



Environmental Protection Agency

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

9/8/2011

MELISSA FARRINGTON  
THE ANDERSONS, INC.  
PO BOX 119  
MAUMEE, OH 43537

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

Facility ID: 0448011196  
Permit Number: P0088160  
Permit Type: Renewal  
County: Lucas

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
No	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install 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, Toledo Blade. 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 Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604

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 Toledo Department of Environmental Services at (419)936-3015.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
TDES; Michigan; Indiana; Canada





Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

The Andersons, Inc. which is headquartered in Maumee, OH, maintains and operates an export type terminal grain elevator on the Maumee River at 125 Edwin Drive in Toledo, Ohio. This facility receives grain by truck and rail, processes the grain, stores the grain, and exports it primarily by ship and rail. It is separated from the Anderson's river elevator at 440 Kulman Drive by a property owned and operated by Kuhlman Concrete Company. The proximity of these sites and shared management do not constitute adequate grounds for considering the emissions from these two facilities to be linked for Title V applicability based on a determination made at the Ohio EPA legal department by Ms. Jean Mallet.

3. Facility Emissions and Attainment Status:

The facility is a minor source for all criteria pollutants.

Table with 3 columns: Pollutant, Title V Threshold, and Attainment Status. Rows include PM2.5, PM10, SO2, VOC, NOx, and CO.

4. Source Emissions:

Table with 7 columns: Emission Unit, Stack PE, Fugitive PE, CONOx, SO2, VOC. Rows include F001, F003, F004, F005, P901, P902, and P905.

5. Conclusion:

It is recommended the permit be issued.

## 6. Please provide additional notes or comments as necessary:

PTI 04-110, effective November 13, 1978 set limitations for the entire facility in a single permit issued as emissions unit P001. In 1984, following the issuance of Engineering Guide #25, the P001 permit was broken down into six separate permits; emissions units F002, F003, P901, P902, P903, and P904. In 1986, a column grain dryer was added (F004). In 1996 when F002 was withdrawn, it was replaced by a new column grain dryer (F005).

Unless otherwise stated, the following emissions calculations of the annual potential to emit (PTE) are based upon the worst case operating scenario of 1000 tons per hour of grain (8,760,000 tons per year) which is the stated maximum grain handling rate for the transferring and conveying system (P903).

F001 – Paved and Unpaved Roadways and Parking Areas

PTI 04-110, effective November 13, 1978, set no emissions limitations for this emissions unit. The emissions generated by the roads is calculated to determine the facility wide emissions. The PTE based on AP-42 emission factors is:

$$\text{paved } E = k[sL]^{0.91} \times [W]^{1.02} \quad (\text{AP-42, dated 1/11, Section 13.2.1.3, Equation (1)})$$

$$E = 0.011 [8.2]^{0.91} \times [18]^{1.02} = 1.42 \text{ lb/VMT}$$

$$\text{unpaved } E = k (s/12)^a (W/3)^b \quad (\text{AP-42, dated 1/11, Section 13.2.2-4, Equation (1a)})$$

$$E = (4.9) (5/12)^a (2/3)^b = 2.21 \text{ lb/VMT}$$

where: a = 0.7

b = 0.45

E = particulate emissions factor, lb/VMT

k = particle size multiplier, paved = 0.011 lb PE/VMT, unpaved = 4.9 lb PE/VMT

s = surface material silt content (%) = 5%

sL = road size silt loading (g/m<sup>2</sup>), table 13.2.1-4 quarry operations = 8.2 g/m<sup>2</sup>

W = average weight (tons) of the vehicles traveling the road = 18 tons paved, 2 tons unpaved

The worst case potential to emit for paved roadways may be calculated by equating the maximum handling material handling rate indicated in the application for P903 (1000 tons per hour) to the maximum potential PE emissions for receiving by truck. Using 1000 tons per hour, multiplied by 8760 hours per year, divided by 40 tons of grain per vehicle trip and multiplied by 0.20 miles per trip = VMT = 43,800 miles per year).

$$\text{uncontrolled emissions} = (43,800 \text{ VMT/yr}) (1.42 \text{ lb PE/VMT}) / (2000 \text{ lb/ton})$$

$$= 31.10 \text{ ton PE/yr}$$

and allowing for 80% effective control by watering **unpaved roadways** and 70% for sweeping **paved roadways**:

$$\text{controlled emissions} = \text{PTE} = (31.10 \text{ tons PE/yr}) (1 - 0.70) = 9.33 \text{ tpy PE from paved roadways}$$

The worst case potential to emit for unpaved roadways and parking areas may be calculated based on the annual vehicle mileage (at a company established maximum of 40 vehicle trips per day and 0.10 miles per trip = 1460 VMT per year) and the calculated emissions factor of 2.21 lb/VMT.

uncontrolled emissions = (1460 VMT/yr) (2.21 lbs PE/VMT)/( 2000 lbs/ton)  
= 1.61 tons PE/yr

and allowing of 80% effective control:

controlled emissions = PTE = 1.61 (1 - 0.8) = 0.32 tpy PE from unpaved roadways

total PTE = 9.65 tpy PE from paved roadways + 0.32 tpy PE from unpaved roadways  
= 9.97 tpy PE

Applicable SIP rules are:

OAC rule 3745-17-07(B)(4) - Except as provided in paragraphs (B)(7), (B)(8), and (B)(11) of this rule, there shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty-minute observation period;

OAC rule 3745-17-07(B)(5) - Except as provided in paragraphs (B)(7), (B)(8), and (B)(11) of this rule, there shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty minute observation period;

OAC rule 3745-17-08(B) - No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

F002 – shutdown 11/5/1996

F003 – ship and truck loading

Fugitive dust was not addressed in PTI 04-110, effective November 13, 1978. Control with a baghouse however was required for ship loading limitations of 2.2 pounds per hour and 0.83 ton per year of particulate matter. The first source specific ST&Cs appear in the 5/18/1984 PTO with BAT stated as a telescopic spout with a choke feed maintained as close to the grain surface as possible and vented to a fabric filter with a 0% opacity exhaust. Other notations indicate that the loading arm is free to swing allowing both ship and truck loading using the same equipment. The 0% opacity as BAT has no supporting basis, so a 20% opacity as a six-minute average per OAC rule 3745-17-07(A)(1) will apply.

For ship loading operations at grain terminals, a review of appropriate regulations indicates that OAC rule 3745-17-08(B)(4) applies:

- (a) Except during topping-off periods and during the loading of tween-deckers or tankers, the covering of the hatches and loading spouts with tarpaulin covers, to the extent practicable, and evacuation of the hatches to control equipment which is designed to achieve an outlet emission rate of 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases; or
- (b) The installation and use of control measures such as deadbox or bullet-type loading spouts

which are equivalent to or better than the overall control efficiency of the measures described in paragraph (B)(4)(a) of this rule.

Additionally, ship loading would have the applicability of:

OAC rule 3745-17-07(A)(1) – Except as otherwise specified in paragraph (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average;

OAC rule 3745-17-07(B)(1) – Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive source shall not exceed twenty percent opacity as a three minute average;

OAC rule 3745-17-08(B) – The installation and use of tauplins, hoods, filters and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust;

OAC rule 3745-17-11(B)(1) – Allowable emissions must be determined using Table I for  $(P) > 30$ ,  $E = 55.0(P)^{0.11} - 40.0$ , where  $P = 500$ ,  $E = 68.96$  lbs/hr PE, or Figure II with uncontrolled emissions of 500 t/hr (0.086 lb/t) = 43 lbs/hr;  $A = 0.5782 U^{0.6456} = 6.56$  lbs/hr. While the Figure II limitations is applicable, the BAT determination of 2.2 pounds per hour is more stringent.

NSPS DD would not apply to either process because construction began before the applicable date of the NSPS.

