



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

7/27/2016

Certified Mail

Mr. Joshua Carney  
Case Farms, LLC  
4001 Millennium Blvd SE  
Massillon, OH 44646

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1576135001  
Permit Number: P0120626  
Permit Type: Administrative Modification  
County: Stark

Dear Permit Holder:

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

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

**How to appeal this permit**

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

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

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

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

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

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

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

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

## **What should you do if you notice a spill or environmental emergency?**

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Canton City Health Department at (330)489-3385 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.  
Assistant Chief, Permitting Section, DAPC

Cc: Canton



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Case Farms, LLC**

Facility ID:	1576135001
Permit Number:	P0120626
Permit Type:	Administrative Modification
Issued:	7/27/2016
Effective:	7/27/2016
Expiration:	5/26/2019





**Division of Air Pollution Control  
Permit-to-Install and Operate**

for  
Case Farms, LLC

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**Final Permit-to-Install and Operate**  
Case Farms, LLC  
**Permit Number:** P0120626  
**Facility ID:** 1576135001  
**Effective Date:** 7/27/2016

## Authorization

Facility ID: 1576135001  
Application Number(s): M0003873  
Permit Number: P0120626  
Permit Description: Facility-initiated Administrative Modification permit to change maximum process rates/voluntary restrictions for existing equipment at an animal feed manufacture operation as part of the plant expansion project.  
Permit Type: Administrative Modification  
Permit Fee: \$4,000.00  
Issue Date: 7/27/2016  
Effective Date: 7/27/2016  
Expiration Date: 5/26/2019  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Case Farms, LLC  
4001 Millennium Blvd SE  
Massillon, OH 44646

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

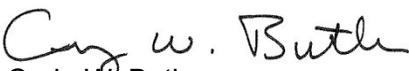
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Canton City Health Department  
420 Market Avenue  
Canton, OH 44702-1544  
(330)489-3385

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0120626

Permit Description: Facility-initiated Administrative Modification permit to change maximum process rates/voluntary restrictions for existing equipment at an animal feed manufacture operation as part of the plant expansion project.

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>P001</b>
Company Equipment ID:	EP1
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	EP2
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	EP3
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P004</b>
Company Equipment ID:	EP4
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P005</b>
Company Equipment ID:	EP5
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P006</b>
Company Equipment ID:	EP6
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P007</b>
Company Equipment ID:	EP7
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P010</b>
Company Equipment ID:	EP10
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P011</b>
Company Equipment ID:	EP11
Superseded Permit Number:	P0104074
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Case Farms, LLC  
**Permit Number:** P0120626  
**Facility ID:** 1576135001  
**Effective Date:** 7/27/2016

**Emissions Unit ID:** **P012**  
Company Equipment ID: EP12A  
Superseded Permit Number: P0104074  
General Permit Category and Type: Not Applicable

**Emissions Unit ID:** **P013**  
Company Equipment ID: EP12B  
Superseded Permit Number: P0104074  
General Permit Category and Type: Not Applicable



**Final Permit-to-Install and Operate**  
Case Farms, LLC  
**Permit Number:** P0120626  
**Facility ID:** 1576135001  
**Effective Date:** 7/27/2016

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

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

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

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

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

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

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

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

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

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

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



**Final Permit-to-Install and Operate**  
Case Farms, LLC  
**Permit Number:** P0120626  
**Facility ID:** 1576135001  
**Effective Date:** 7/27/2016

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



**Final Permit-to-Install and Operate**

Case Farms, LLC

**Permit Number:** P0120626

**Facility ID:** 1576135001

**Effective Date:** 7/27/2016

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 Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart DDDDDDD, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Prepared Feeds Manufacturing. At this time, the Ohio EPA is not accepting delegation for area sources subject to the Maximum Achievable Control Technology NESHAP (MACT) rules. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov/> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.



**Final Permit-to-Install and Operate**  
Case Farms, LLC  
**Permit Number:** P0120626  
**Facility ID:** 1576135001  
**Effective Date:** 7/27/2016

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

**1. P001, EP1**

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

Truck receiving pit with negative air system connected to fabric filter: Dry ingredients (softstocks, whole grain, etc) unloaded from trucks via gravity into truck pit, then transferred to storage bins (separate EU) using bucket elevator, drag conveyor and turnhead. The maximum instantaneous unloading rate is 249 tons per hour. Dust laden discharge air is vented to bin vent style bag filter. The filter fines are returned to the product stream.

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. b)(1)a., b)(1)c., and b)(2)c..

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.0006 pounds/hour and 0.0005 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 60.9 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
- i. the truck unloading pit shall be located in a four-sided building with roof and equipped with operable truck entrance and exit doors.
  - ii. the enclosure and emission unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.
  - iii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iv. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - v. the operational restrictions listed in section c).

- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.
  - c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c) Operational Restrictions
- (1) The maximum rate of grain unloading through this emission unit shall not exceed 364,000 tons per year.
  - (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
  - (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
  - a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per "a", the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "a";
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per "b", the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "b";
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per "c", the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "c".
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;
- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.
- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of grain handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.0006 lb/hr and 0.0005 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (364,000tons grains/yr) (0.0025 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.999)

=0.0005 tons/yr

maximum actual controlled emission rate (lb/hr)

= (249 tons grain/hr) (0.0025 lb PM10/ton grain) (1 -0.999)

= 0.0006 lb/hr

Where,

364,000 tons grain/yr is the projected actual grain handled,

249 tons grain/hr is the maximum instantaneous process rate

0.0025 lb PM10/ton grain is an uncontrolled Emissions Factor for PM10 from AP-42, Table 9.9.1-2, for grain receiving.

