



Environmental Protection Agency

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

12/6/2011

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0124000088  
Permit Number: P0108729  
Permit Type: Initial Installation  
County: Fayette

Certified Mail

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

Dear Permit Holder:

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

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
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 will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact 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



PUBLIC NOTICE  
12/6/2011 Issuance of Draft Air Pollution Permit-To-Install and Operate

CARGILL INC - BLOOMINGBURG

4201 STATE RTE 238 N E,  
BLOOMINGBURG, OH 43106

Fayette County

FACILITY DESC.: Grain and Field Bean Merchant Wholesalers

PERMIT #: P0108729

PERMIT TYPE: Initial Installation

PERMIT DESC: Initial installation permit for a rail dump pit (Dump Pit #4)

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Benjamin Halton, Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049, Columbus, OH 43216-1049. Ph: (614)728-3778





## 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. Historically, emissions unit F005 has included all of the handling, receiving (both truck and rail), and load-out (both truck and rail) operations. CDO feels that this approach is antiquated and is not conducive to establishing separate applicable limitations for each of these processes. CDO coordinated with Cargill to separate EU F005 into the following EU IDs:

- F005 – Grain receiving by truck; dump pit #1
- F016 – Grain receiving by truck; dump pit #2
- F017 – Grain receiving by truck; dump pit #3
- F009 – Grain shipping and load-out; truck loading.
- F021 – Grain shipping and load-out; rail loading.
- F018 – Grain receiving by rail, dump pit #3
- F019 – Grain receiving by rail, dump pit #4 (Initial Installation)

With the exception of F019, each of these units is included in FEPTIO P0108564 because each process has been previously permitted and the permitting action is considered a Chapter 31 modification. F019 is included in FEPTIO P0108729 because it has not been included in any previous permits and the permitting action is considered a new installation.

3. Facility Emissions and Attainment Status:

Cargill has submitted a Chapter 31 modification to increase the synthetic minor operational restrictions and emissions limitations necessary to avoid the Title V permitting program and to avoid future PSD considerations. The potential to emit for PM<sub>10</sub> without restrictions is greater than the 100 TPY threshold for Title V and approaching the 250 TPY threshold for PSD. 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 potential emissions from the facility without synthetic minor limitations are as follows (tons per year):

EU	PE	PM <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	VOC	CO
F005	30.70	8.67	--	--	--	--
F008						
combustion	1.05	1.05	14.06	0.09	0.79	11.83
process	38.28	9.57	--	--	--	--
F009	257.55	61.45	--	--	--	--
F010						
combustion	1.05	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	--	--	--	--
F016	141.65	31.57	--	--	--	--
F017	85.85	19.13	--	--	--	--
F018	78.49	19.13	--	--	--	--
F019	39.24	9.55	--	--	--	--
F020	4.73	2.63	--	--	--	--
F021	99.34	8.10	--	--	--	--
<b>Total</b>	<b>930.22</b>	<b>228.38</b>	<b>28.12</b>	<b>0.18</b>	<b>1.58</b>	<b>23.66</b>



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 <sub>10</sub>	NO <sub>x</sub>	SO <sub>2</sub>	VOC	CO
F005 (stack)	2.37	2.37	--	--	--	--
F016 (stack)	1.93	1.93	--	--	--	--
F017/F018 (stack)	3.55	3.55	--	--	--	--
F005, F016 & F017 combined fugitive	7.15	1.59	--	--	--	--
F018 & F019 combined fugitive	4.48	--	--	--	--	--
F018 & F019 combined stack	--	0.22*				
F020	0.64**	0.36**	--	--	--	--
F009 & F021 combined fugitive	90.3	30.45	--	--	--	--
F008 & F010 combined combustion process	1.47	1.47	19.35	0.12	1.06	16.25
F011	8.10	5.84	--	--	--	--
F013	8.70	1.74	--	--	--	--
<b>Total</b>	<b>154.90</b>	<b>56.07</b>	<b>19.35</b>	<b>0.12</b>	<b>1.06</b>	<b>16.25</b>

\* For the purpose of determining potential to emit, the stack emissions from the baghouse serving emissions units F017 and F018 should only be counted once, considering that it is not physically possible to unload railcars and trucks at the same time.

