



7/18/2014

Certified Mail

Melissa Farrington
MINERAL PROCESSING
PO Box 119
Maumee, OH 43537

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0388000025
Permit Number: P0117054
Permit Type: Renewal
County: Wyandot

Dear Permit Holder:

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

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

Please complete a survey at 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 by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NWDO



FINAL

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

Facility ID:	0388000025
Permit Number:	P0117054
Permit Type:	Renewal
Issued:	7/18/2014
Effective:	7/18/2014
Expiration:	4/17/2019



Division of Air Pollution Control
Permit-to-Install and Operate
for
MINERAL PROCESSING

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit?	4
3. What records must I keep under this permit?	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application?	4
6. What happens to this permit if my project is delayed or I do not install or modify my source?	5
7. What reports must I submit under this permit?	5
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?	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently?	6
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?	7
15. What happens if a portion of this permit is determined to be invalid?	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions	10
1. P901, Mineral Processing Line.....	11



Final Permit-to-Install and Operate
MINERAL PROCESSING
Permit Number: P0117054
Facility ID: 0388000025
Effective Date: 7/18/2014

Authorization

Facility ID: 0388000025
Application Number(s): A0050193
Permit Number: P0117054
Permit Description: Renewal FEPTIO for a mineral processing operation.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 7/18/2014
Effective Date: 7/18/2014
Expiration Date: 4/17/2019
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

MINERAL PROCESSING
1855 COUNTY HIGHWAY 99
Crawford Twp., OH 43316

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

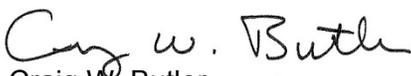
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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



Final Permit-to-Install and Operate
MINERAL PROCESSING
Permit Number: P0117054
Facility ID: 0388000025
Effective Date: 7/18/2014

Authorization (continued)

Permit Number: P0117054
Permit Description: Renewal FEPTIO for a mineral processing operation.

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

Emissions Unit ID:	P901
Company Equipment ID:	Mineral Processing Line
Superseded Permit Number:	P0105386
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
MINERAL PROCESSING
Permit Number: P0117054
Facility ID: 0388000025
Effective Date: 7/18/2014

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
MINERAL PROCESSING
Permit Number: P0117054
Facility ID: 0388000025
Effective Date: 7/18/2014

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.



Final Permit-to-Install and Operate
MINERAL PROCESSING
Permit Number: P0117054
Facility ID: 0388000025
Effective Date: 7/18/2014

C. Emissions Unit Terms and Conditions



1. P901, Mineral Processing Line

Operations, Property and/or Equipment Description:

Pelletized limestone processing line

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. b)(1)b., b)(2)d., c)(1), c)(2), d)(4), d)(5), e)(3), f)(2)n., f)(2)o., f)(2)p.,
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Control requirements [See b)(2)a.] 1.32 tons fugitive particulate emissions (PE)/year 0.53 ton fugitive particulate matter less than 10 microns in size (PM10)/year See b)(2)b. Emissions from the air classifier stack shall not exceed the following: 0.03 grain PM10 per dry standard cubic foot (dscf), 8.02 tons PM10/year [See b)(2)c.] 0.60 lb nitrogen oxides (NOx)/hour, 2.63 tons NOx/year



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>0.48 lb carbon monoxide (CO)/hour, 2.10 tons CO/year</p> <p>Emissions from the baghouse stack shall not exceed the following:</p> <p>0.03 grain PM10/dscf, 46.17 tons PM10/year [See b)(2)c.]</p> <p>10.16 tons CO/year</p> <p>25.74 lbs organic compounds (OC)/hour</p> <p>Emissions from the baghouse stack shall not exceed the following while burning natural gas:</p> <p>2.90 lbsNOx/hour</p> <p>2.32 lbs CO/hour</p> <p>Emissions from the baghouse stack shall not exceed the following while burning #6 fuel oil:</p> <p>19.00 lbs sulfur dioxide (SO2)/hour</p> <p>6.05 lbsNOx/hour</p> <p>0.55 lb CO/hour</p>
b.	OAC rule 3745-31-05(D)	<p>Emissions from the baghouse stack shall not exceed the following while burning natural gas or # 6 fuel oil or a combination of natural gas and #6 fuel oil:</p> <p>76.05 tons OC per rolling, 12-month period</p> <p>19.43 tons SO2 per rolling, 12-month period</p> <p>15.93 tons NOx per rolling, 12-month period</p> <p>See b)(2)d.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the classifier and baghouse stacks shall not exceed 20% opacity, as a six-minute average.
d.	OAC rule 3745-17-07(B)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a three-minute average.
e.	OAC rule 3745-17-08	See b)(2)a.
f.	OAC rule 3745-17-11(A)	See b)(2)e.
g.	OAC rule 3745-18-06(E)	See b)(2)e.