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit application A0055558 as the manufacturer's specification of the fabric filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 60.9 pounds per hour

Applicable Compliance Method:

Using equation  $E = 55 \times (P)^{0.11} - 40$  from Table I and Process weight rate (P),

P = 249 tons/hr maximum throughput provided in permit application A0055558



The emission limitation was calculated as follows:

$$E = (55 \times (249)^{0.11}) - 40 = 60.9 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 60.9 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 60.9 \text{ lb/hr} \times 8760 \text{ hr} \times (1 / 2000 \text{ lb}) = 266.8 \text{ TPY PE} > 0.0034 \text{ TPY PE}$$

$$0.0005 \text{ TPY PM}_{10} \text{ limit} \times (0.017 \text{ PE} / 0.0025 \text{ PM}_{10}) = 0.0034 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

f. Operational Restriction:

The maximum grain handling rate shall not exceed 364,000 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

g) Miscellaneous Requirements

- (1) None.

**2. P002, EP2**

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

Hammermill #2 with negative air system connected to fabric filter; product from the hammermill is discharged using a screw conveyor and bucket elevator. The instantaneous grinding rate is 52 tons per hour. Fines from fabric filter are turned to product stream.

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. b)(1)a., b)(1)b., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling requirements originally established in PTIO P0104074 and administratively modified in this permit]	0.03 pounds/hour and 0.06 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a..
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 11.7 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles
  - ii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of grain handling through this emissions unit shall not exceed 236,600 tons per year.
- (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
- (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per "a", the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "a";
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per "b", the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "b";
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per "c", the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "c".
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of grain handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.03 lb/hr and 0.06 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (236,600 tons grains/yr) (0.525 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.999)



=0.06 tons/yr

maximum actual controlled emission rate (lb/hr)

= (52 tons grain/hr) (0.525 lb PM10/ton grain) (1 - 0.999)

= 0.03 lb/hr

Where,

236,600 tons grain/yr is the projected actual grain handled

52 tons grain/hr is the maximum instantaneous process rate

0.525 lb PM10/ton grain is an uncontrolled Emissions Factor (from application A0055558 table E1)

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details).

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit

application A0055558 as the manufacturer’s specification of the vent filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 11.7 pounds per hour

Applicable Compliance Method:

Using equation  $E = 0.5782 \times (U)^{0.6456}$  from Figure II and the uncontrolled mass rate of emissions (U) as provided in permit application A0055558,

$$U = (2.10 \text{ lb PE/ton})(52 \text{ tons grain/hr}) = 109.2 \text{ lbs PE/hr,}$$

Where,

2.10 lb PE/ton is the uncontrolled emission factor (from application A0055558 table E1)

52 tons grain/hr is maximum throughput as provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = 0.5782 \times (109.2)^{0.6456} = 11.7 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 11.7 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 11.7 \text{ lb/hr} \times 8760 \text{ hr} \times (1 / 2000 \text{ lb}) = 51.2 \text{ TPY PE} > 0.24 \text{ TPY PE}$$

$$0.06 \text{ TPY PM}_{10} \text{ limit} \times (2.10 \text{ PE} / 0.525 \text{ PM}_{10}) = 0.24 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

e. Emission Limitation

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

f. Operational Restriction:

The maximum grain handling rate shall not exceed 236,600 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

g) Miscellaneous Requirements

(1) None.

**3. P003, EP3**

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

Mill receiving turnhead with negative air system connected to fabric filter; the mill receiving system receives dry ingredients from other EUs. The maximum instantaneous handling rate is 249 tons per hour. Fabric filter fines are returned to product stream.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.008 pounds/hour and 0.005 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08	The Best Available Technology (BAT) requirements under OAC rule 3745-31-

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[Less than 10 ton/yr BAT exemption]	05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 3.0 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and state modeling requirements:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.
  - ii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. the PM10 emissions shall not exceed the limits listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of grain handling through this emission unit shall not exceed 291,200 tons per year.
- (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
- (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of grain handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.008 lb/hr and 0.005 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (291,200 tons grains/yr) (0.034 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.999)

=0.005 tons/yr

maximum actual controlled emission rate (lb/hr)

= (249 tons grain/hr) (0.034 lb PM10/ton grain) (1 -0.999)

= 0.008 lb/hr

Where,

291,200 tons grain/yr is the projected actual grain handled,

249 tons grain/hr is the maximum instantaneous process rate

0.034 lb PM10/ton grain is an uncontrolled Emissions Factor (from application A0055558 table E1)

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit

application A0055558 as the manufacturer's specification of the vent filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 3.0 pounds per hour

Applicable Compliance Method:

Using equation  $E = 0.20 \times (U)$  from Figure II and the uncontrolled mass rate of emissions (U) as provided in permit application A0055558,

$$U = (0.061 \text{ lb PE/ton})(249 \text{ tons grain/hr}) = 15.2 \text{ lbs PE/hr,}$$