Loading spout emissions may be calculated using AP-42 Table 9.9.1-1 emissions factors: ship – 0.048 lb PE/ton and truck – 0.086 lb PE/ton. The maximum loading rate for a ship is 1800 tons per hour and for a truck is 500 tons per hour. Given an 80% capture for ship and truck loading, with 99% control with a fabric filter, stack emissions of PE are:

Ship 1800 ton/hr (0.048 lb PE/ton)(0.80)(1-0.99) = 0.69 lb PE/hr

Truck 500 ton/hr (0.086 lb PE/ton)(0.80)(1-0.99) = 0.34 lb PE/hr

Fugitive emissions of PE have no applicable limits but are calculated for PTE:

Ship (8760 hr/yr)(1800 ton/hr)(0.048 lb PE/ton)(1-0.80)/(2000 lb/ton) = 75.69 tpy PE

Truck (8760 hr/yr)(500 t/hr)(0.086 lb PE/t)(1-0.80)/(2000 lb/ton) = 37.67 tpy PE

PTI 04-110, as issued November 13, 1978 restricts this emissions unit to stack emissions of 0.83 tons of PE per year from DSC#5 and 0.83 ton per year from DCS#6. The PTE for ship loading of 1800 ton/hr would result in yearly stack emissions of 3.02 tons per year [(0.69 lb PE/hr)(8760 hrs/yr)/(2000 lbs/ton)] and for truck loading of 500 ton/yr would result in yearly stack emissions of 1.49 tons per year [(0.34 lb PE/hr)(8760 hrs/yr)/(2000 lbs/t)]. These PTE amounts would exceed the permitted stack limit of 0.83 tons of PE per year. In order to verify compliance with the restriction on stack particulate emissions per year, monitoring and reporting requirements will have the facility track grain throughput on a yearly basis and calculate particulate emissions as outlined in the Testing Requirements. The maximum annual grain throughput that will still allow compliance with the 0.83 tons of PE per year stack emissions can be calculated. Since truck loading would generate the greater emissions (0.086 lb PE/ton), this emission factor will be used as the worst case scenario:



$$(0.83 \text{ ton PE/yr})(2000 \text{ lbs/ton})/((0.086 \text{ lb PE/ton})(0.80)(1-0.99)) = 2.41 \text{ million tons of grain per year}$$

This throughput will allow calculation of the maximum annual fugitive emissions taking into account the restriction on particulate stack emissions:

$$(2.41 \times 10^6 \text{ tons grain/yr})(0.086 \text{ lb PE/ton grain})(1-0.80)/(2000 \text{ lbs/ton}) = 20.73 \text{ tons PE/yr}$$

F004 – Column Grain Dryer

PTI 04-351, issued December 31, 1986, assigned as BAT: a maximum actual perforation plate hole diameter of 0.078", a limit of 0.3 lb PE/ton grain, a limit of 11.30 tons PE year and a maximum annual throughput of 75,000 tons of grain. NSPS Subpart DD is applicable, requiring a 0% opacity. Hourly potential throughput is given as 1200 bushels per hour or 34.8 tons per hour [(1200 bushels/hr)(58 lbs/bushel)/( 2000 lbs/ton)]. Not addressed in the PTI is the 28 mmBtu/hr distillate fuel oil #2 fired burner. Since no BAT was applied to the burner, only SIP limitations would apply. Using AP-42 Table 9.9-1, 1.3-3, and 1.3-4 values to establish PTE for this emissions unit:

$$\text{Fugitive} - (34.8 \text{ tons/hr})(8760 \text{ hrs/yr})(0.22 \text{ lb PE/ton})/(2000 \text{ lbs/ton}) = 33.53 \text{ tpy PE}$$

Combustion:

- CO: (28mmBtu/hr)(1 gal/0.14 mmBtu)(5 lb CO/1000 gal)(8760 hr/yr)/(2000 lb/ton)=4.38 tpy
- NO<sub>x</sub>: (28mmBtu/hr)(1 gal/0.14 mmBtu)(20 lbNO<sub>x</sub> /1000 gal)(8760 hr/yr)/(2000 lb/ton)=17.52 tpy
- SO<sub>2</sub>: (28mmBtu/hr)(1 gal/0.14 mmBtu)(142 lb SO<sub>2</sub>/1000 gal)(0.5)(8760 hr/yr)/(2000 lb/ton)=62.20 tpy
- VOC: (28mmBtu/hr)(1 gal/0.14 mmBtu)(0.34 lb VOC/1000 gal)(8760 hr/yr)/(2000 lb/ton)=0.30 tpy

Since PTI 04-351 included a restriction to maximize annual grain throughput to 75,000 tons, this will restrict the emissions unit to:

$$\text{Fugitive} - (75,000 \text{ tons grain/yr})(0.22 \text{ lb PE/ton grain})/(2000 \text{ lbs/ton}) = 8.25 \text{ tpy PE}$$

To calculate the PTE for the combustion emissions taking onto account the restriction on grain throughput, a strategy established in emissions unit F005 will be used. A throughput averaged emission factor in pound per ton will be established for the combustion gases at the maximum burner capacity of 28 mmBtu/hr and an annual throughput of 75,000 tpy:

- 75,000 t/yr[(28mmBtu/hr)(1 gal/0.14 mmBtu)(5 lb CO/1000 gal)/(34.8 t/hr)]/(2000 lb/ton)=1.08 tpy CO
- 75,000 t/yr[(28mmBtu/hr)(1 gal/0.14 mmBtu)(20 lbNO<sub>x</sub> /1000 gal)/(34.8 t/hr)]/(2000 lb/ton)=4.31 tpyNO<sub>x</sub>
- 75,000 t/yr[(28mmBtu/hr)(1 gal/0.14 mmBtu)(142 lb SO<sub>2</sub> /1000 gal)(0.50)/(34.8 t/hr)]/(2000 lb/ton)=15.30 tpy SO<sub>2</sub>
- 75,000 t/yr[(28mmBtu/hr)(1 gal/0.14 mmBtu)(0.34 lb VOC/1000 gal)/(34.8 t/hr)]/(2000 lb/ton)=0.07 tpy VOC

Also applicable:

OAC rule 3745-17-07(B)(1) – Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive dust source shall not exceed twenty percent opacity as a three-minute average;

OAC rule 3745-17-08(B), (B)(3) – The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control fugitive dust. Such equipment shall meet the following requirements:

- a. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
- b. The control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gasses or there are no visible particulate emissions from the exhaust stack(s), whichever is less stringent.

The BAT set a restriction on perforation plate hole diameter to meet this requirement.

OAC rule 3745-18-06(E)(2) – No owner or operator of any process equipment shall cause or permit the maximum emission of sulfur dioxide from any source to exceed the amounts indicated by the following equations:

$$\text{AER} = 30 P^{0.67} = 30(34.8)^{0.67} = 323.6 \text{ lb/hr}$$

Where P is the process weight rate in tons per hour and AER is the allowable emission rate in pounds of sulfur per hour.

NSPS Subpart DD – Maximum annual perforation plate hole diameter of 2.4 mm diameter (ca. 0.094 inch). Though the hole diameter set by NSPS Subpart DD is applicable (0.094”), the limit set by BAT is more restrictive (0.078”).

#### F005 – Column Grain Dryer

PTI 04-0973, issued December 1, 1995 to replace emission unit F002, was issued draft/final and the limitations contained in this emissions unit are considered to be federally enforceable: 7 lb CO per hour and 7.3 tons CO per year, 2.3 pounds NO<sub>x</sub> per day and 2.4 tons NO<sub>x</sub> per year, 10 pounds PE per hour and 11 tons PE per year, 22 pounds SO<sub>2</sub> per hour and 23 tons SO<sub>2</sub> per year, 0.06 pound VOC per day and 0.06 tons VOC per year, and 0.5% S maximum in fuel. This permit restricts throughput of grain to 250,000 tons per year as a rolling, 365-day summation. P0088160 administratively modifies the limitations from ton per year as a rolling 365-day basis to a rolling, 12-month summation. A review of the PTI calculations indicate the BAT limits of 2.3 pounds NO<sub>x</sub> per day and 0.06 pound VOC per day were intended to be based on pounds per hour, not pounds per day. EPA central office indicated that an administrative modification can be combined with a PTIO renewal without having to submit a separate application, therefore these modifications will be incorporated into this PTIO renewal.

