Company Equipment ID:	TRUCK LOAD OUT SPOUT
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F010
Company Equipment ID:	Zimmerman #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F011
Company Equipment ID:	FS104
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F013
Company Equipment ID:	FS103
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104588

Facility ID: 0124000088

Effective Date: To be entered upon final issuance

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 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 Ohio EPA DAPC, Central District Office 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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104588

Facility ID: 0124000088

Effective Date: To be entered upon final issuance

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104588

Facility ID: 0124000088

Effective Date: To be entered upon final issuance

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Permit-to-Install and Operate

Permit Number: P0104588

Facility ID: 0124000088

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. F005, LEGS, SCREW, BELT AND ENMASS CONVEYORS

Operations, Property and/or Equipment Description:

Grain receiving, handling, transferring and conveying including dump pits, conveyors, elevators and bins vented to three baghouses

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)b., c)(1), d)(1), e)(1) and f)(1)a. & b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii)	See b)(2)a. and b)(2)b. below.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD) (Synthetic minor to avoid Title V)	Stack and fugitive PE shall not exceed 5.64 tons per rolling, 12-month period. Stack and fugitive PM ₁₀ emissions shall not exceed 1.39 tons per rolling, 12-month period. See b)(2)e. and c)(1) below.
c.	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.
d.	OAC rule 3745-17-07(B)	See b)(2)c. below.
e.	OAC rule 3745-17-08(A)(1)	See b)(2)d. below.
f.	OAC rule 3745-17-11(B)(3)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60 Subpart DD.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR Part 60, Subpart DD	<p>The PE from the stack(s) of each baghouse serving this emissions unit shall not exceed 0.01 grains per dry standard cubic feet (gr/dscf).</p> <p>Visible emissions of fugitive dust from grain handling operations associated with this emissions unit shall not exceed 0 percent opacity.</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)f. below.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this air contaminant source since the calculated annual emission rate for PE is less than 10 tons/year, taking into account the federally enforceable rule limit of 5.64 tons per rolling, 12-month period under OAC rule 3745-31-05(D). See c)(1) below.
- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter less than ten microns in diameter (PM₁₀) emissions from this air contaminant source since the calculated annual emission rate for PM₁₀ is less than 10 tons/year, taking into account the federally enforceable rule limit of 1.39 tons per rolling, 12-month period under OAC rule 3745-31-05(D). See c)(1) below.
- 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 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.



- 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) The maximum grain throughput for this emissions unit shall not exceed 51,000,000 bushels (1,428,000 tons) per rolling, 12-month period.

The permittee has existing records of the grain throughput for this emissions unit; therefore, the first year of accumulating monthly grain throughput limitations is not necessary.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
 - a. the grain throughput, in bushels; and
 - b. the rolling, 12-month summation of the grain throughput, in bushels.
- (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 4 and 8 inches of water;
 - b. for dust system 2, the acceptable range is between 0.5 and 2 inches of water; and
 - c. for dust system 3, the acceptable range is between 1 and 4 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 fugitive particulate emissions from the grain handling 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 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 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.

- (6) 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) 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 51,000,000 bushels was exceeded;



- ii. 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
- iii. 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 (the Central District Office).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

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

- a. Emissions Limitation:

PE from stack and fugitive emissions shall not exceed 5.64 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance may be determined by the record keeping requirements identified in d)(1) and the following equations:

$$\text{Total PE} = \text{Receiving fugitive PE} + \text{Receiving stack PE} + \text{Handling fugitive PE}$$

	Grain throughput (bushels)	Bushels to tons conversion	AP-42 emissions factor*	Captured	Uncaptured	Control efficiency	PE (tons)



		factor					
Receiving fugitive PE	51,000,000	0.028	0.035		20%		5.00
Receiving stack PE	51,000,000	0.028	0.035	80%		99%	0.20
Handling fugitive PE	51,000,000	0.028	0.061		1%		0.44
Total							5.64

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

b. Emissions Limitation:

PM₁₀ from stack and fugitive emissions shall not exceed 1.39 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance may be determined by the record keeping requirements identified in d)(1) and the following equations:

$$\text{Total PM}_{10} = \text{Receiving fugitive PM}_{10} + \text{Receiving stack PM}_{10} + \text{Handling fugitive PM}_{10}$$

	Grain throughput (bushels)	Bushels to tons conversion factor	AP-42 emissions factor*	Captured	Uncaptured	Control efficiency	PM ₁₀ (tons)
Receiving fugitive PM ₁₀	51,000,000	0.028	0.0078		20%		1.11
Receiving stack PM ₁₀	51,000,000	0.028	0.0078	80%		99%	0.04
Handling fugitive PE	51,000,000	0.028	0.034		1%		0.24
Total							1.39

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

c. Emissions Limitation:

The PE from the stack(s) of each baghouse serving this emissions unit shall not exceed 0.01 grains per dry standard cubic feet (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.

d. Emissions Limitation:

Visible emissions of fugitive dust from grain handling operations associated with this emissions unit shall not exceed 0 percent opacity.