\*\* For the purpose of determining potential to emit, the stack emissions from the baghouse serving emissions units F005, F016, F017, F018, F009 and F021 should only be counted once. The stack emissions are included in the rolling, 12-month limitations established for each of these emissions units and for emissions from grain handling at EU F020.

4. Source Emissions:

**F005 – Grain receiving by truck; dump pit #1**

**F016 – Grain receiving by truck; dump pit #2**

**F017 – Grain receiving by truck; dump pit #3**

Emissions from these emissions units include the fugitive particulate emissions generated from grain receiving as well as stack particulate emissions generated from the partial capture and control of dust produced at three truck dump pits. These emissions units are limited to a combined 73,000,000 bushels per rolling, 12-month period. Actual emissions are required to be calculated on a monthly basis for each EU.

PE and PM<sub>10</sub> emissions are calculated according to the following table:

	Grain throughput (bushels)	Bushels to tons conversion factor	AP-42 emissions factor	Captured	Grain loading limitation	ACFM	PE (tons per rolling, 12-month period)
PE (fugitive)	73,000,000	0.028	0.035	80%			7.15
PM <sub>10</sub> (fugitive)	73,000,000	0.028	0.0078	80%			1.59
F005 PE (stack)					0.005	12,500	2.37
F016 PE (stack)					0.005	10,150	1.93
F017 PE (stack)					0.005	19,000	3.55



F005 PM <sub>10</sub> (stack)					0.005	12,500	2.37
F016 PM <sub>10</sub> (stack)					0.005	10,150	1.93
F017 PM <sub>10</sub> (stack)					0.005	19,000	3.55
<b>Total PE</b>							<b>15.00</b>
<b>Total PM<sub>10</sub></b>							<b>9.44</b>

Emissions units F005, F016 and F017 are subject to the following rules:

OAC 3745-31-05(A)(3), as effective 11/30/2001 – Hourly PE and PM<sub>10</sub> emissions limitations for F005 and F016 were established because the potential to emit for each pollutant from each EU is less than ten tons per year. An hourly PM<sub>10</sub> emissions limitation was established for F017 because the potential to emit for PM<sub>10</sub> from F017 is less than ten tons per year.

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the PE and PM<sub>10</sub> emissions from F005 and F016 or the PM<sub>10</sub> emissions from F017 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 accepted to avoid Title V and PSD include; 15.00 tons PE per rolling, 12-month period, 9.44 tons PM<sub>10</sub> per rolling, 12-month period and a 73,000,000 bushels per rolling, 12-month period operational restriction for EUs F005, F016 and F017 combined. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

ORC 3704.03(T) – The BAT limitations established by this rule for F017 (PE) are equivalent to the BAT limitations established pursuant to OAC rule 3745-31-05(D) and NSPS Subpart DD.

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 grain loading limitation established by this rule (0.01 gr/dscf) is less stringent than the grain loading limitation established under OAC rule 3745-31-05(D) for the purpose of avoiding the Title V program (0.005 gr/dscf). 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 – Zimmerman 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 18,000,000 bushels per rolling 12-month period and they are limited to a combined natural gas usage of 387 million cubic ft (MMcf) per rolling, 12-month period. Actual emissions are required to be calculated on a monthly basis for each EU.