Where,

0.061 lb PE/ton is the uncontrolled emission factor (from application A0055558 table E1)

249 tons grain/hr is maximum throughput as provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = 0.20 \times (15.2) = 3.0 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 3.0 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit  $\times 8760 \times (1/2000)$ , which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 3.0 \text{ lb/hr} \times 8760 \text{ hr} \times (1/2000) = 13.1 \text{ TPY PE} > 0.009 \text{ TPY PE}$$

$$0.005 \text{ TPY PM}_{10} \text{ limit} \times (0.061 \text{ PE} / 0.034 \text{ PM}_{10}) = 0.009 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

e. Operational Restriction:

The maximum grain handling rate shall not exceed 291,200 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

f. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

**4. P004, EP4**

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

#1 Pneumatic truck receiving system: dry ingredients unloaded pneumatically using the supply truck's blower system; the maximum instantaneous unloading rate is 25 tons per hour; emissions controlled by a fabric filter located above ingredient bin. Fabric filter fines returned to product stream.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.175 pounds/hour and 0.036 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as	The Best Available Technology (BAT)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	effective 6/30/08  [Less than 10 ton/yr BAT exemption]	requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 16.2 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P01260626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles
  - ii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of dry ingredients handling through this emission unit shall not exceed 10,400 tons per year.
- (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
- (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of dry ingredients handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of dry ingredients handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.175 lb/hr and 0.036 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations.

The projected actual controlled emission rate (ton/yr)

= (10,400 tons grains/yr) (7.0 lb PM10/ton grain) (ton/ 2000lbs) (1-0.999)

=0.036 tons/yr



$$\begin{aligned} & \text{maximum actual controlled emission rate (lb/hr)} \\ & = (25 \text{ tons grain/hr}) (7.0 \text{ lb PM}_{10}/\text{ton grain}) (1-0.999) \\ & = 0.175 \text{ lb/hr} \end{aligned}$$

Where,

10,400 tons grain/yr is the projected actual grain handled,

25 tons grain/hr is the maximum instantaneous process rate

7.0 lb PM<sub>10</sub>/ton grain is an uncontrolled Emissions Factor (from application A0055558 table E1)

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit application A0055558 as the manufacturer's specification of the fabric filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 16.2 pounds per hour

Applicable Compliance Method:

Using equation  $E = 0.5782 \times (U)^{0.6456}$  from Figure II and the uncontrolled mass rate of emissions (U) as provided in permit application A0055558,

$$U = (7.0 \text{ lb PE/ton})(25 \text{ tons grain/hr}) = 175.0 \text{ lbs PE/hr,}$$

Where,

7.0 lb PE/ton is the uncontrolled emission factor (from application A0055558 table E1)



25 tons grain/hr is maximum throughput as provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = 0.5782 \times (175.0)^{0.6456} = 16.2 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 16.2 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) (which is equal to PE per the permit application), as shown below.

$$= 16.2 \text{ lb/hr} \times 8760 \text{ hr} \times (1/2000 \text{ lb}) = 71.0 \text{ TPY} > 0.036 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

f. Operational Restriction:

The maximum dry ingredients handling rate shall not exceed 10,400 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

g) Miscellaneous Requirements

- (1) None.

**5. P005, EP5**

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

#2 Pneumatic truck receiving system: dry ingredients unloaded pneumatically using the supply truck's blower system; the maximum instantaneous unloading rate is 25 tons per hour; emissions controlled by a fabric filter located above ingredient bin. Fabric filter fines returned to product stream.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.175 pounds/hour and 0.036 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 16.2 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles
  - ii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of dry ingredients handling through this emission unit shall not exceed 10,400 tons per year.
- (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
- (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of dry ingredients handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of dry ingredients handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.175 lb/hr and 0.036 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations.

The projected actual controlled emission rate (ton/yr)

= (10,400 tons grains/yr) (7.0 lb PM10/ton grain) (ton/ 2000lbs) (1-0.999)

=0.036 tons/yr

$$\begin{aligned} & \text{maximum actual controlled emission rate (lb/hr)} \\ & = (25 \text{ tons grain/hr}) (7.0 \text{ lb PM}_{10}/\text{ton grain}) (1-0.999) \\ & = 0.175 \text{ lb/hr} \end{aligned}$$

Where,

10,400 tons grain/yr is the projected actual grain handled,

25 tons grain/hr is the maximum instantaneous process rate

7.0 lb PM<sub>10</sub>/ton grain is an uncontrolled Emissions Factor (from application A0055558 table E1)

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit application A0055558 as the manufacturer's specification of the fabric filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 16.2 pounds per hour

Applicable Compliance Method:

Using equation  $E = 0.5782 \times (U)^{0.6456}$  from Figure II and the uncontrolled mass rate of emissions (U) as provided in permit application A0055558,

$$U = (7.0 \text{ lb PE/ton})(25 \text{ tons grain/hr}) = 175.0 \text{ lbs PE/hr,}$$

Where,

7.0 lb PE/ton is the uncontrolled emission factor (from application A0055558 table E1)



**Final Permit-to-Install and Operate**

Case Farms, LLC

**Permit Number:** P0120626

**Facility ID:** 1576135001

**Effective Date:** 7/27/2016

25 tons grain/hr is maximum throughput as provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = 0.5782 \times (175.0)^{0.6456} = 16.2 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 16.2 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) (which is equal to PE per the permit application), as shown below.

$$= 16.2 \text{ lb/hr} \times 8760 \text{ hr} \times (1/2000 \text{ lb}) = 71.1 \text{ TPY} > 0.036 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

f. Operational Restriction:

The maximum dry ingredients handling rate shall not exceed 10,400 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

g) Miscellaneous Requirements

- (1) None.