Applicable Compliance Method:

Compliance with the visible emission limitation for the fugitive dust from grain handling operations associated with this emissions unit shall be determined in accordance with U.S. EPA Method 22.

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:

Compliance with the visible emission limitation for the stack(s) of each baghouse serving this emission unit shall be determined in accordance with U.S. EPA Method 22.

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.

g) Miscellaneous Requirements

- (1) None.



2. F008, ZIMMERMAN GRAIN DRYER

Operations, Property and/or Equipment Description:

Zimmerman grain dryer no. 1

- 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)(2), c)(3), d)(2), e)(1), f)(1)d. and f)(1)e.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(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. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Nitrogen oxide (NO _x) emissions from the combustion of natural gas in this emissions unit shall not exceed 3.21 pounds per hour (lbs/hr). Particulate emissions (PE) from the combustion of natural gas in this emissions unit shall not exceed 0.24 lb/hr. PE from the grain drying process shall not exceed 8.74 lbs/hr. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b. and b)(2)c. below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD) (Synthetic minor to avoid Title V)	See b)(2)d., c)(2) and c)(3) below.
d.	OAC rule 3745-17-07(B)	See b)(2)e. below.
e.	OAC rule 3745-17-08(A)(1)	See b)(2)f. below.
f.	40 CFR Part 60, Subpart DD	This emissions unit is exempt from Subpart DD because the column plate



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		perforations are smaller than 2.4 mm in diameter.

(2) Additional Terms and Conditions

- a. The hourly NO_x and PE limitations for this emissions unit were established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the carbon monoxide (CO), volatile organic compound (VOC), particulate matter less than ten microns in diameter (PM₁₀) and sulfur dioxide (SO₂) 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 account the federally enforceable rule limits established under OAC rule 3745-31-05(D) identified in b)(2)d. below.
- c. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM₁₀ emissions from the grain drying process associated with this air contaminant source since the calculated annual emission rate for PM₁₀ is less than 10 tons/year, taking into account the federally enforceable rule limits established under OAC rule 3745-31-05(D) identified in b)(2)d. below.
- 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 9.03 tons per rolling, 12-month period;
 - ii. NO_x emissions shall not exceed 10.75 tons per rolling, 12-month period;
 - iii. VOC emissions shall not exceed 0.59 ton per rolling, 12-month period;
 - iv. PE emissions shall not exceed 0.82 ton per rolling, 12-month period; and
 - v. SO₂ emissions shall not exceed 0.06 ton 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 14.56 tons per rolling, 12-month period; and
- ii. PM₁₀ shall not exceed 3.64 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 215 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 10,000,000 bushels (280,000 tons) per rolling, 12-month period. The permittee has existing records of the grain throughput for this emissions unit, therefore, the first year of accumulating monthly grain throughput limitations is not necessary.

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 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; and
 - d. the rolling 12-month grain throughput, in bushels.

e) Reporting Requirements

- (1) 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 215 MMcf for F008 and F010 was exceeded;
 - iii. each rolling, 12-month period when the combined grain throughput limitation of 10,000,000 bushels for 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 (the Central District Office).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

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

- a. Emissions Limitation:

NO_x emissions from the combustion of natural gas in this emissions unit shall not exceed 3.21 lbs/hr.

Applicable Compliance Method:

The potential to emit for NO_x was established by multiplying the maximum heating capacity (32.8 MMBtu/hr) by the AP-42 emission factor* (0.0980 lb NO_x/MMBtu).

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

- b. Emissions Limitation:

PE from the combustion of natural gas in this emissions unit shall not exceed 0.24 lb/hr.

Applicable Compliance Method:

The potential to emit for PE was established by multiplying the maximum heating capacity (32.8 MMBtu/hr) by the AP-42 emission factor* (0.00745 lb PE/MMBtu).



c. Emissions Limitation:

PE from the grain drying process shall not exceed 8.74 lbs/hr.

Applicable Compliance Method:

The potential to emit for PE was established by multiplying the maximum throughput (84 tons per hour) by the emission factor* (0.104 lb PE/ton throughput).