Combustion emissions are calculated according to the following tables:

	MMcf per year	Emissions factor (lb/MMcf)	lbs/yr	tons per rolling, 12-month period
PM Total (PE)	387	7.6	2,941.2	1.47
PM Total (PM <sub>10</sub> )	387	7.6	2,941.2	1.47
NO <sub>x</sub>	387	100	38,700	19.35
SO <sub>2</sub>	387	0.6	232.2	0.12
CO	387	84	32,508	16.25
VOC	387	5.5	2,128.5	1.06

	MMbtu/hr	Emissions factor (lb/MMBtu)	Ton/hr	Emission Factor (T/hr)	lbs/hr
VOC	32.8	0.00539			0.18
SO <sub>2</sub>	32.8	0.000588			0.02
PM <sub>10</sub> (combustion)	32.8	0.00745			0.24
PM <sub>10</sub> (process)			84	0.026	2.18
PM <sub>10</sub> Total					2.42

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	18,000,000	0.028	0.104	52,416	26.21
PM <sub>10</sub>	18,000,000	0.028	0.026	13,104	6.55

	MMbtu/hr	Emissions factor (lb/MMBtu)	Emissions rate (lb/hr)	Emissions factor (lb/ton)	Process weight rate (tons per hour)	Limitation (lbs/ton grain processed)
CO	32.8	0.0824	2.70		84	0.03
NO <sub>x</sub>	32.8	0.0980	3.21		84	0.04
PE (combustion)	32.8	0.00745	0.24		84	0.003
PE (process)				0.104		0.104
Total PE						0.11

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

OAC 3745-31-05(A)(3), as effective 11/30/2001 – Hourly VOC, SO<sub>2</sub> and PM<sub>10</sub> emissions limitations for F008/F010 were established to reflect the potential to emit for each pollutant. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the VOC, PM<sub>10</sub>, or SO<sub>2</sub> emissions from the combustion of natural gas or to the PM<sub>10</sub> 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). (note: the evaluation of PM<sub>10</sub> with respect to BAT is not process specific, the total PM<sub>10</sub> emissions including combustion and process emissions is less than 10 tons per year).

ORC 3704.03(T) – In accordance with the December 10, 2009, BAT guidance, lb/Ton of grain processed emissions limitations were established for CO, NO<sub>x</sub> and PE because the potential to emit for each pollutant is greater than 10 tons per year.

OAC rule 3745-31-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 1.47 tons PE per rolling, 12-month period, 19.35 tons NO<sub>x</sub> per rolling, 12-month period, 0.12 tons SO<sub>2</sub> per rolling, 12-month period, 16.25 tons CO per rolling, 12-month period, 1.06 tons VOC per rolling, 12-month period, and 1.47 tons PM<sub>10</sub> per rolling, 12-month period for the combustion of natural gas emissions, 26.21 tons PE per rolling, 12-month period and 6.55 tons PM<sub>10</sub> per rolling 12-month period for the grain drying process emissions, 18,000,000 bushels of grain throughput per rolling, 12-month period and 387 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 units are exempt from Subpart DD because the column plate perforations are smaller than 2.4 mm in diameter.

**F009 – Grain shipping and load-out; truck loading.**

**F021 – Grain shipping and load-out; rail loading.**

Emissions from these emissions units include the fugitive particulate emissions generated from the load-out of grain into trucks and railcars. These emissions units are limited to a combined 75,000,000 bushels per rolling, 12-month period. The rolling, 12-month synthetic minor limitation for EUs F009 and F021 were calculated assuming that all of the allowable 75,000,000 bushels (2,100,000 tons) are loaded out at F009. Actual emissions are required to be calculated on a monthly basis for each EU.

Fugitive PE and PM<sub>10</sub> emissions are calculated according to the following tables:

	Grain throughput (Tons/hr)	Emissions factor (lb/ton)	lbs/hr	tons per year
F009 PE	420	0.086	36.12	158.21
F009 PM <sub>10</sub>	420	0.029	12.18	53.35
F021 PE	840	0.027	22.68	99.34
F021 PM <sub>10</sub>	840	0.0022	1.85	8.10

	bushels per year	tons per bushel	Emissions factor (lb/ton)	lbs/yr	tons per rolling, 12-month period
PE	75,000,000	0.28	0.086	180,600	90.3
PM <sub>10</sub>	75,000,000	0.28	0.029	60,900	30.45

**Emissions units F009 and F021 are subject to the following rules:**

**OAC 3745-31-05(A)(3), as effective 11/30/2001 – In accordance with December 10, 2009 BAT guidance, an hourly PM<sub>10</sub> emissions limitations for F021 was established to reflect the potential to emit. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with this limitation.**

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the PM<sub>10</sub> emissions from F021 because the uncontrolled potential to emit for PM<sub>10</sub> is less than ten tons per year.