(2) Additional Terms and Conditions

- a. Best available technology (BAT) for this emissions unit has been determined to be the use of a partial building enclosure an air classifier and baghouse, both with a maximum outlet concentration of 0.03 gr/dscf.

Since this emissions unit is located within an Appendix A area, as defined under OAC rule 3745-17-08, and therefore must employ reasonable available control measures (RACM), it has been determined that the control requirements established under OAC rule 3745-31-05 (BAT) also satisfy the requirements of OAC rule 3745-17-08.

- b. Visible PE and BAT requirements for the pelletized limestone processing line shall comply with the following:

Emissions Point (company ID)	Equipment Type	BAT Control Requirements	Opacity Limitations
front-end loading into hopper	transfer point	partial building enclosure	20% opacity, as a three-minute average
hopper to belt	transfer point	partial building enclosure	20% opacity, as a three-minute average
belt to elevator	transfer point	partial building enclosure	20% opacity, as a three-minute average
elevator to chute	transfer point	partial building enclosure	20% opacity, as a three-minute average
chute to ball mill	transfer point	air classifier with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity as a three-minute average from building
screw to mixer	transfer point	air classifier with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity as a three-minute average from building



chute to pelletizer	transfer point	partial building enclosure	20% opacity, as a three-minute average
pelletizer to dryer	transfer point	baghouse with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity, as a three-minute average from building
dryer to chute	transfer point	baghouse with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity, as a three-minute average from building
chute to elevator	transfer point	baghouse with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity, as a three-minute average from building
chute to elevator	transfer point	partial building enclosure	20% opacity, as a three-minute average
elevator to belt conveyor	transfer point	baghouse with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity, as a three-minute average from building
screw to belt	transfer point	baghouse with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity, as a three-minute average from building
belt to auger	transfer point	baghouse with outlet grain loading of 0.03 gr/dscf and partial building enclosure	20% opacity, as a six-minute average from stack, 20% opacity, as a three-minute average from building
belt to storage	transfer point	partial building enclosure	20% opacity, as a three-minute average

- c. All particulate emissions are PM10
- d. Annual emissions shall not exceed the following, based upon a rolling, 12-month summation of the monthly emissions:
 - i. 19.43 tons of SO₂
 - ii. 15.93 tons of NO_x
 - iii. 76.05 tons of OC

The federally enforceable OC limitation is based on an annual production restriction [See c)(1)] and the federally enforceable NO_x and SO₂ limitations are



based on an annual #6 fuel usage restriction [See c)(2.)]. Federally enforceable OC, NOx and SO2 limitation are being established for the purpose of avoiding Title V applicability. For purpose of federal enforceability, a restriction on OC emissions effectively limits VOC emissions.

- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- f. The permittee must comply with the following conditions for this emissions unit, as required per the April 22, 2002 consent order:
 - i. Operate and maintain two thermocouples in the dryer to provide redundant temperature controls to properly operate and maintain the drying process via controller/microprocessor;
 - ii. Operate and maintain a thermocouple on the finished product exit chute
 - iii. Ensure proper employee training to operate dryer controls and avoid overheating problems;
 - iv. Remove burned product from the dryer and all downstream process equipment
 - v. In accordance with applicable law, bury all burned product in the raw material storage pile and immediately dilute and reprocess; and
 - vi. In accordance with applicable law, truck all burned product to a properly licensed/permitted sanitary landfill for immediate disposal if the plant is not operating following a burned product incident.

c) Operational Restrictions

- (1) The maximum annual production rate for this emissions unit shall not exceed 130,000 tons of finished product based as a rolling, 12-month summation of finished product.