*Manufacturer's supplied performance testing data.

d. 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 9.03 tons per rolling, 12-month period;
NO_x emissions shall not exceed 10.75 tons per rolling, 12-month period;
VOC emissions shall not exceed 0.59 ton per rolling, 12-month period;
PE emissions shall not exceed 0.82 ton per rolling, 12-month period; and
SO₂ emissions shall not exceed 0.06 ton 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)a. by the following emissions factors:

<u>Pollutant</u>	<u>Emissions Factor*</u>
CO	84 lbs/MMcf
NO _x	100 lbs/MMcf
VOC	5.5 lbs/MMcf
PE	5.7 lbs/MMcf
SO ₂	0.6 lb/MMcf

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

e. 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 14.56 tons per rolling, 12-month period; and
PM₁₀ shall not exceed 3.64 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)c. by the following emissions factors:



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<u>Pollutant</u>	<u>Emissions Factor</u>
PE	0.104 lbs PE/ton*
PM ₁₀	0.026 lbs PM ₁₀ /ton**

*Manufacturer's supplied performance testing data.

**Assumes PM₁₀ represents 25% of PE, consistent with AP-42 guidance.

g) Miscellaneous Requirements

- (1) None.



3. F009, TRUCK LOAD OUT SPOUT

Operations, Property and/or Equipment Description:

Shipping and loadout spouts to truck and rail

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)b., c)(1), d)(1), e)(1) and f)(1)a. & b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii)	See b)(2)a. below.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD) (Synthetic minor to avoid Title V)	PE shall not exceed 61.40 tons per rolling, 12-month period. PM ₁₀ emissions shall not exceed 20.71 tons per rolling, 12-month period.
c.	OAC rule 3745-17-07(B)	See b)(2)b. below.
d.	OAC rule 3745-17-08(A)(1)	See b)(2)c. below.
e.	40 CFR Part 60, Subpart DD	Visible emissions of fugitive dust from truck loadout operations associated with this emissions unit shall not exceed 10 percent opacity. Visible emissions of fugitive dust from rail loadout operations associated with this emissions unit shall not exceed 5 percent opacity.
f.	40 CFR Part 60, Subpart A	See b)(2)d. below.



(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter less than ten microns in diameter (PM₁₀) and particulate emissions (PE) from this air contaminant source since the calculated annual emission rate for these pollutants is less than 10 tons/year, taking into account the federally enforceable rule limits established under OAC rule 3745-31-05(D). See c)(1) below.
- b. 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).
- c. 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).
- d. 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 throughput for this emissions unit shall not exceed 51,000,000 bushels (1,428,000 tons) per rolling, 12-month period.

The permittee has existing records of the grain throughput for this emissions unit; therefore, the first year of accumulating monthly grain throughput limitations is not necessary.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
 - a. the grain throughput, in bushels; and
 - b. the rolling, 12-month summation of the grain throughput, in bushels.
- (2) 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 loadout 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) 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 51,000,000 bushels 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).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.



f) Testing Requirements

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

a. Emissions Limitation:

PE shall not exceed 61.40 tons per rolling, 12-month period.

Applicable Compliance Method:

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

PE = (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 tons per bushel)
EF = AP-42 emissions factor (0.086 pounds PE/ton) (AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Elevators and Processes", Table 9.9.1-1, March 2003)

b. Emissions Limitation:

PM₁₀ emissions shall not exceed 20.71 tons per rolling, 12-month period.

Applicable Compliance Method:

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

PM₁₀ = (Grain throughput * CF * EF)/2000 where,
PM₁₀ = Actual PM₁₀ emissions, in tons per rolling, 12- month period
CF = Conversion factor from bushels to tons (0.028 tons per bushel)
EF = AP-42 emissions factor (0.029 pounds PM₁₀/ton) (AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Elevators and Processes", Table 9.9.1-1, March 2003)

c. Emissions Limitation:

Visible emissions of fugitive dust from truck loadout operations associated with this emissions unit shall not exceed 10 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.

d. Emissions Limitation:

Visible emissions of fugitive dust from rail loadout operations associated with this emissions unit shall not exceed 5 percent opacity.



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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.