ORC 3704.03(T) – The BAT limitations established by this rule for F009 (PE), F009 (PM<sub>10</sub>), and F021 (PE) are equivalent to the BAT limitations established pursuant to OAC rule 3745-31-05(D) and NSPS Subpart DD.

OAC rule 3745-31-05(D) – Synthetic minor emissions limitations accepted to avoid Title V and PSD include; 90.30 tons PE per rolling, 12-month period, 30.45 tons PM<sub>10</sub> per rolling, 12-month period and a 75,000,000 bushels per rolling, 12-month period operational restriction for EUs F009 and F021 combined. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

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 or F021 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 (**F009**) shall not exceed 10 percent opacity. Visible emissions of fugitive dust from rail load-out operations (**F021**) 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	75,000,000	0.28	0.00205	4,305	2.15
PM10	75,000,000	0.28	0.000969	2034.9	1.02

**Load-out**

	bushels per year	tons per bushel	Emissions factor (lb/ton)	lbs/yr	tons per rolling, 12-month period
PE	51,000,000	0.28	0.00205	4,305	2.15
PM10	51,000,000	0.28	0.000969	2034.9	1.02

**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	2.15	1.02
Load-out	2.15	1.02
Wind erosion*	3.80	3.80
<b>Total</b>	<b>8.10</b>	<b>5.84</b>

\* 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), as effective 11/30/2001 – Consistent with GP7.2, short term emissions limitations aren't established for storage piles. Long term emissions limitation would be equivalent to rolling, 12-month limitation established under 31-05(D). Establishes a 'no visible emissions' requirement with 'if required' Method 22 as the applicable compliance method.

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – 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 3745-31-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 8.10 tons PE per rolling, 12-month period, 5.84 tons PM<sub>10</sub> per rolling, 12-month period and 75,000,000 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 established for EUs F005, F016, F017, F009 and F021.

The emissions factor for paved roadways and parking areas for PE and PM<sub>10</sub> were calculated according to AP-42, Section 13.2.1-2, using a particle size multiplier of 0.011 for PE and of 0.0022 for PM<sub>10</sub>. PE and PM<sub>10</sub> emissions are calculated according to the following tables and formulas:

$$E_f = [k(sL/2)^{0.91}(W)^{1.02}] \text{ where,}$$

- k = particle size multiplier
- sL = road surface silt loading (0.40 g/m<sup>2</sup>)
- W = average weight of vehicles (27 tons)

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

$$\text{VMT (receiving)} = [(7,300,000 \text{ bushels} * 0.28 \text{ tons per bushel}) / 25 \text{ tons grain per truck}](0.75 \text{ miles}) = 61,320 \text{ VMT}$$

$$\text{VMT (loadout)} = [(7,500,000 \text{ bushels} * 0.28 \text{ tons per bushel}) / 25 \text{ tons grain per truck}](0.75 \text{ miles}) = 63,000 \text{ VMT}$$

	VMT/yr	Emissions factor (lb/VMT)	lbs/yr	tons per rolling, 12-month period
PE	124,320	0.14	17,404.8	8.70
PM <sub>10</sub>	124,320	0.028	3,480.96	1.74

Emissions unit F013 is subject to the following rules:

OAC 3745-31-05(A)(3), as effective 11/30/2001 – Consistent with GP6.4, short term emissions limitations aren’t established for paved roadways and parking areas. Maintains a ‘no visible emissions’ requirement with ‘if required’ Method 22 as the applicable compliance method (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the PE and PM<sub>10</sub> emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the synthetic minor emissions limitations of 8.70 tons PE per rolling, 12-month period and 1.74 tons PM<sub>10</sub> per rolling, 12-month period.