**6. P006, EP6**

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

Ground grain handling and storage with negative air system connected to fabric filter: Ground grain conveyed and discharged into storage bins. The maximum instantaneous handling rate is 52 tons per hour. Dust laden discharge air vented through fabric filter. Fines from fabric filter returned directly to storage bin.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.002 pounds/hour and 0.004 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 44.9 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles
  - ii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum ground grain handling rate shall not exceed 236,600 tons per year.
- (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
- (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
  - a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of ground grain handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of ground grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.002 lb/hr and 0.004 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (236,600 tons grains/yr) (0.034 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.999)

=0.004 tons/yr

maximum actual controlled emission rate (lb/hr)

= (52 tons grain/hr) (0.034 lb PM10/ton grain) (1 -0.999)

= 0.002 lb/hr

Where, as provided in the permit application A0055558,

236,600 tons grain/yr is the projected actual grain handled,

52 tons grain/hr is the maximum instantaneous process rate

0.034 lb PM10/ton grain is an uncontrolled Emissions Factor for PM10 from AP-42, Table 9.9.1-1,

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit

application A0055558 as the manufacturer’s specification of the vent filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 44.9 pounds per hour

Applicable Compliance Method:

Using equation  $E = 55 \times (P)^{0.11} - 40$  from Table I and Process weight rate (P),

P = 52 tons/hr maximum throughput provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = (55 \times (52)^{0.11}) - 40 = 44.9 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 44.9 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 44.9 \text{ lb/hr} \times 8760 \text{ hr} \times (1 / 2000 \text{ lb}) = 196.7 \text{ TPY} > 0.007 \text{ TPY PE}$$

$$0.004 \text{ TPY PM}_{10} \text{ limit} \times (0.061 \text{ PE} / 0.034 \text{ PM}_{10}) = 0.007 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

e. Operational Restriction:

The maximum ground grain handling rate shall not exceed 236,600 tons per year.



Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

f. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

**7. P007, EP7**

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

Mash handling, pelletizing, and pellet cooling system #1 for cooling and drying pellets after they are manufactured. The instantaneous pelleting rate is 70 tons per hour. Pellet cooler equipped with negative air system connected to cyclones. The cyclone separates air and fines, and the fines are returned to the product stream.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	2.6 pounds/hour and 6.77 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 47.8 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a high efficiency cyclone having a minimum control efficiency of 95% based on 10 micron and larger particles.
  - ii. There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of grain processed through this emissions unit shall not exceed 360,880 tons per year.
- (2) The emissions from this emissions unit shall be vented to the cyclone at all times the emissions unit is in operation.
- (3) The permittee shall maintain the cyclone in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the cyclone is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the cyclone shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
  - a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the cyclone. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the cyclone to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the cyclone and shall maintain the following information:

  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the cyclone.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the cyclone was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of grain processed through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the cyclone; and
  - d. value of total annual quantity of grain processed through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 2.6 lb/hr and 6.77 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (360,880 tons grains/yr) (0.75 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.95)

=6.77 tons/yr

maximum actual controlled emission rate (lb/hr)

= (70 tons grain/hr) (0.75 lb PM10/ton grain) (1 -0.95)

= 2.6 lb/hr

Where,

360,880 tons grain/yr is the projected actual grain handled,

70 tons grain/hr is the maximum instantaneous process rate

0.75 lb PM10/ton grain is an uncontrolled Emissions Factor (from application A0055558 table E1)

0.95 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a high efficiency cyclone having a minimum control efficiency of 95% based on 10 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 95% was provided in permit

application A0055558 as the manufacturer's specification of the cyclone control device.

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.95 = 0.95 \rightarrow 95\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 47.8 pounds per hour

Applicable Compliance Method:

Using equation  $E = 55 \times (P)^{0.11} - 40$  from Table I and Process weight rate (P),

P = 70 tons/hr maximum throughput provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = (55 \times (70)^{0.11}) - 40 = 47.8 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 47.8 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 47.8 \text{ lb/hr} \times 8760 \text{ hr} \times (1 / 2000 \text{ lb}) = 209.4 \text{ TPY} > 13.5 \text{ TPY PE}$$

$$6.77 \text{ TPY PM}_{10} \text{ limit} \times (0.15 \text{ PE} / 0.075 \text{ PM}_{10}) = 13.5 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

e. Operational Restriction:

The maximum grain processing rate shall not exceed 360,880 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

f. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) **Miscellaneous Requirements**

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

**8. P010, EP10**

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

Finish Feed Load Out Area #1: Finish feed is loaded onto trucks to be delivered to customers. The feed is transferred from the storage bins via closed spouting and bulk hopper and then gravity transferred to the truck. The maximum instantaneous truck loading rate is 400 tons per hour. Flexible dust sock used to minimize air contact while feed falls from the bulk hopper into the truck. Operation contained in 4 sided concrete enclosure with 2 truck openings for entrance/exit.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.032 pounds/hour and 0.015 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(B)	This emissions unit is exempt from the visible particulate emission limitations for fugitive dust specified in OAC rule 3745-17-07(B) pursuant to 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-08(B)	This emissions unit is not located in an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)
f.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 66.3 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the finished feed shall be transferred from the storage bins to a bulk hopper utilizing closed spouting. Transfer of feed from the bulk hopper to trucks shall be through flexible socks to minimize escape of dust. The truck loading process shall be located in a four (4) sided enclosure designed to have an overall control efficiency of 90%.
  - ii. Visible emissions of fugitive dust from this emission unit shall not exceed 20% opacity as a 3-minute average.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.