Throughput on the most recent application is given as 4000 bushel/hr or 116 tons per hour [(4000 bushel/hr)(58 lbs/bushel)/(2000 lb/ton)]. Fuel usage is set at 20.53 mmBtu/hr in a distillate fuel oil #2 fired burner. Using manufacturer’s data for CO, PE and NO<sub>x</sub> (6.16 pound CO per hour, 2.05 pound NO<sub>x</sub> per hour, and 8.73 pound PE per hour; all at 105.41 tons grain per hour) and for SO<sub>2</sub> and VOC using AP-42 Tables 1.3-1 through 1.3-4, PTE was established:

$$\begin{aligned} \text{CO:} & \quad (116 \text{ ton/hr})(6.16 \text{ lb/hr})/(105.41 \text{ ton/hr}) = 6.78 \text{ lb CO/hr} \\ \text{NO}_x: & \quad (116 \text{ ton/hr})(2.05 \text{ lb/hr})/(105.41 \text{ ton/hr}) = 2.26 \text{ lbNO}_x\text{/hr} \\ \text{PE:} & \quad (116 \text{ ton/hr})(8.73 \text{ lb/hr})/(105.41 \text{ ton/hr}) = 9.61 \text{ lb PE/hr} \\ \text{SO}_2: & \quad (303 \text{ gal/hr})(142 \text{ lb SO}_2/ 1000 \text{ gal})(0.5) = 21.51 \text{ lb SO}_2\text{/hr} \end{aligned}$$



VOC: (303 gal/hr)(0.2 lb VOC/1000 gal) = 0.0606 lb VOC/hr

The annual allowable emissions were set based on the throughput averaged emission factors shown above at a maximum annual throughput of 250,000 tons per year.

CO: (250,000 ton/yr)(6.16 lb/hr)/((105.41 ton/hr)(2000 lb/ton)) = 7.30 ton CO/yr  
NO<sub>x</sub>: (250,000 ton/yr)(2.05 lb/hr)/((105.41 ton/hr)(2000 lb/ton)) = 2.43 ton NO<sub>x</sub>/yr  
PE: (250,000 ton/yr)(8.73 lb/hr)/((105.41 ton/hr)(2000 lb/ton)) = 10.35 ton PE/yr  
SO<sub>2</sub>: (250,000 ton/yr) (303 gal/hr)(142 lb SO<sub>2</sub>/ 1000 gal)(0.5)/((116 ton/hr)(2000 lb/ton)) = 23.18 tons SO<sub>2</sub>/yr  
VOC: (250,000 ton/yr) (303 gal/hr)(0.2 lb VOC/ 1000 gal)/((116 ton/hr)(2000 lb/ton)) = 0.07 tons VOC/yr

Also applicable:

OAC rule 3745-17-07(B)(1) – Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive source shall not exceed twenty percent opacity as a three-minute average;

OAC rule 3745-17-08(B), (B)(3) – The installation and use of hoods, fans, and other such equipment to adequately enclose, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

- a. The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
- b. The control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust stack(s), whichever is less stringent.

The BAT restriction on perforation plate hole diameter and restriction to a 0% opacity will meet this requirement.

OAC rule 3745-18-06(E)(2) – no owner or operator of any process equipment shall cause or permit the maximum emission of sulfur dioxide from any source to exceed the amounts indicated by the following equation:

$$AER = 30 P^{0.67} = (30)(116)^{0.67} = 725 \text{ lb/hr}$$

Where P is the process weight rate in tons per hour and AER is the allowable emission rate in pounds of sulfur dioxide per hour. The BAT limitation of 21.51 pounds per hour is more stringent than this rule.

NSPS Subpart DD – maximum actual perforation plate hole diameter of 2.4 mm diameter (ca. 0.094 inch). Though the hole diameter set by NSPS Subpart DD is applicable (0.094”), the limit set by BAT is more restrictive (0.078”).

P901 – Truck unloading

Fugitive dust was not addressed for this emissions unit in PTI 04-110, effective November 13, 1978. Control was required with baghouse limitations of 9.0 pounds of PE per hour and 1.89 tons of PE per



year for each of the two baghouses – dust control system 61 and 62 (previously referred to as systems DCS #3 & 4). PTI 04-110 also required a minimum stack height of 50 feet for stacks associated with this emission unit. The first source specific ST&Cs appear in the 5/18/1984 PTO with BAT stated as requiring a roofed, 3-sided enclosure venting to a fabric filter with a 0% opacity and 0.010 grains/dscf exhaust. The stated BAT of 0% opacity and 0.010 grains/dscf exhaust of has no supporting basis. Maximum throughput was stated on the most recent application as 900 ton per hour.

Assuming 90% capture and 99% control with enclosure and baghouse, and an emission factor from AP-42 Table 9.9.1-1, the PTE:

$$\text{PE stack: } (900 \text{ ton grain/hr})(0.18 \text{ lb PE/ton grain})(0.90)(1-0.99) = 1.46 \text{ lb PE/hr}$$
$$(900 \text{ ton grain/hr})(8760 \text{ hr/yr})(0.189 \text{ lb PE/ton grain})(0.90)(1-0.99)/(2000 \text{ lb/ton}) = 6.39 \text{ ton PE/yr}$$

$$\text{PE fugitive: } (900 \text{ ton/hr})(8760 \text{ hr/yr})(0.18 \text{ lb/ton})(1-0.90)/(2000 \text{ lb/ton}) = 70.96 \text{ ton PE/yr}$$

Since PTE for stack emissions is greater than the BAT determination of 1.89 tons of PE per baghouse (1.89 x 2 = 3.78 tons), Monitoring and Record keeping requirements will be set to monitor annual throughput of grain and annual emission calculated as outlined in the Testing Requirements. The restriction on stack PE emissions will also limit fugitive PE emissions. To calculate the fugitive emissions based on the annual stack emission limitation, the minimum grain throughput that will generate the emissions limitation is:

$$(3.78 \text{ tons PE/yr})(2000 \text{ lbs/ton})/[(0.18 \text{ lb/ton})(0.90)(1-0.99)] = 4,666,000 \text{ tons of grain per year}$$

This annual grain throughput will generate a maximum fugitive emissions, taking into account the particulate stack emissions limitation:

$$\text{Fugitive PE: } (4,666,000 \text{ tons grain/yr})(0.18 \text{ lb/ton})(1-0.90)/(2000 \text{ lbs/ton}) = 42.00 \text{ tons PE/yr}$$

Truck unloading would have applicability of:

OAC rule 3745-17-07(A)(1) – Except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average;

OAC rule 3745-17-07(B)(1) – Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive dust source shall not exceed twenty percent opacity, as a three-minute average;

OAC rule 3745-17-08(B) – No person shall cause or permit any fugitive dust source to be operated without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

The permittee has elected to meet this requirement with the restriction that each truck dump shall be adequately enclosed by a three-sided structure with a roof and an access door and vented to a fabric filter.

OAC rule 3745-17-11(B)(1) – Allowable emissions must be determined using Table I for (P)>30, (E) = (55.0)(P)<sup>0.11</sup> – 40.0 where P=900, E= 76.23 lb PE/hr, or Figure II with uncontrolled emissions of 900 ton



per hour (0.18 lb/ton) = 162 lb/hr;  $A=0.5782 U^{0.6456} = 15.44$  lb/hr. While Figure II limitation is applicable, the BAT determination of 9.0 lb/hr (x2) = 18.0 lb/hr appears to create a conflict. But the maximum throughput of 900 tons of grain per hour only generates 1.46 pounds of PE per hour as shown above as calculate from AP-42 emission factors.

NSPS DD would not apply because construction began before the applicability date of NSPS.

P902 – Rail loading and unloading

Fugitive dust for this emissions unit was not addressed in PTI 04-110, effective November 13, 1978. Control however was required with a baghouse limitation of 9 pounds per hour and 0.38 ton per year of particulate matter. The first source specific ST&Cs appear in the 5/18/1984 PTO with BAT stated as requiring a four sided roofed enclosure with closed doors at each end, venting to a fabric filter with no visible emissions from the baghouse exhausts. In the most recent permit application, maximum railcar unloading rate was stated as 900 tons per hour while railcar loading rate was stated as 1250 tons per hour.