OAC rule 3745-31-05(D) – Synthetic minor emissions limitations accepted to avoid Title V and PSD include; 8.70 tons PE per rolling, 12-month period and 1.74 tons PM<sub>10</sub> per rolling, 12-month period. It is not necessary to apply synthetic minor operational restrictions to this emissions unit because vehicle traffic is essentially limited by operational restrictions established for EUs F005, F016, F017, F009 and F021. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

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.



**F018 – Grain receiving by rail, dump pit #3**

Emissions from this emissions unit include the fugitive particulate emissions generated from unloading railcars into a dump pit and the stack PE resulting from the use of a dust collection system and baghouse. The synthetic minor limitation for this emissions unit is combined with EU F019 and includes all of the emissions from unloading by rail. The short term limitations for this EU were calculated using the maximum rating on the baghouse fan (19,000 acfm), the federally enforceable grain loading limitation (0.005 gr/dscf), and the AP-42 emissions factors for fugitive emissions from rail receiving (0.032 for PE and 0.0078 for PM<sub>10</sub>). For PE, the rolling, 12-month synthetic minor limitation for EUs F018 and F019 was calculated assuming that all of the allowable 10,000,000 bushels (280,000 tons) is received at F019 which does not have a dust collection system or baghouse. For PM<sub>10</sub> emissions, the rolling, 12-month synthetic minor limitation for EUs F018 and F019 was calculated assuming that all of the allowable 10,000,000 bushels (280,000 tons) is received at F018. Actual emissions are required to be calculated on a monthly basis for each EU.

PE and PM<sub>10</sub> emissions are calculated according to the following table:

	Grain throughput (bushels)	Bushels to tons conversion factor	AP-42 emissions factor	Captured	Grain loading limitation	ACFM	PE (tons per rolling, 12-month period)
F018 PE (fugitive)	10,000,000	0.028	0.032	80%			0.90
F018 PM <sub>10</sub> (fugitive)	10,000,000	0.028	0.0078	80%			0.22
F018 PE (stack)					0.005	19,000	3.55
F018 PM <sub>10</sub> (stack)					0.005	19,000	3.55
F019 PE (fugitive)	10,000,000	0.028	0.032	0%			4.48
F019 PM <sub>10</sub> (fugitive)	10,000,000	0.028	0.0078	0%			1.09
<b>Total PE</b>							<b>4.48</b>
<b>Total PM<sub>10</sub></b>							<b>3.77</b>

	Grain throughput (Tons/hr)	Emissions factor (lb/ton)	Captured	Grain loading limitation	ACFM	lbs/hr	tons per year
F018 PE (fugitive)	560	0.032	36.12	158.21		36.12	158.21
F018 PE (stack)			12.18	53.35		12.18	53.35
F018 PM <sub>10</sub> (fugitive)	840	0.027	22.68	99.34		22.68	99.34
F018 PM <sub>10</sub> (stack)	840	0.0022	1.85	8.10		1.85	8.10

Emissions unit F018 is subject to the following rules:

OAC 3745-31-05(A)(3), as effective 11/30/2001 – Hourly PE and PM<sub>10</sub> emissions limitations for F018 were established taking into consideration both fugitive and stack emissions and the 0.005 gr/dscf synthetic minor limitation established under OAC rule 3745-31-05(D). The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.



OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the PE and PM<sub>10</sub> emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the combined synthetic minor limitation of 10,000,000 bushels per rolling, 12-month period established for emissions units F018 and F019. Includes terms and conditions necessary to demonstrate compliance with the rolling, 12-month operational restriction and associated PE and PM<sub>10</sub> emissions limitations.