- iv. the operational restrictions listed in section c).
  - b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.
  - c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c) Operational Restrictions
- (1) The maximum rate of finished feed handling through this emission unit shall not exceed 364,000 tons per year.
  - (2) The emissions unit shall be contained in a 4-sided enclosure and use a flexible dust sock at all times the emissions unit is in operation.
  - (3) The permittee shall maintain the flexible dust sock and 4-sided enclosure in proper working condition. In the event the flexible dust sock and/or enclosure is not in proper working condition, it shall be expeditiously repaired or otherwise returned to proper working condition.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate 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 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 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 checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the fugitive egress points in 10 consecutive daily checks performed per "a", the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "a";
  - c. Monthly: If no visible emissions are detected from the fugitive egress points in 4 consecutive weekly checks performed per "b", the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "b";
  - d. Quarterly: If no visible emissions are detected from the fugitive egress points in 3 consecutive monthly checks performed per "c", the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "c".
- (3) The permittee shall conduct periodic inspections of the flexible dust sock and enclosure to determine whether it is in proper working condition. These inspections shall be performed at no less than once per quarter.

The permittee shall document each inspection of the flexible dust sock and enclosure and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (4) The permittee shall maintain daily and annual (in tons per year) records of the quantity of finished feed handled through this emissions unit.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio



EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions; and
  - c. value of total annual quantity of finished feed handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

PM10 emissions shall not exceed 0.032 lb/hr and 0.015 tpy.

- a. Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

$$\begin{aligned} &\text{The projected actual controlled emission rate (ton/yr)} \\ &= (364,000 \text{ tons grains/yr}) (0.0008 \text{ lb PM10/ton grain}) (\text{ton/ } 2000\text{lbs}) (1 - 0.90) \end{aligned}$$

$$= 0.015 \text{ tons/yr}$$

maximum actual controlled emission rate (lb/hr)

$$= (400 \text{ tons grain/hr}) (0.0008 \text{ lb PM10/ton grain}) (1 - 0.90)$$

$$= 0.032 \text{ lb/hr}$$

Where,

364,000 tons grain/yr is the projected actual grain handled,

400 tons grain/hr is the maximum instantaneous process rate

0.0008 lb PM10/ton grain is an uncontrolled Emissions Factor for PM10 from AP-42, Table 9.9.1-2, from Feed Shipping

0.90 is the capture efficiency of the enclosure (90%) expressed as a decimal.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Operational Restriction:

The maximum finished feed handling rate shall not exceed 364,000 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(4).

c. Emission Limitation:

Particulate emissions (PE) shall not exceed 66.3 pounds per hour

Applicable Compliance Method:

Using equation  $E = 55 \times (P)^{0.11} - 40$  from Table I and Process weight rate (P),

P = 400 tons/hr maximum throughput provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = (55 \times (400)^{0.11}) - 40 = 66.3 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 66.3 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 66.3 \text{ lb/hr} \times 8760 \text{ hr} \times (1 / 2000 \text{ lb}) = 290.4 \text{ TPY} > 0.06 \text{ TPY PE}$$

$$0.015 \text{ TPY PM}_{10} \text{ limit} \times (0.003 \text{ PE} / 0.0008 \text{ PM}_{10}) = 0.06 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

d. Control Requirement:

The finished feed shall be transferred from the storage bins to a bulk hopper utilizing closed spouting. Transfer of feed from the bulk hopper to trucks shall be

through flexible socks to minimize escape of dust. The truck loading process shall be located in a four (4) sided enclosure designed to have an overall control efficiency of 90%

Applicable Compliance Method:

The 90% overall efficiency was supplied by permittee in application A0055558 (based on a December 2000 Technical Guidance Package for Feed mills published by the Texas Natural Resource Conservation Commission).

Ongoing compliance with the control efficiency limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(4).

e. Emission Limitation:

Visible emissions of fugitive dust from this emission unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 90% control efficiency value in this permit proposed in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

**9. P011, EP11**

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

Rail and truck receiving pit: covered hopper rail cars and trucks unload dry ingredients (whole grain, softstocks, etc) via gravity into a shallow dump pit. Material in pit transferred through enclosed conveyance system and bucket elevator to storage silos/bins (separate EU). The maximum instantaneous unloading rate is 280 tons per hour. Operation contained in 4 sided metal enclosure with 2 rail/truck openings for entrance/exit.