4. F010, Zimmerman #2

Operations, Property and/or Equipment Description:

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)c., b)(2)d., c)(2), c)(3), d)(2), e)(1), f)(1)d. and f)(1)e.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(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. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Nitrogen oxide (NO _x) emissions from the combustion of natural gas in this emissions unit shall not exceed 3.21 pounds per hour (lbs/hr). Particulate emissions (PE) from the combustion of natural gas in this emissions unit shall not exceed 0.24 lb/hr. PE from the grain drying process shall not exceed 8.74 lbs/hr. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)b. and b)(2)c. below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD) (Synthetic minor to avoid Title V)	See b)(2)d., c)(2) and c)(3) below.
d.	OAC rule 3745-17-07(B)	See b)(2)e. below.
e.	OAC rule 3745-17-08(A)(1)	See b)(2)f. below.
f.	40 CFR Part 60, Subpart DD	This emissions unit is exempt from Subpart DD because the column plate



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		perforations are smaller than 2.4 mm in diameter.

(2) Additional Terms and Conditions

- a. The hourly NO_x and PE limitations for this emissions unit were established to reflect the potential to emit; therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the carbon monoxide (CO), volatile organic compound (VOC), particulate matter less than ten microns in diameter (PM₁₀) and sulfur dioxide (SO₂) 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 account the federally enforceable rule limits established under OAC rule 3745-31-05(D) identified in b)(2)d. below.
- c. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM₁₀ emissions from the grain drying process associated with this air contaminant source since the calculated annual emission rate for PM₁₀ is less than 10 tons/year, taking into account the federally enforceable rule limits established under OAC rule 3745-31-05(D) identified in b)(2)d. below.
- 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 9.03 tons per rolling, 12-month period;
 - ii. NO_x emissions shall not exceed 10.75 tons per rolling, 12-month period;
 - iii. VOC emissions shall not exceed 0.59 ton per rolling, 12-month period;
 - iv. PE emissions shall not exceed 0.82 ton per rolling, 12-month period; and
 - v. SO₂ emissions shall not exceed 0.06 ton 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:

- vi. PE shall not exceed 14.56 tons per rolling, 12-month period; and
- vii. PM₁₀ shall not exceed 3.64 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 215 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 10,000,000 bushels (280,000 tons) per rolling, 12-month period. The permittee has existing records of the grain throughput for this emissions unit, therefore, the first year of accumulating monthly grain throughput limitations is not necessary.

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 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; and
 - d. the rolling 12-month grain throughput, in bushels.

e) Reporting Requirements

- (1) 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 215 MMcf for F008 and F010 was exceeded;
 - iii. each rolling, 12-month period when the combined grain throughput limitation of 10,000,000 bushels for 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 (the appropriate District Office or local air agency).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

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

a. Emissions Limitation:

NO_x emissions from the combustion of natural gas in this emissions unit shall not exceed 3.21 lbs/hr.

Applicable Compliance Method:

The potential to emit for NO_x was established by multiplying the maximum heating capacity (32.8 MMBtu/hr) by the AP-42 emission factor* (0.0980 lb NO_x/MMBtu).

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

b. Emissions Limitation:

PE from the combustion of natural gas in this emissions unit shall not exceed 0.24 lb/hr.

Applicable Compliance Method:

The potential to emit for PE was established by multiplying the maximum heating capacity (32.8 MMBtu/hr) by the AP-42 emission factor* (0.00745 lb PE/MMBtu).



c. Emissions Limitation:

PE from the grain drying process shall not exceed 8.74 lbs/hr.

Applicable Compliance Method:

The potential to emit for PE was established by multiplying the maximum throughput (84 tons per hour) by the emission factor* (0.104 lb PE/ton throughput).

*Manufacturer's supplied performance testing data.

d. 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 9.03 tons per rolling, 12-month period;
NO_x emissions shall not exceed 10.75 tons per rolling, 12-month period;
VOC emissions shall not exceed 0.59 ton per rolling, 12-month period;
PE emissions shall not exceed 0.82 ton per rolling, 12-month period; and
SO₂ emissions shall not exceed 0.06 ton 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)a. by the following emissions factors:

<u>Pollutant</u>	<u>Emissions Factor*</u>
CO	84 lbs/MMcf
NO _x	100 lbs/MMcf
VOC	5.5 lbs/MMcf
PE	5.7 lbs/MMcf
SO ₂	0.6 lb/MMcf

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

e. 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 14.56 tons per rolling, 12-month period; and
PM₁₀ shall not exceed 3.64 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)c. by the following emissions factors:



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<u>Pollutant</u>	<u>Emissions Factor</u>
PE	0.104 lbs PE/ton*
PM ₁₀	0.026 lbs PM ₁₀ /ton**

*Manufacturer's supplied performance testing data.

**Assumes PM₁₀ represents 25% of PE, consistent with AP-42 guidance.

g) Miscellaneous Requirements

- (1) None.