OAC rule 3745-31-05(D) – Synthetic minor emissions limitations accepted to avoid Title V and PSD include; 4.48 tons PE per rolling, 12-month period, 3.77 tons PM<sub>10</sub> per rolling, 12-month period and a 10,000,000 bushels per rolling, 12-month period operational restriction for EUs F018 and F019 combined. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

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.

40 CFR Part 60, Subpart DD – The grain loading limitation established by this rule (0.01 gr/dscf) is less stringent than the grain loading limitation established under OAC rule 3745-31-05(D) for the purpose of avoiding the Title V program (0.005 gr/dscf). 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.

#### **F019 – Grain receiving by rail, dump pit #4**

Emissions from this emissions unit include the fugitive particulate emissions generated from unloading railcars into a dump pit. The synthetic minor limitation for this emissions unit is combined with EU F019 and includes all of the emissions from unloading by rail. The short term limitations for this EU were calculated using the AP-42 emissions factors for fugitive emissions from rail receiving (0.032 for PE and 0.0078 for PM<sub>10</sub>). For PE, the rolling, 12-month synthetic minor limitation for EUs F018 and F019 was calculated assuming that all of the allowable 10,000,000 bushels (280,000 tons) is received at F019 which does not have a dust collection system or baghouse. For PM<sub>10</sub> emissions, the rolling, 12-month synthetic minor limitation for EUs F018 and F019 was calculated assuming that all of the allowable 10,000,000 bushels (280,000 tons) is received at F018. Actual emissions are required to be calculated on a monthly basis for each EU. See the table above for calculations associated with the combined synthetic minor limitations for EUs F018 and F019.

Emissions unit F019 is subject to the following rules:

OAC 3745-31-05(A)(3), as effective 11/30/2001 – Hourly PE and PM<sub>10</sub> emissions limitations for F019 were established to reflect the potential to emit. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the PE and PM<sub>10</sub> emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the combined synthetic minor limitation of 10,000,000 bushels per rolling, 12-month period established for emissions units F018 and F019. Includes terms and conditions necessary to demonstrate compliance with the rolling, 12-month operational restriction and associated PE and PM<sub>10</sub> emissions limitations.

OAC rule 3745-31-05(D) – Synthetic minor emissions limitations accepted to avoid Title V and PSD include; 4.48 tons PE per rolling, 12-month period, 3.77 tons PM<sub>10</sub> per rolling, 12-month period and a 10,000,000 bushels per rolling, 12-month period operational restriction for EUs F018 and F019 combined. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

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.



40 CFR Part 60, Subpart DD – Visible emissions of fugitive dust from receiving operations associated with this emissions unit shall not exceed 5 percent opacity. EU specific testing requirements section includes requirement to perform initial 5% opacity compliance demonstration within 60 days 60 days after achieving the maximum production rate at which the emissions unit will be operated but no later than 180 days after initial startup of the emissions unit.

**F020 – Grain handling, transfer and conveying**

Emissions from this emissions unit include the fugitive particulate emissions generated from, handling, transferring and conveying grain as well as stack particulate emissions generated from the partial capture and control of dust during handling, transfer and conveying. Actual emissions are required to be calculated on a monthly basis.

	Grain throughput (bushels)	Bushels to tons conversion factor	AP-42 emissions factor	Captured	Grain loading limitation	ACFM	PE (tons per rolling, 12-month period)
F020 PE (fugitive)	75,100,000	0.028	0.061	99%			0.64
F020 PM <sub>10</sub> (fugitive)	75,100,000	0.028	0.034	99%			0.36
F020 (stack) (Dust system1)					0.005	12,500	2.37
F020 (stack) (Dust system2)					0.005	10,150	1.93
F020 (stack) (Dust system3)					0.005	19,000	3.55
<b>Total PE</b>							<b>8.49</b>
<b>Total PM<sub>10</sub></b>							<b>8.21</b>

Stack emissions contribute to both PE and PM<sub>10</sub> totals.