Assuming 98% capture and 99% control for receiving and for shipping and emissions factors from AP-42 Table 9.9.1-1 (0.027 lb PE per ton shipping & 0.032 pounds PE per ton receiving) and assuming that only one process happens at a time, worst case uncontrolled emissions would occur during receiving (assuming maximum throughput of 8,760,000 tons of grain set by P903):

Shipping:  $(0.027 \text{ lb PE/ton})(900 \text{ ton/hr}) = 24.3 \text{ lb PE/hr}$   
Receiving:  $(0.032 \text{ lb PE/ton})(1250 \text{ ton/hr}) = 40.00 \text{ lb PE/hr}$

Stack PE:  $(0.032 \text{ lb PE/ton})(1250 \text{ ton/hr})(0.98)(1-0.99) = 0.39 \text{ lb PE/hr}$   
 $(8,760,000 \text{ ton/yr})(0.032 \text{ lb PE/ton})(0.98)(1-0.99)/(2000 \text{ lb/ton}) = 1.37 \text{ tpy PE}$   
Fugitive PE:  $(0.032 \text{ lb PE/ton})(1250 \text{ ton/hr})(1-0.98) = 0.80 \text{ lb PE/hr}$   
 $(8,760,000 \text{ ton/yr}) (0.032 \text{ lb PE/ton})(1-0.98) /(2000 \text{ lb/ton}) = 2.80 \text{ tpy PE}$

Since PTE for annual particulate stack emissions is greater than the BAT determination of 0.38 ton PE per year, Monitoring and Record keeping requirements will be set to monitor annual throughput of grain and calculate annual emissions as outlined in the Testing Requirements. The restriction on stack PE emissions will also limit fugitive PE emissions. In order to calculate the annual fugitive emissions of PE taking into account the BAT restriction on annual stack emissions, the minimum annual throughput of grain with the BAT limitation of 0.38 ton PE per year will be determined:

$$(0.38 \text{ ton/yr})(2000 \text{ lb/ton})/((0.032 \text{ lb/ton})(0.98)(1-0.99)) = 2,400,000 \text{ tons grain/year}$$

With this grain throughput, annual fugitive particulate emissions becomes:

$$\text{Fugitive PE: } (2,400,000 \text{ ton/yr})(0.032 \text{ lb/ton})(1-0.98)/(2000 \text{ lb/ton}) = 0.77 \text{ tpy PE}$$

Railcar loading and unloading would have applicability of:

OAC rule 3745-17-07(A)(1) – Except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average;



OAC rule 3745-17-07(B)(1) – Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive dust sources shall not exceed twenty percent opacity, as a three-minute average;

OAC rule 3745-17-08(B) – No person shall cause or permit any fugitive dust source to be operated without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne;

The facility shall comply by enclosing the rail car loading and unloading operations with a four-sided structure, a roof, and venting to a fabric filter.

OAC rule 3745-17-11(B)(1) – Allowable emissions must be determined using Table I for (P)>30, (E) = 55.0(P)<sup>0.11</sup> – 40.0 where P= 900 (most restrictive), E=76.23 lb PE/hr, or Figure II with uncontrolled emissions of 900 ton/hr (0.18 lb/ton) = 162 lb/hr; A=0.5782 U<sup>0.6456</sup>=15.44 lb/hr. While the Figure II limitation is applicable, the BAT determination of 9.0 pounds per hour is more restrictive.

NSPS DD would not apply because construction began before the applicability date of the NSPS.

P905 – transferring and conveying + screening cleaning (Formerly P903 and P904)

Former emission units P903 and P904 have been combined into one emissions unit (P905) as allowed under Engineering Guide #25 section 2.5.

Fugitive dust for this emissions unit was not addressed in PTI 04-110, effective November 13, 1978. However, control is required with baghouse limitations of 4.9 pounds PE per hour and 4.15 tons PE per year from the DCS#1 (dust control system #1 or later referred to as dust control system 63) and 0.1 pounds per hour and 0.10 ton per year PE from DHS#1 (Dust Handling System). PTI 04-173 was issued final on October 23, 1981 to add three storage silos. This addition did not increase the processing capacity of the facility, did not increase the potential to emit, introduced no new terms and conditions, and did not trigger NSPS DD applicability (by the provision of 40 CFR 60.304(b)(4)). The first source specific ST&Cs appear in the 5/18/1984 PTO with BAT stating as required 4.9 pounds PE per hour, complete enclosure, and venting to a fabric filter with no visible emissions from the baghouse exhaust. Maximum transfer rate was stated as 1000 tons grain per year on the most recent application, which provides the basis for the maximum throughput restriction of 8.76 million tons grain per year [(1000 tons grain/hr)(8760 hr/yr)] in all other emission units comprising this permit. No mention of Screening and Cleaning is mentioned in PTI 04-110, but a subsequent PTO, dating from October 4, 1983, identify Screening and Cleaning under emissions unit P904. The P904 emissions unit shares the baghouse (DCS#1) and therefore the PE emission limitation with P903. With the common control system and emission limitation, both of these emission units must be taken into account when calculating emission limits.

Assuming 99% capture and 99% control and emissions factors from AP-42 Table 9.9.1-1 (0.061 lb PE per ton for transferring and conveying, 0.075 lb PE per ton for cleaning and screening) PTE emissions are:

DHS #1 Stack: (0.061 lb PE/ton + 0.075 lb PE/ton)(1000 tons/hr)(0.99)(1-0.99) = 1.35 lb PE/hr

(8,760,000 ton/yr)(0.061 lb PE/ton + 0.075 lb PE/ton)(0.99)(1-0.99)/(2000 lb/ton) = 5.90 tpy PE

Fugitive: (8,760,000 ton/yr)(0.061 lb/ton + 0.075 lb PE/ton)(1-0.99)/(2000 lb/ton) = 5.96 tpy PE



Since the PTE for annual stack emissions (5.90 tpy) is greater than the BAT restriction (4.15 tpy), Monitoring and Record keeping requirements will be set to monitor annual throughput of grain and annual emission calculated as outlined in the Testing Requirements. The restriction on stack PE emissions will also limit fugitive PE emissions. To calculate the annual fugitive emissions taking into account the emissions limitation on stack emissions; the minimum annual throughput of grain to generate the maximum particulate emissions determined to be BAT will be calculated:

$$(4.15 \text{ tons/yr})(2000 \text{ lb/ton}) / ((0.061 \text{ lb PE/ton} + 0.075 \text{ lb PE/ton})(0.99)(1-0.99)) = 6,164,000 \text{ tons grain/year}$$

With this annual throughput of grain, annual fugitive particulate emissions becomes:

$$\text{Fugitive PE: } (6,164,000 \text{ tons grain/yr})(0.061 \text{ lb PE/ton grain} + 0.075 \text{ lb PE/ton grain})(1-0.99) / (2000 \text{ lbs/ton}) = 4.19 \text{ tpy PE}$$

DHS 1 (Dust handling system) is the dust handling for material collected by DCS#1, DCS#2, DCS#3, and DCS#4. The baghouse dust is pneumatically transferred from DCS#1 – DCS#4 to a silo which is vented to baghouseDHS#1.

PTI 04-110 established limitations of 0.1 lb/hr and 0.10 tons/year PE for DHS#1.

The maximum process weight rate for DHS#1 is identified as 4,650 lbs/hr (2.325 tons/yr) with 100% capture and 99% control.