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. b)(1)a., b)(1)c., and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.10 pounds/hour and 0.07 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(B)	This emissions unit is exempt from the visible particulate emission limitations for fugitive dust specified in OAC rule 3745-17-07(B) pursuant to 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-08(B)	This emissions unit is not located in an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)
f.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 62.2 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the railcar/truck unloading pit shall be located in a four-sided building with roof. The entrance and exit openings shall be equipped with air curtain strips. Fugitive emissions shall be minimized by using "choke feeding" from hopper bottom railcars/trucks into a shallow pit designed to have an overall control efficiency of 85.5%.
  - ii. Visible emissions of fugitive dust from this emission unit shall not exceed 20% opacity as a 3-minute average.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.

- iv. the operational restrictions listed in section c).
  - b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.
  - c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c) Operational Restrictions
- (1) The maximum rate of grain unloaded through this emission unit shall not exceed 364,000 tons per year.
  - (2) The emissions unit shall be contained in a 4-sided enclosure and use choke feeding at all times the emissions unit is in operation.
  - (3) The permittee shall maintain the choke feeding system and 4-sided enclosure in proper working condition. In the event the enclosure and/or choke feeding system is not in proper working condition, it shall be expeditiously repaired or otherwise returned to proper working condition.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate 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 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 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 checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the fugitive egress points in 10 consecutive daily checks performed per "a", the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "a";
  - c. Monthly: If no visible emissions are detected from the fugitive egress points in 4 consecutive weekly checks performed per "b", the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "b";
  - d. Quarterly: If no visible emissions are detected from the fugitive egress points in 3 consecutive monthly checks performed per "c", the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "c".
- (3) The permittee shall conduct periodic inspections of the enclosure and choke feeding system to determine whether it is in proper working condition. These inspections shall be performed at no less than once per quarter.

The permittee shall document each inspection of the enclosure and choke feeding system and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (4) The permittee shall maintain daily and annual records (in tons per year) of the quantity of grain unloaded through this emissions unit.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio

EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
- a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions; and
  - c. value of total annual quantity of grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the allowable emission limitations in section 11.b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Control Requirement:

The railcar/truck unloading pit shall be located in a four-sided building with roof. The entrance and exit openings shall be equipped with air curtain strips. Fugitive emissions shall be minimized by using "choke feeding" from hopper bottom railcars/trucks into a shallow pit designed to have an overall control efficiency of 85.5%.

Applicable Compliance Method:

The 85.5% overall efficiency was supplied by permittee in application A0055558 (based on a December 2000 Technical Guidance Package for Feed mills published by the Texas Natural Resource Conservation Commission).

Ongoing compliance with the control efficiency limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(4).

b. Emission Limitation:

PM10 emissions shall not exceed 0.10 lb/hr and 0.07 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (364,000 tons grains/yr) (0.0025 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.855)

=0.07 tons/yr  
 maximum actual controlled emission rate (lb/hr)  
 = (280 tons grain/hr) (0.0025 lb PM10/ton grain) (1 - 0.855)  
 = 0.10 lb/hr

Where,

364,000 tons grain/yr is the projected actual grain handled,

280 tons grain/hr is the maximum instantaneous process rate

0.0025 lb PM10/ton grain is an uncontrolled Emissions Factor for PM10 from AP-42, Table 9.9.1-1, from grain receiving.

0.855 combined capture efficiency (85.5%) of the shallow pit, building enclosure, the choke feed rate, and high conveyance speed, expressed as a decimal.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

c. Emission Limitation:

Particulate emissions (PE) shall not exceed 62.2 pounds per hour

Applicable Compliance Method:

Using equation  $E = 55 \times (P)^{0.11} - 40$  from Table I and Process weight rate (P),

P = 280 tons/hr maximum throughput provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = (55 \times (280)^{0.11}) - 40 = 62.2 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 62.2 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 62.2 \text{ lb/hr} \times 8760 \text{ hr} \times (1 / 2000 \text{ lb}) = 272.4 \text{ TPY} > 0.48 \text{ TPY PE}$$

$$0.07 \text{ TPY PM10 limit} \times (0.017 \text{ PE} / 0.0025 \text{ PM10}) = 0.48 \text{ TPY PE}$$



Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

d. Operational Restriction:

The maximum grain handling rate shall not exceed 364,000 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(4).

e. Emission Limitation:

Visible emissions of fugitive dust from this emission unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 85.5% control efficiency value in this permit proposed in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

g) **Miscellaneous Requirements**

- (1) None.

**10. P012, EP12A**

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

Whole grain storage silos No. 101, 102, 103. Two concrete hopper bottom grain storage silos each (21' x 161') and one integral interstice silo. Total capacity of 75,846 bushels. Instantaneous fill rate is a maximum of 560 tons per hour combined. These 3 silos vent to a common bin vent style bag filter to vent dust laden discharge air during fill/reclaim operations. Fines are returned to bin.

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. b)(1)a., b)(1)c. and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.004 pounds/hour and 0.0015 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 2.8 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.
  - ii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of grain handling through this emission unit shall not exceed 473,200 tons per year.
- (2) The emissions from this emissions unit shall be vented to the fabric filter baghouse at all times the emissions unit is in operation.
- (3) The permittee shall maintain the fabric filter baghouse in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the fabric filter baghouse is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the fabric filter baghouse shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
- a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per "a", the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "a";
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per "b", the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "b";
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per "c", the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in "c".
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the fabric filter baghouse to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the fabric filter baghouse and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the fabric filter baghouse was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of grain handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the fabric filter baghouse; and
  - d. value of total annual quantity of grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.004 lb/hr and 0.0015 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (473,200 tons grains/yr) (0.0063 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.999)

=0.0015 tons/yr

maximum actual controlled emission rate (lb/hr)

= (560 tons grain/hr) (0.0063 lb PM10/ton grain) (1 -0.999)

= 0.004 lb/hr

Where,

473,200 tons grain/yr is the projected actual grain handled,

560 tons grain/hr is the maximum instantaneous process rate

0.0063 lb PM10/ton grain is an uncontrolled Emissions Factor for PM10 from AP-42, Table 9.9.1-2, from Storage bins.