5. F011, FS104

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)b., c)(1), d)(1), e)(1) and f)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii)	See b)(2)a. and b)(2)b. below.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD) (Synthetic minor to avoid Title V)	PE shall not exceed 6.72 tons per rolling, 12-month period. PM ₁₀ emissions shall not exceed 5.18 tons per rolling, 12-month period. See c)(1) below.
c.	OAC rule 3745-17-07(B)	See b)(2)c. below.
d.	OAC rule 3745-17-08(A)(1)	See b)(2)d. below.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this air contaminant source since the calculated annual emission rate for PE is less than 10 tons/year, taking into account the federally enforceable rule limit of 6.72 tons per rolling, 12-month period under OAC rule 3745-31-05(D). See c)(1) below.



- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter less than ten microns in diameter (PM₁₀) emissions from this air contaminant source since the calculated annual emission rate for PM₁₀ is less than 10 tons/year, taking into account the federally enforceable rule limit of 5.18 tons per rolling, 12-month period under OAC rule 3745-31-05(D). See c)(1) below.
 - 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 51,000,000 bushels (1,428,000 tons) per rolling, 12-month period.

The permittee has existing records of the grain throughput for this emissions unit; therefore, the first year of accumulating monthly grain throughput limitations is not necessary.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain monthly records of the following information:
 - a. the grain throughput, in bushels; and
 - b. the rolling, 12-month summation of the grain throughput, in bushels.
- e) Reporting Requirements
- (1) 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 51,000,000 bushels 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).

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

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

- a. Emissions Limitation:

PE shall not exceed 6.72 tons per rolling, 12-month period.

Applicable Compliance Method:

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

Load-in:

PE = (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 = (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 * 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 lbs PM₁₀/day/acre (EPA-450-2/92-004, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, September 1992)



b. Emissions Limitation:

PM₁₀ emissions shall not exceed 5.18 tons per rolling, 12-month period.

Applicable Compliance Method:

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

Load-in:

PM₁₀ = (Grain throughput * CF * EF)/2000 where,

PM₁₀ = Actual PM₁₀ 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 PM₁₀/ton) (AP-42, Volume I, Fifth Edition, Section 13.2.4, "Aggregate Handling and Storage Piles", November 2006)

Load-out:

PM₁₀ = (Grain throughput * CF * EF)/2000 where,

PM₁₀ = Actual PM₁₀ 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 PM₁₀/ton) (AP-42, Volume I, Fifth Edition, Section 13.2.4, "Aggregate Handling and Storage Piles", November 2006)

Wind erosion:

PM₁₀ = (SA * days of use * EF)/2000 where,

PM₁₀ = Actual PM₁₀ emissions, in tons per rolling, 12- month period

SA = Surface area, in acres (2)

EF = 10.42 lbs PM₁₀/day/acre (EPA-450-2/92-004, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, September 1992)

g) Miscellaneous Requirements

(1) None.



6. F013, FS103

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. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii)	See b)(2)a. and b)(2)b. below.
b.	OAC rule 3745-17-07(B)	See b)(2)c. below.
c.	OAC rule 3745-17-08(A)(1)	See b)(2)d. below.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this air contaminant source since the calculated annual emission rate for PE is less than 10 tons/year, taking into account the federally enforceable rule limit of 51,000,000 bushels per rolling, 12-month period operational restriction that applies to emissions units F005 and F009 and the following voluntary restrictions as proposed by the permittee for the purpose of avoiding BAT under OAC rule 3745-31-05(A)(3)(a)(ii):

i. treatment of paved roadways and parking areas with water at sufficient treatment frequencies to prevent visible emissions of fugitive dust.



- b. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM₁₀ emissions from this air contaminant source since the calculated annual emission rate for PM₁₀ is less than 10 tons/year, taking into account the federally enforceable rule limit of 51,000,000 bushels per rolling, 12-month period operational restriction that applies to emissions units F005 and F009.
- 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) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) 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:

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

- (2) The purpose of the inspections is to determine the need for implementing the control measures identified in b)(2)a.i. above. 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.

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

- 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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

f) Testing Requirements

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

- a. Emissions Limitation:

No visible PE from paved roadways and parking areas.

Applicable Compliance Method:

Compliance with the visible emission limitation for the fugitive dust from paved roadways and parking areas shall be based upon the record keeping requirements specified in d). If required, compliance shall be determined in accordance with U.S. EPA Method 22.

g) Miscellaneous Requirements

- (1) None.