Emissions unit F020 is subject to the following rules:

OAC 3745-31-05(A)(3), as effective 11/30/2001 – Hourly PE and PM<sub>10</sub> emissions limitations for F020 were established taking into consideration both fugitive and stack emissions and the 0.005 gr/dscf synthetic minor limitation established under OAC rule 3745-31-05(D). These limitations were established to reflect the potential to emit for PE and PM<sub>10</sub> emissions. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.

OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 – BAT does not apply to the PE and PM<sub>10</sub> emissions because the potential to emit for each pollutant is less than ten tons per year taking into account the synthetic minor emissions limitations of 8.49 tons PE per rolling, 12-month period and 8.21 tons PM<sub>10</sub> per rolling, 12-month period.

OAC rule 3745-31-05(D) – Synthetic minor emissions limitations and operational restrictions accepted to avoid Title V and PSD include; 0.005 gr/dscf grain loading limitation, 8.49 tons PE per rolling, 12-month period, 8.21 tons PM<sub>10</sub> per rolling, 12-month period. It is not necessary to apply synthetic minor operational restrictions to this emissions unit because handling operations are essentially limited by operational restrictions established for EUs F005, F016, F017, F018, F019, F009 and F021. The monitoring, recordkeeping, reporting, and testing requirements, established in the EU specific terms and conditions are sufficient to demonstrate compliance with these limitations.



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.

40 CFR Part 60, Subpart DD – The grain loading limitation established by this rule (0.01 gr/dscf) is less stringent than the grain loading limitation established under OAC rule 3745-31-05(D) for the purpose of avoiding the Title V program (0.005 gr/dscf). 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 handling operations shall not exceed 0 percent opacity.

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	154.90
PM <sub>10</sub>	56.07
NO <sub>x</sub>	19.35
SO <sub>2</sub>	0.12
VOC	1.06
CO	16.25



**Ohio**

**Environmental  
Protection Agency**

**DRAFT**

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

Facility ID:	0124000088
Permit Number:	P0108729
Permit Type:	Initial Installation
Issued:	12/6/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





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

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## Authorization

Facility ID: 0124000088  
Application Number(s): A0041843, A0042724  
Permit Number: P0108729  
Permit Description: Initial installation permit for a rail dump pit (Dump Pit #4)  
Permit Type: Initial Installation  
Permit Fee: \$1,250.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 12/6/2011  
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

Scott J. Nally  
Director



## **Authorization (continued)**

Permit Number: P0108729

Permit Description: Initial installation permit for a rail dump pit (Dump Pit #4)

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

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

## **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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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<sup>1</sup> 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 emissions 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.

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<sup>1</sup>Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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

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

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

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

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

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

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

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

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

1. F019, Dump Pit #4-RL

Operations, Property and/or Equipment Description:

Grain receiving by rail, dump pit #4

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. None.
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(1)c., c)(1), d)(1), and e)(2)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 8.96pounds per hour (lbs/hr).  Fugitiveemissions of particulate matter less than ten microns in diameter (PM <sub>10</sub> ) shall not exceed 2.18lb/hr.  See b)(2)a. and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD) (Synthetic minor to avoid Title V)	Stack and fugitive PEfrom emissions units F018 and F019 combined shall not exceed 4.48 tons per rolling, 12-month period.  Stack and fugitive PM <sub>10</sub> emissions from emissions units F018 and F019 combinedshall not exceed 3.77 tons per rolling, 12-month period.
d.	OAC rule 3745-17-07(B)	See b)(2)d.
e.	OAC rule 3745-17-08(A)(1)	See b)(2)e.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR Part 60, Subpart DD	Visible emissions of fugitive dust from receiving operations associated with this emissions unit shall not exceed 5 percent opacity.
g.	40 CFR Part 60, Subpart A	See b)(2)f.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.
- b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM<sub>10</sub> emissions from this air contaminant source because the calculated annual emission rate for PE and PM<sub>10</sub> is less than 10 tons/year, taking into consideration the combined synthetic minor limitation of 10,000,000 bushels per rolling, 12-month period established for emissions units F018 and F019.
- c. The hourly PE and PM<sub>10</sub> emissions limitations were established to reflect the potential to emit. The monitoring, recordkeeping, reporting, and testing requirements, established in the following terms and conditions are sufficient to demonstrate compliance with these limitations.
- d. This emissions unit is exempt from the visible particulate fugitive dust emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- e. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- f. The permittee shall demonstrate compliance with the applicable limitations identified in 40 CFR Part 60, Subpart DD in accordance with the General