An AP-42 emission factor for grain dust conveying to silo is not available, so an emission factor for lime pneumatic conveying to truck was used as a representative emission factor. AP-42 Table 11.17-4 dated 2/98 identifies an emission factor of 0.61 lb/ton PE for loading line into a truck.

$$\text{DHS\#1 Stack: } 0.61 \text{ lb/ton}(2.325 \text{ ton/year})(1-0.99) = 0.014 \text{ lb/hr}$$
$$0.014 \text{ lb/hr PE} (8760 \text{ hrs/yr}) / (\text{ton}/2000 \text{ lb}) = 0.06 \text{ ton/yr PE}$$

Transferring and conveying would have the applicability of:

OAC rule 3745-17-07(A)(1) – Except as otherwise specified in paragraphs (A)(1)(b), (A)(2) and (A)(3) of this rule, visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average;

OAC rule 3745-17-07(B)(1) – Except as provided in paragraphs (B)(2) to (B)(11) of this rule, visible particulate emissions from any fugitive dust source shall not exceed twenty percent opacity as a three-minute average;

OAC rule 3745-17-08(B) – No person shall cause or permit any fugitive dust source to be operated without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne;

The facility shall comply by completely enclosing the transferring and conveying operation and venting to a fabric filter.

OAC rule 3745-17-11(B)(1) – Allowable emissions must be determined using Table I for (P)>30, (E) =  $55.0(P)^{0.11} - 40.0$  where P=1000, E=77.59 lb PE/hr, or Figure II with uncontrolled emissions of 1000



ton/hr(0.061 lb/ton) = 61 lb/hr;  $A=0.5782U^{0.6456}=8.22$  lb/hr. While the Figure II limitation is applicable, the BAT determination of 4.9 lb/hr is more restrictive.

NSPS DD would not apply because construction began before the applicability date of the NSPS.

Our 2004 review of PTE at the Anderson's 044801196 facility for Tile V applicability included the following table:

tpy	SO2	PM10	
	PTE at 8760 hours/yr	stack	fugitive
F001	-	-	2.66
F003 <sup>a</sup>	-	0.72	17.96
F004 <sup>b</sup>	62.20	-	8.38
F005 <sup>c</sup>	23.18	-	27.94
P901 <sup>d</sup>	-	2.09	23.26
P902 <sup>e</sup>	-	0.33	0.68
P903	-	1.47	1.49
Facility PTE	85.38	4.61	82.37
		86.98	

<sup>a</sup> 2.41 million tons of grain throughput per year to meet the BAT determination set by PTI 04-110 of 0.83 tpy PE.

<sup>b</sup> 75,000 tons of grain throughput per year set by PTI 04-351.

<sup>c</sup> 250,000 tons of grain throughput per year set by PTI 04-973.

<sup>d</sup> 2.333 million tons of grain throughput per year per dust collection system to meet the BAT determination set by PTI 04-110 of 1.89 tpy PE per baghouse.

<sup>e</sup> 2.4 million tons of grain throughput per year to meet the BAT determination set by PTI 04-110 of 0.38 tpy PE.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NO <sub>x</sub>	6.71
CO	8.38
SO <sub>2</sub>	38.3
VOC	0.13
PE <sub>Stack</sub>	9.14
<b>PE<sub>Fugitive</sub></b>	<b>99.96</b>

PUBLIC NOTICE  
Issuance of Draft Air Pollution Permit-To-Install and Operate  
THE ANDERSONS, INC.

Issue Date: 9/8/2011  
Permit Number: P0088160  
Permit Type: Renewal  
Permit Description: FEPTIO Renewal permit for Grain Elevator  
Facility ID: 0448011196  
Facility Location: THE ANDERSONS, INC.  
125 EDWIN DRIVE,  
Toledo, OH 43609  
Facility Description: Grain and Field Bean Merchant Wholesalers

The 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 Babak Firoozi at Toledo Department of Environmental Services, 348 South Erie Street, Toledo, OH 43604 or (419)936-3015. The permit can be downloaded from the Web page: [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc)





**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
THE ANDERSONS, INC.**

Facility ID:	0448011196
Permit Number:	P0088160
Permit Type:	Renewal
Issued:	9/8/2011
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
THE ANDERSONS, INC.

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## Authorization

Facility ID: 0448011196

Application Number(s): A0019313, A0037349, A0037722

Permit Number: P0088160

Permit Description: FEPTIO Renewal permit for Grain Elevator

Permit Type: Renewal

Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 9/8/2011

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:

THE ANDERSONS, INC.  
125 EDWIN DRIVE  
Toledo, OH 43609

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:

Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604  
(419)936-3015

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: P0088160

Permit Description: FEPTIO Renewal permit for Grain Elevator

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>F001</b>
Company Equipment ID:	roadways and parking lots
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F003</b>
Company Equipment ID:	ship and truck loading
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F004</b>
Company Equipment ID:	grain drying
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>F005</b>
Company Equipment ID:	Zimmerman column grain dryer
Superseded Permit Number:	04-973
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	truck unloading
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P902</b>
Company Equipment ID:	rail loading and unloading
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P905</b>
Company Equipment ID:	Transferring, conveying, screening, and cleaning
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 Toledo Department of Environmental Services 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.
2. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart DD: F004 and F005.

The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Toledo Division of Environmental Services.

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



1. F001, roadways and parking lots

Operations, Property and/or Equipment Description:

Roadways and Parking Lots

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 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
paved roadways and parking lots		
a.	OAC rule 3745-17-07(B)(4)	no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty minute observation period
c.	OAC rule 3745-17-08(B)	see b)(2)a. and b)(2)c. through b)(2)e.
unpaved roadways and parking lots		
b.	OAC rule 3745-17-07(B)(5)	no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty minute observation period
c.	OAC rule 3745-17-08(B)	see b)(2)b. through b)(2)f.

(2) Additional Terms and Conditions

- a. The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to control by maintaining adequate moisture to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for roadways and parking areas that are 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measures specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

c) Operation 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 and unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
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all roads and parking areas	daily
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- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. 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 quarter 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.

- (4) The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) The permittee shall provide the following in the required annual permit evaluation report:

- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

No visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").Miscellaneous Requirements

b. Emission Limitation:

No visible PE from unpaved roadways and parking areas except for a period of time not to exceed thirteen minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").Miscellaneous Requirements

g) Miscellaneous Requirement

(1) None.



2. F003, ship and truck loading

Operations, Property and/or Equipment Description:

ship and truck loading, controlled by adequate enclosure and ventilation system ducted to a fabric filter (DCS#5 and DCS#6)

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 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
ship and truck loading		
a.	OAC rule 3745-31-05(A)(3) PTI 04-110 as issued 11/13/78	Particulate emissions (PE) from DCS#5 and DSC#6 serving this emissions unit shall not exceed 2.2 pounds per hour and 0.83 ton per year each.  see b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	see b)(2)c.
ship loading		
c.	OAC rule 3745-17-07(B)(11)	see b)(2)d.
d.	OAC rule 3745-17-08(B), (B)(4)	see b)(2)e.
truck loading		
e.	OAC rule 3745-17-07(B)(1)	see b)(2)f.
f.	OAC rule 3745-17-08(B), (B)(3)	see b)(2)g.

- (2) Additional Terms and Conditions
- a. The permittee shall employ best available control measures for the loading of ships in this emissions unit to ensure compliance with the applicable rule: the permittee shall maintain and operate a telescoping loading spout providing for choked feed and a fabric filtration dust collection system sufficient to minimize or eliminate visible emissions of fugitive dust at the point of capture. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
  - b. The permittee shall employ best available control measures for the loading of trucks in this emissions unit to ensure compliance with the applicable rule: the permittee shall maintain and operate a telescoping loading spout providing for choked feed and a fabric filtration dust collection system sufficient to minimize or eliminate visible emissions of fugitive dust at the point of capture. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
  - c. Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
  - d. The visible particulate emission limitations specified in paragraphs OAC rule 3745-17-07(B)(1) shall not apply to ship loading spouts at grain terminals.
  - e. The permittee shall employ the following control measures for the loading of ships in this emissions unit to ensure compliance with the applicable rule:
    - i. except during topping-off periods or during the loading of tween-deckers or tankers, the permittee shall cover the hatches and loading spouts with tarpaulin covers, to the extent practicable, and evacuate the hatches to control equipment which is designed to achieve an outlet emission rate of 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases; or,
    - ii. the permittee shall maintain and operate control measures such as deadbox or bullet-type loading spouts which are equivalent to or better than the overall control efficiency of the measures described in the paragraph above.
    - iii. implementation of the control measure(s) of b)(2)e.i. and b)(2)e.ii. in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08(B)(4).
  - f. The visible emissions of fugitive dust from the loading of trucks in this emissions unit shall not exceed twenty percent opacity as a three-minute average.
  - g. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from this emissions unit shall meet the following requirements:

- i. the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
    - ii. the control equipment for this emissions unit shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions (whichever is less stringent) from the exhaust stack of this emissions unit.
    - iii. implementation of the control measure(s) of b)(2)g.i. and b)(2)g.ii. in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08(B)(3).
- c) Operational Restrictions
  - (1) The permittee shall operate the fabric filter(s) associated with each ship and truck loading operation whenever the respective process is in operation.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
    - a. the 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 emissions incident; and
    - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (2) The permittee shall maintain annual records of the grain handling throughput for all ship and truck loading served by each of the two dust collection systems utilized for this emissions unit in tons per year. By January 31 of each year, the permittee shall calculate and record the annual particulate emissions from each stack according to the procedure described in f)(1)e.
- e) Reporting Requirement
- (1) The permittee shall identify in the annual permit evaluation report any exceedance of the annual PE emissions limitation.
  - (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions:
    - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
    - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
    - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
  - (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
    - b. Emission Limitation:

The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

The control equipment shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 2.2 pounds per hour from each stack serving this emissions unit.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

e. Emission Limitation:

PE shall not exceed 0.83 ton per year from the stack(s) serving this emissions unit.

Applicable Compliance Method:

Compliance with the annual PE limitation shall be determined using the emission factors and procedures specified in US EPA reference document AP-42 Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1 (Ship loading – 0.048 lb/ton and truck loading – 0.086 lb/ton PE). With 80% capture and 99% control using a fabric filter, the individual stack emissions are:

Ship  $(0.048 \text{ lb/ton})(T)(0.8)(1-0.99)$ =tons per year PE

Truck  $(0.086 \text{ lb/ton})(T)(0.8)(1-0.99)$ =tons per year PE

where T = annual throughput recorded in d)(2).

- g) Miscellaneous Requirements
  - (1) None.



3. F004, grain drying

Operations, Property and/or Equipment Description:

grain drying, Zimmerman column grain dryer model AP-3000 Drying

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 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) PTI 04-351 as issued 12/31/86	Fugitive particulate emissions (PE) shall not exceed 0.3 pound per ton of grain processed.  Fugitive PE shall not exceed 11.30 tons per calendar year.  See b)(2)a. through b)(2)c.
c.	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust shall not exceed 20% opacity as a three-minute average.
d.	OAC rule 3745-17-08(B), (B)(3)	See b)(2)d.
e.	OAC rule 3745-18-06(E)(2)	Sulfur dioxide emissions (SO2) from this emissions unit shall not exceed 323 pounds per hour.
f.	40 CFR Part 60, Subpart DD	See b)(2)e.

- (2) Additional Terms and Conditions
- a. The maximum actual perforation plate hole diameter shall not exceed 0.078 inch.
  - b. The maximum annual throughput for this emissions unit shall not exceed 75,000 tons as a calendar year summation.
  - c. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B), (B)(3).
  - d. The permittee shall employ reasonably available control measures for the purpose of ensuring compliance with this requirement. In accordance with the permittee's application, the permittee has committed to maintain a maximum actual perforation plate hole diameter no greater than 0.078 inch in diameter.  
  
Implementation of the above-mentioned control measure in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
  - e. The emissions limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c) Operational Restrictions
- (1) None
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received (in gallons) and the permittee's or oil supplier's analyses for sulfur content (as a weight percent). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
  - (2) The permittee shall maintain annual records of the throughput.
  - (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.
- (4) If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- e) Reporting Requirements
- (1) The permittee shall identify in the annual permit evaluation report any exceedance of the annual throughput limitation.
  - (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions:
    - a. all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit; and
    - b. any corrective actions taken to minimize or eliminate the visible emissions of fugitive dust.
  - (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in 3745-17-03(B)(3).

b. Emission Limitation:

Fugitive PE shall not exceed 0.3 pound per ton of grain processed.

Applicable Compliance Method:

Compliance may be based on the emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: 0.22 pound per ton of grain processed in a column dryer.

If required, the permittee shall develop a site specific emission factor through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(7). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

c. Emission Limitation:

Fugitive PE shall not exceed 11.30 tons per calendar year.

Applicable Compliance Method:

Compliance shall be determined by a one-time calculation of the annual potential to emit, based upon the worst case operating scenario. This calculation utilizes the emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1:

$$75,000 \text{ t/yr} (0.22 \text{ lb/ton})(t/2000 \text{ lb}) = 8.25 \text{ t/yr}$$

If required, the permittee shall develop a site specific emissions factor through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(7). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

d. Emission Limitation:

SO2 emissions from this emissions unit shall not exceed 323 pounds per hour.

Applicable Compliance Method:

Compliance may be determined by a one-time calculation, based upon the worst case operating scenario. This calculation utilizes the maximum burner firing rate with distillate fuel oil #2 (28 mmBtu/hr) and emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.3-1, as follows:

$$28 \text{ mmBtu/hr} (1000 \text{ gallon}/140 \text{ mmBtu})(142 \text{ lb}/1000 \text{ gal})(0.5) = 14.2 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance in accordance with Methods 1 thru 4 and 6 of 40 CFR Part 60 Appendix A using the methods and



procedures specified in OAC rule 3745-18-04. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

- g) Miscellaneous Requirements
  - (1) None.



4. F005, Zimmerman column grain dryer, 120 tons per hour

Operations, Property and/or Equipment Description:

grain drying, Zimmerman column grain dryer model AP-4000 Drying

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 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) PTI 04-973 as issued 10/25/1995	Carbon monoxide (CO) emissions shall not exceed 7.0 pounds per hour and 7.3 tons per year, based upon a rolling, 12-month summation of the monthly emissions.  Nitrogen oxides (NOx) emissions shall not exceed 2.3 pounds per hour and 2.4 tons per year, based upon a rolling, 12-month of the monthly emissions.  Particulate emissions (PE) shall not exceed 10 pounds per hour and 11 tons per year, based upon a rolling, 12-month summation of monthly emissions.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 22 pounds per hour and 23 tons per year, based a rolling, 12-month



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>summation of the monthly emissions.</p> <p>Volatile organic compound (VOC) emissions shall not exceed 0.06 pound per hour and 0.06 ton per year, based upon a rolling, 12-month summation of the monthly emissions.</p> <p>Visible emissions of fugitive dust shall not exceed 0% opacity as a 6-minute average.</p> <p>See b)(2)a. through b)(2)c. and b)(2)g.</p>
c.	OAC rule 3745-17-07(B)(1)	See b)(2)d.
d.	OAC rule 3745-17-08(B), (B)(3)	See b)(2)e.
e.	OAC rule 3745-18-06(E)(2)	See b)(2)d.
f.	40 CFR Part 60, Subpart DD	See b)(2)f.

(2) Additional Terms and Conditions

- a. The maximum actual perforation plate hole diameter shall not exceed 0.078 inch.
- b. The maximum annual throughput for this emissions unit shall not exceed 250,000 tons per year based upon a rolling 12-month summation of throughput rates.
- c. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-08(B), (B)(3).
- d. The emissions limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
- e. The permittee shall employ reasonably available control measures for the purpose of ensuring compliance with this requirement. In accordance with the permittee's application, the permittee has committed to maintain a maximum actual perforation plate hole diameter no greater than 0.078 inch in diameter.