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a fabric filter baghouse having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit

application A0055558 as the manufacturer's specification of the vent filter control device

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 2.8 pounds per hour

Applicable Compliance Method:

Using equation  $E = 0.2 \times U$  from Figure II and the uncontrolled mass rate of emissions (U) as provided in permit application A0055558,

$$U = (0.025 \text{ lb PE/ton})(560 \text{ tons grain/hr}) = 14.0 \text{ lbs PE/hr,}$$

Where,



0.025 lb PE/ton is the uncontrolled emission factor from AP-42 Table 9.9.1-1 for PE from Storage bins provided in permit application A0055558.

560 tons grain/hr is maximum throughput as provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = 0.2 \times 14.0 = 2.8 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 2.8 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 2.8 \text{ lb/hr} \times 8760 \text{ hr} \times (1/2000) = 12.3 \text{ TPY} > 0.006 \text{ TPY PE}$$

$$0.0015 \text{ TPY PM}_{10} \text{ limit} \times (0.025 \text{ PE} / 0.0063 \text{ PM}_{10}) = 0.006 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

f. Operational Restriction:

The maximum ground grain handling rate shall not exceed 473,200 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

g) Miscellaneous Requirements

- (1) None.

**11. P013, EP12B**

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

Whole grain storage silos No. 104, 105: Two metal hopper bottom grain storage bins each (36' x 88'-2"). Total capacity of 116,468 bushels. Instantaneous fill rate is a maximum of 560 tons per hour combined. Each bin will have vent style bag filters to vent dust laden discharge air during fill/reclaim operations. Fines are returned to bin.

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. b)(1)a., b)(1)c. and b)(2)c.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(E)  [Voluntary restrictions to avoid BAT and State modeling originally established in PTIO P0104074 and administratively modified in this permit]	0.004 pounds/hour and 0.0007 tons/year of Particulate Matter 10 microns or less (PM10).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) as effective 6/30/08  [Best Available Technology (BAT) requirements re-expressed in this permit]	BAT has been determined to be equivalent to the voluntary restriction established pursuant to OAC rule 3745-31-05(E).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08  [Less than 10 ton/yr BAT exemption]	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the voluntary restriction established pursuant to OAC rule 3745-31-05(E).  See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, accept as provided by rule.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 2.8 lb PE/hr  The emissions limitation specified by this rule is less stringent than the limitation specified by OAC rule 3745-31-05(E).

(2) Additional Terms and Conditions

- a. PTIO P0120626 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and to avoid State modeling requirements for PM10:
  - i. the emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a vent bag filter having a minimum control efficiency of 99.9% based on 2 micron and larger particles
  - ii. there shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.
  - iii. the PM10 emissions shall not exceed the limitations listed in b)(1)a.
  - iv. the operational restrictions listed in section c).
- b. The Best Available Technology (BAT) requirements in b)(1)a. above apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the State Implementation Plan (SIP) for Ohio.

- c. The exemptions described in b)(1)b. above apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c) Operational Restrictions

- (1) The maximum rate of grain handling through this emission unit shall not exceed 208,000 tons per year.
- (2) The emissions from this emissions unit shall be vented to the vent bag filters at all times the emissions unit is in operation.
- (3) The permittee shall maintain the vent bag filters in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). In the event the vent bag filters are not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, the vent bag filters shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform checks per the frequency specified in term d)(2) below, 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 fugitive particulate emissions from any non-stack egress point (e.g. conveyors, piping, enclosures, 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 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 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.

- (2) The checks required by term d)(1) above shall be performed in accordance with the following frequency schedule:
  - a. Daily: Perform once per day, on each day the emissions unit is in operation, during the time the emissions unit is operating;
  - b. Weekly: If no visible emissions are detected from the stack and fugitive egress points in 10 consecutive daily checks performed per “a”, the permittee may decrease the frequency to conduct the checks once every 5 days of operation of the emission unit (one calendar week). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “a”;
  - c. Monthly: If no visible emissions are detected from the stack and fugitive egress points in 4 consecutive weekly checks performed per “b”, the permittee may decrease the frequency to conduct the checks once every 21 days of operation of the emission unit (one calendar month). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “b”;
  - d. Quarterly: If no visible emissions are detected from the stack and fugitive egress points in 3 consecutive monthly checks performed per “c”, the permittee may decrease the frequency to conduct the checks once every 60 days of operation of the emission unit (3 calendar months). If visible stack or fugitive emissions are detected during these checks, the permittee must resume the checks per the frequency in “c”.
- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the fabric filter baghouse. These documents shall be maintained at the facility.
- (4) The permittee shall conduct periodic inspections of the vent bag filters to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency.