Provisions of the Standards of Performance for New Stationary Sources, 40 CFR Part 60, Subpart A (60.1-60.19).

c) Operational Restrictions

- (1) The maximum, combined grain throughput for emissions units F018 and F019 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) The permittee shall maintain monthly records of the following information:
- a. the grain throughput, in bushels;
  - b. the rolling, 12-month summation of the grain received by emissions unit F018, in bushels;
  - c. the rolling, 12-month summation of the grain received by emissions unit F019, in bushels;
  - d. the rolling, 12-month summation of the grain received by emissions units F018 and F019 combined, in bushels;
  - e. the rolling, 12-month summation of the grain received by emissions units F018 and F019 combined, in tons [the product of d)(1)d. and the conversion factor of 0.028 tons per bushel];
  - f. the rolling, 12-month PE from emissions units F018 and F019 combined, in tons, calculated in accordance with f)(1)c.; and
  - g. the rolling, 12-month PM<sub>10</sub> emissions from emissions units F018 and F019 combined, in tons, calculated in accordance with f)(1)d.
- (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 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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the combined grain throughput limitation of 10,000,000 bushels for grain received by emissions units F018 and F019 was exceeded;
    - ii. each rolling, 12-month period when the combined PE limitation of 4.48tons for emissions units F018 and F019 was exceeded; and
    - iii. each rolling, 12-month period when the combined PM<sub>10</sub> emissions limitation of 3.77tons for emissions units F018 and F019 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).

- (3) 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 and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emissions Limitation:
- Fugitive PE shall not exceed 8.96 lbs/hr (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).
- Applicable Compliance Method:
- Compliance with this limitation may be determined through the following calculations:
- Fugitive PE = ( $G_{max} * E_f$ ); where,
- $G_{max}$  = maximum hourly grain throughput (280 tons per hour);  
 $E_f$  = AP-42<sup>#</sup> emissions factor (0.032 lb PE/ton grain); and
- # - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.
- b. Emissions Limitation:
- Fugitive PM<sub>10</sub> emissions shall not exceed 2.18 lbs/hr (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).
- Applicable Compliance Method:
- Compliance with this limitation may be determined through the following calculations:
- Fugitive PM<sub>10</sub> = ( $G_{max} * E_f$ ) \* (1-CapE); where,
- $G_{max}$  = maximum hourly grain throughput (280 tons per hour);  
 $E_f$  = AP-42<sup>#</sup> emissions factor (0.0078 lb PM<sub>10</sub>/ton grain);
- # - AP-42, Volume I, Fifth Edition, Section 9.9, "Grain Processing", Table 9.9.1-1, March 2003.

c. Emissions Limitation:

Stack and fugitive PE from emissions units F018 and F019 combined shall not exceed 4.48 tons per rolling, 12-month period.

Applicable Compliance Method:

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

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

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

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

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

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

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

CapE = capture efficiency (80%); and

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

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

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

d. Emissions Limitation:

Stack and fugitive PM<sub>10</sub> emissions from emissions units F018 and F019 combined shall not exceed 3.77 tons per rolling, 12-month period.

Applicable Compliance Method:

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

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

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

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

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

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

$E_f$  = AP-42<sup>#</sup> emissions factor (0.0078 lb $PM_{10}$ /ton grain);  
CapE = capture efficiency (80%); and

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

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

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

e. Emissions Limitation:

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

Applicable Compliance Method:

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

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

g) Miscellaneous Requirements

(1) None.