Implementation of the above-mentioned control measure in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- f. The emissions limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

- g. Fuel combusted in this emissions unit shall be restricted to No.2 fuel oil containing no more than 0.5 percent sulfur by weight.

c) Operational Restrictions

- (1) The quality of fuel oil received for burning in this emissions unit shall be sufficient to comply with the allowable sulfur content limitation of less than or equal to 0.5 weight per cent sulfur.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received (in gallons) and the permittee's or oil supplier's analyses for sulfur content (as a weight percent). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
- (2) The permittee shall maintain monthly records of the following information:
  - a. the throughput rate for each month; and
  - b. the rolling, 12-month summation of the monthly throughput rates.
- (3) The permittee shall perform daily checks, when the emissions unit is in operation and, when the weather conditions allow, for any visible emissions of fugitive dust from the egress points serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed from any points, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. the total duration of any visible emissions incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

e) Reporting Requirements

- (1) The permittee shall identify any record which shows a deviation of the allowable fuel oil sulfur content limitation in the annual permit evaluation report.
- (2) The permittee shall submit semi-annual deviation(excursion) reports that identify all months during which the rolling, 12-month throughput exceed 250,000 tons.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions:
  - a. all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit; and



- b. any corrective actions taken to minimize or eliminate the visible emissions of fugitive dust.
- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:  
  
7.0 pounds per hour CO  
  
Applicable Compliance Method:  
  
This emissions limitations was based on manufacturer's emission data. If required, the permittee shall demonstrate compliance using Methods 1 thru 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
    - b. Emission Limitation:  
  
7.3 tons per year CO, based upon a rolling, 12-month summation of the monthly emissions  
  
Applicable Compliance Method:  
  
Compliance may be determined by the following calculation. Multiply the maximum throughput(250,000 tons/yr) by the manufacturer's CO emission factor (0.058 lb/ton) and divide by 2,000 pounds per ton.
    - c. Emission Limitation:  
  
2.3 pounds per hour NOx  
  
Applicable Compliance Method:  
  
This emissions limitation was based on manufacturer's emission data. If required, the permittee shall demonstrate compliance using Methods 1 thru 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA test methods may be used with prior approval from the Ohio EPA.
    - d. Emission Limitation:  
  
2.4 tons per year NOx, based upon a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Compliance may be determined by be determined by the following calculation. Multiply the maximum throughput(250,000 tons/yr) by the manufacturer's Nox emissions factor (0.0194 lb/ton) and divide by 2,000 pounds per ton.

e. Emission Limitation:

10 pounds per hour PE

Applicable Compliance Method:

This emissions limitation was based on manufacturer's emission data. If required, the permittee shall demonstrate compliance using Methods 1 thru 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

11 tons per year PE, based upon a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Compliance may be determined by be determined by the following calculation. Multiply the maximum throughput(250,000 tons/yr) by the manufacturer's particulate emissions factor (5.57E-03 lb/ton) and divide by 2,000 pounds per ton.

g. Emission Limitation:

Less than or equal to 0.5 weight percent sulfur

Applicable Compliance Method:

If required, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Toledo Division of Environmental Services.

h. Emission Limitation:

22 pounds per hour SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be determined by be determined by the following calculation. Multiply the maximum oil firing rate (0.303 thousand gallons per hour) by the AP-42 emission factor from Table 1.3-1 dated 5/10 for distillate oil (142 x %S lb/1000 gal) and multiply by the %S (0.5).

If required, the permittee shall demonstrate compliance using Methods 1 thru 4 and 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

23 tons per year SO<sub>2</sub>, based upon a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Compliance may be determined by be determined by the following calculation. Multiply the hourly emission limitation (22 lbs/hour) by the maximum annual throughput (250,000 tons/yr) divided by the maximum hourly throughput (120 tons/hr) and divide by 2,000 pounds per ton.

j. Emission Limitation:

0.06 pound per hour VOC

Applicable Compliance Method:

Compliance may be determined by the following calculation. Multiply the maximum oil firing rate (0.303 thousand gallons per hour) by the VOC AP-42 emissions factor from Table 1.3-1 dated 5/10 for industrial boilers firing distillate oil (0.2 lb/1000 gal).

If required, the permittee shall demonstrate compliance using Methods 1 thru 4 and 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

k. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 0% opacity as a 6-minute average.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



5. P901, truck unloading

Operations, Property and/or Equipment Description:

truck dumps with partial enclosure and fabric filtration systems, (DCS 61 and 62 – formerly identified as DCS#3 and DCS#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. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-110 as issued November 13, 1978)	Particulate emissions (PE) from DCS 61 and 62 shall not exceed 9.0 pounds per hour and 1.89 tons per year each.  See b)(2)a. and c)(2)
b.	OAC rule 3745-17-07(A)(1)	See b)(2)b.
c.	OAC rule 3745-17-07(B)(1)	See b)(2)c.
d.	OAC rule 3745-17-08(B)	See b)(2)a.
e.	OAC rule 3745-17-11(B)(1)	See b)(2)d.
f.	40 CFR Part 60, Subpart DD	See b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures for the purpose of ensuring compliance. The permittee has committed to the following to ensure compliance:

i. each truck dump shall be adequately enclosed by a structure with a roof and vented to a fabric filter; and

Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The visible particulate emissions from each stack serving this emissions unit shall not exceed twenty per cent opacity as a six-minute average, except as provided by rule.

c. The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty per cent opacity as a three-minute average.

d. The combined PE from both dust collection systems serving this emissions unit shall not exceed 15.44 pounds per hour.

e. This emissions unit is not subject to the requirements of this regulation as construction commenced prior to August 3, 1978.

c) Operational Restrictions

(1) The permittee shall operate the fabric filter(s) associated with each truck unloading operation whenever the respective process is in operation.

(2) The minimum stack height for DCS 61 and 62 shall be 50 feet above ground level.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document any time periods when a fabric filter was not in service when the associated process(es) was (were) in operation.

(2) The permittee shall perform daily checks, when one (or more) truck unloading process(es) is in operation and when the weather conditions allow, for any visible particulate emissions from each applicable stack and for any visible fugitive particulate emissions from any applicable egress points (i.e., doors, openings, etc.) serving the respective operation. 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.

- (3) The permittee shall maintain annual records of the grain handling throughput for all truck dumps served by each of the two dust collection systems utilized for this emissions unit in tons per year. By January 31 of each year, the permittee shall calculate and record the annual particulate emissions from each stack according to the procedure described in f)(1)e.

e) Reporting Requirements

- (1) The permittee shall notify the Director (the Toledo Division of Environmental Services) in writing of any daily record showing that a fabric filter was not in service when the associated material handling operation was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Toledo Division of Environmental Services) on a semi-annual basis.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) above:
  - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (3) The permittee shall identify in the annual permit evaluation report any exceedances of the 1.89 tons per year PE limitations as recorded in d)(3).

- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 emission limitations in b) these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty per cent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

The visible particulate emissions from each stack serving this emissions unit shall not exceed twenty per cent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

c. Emission Limitation:

PE shall not exceed 9.0 pounds per hour from each stack serving this emissions unit.

Applicable Compliance Method:

Compliance with the short term PE limitation shall be determined by a one-time calculation of the potential to emit, based upon the worst case operating scenario. This calculation utilizes the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: truck unloading - 0.18 lb PE/t grain, and a maximum unloading rate of 900 tons of grain per hour. With 90% capture and 99% control utilizing a fabric filter, the maximum stack emissions are:

$$(0.18 \text{ lb/t})(900 \text{ t/hr})(0.90)(1-0.99) = 1.46 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

The combined stack emissions of PE from both dust collection systems serving this emissions unit shall not exceed 15.44 pounds per hour.

Applicable Compliance Method:

Compliance with this short term PE limitation shall be determined by a one-time calculation of the potential to emit, based upon the worst case operating scenario. This calculation utilizes the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: truck unloading - 0.18 lb PE/t grain, and a maximum unloading rate of 900 tons of grain per hour associated with each dust collection system. With 90% capture and 99% control utilizing a fabric filter, the maximum stack emissions are:

$$(0.18 \text{ lb/t})(2)(900 \text{ t/hr})(0.90)(1-0.99) = 2.92 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 1.89 tons per year from each stack serving this emissions unit.

Applicable Compliance Method:

Compliance with the annual PE limitation shall be determined using the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: truck unloading - 0.18 lb/t PE. With 90% capture and 99% control utilizing a fabric filter, the individual stack emissions are:

$$(0.18 \text{ lb/t})(T)(0.90)(1-0.99)(1 \text{ t}/2000 \text{ lb}) = \text{tons per year PE}$$

where T = annual throughput recorded in d)(3).

g) Miscellaneous Requirements

- (1) None.