The permittee shall document each inspection (periodic and annual) of the vent bag filters and shall maintain the following information:

- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.
- (5) The permittee shall record any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the vent bag filters.

- (6) The permittee shall record any period of time (start time and date, and end time and date) during which the vent bag filters was/were not operated according to the manufacturer's recommendations while the emission unit was operating.
- (7) The permittee shall maintain daily and annual (in tons per year) records of the quantity of grain handled through this emissions unit.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Canton City Health Department, Air Pollution Control Division 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements in section d) above:
  - a. all days during which any visible particulate emissions were observed;
  - b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
  - c. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the vent bag filter(s); and
  - d. value of total annual quantity of grain handled through this emissions unit in tons per year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PM10 emissions shall not exceed 0.004 lb/hr and 0.0007 tpy.

Applicable Compliance Method:

The emission limitations were established per the following calculations based on the information provided in the permit application A0055558.

The projected actual controlled emission rate (ton/yr)

= (208,000 tons grains/yr) (0.0063 lb PM10/ton grain) (ton/ 2000lbs) (1 - 0.999)



=0.0006552 rounded to 0.0007 tons/yr

maximum actual controlled emission rate (lb/hr)

= (560 tons grain/hr) (0.0063 lb PM10/ton grain) (1 -0.999)

= 0.004 lb/hr

Where,

208,000 tons grain/yr is the projected actual grain handled,

560 tons grain/hr is the maximum instantaneous process rate

0.0063 lb PM10/ton grain is an uncontrolled Emissions Factor for PM10 from AP-42, Table 9.9.1-2, from Storage bins

0.999 is the overall control efficiency expressed as a decimal fraction (see f)(1)c. for details)

If required, the permittee shall demonstrate compliance with the hourly stack emissions rate by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Ongoing compliance with the ton/yr limitation above is assumed provided compliance is demonstrated with the operational restrictions listed in section c) through the monitoring and recordkeeping listed in section d).

b. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

c. Control Requirement:

The emissions unit shall exhaust to a dust control system having a 100% capture efficiency and a vent bag filter having a minimum control efficiency of 99.9% based on 2 micron and larger particles.

Applicable Compliance Method:

The capture efficiency of 100% was supplied by facility calculations in permit application A0055558 and the control efficiency of 99.9% was provided in permit

application A0055558 as the manufacturer's specification of the vent bag filter control device.

These two values are multiplied together to get an overall control efficiency as follows:

$$1.00 * 0.999 = 0.999 \rightarrow 99.9\%$$

Ongoing compliance with the capture and control efficiency limitations above is assumed provided compliance is demonstrated with the operational restrictions listed in terms c)(2) and c)(3) through the monitoring and recordkeeping listed in terms d)(3)-(6).

d. Emission Limitation:

There shall be no visible emissions of fugitive dust emitted from this emissions unit and/or the area immediately above the capture system serving this emissions unit.

Applicable Compliance Method:

The emission limitation was established to be used as ongoing compliance monitoring for the 100% capture efficiency percent value provided in the permit application.

Ongoing compliance shall be based upon the monitoring and recordkeeping requirements specified in terms d)(1)-(2).

For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress points from the building or enclosure housing this emissions unit. These egress points shall include, but not be limited to, piping, conveyors, seams, doorways, windows, and roof monitors.

If required, compliance with the visible emissions limitation of fugitive dust shall be determined in accordance with U.S. EPA Method 22 of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

Particulate emissions (PE) shall not exceed 2.8 pounds per hour

Applicable Compliance Method:

Using equation  $E = 0.2 \times U$  from Figure II and the uncontrolled mass rate of emissions (U) as provided in permit application A0055558,

$$U = (0.025 \text{ lb PE/ton})(560 \text{ tons grain/hr}) = 14.0 \text{ lbs PE/hr,}$$

Where,



0.025 lb PE/ton is the uncontrolled emission factor from AP-42 Table 9.9.1-1 for PE from Storage bins provided in permit application A0055558.

560 tons grain/hr is maximum throughput as provided in permit application A0055558

The emission limitation was calculated as follows:

$$E = 0.2 \times 14.0 = 2.8 \text{ lb PE /hr}$$

If required, compliance with the particulate emissions limit of 2.8 pounds per hour shall be determined in accordance with U.S. EPA Methods 1 through 5 of 40 CFR Part 60 Appendix A.

The annual emissions based on this allowable rate would be equal to the hourly limit x 8760 x (1/2000), which is more than the TPY limit pursuant to OAC 3745-31-05(E) converted to PE (using an emission factor ratio), as shown below.

$$= 2.8 \text{ lb/hr} \times 8760 \text{ hr} \times (1/2000) = 12.3 \text{ TPY} > 0.28 \text{ TPY}$$

$$0.0007 \text{ TPY PM}_{10} \text{ limit} \times (0.025 \text{ PE} / 0.0063 \text{ PM}_{10}) = 0.0028 \text{ TPY PE}$$

Therefore, compliance with this limit is assumed provided compliance is demonstrated with the limit pursuant to OAC 3745-31-05(E).

f. Operational Restriction:

The maximum ground grain handling rate shall not exceed 208,000 tons per year.

Applicable Compliance Method:

The production limitations were included in the permit application A0055558 to avoid modeling.

Compliance is based on the monitoring and recordkeeping in term d)(7).

g) Miscellaneous Requirements

- (1) None.