6. P902, rail loading and unloading

Operations, Property and/or Equipment Description:

rail loading and unloading with full enclosure and fabric filtration systems, DCS#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. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-110 as issued November 13, 1978)	a) Particulate emissions (PE) shall not exceed 9.0 pounds per hour and 0.38 ton per year.  See b)(2)a.
b.	OAC rule 3745-17-07(A)(1)	See b)(2)b.
c.	OAC rule 3745-17-07(B)(1)	See b)(2)c.
d.	OAC rule 3745-17-08(B)	See b)(2)d.
e.	OAC rule 3745-17-11(B)(1)	See b)(2)e.
f.	40 CFR Part 60, Subpart DD	See b)(2)f.

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures for the purpose of ensuring compliance. The permittee has committed to the following to ensure compliance: the rail car loading and unloading operations shall be enclosed by a four-sided structure with a roof and vented to a fabric filter(s).
- b. The visible particulate emissions from each stack servicing this emissions unit shall not exceed twenty per cent opacity as a six-minute average, except as provided by rule.
- c. The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty per cent opacity as a three-minute average.
- d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- f. This emissions unit is not subject to the requirements of this regulation as construction commenced prior to August 3, 1978.

c) Operational Restrictions

- (1) The permittee shall operate the fabric filter(s) associated with each railcar loading and unloading operation whenever the respective process is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records that document any time periods when a fabric filter was not in service when the associated process(es) was (were) in operation.
- (2) The permittee shall maintain annual records of the throughput.
- (3) The permittee shall perform daily checks, when one (or more) railcar loading and unloading process(es) is in operation and when the weather conditions allow, for any visible particulate emissions from each applicable stack and for any visible fugitive particulate emissions from any applicable egress points (i.e., doors, openings, etc.) serving the respective operation. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (4) By January 31<sup>st</sup> of each year, the permittee shall calculate the annual PE stack emissions using the procedure specified in f)(1)d.

e) Reporting Requirements

- (1) The permittee shall notify the Director (the Toledo Division of Environmental Services) in writing of any daily record showing that a fabric filter was not in service when the associated material handling operation was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Toledo Division of Environmental Services) on a semi-annual basis.
- (2) The permittee shall submit Permit Evaluation Reports that identify any exceedances of the rolling, 12-month throughput limitation.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(3) above:
  - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The visible particulate emissions from each stack serving this emissions unit shall not exceed twenty per cent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty per cent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE shall not exceed 9.0 pounds per hour.

Applicable Compliance Method:

Compliance with the short term PE limitation shall be determined by a one-time calculation of the potential to emit, based upon the worst case operating scenario. This calculation utilizes the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: truck unloading - 0.032 lb PE/t grain, and a maximum unloading rate of 1250 tons of grain per hour. With 90% capture and 99% control utilizing a fabric filter, the maximum stack emissions are:

$$0.032 \text{ lb/t} (1250 \text{ t/hr})(0.98)(1-0.99) = 0.39 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A.



d. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.38 tons per year from each stack serving this emissions unit.

Applicable Compliance Method:

Compliance with the annual PE limitation for shall be determined using the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: railcar unloading - 0.032 lb/t PE. With 98% capture and 99% control utilizing a fabric filter, the overall stack emissions are:

$$(0.032 \text{ lb/t})(T)(0.98)(1-0.99)(1 \text{ t}/2000 \text{ lb}) = \text{tons per year PE}$$

where T = annual throughput recorded in d)(2).

g) Miscellaneous Requirements

(1) None.



7. P905, Transferring, conveying, screening, and cleaning

Operations, Property and/or Equipment Description:

1,000 tons per hour elevating legs, conveyors, belts, distributor, scale and enclosed cleaners constituting the transfer and conveying processes at this facility, equipped with full enclosure and fabric filters, DCS#1 & DHS#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. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Table with 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include OAC rules 3745-31-05(A)(3), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1), and 40 CFR Part 60, Subpart DD.

- (2) Additional Terms and Conditions
- a. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
  - b. The visible particulate emissions from each stack serving this emissions unit shall not exceed twenty per cent opacity as a six-minute average, except as provided by rule.
  - c. The visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
  - d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
  - e. This emissions unit is not subject to the requirements of this regulation as construction commenced prior to August 3, 1978.
- c) Operational Restrictions
- (1) The permittee shall operate the fabric filter(s) associated with each railcar loading and unloading operation whenever the respective process is in operation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain daily records that document any time periods when a fabric filter was not in service when the associated process(es) was (were) in operation.
  - (2) The permittee shall maintain monthly records of the following information:
    - a. the throughput rate for each month; and
    - b. the rolling, 12-month summation of the throughput rates.
  - (3) The permittee shall perform daily checks, when one (or more) railcar loading and unloading process(es) is in operation and when the weather conditions allow, for any visible particulate emissions from each applicable stack and for any visible fugitive particulate emissions from any applicable egress points (i.e., doors, openings, etc.) serving the respective operation. 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 identify in the Permit Evaluation Report any daily record showing that a fabric filter was not in service when the associated material handling operation was in operation.
- (2) The permittee shall identify in the Permit Evaluation Report any exceedances of the annual PE limitation.
- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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.
- (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(3) above:
  - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

f) Testing Requirements

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

a. Emission Limitation:

The visible particulate emissions from each stack serving this emissions unit shall not exceed twenty per cent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

The visible particulate emissions of fugitive dust from this emissions unit shall not exceed twenty per cent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE shall not exceed 4.9 pounds per hour from DCS#1.

Applicable Compliance Method:

Compliance with the short term PE limitation shall be determined by a one-time calculation of the potential to emit, based upon the worst case operating scenario. This calculation utilizes the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: transferring and conveying - 0.061 lb PE/t grain, and a maximum unloading rate of 1000 tons of grain per hour. With 99% capture and 99% control utilizing a fabric filter, the maximum stack emissions are:

$$0.061 \text{ lb/t} (1000 \text{ t/hr})(0.99)(1-0.99) = 0.60 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

PE shall not exceed 4.15 tons per year from DCS#1.

Applicable Compliance Method:

Compliance with the short term PE limitation shall be determined by a one-time calculation of the potential to emit, based upon the worst case operating

scenario. This calculation utilizes the emission factors and procedures specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 9.9.1-1: transferring and conveying - 0.061 lb PE/t grain, and a maximum unloading rate of 8.76 million tons of grain per year. With 99% capture and 99% control utilizing a fabric filter, the maximum stack emissions are:

$$0.061 \text{ lb/t} (8,760,000 \text{ t/yr})(0.99)(1-0.99)(1 \text{ t}/2000 \text{ lb}) = 2.65 \text{ t/yr}$$

If required, the permittee shall demonstrate compliance with the AP-42 emissions factor through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(10).

e. Emission Limitation:

PE shall not exceed 0.1 pound per hour from DHS#1.

Applicable Compliance Method:

Compliance with the pound per hour PE limitation may be determined by the following calculation. An emission factor for pneumatic conveying of grain dust to a bin is not available, so the AP-42 emission factor from table 11.17-4 dated 2/98 for pneumatic loading of lime to an enclosed truck (0.61 lb/ton) may be used. With 10% capture, 99% control, and a maximum dust handling rate of 2.325 tons per hour, the maximum stack emissions are:

$$0.61 \text{ lb/ton}(2.325 \text{ tons/hr})(1-0.99)=0.014 \text{ lb/hr}$$

If required, the permittee shall demonstrate compliance shall establish a site specific emissions factor through emission testing performed in accordance with Methods 1 thru 5 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

PE shall not exceed 0.10 ton per year from DHS#1.

Applicable Compliance Method:

Compliance may be determined by the following one-time calculation. Multiply the maximum hourly particulate emissions from f(1)(f). (0.014 lb/hr) by 8760 hours per year of operation and divide by 2,000 pounds per ton

g) Miscellaneous Requirements

(1) None.