This emissions unit has been in operation for greater than 12 months and as such the permittee has existing information to generate records to demonstrate compliance with the rolling 12-month production restriction upon issuance of this permit.

- (2) The maximum annual usage of #6 fuel oil shall not exceed 225,000 gallons based on a rolling, 12-month summation of #6 fuel oil usage.

This emissions unit has been in operation for greater than 12 months and as such the permittee has existing information to generate records to demonstrate compliance with the rolling 12-month production restriction upon issuance of this permit.

- (3) The permittee shall only burn natural gas in the ball mill heater and natural gas and/or #6 fuel oil in the dryer furnace.

- (4) The sulfur content of #6 fuel oil combusted in this emissions unit shall not exceed 1.1 weight percent.



- (5) The permittee shall only employ in this emissions unit those materials specified in their permit to install application. Prior to the use of a different binder, mineral product or binder supplier, the permittee shall submit acceptable, written documentation to show that the use of the new material does not constitute a "modification", as defined in OAC rule 3745-31-01 and will not result in a violation of OAC rule 3745-15-07. The permittee shall collect, record and retain any information and the final determination when modification evaluations are performed.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) For each day during which the permittee burns a fuel other than natural gas in the ball mill heater or natural gas and/or #6 fuel oil in the dryer furnace, the permittee shall maintain a record of the type and quantity of fuel burned
- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:
- a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (3) The permittee shall collect and record the following information each day for this emission unit:
- a. the name and manufacturer of each binder employed
 - b. the amount of each binder employed, in gallons; and
 - c. the name and throughput of each mineral processed, in tons.



- (4) The permittee shall collect and record the following information each month for this emission unit:
- a. the total amount of finished product processed, in tons;
 - b. the rolling, 12-month summation of finished product processed, in tons;
 - c. the total monthly OC emissions rate calculated by the following equation, in tons/month

$$\text{OC emissions} = (\text{total amount of finished product processed}) \times (\text{stack derived OC emission factor}) \times (\text{ton}/2000 \text{ lbs})$$
$$= [d)(4)a.] \times (1.17 \text{ lbs OC/ton of finished product}) \times (\text{ton}/2000 \text{ lbs})$$
 - d. the rolling, 12-month summation of monthly OC emissions, in tons.
- (5) The permittee shall collect and record the following information each month for this emission unit.
- a. the total amount of #6 fuel oil usage, in gallons;
 - b. the rolling, 12-month summation of #6 fuel oil usage, in gallons;
 - c. the total monthly SO₂ emission rate, in tons, calculated by multiplying #6 fuel usage [d)(5)a.] by an AP 42, Chapter 1, Table 1.3-1 calculated emission factor of 172.7 lbs SO₂/1000 gal and dividing by ton/2000 lbs;
 - d. total amount of natural gas usage, in mmft³;
 - e. the total monthly NO_x emission rate from natural gas usage, in tons, calculated by multiplying the monthly natural gas usage [d)(5)d.] by a conversion factor of ft³/1020 mmBtu and multiplying by an AP 42, Chapter 1, Table 1.4-1 calculated emission factor of 0.10 lb/mmBtu and dividing by ton/2000 lbs;
 - f. the total monthly NO_x emission rate from #6 fuel oil usage, in tons, calculated by multiplying #6 fuel usage [d)(5)a.] by an AP 42, Chapter 1, Table 1.3-1 emission factor of 55 lbsNO_x/1000 gal and dividing by ton/2000 lbs;
 - g. the total monthly NO_x emissions, in tons, sum of [d)(5)e.] + [d)(5)f.];
 - h. the rolling, 12-month summation of monthly SO₂ and NO_x emissions, in tons.
- (6) For each day during which the permittee employs a binder, mineral or binder system supplied by a manufacturer other than the ones approved in accordance with c)(3) above, the permittee shall maintain a record of the following information for this emission unit on a daily basis:
- a. name of binder system manufacturer;
 - b. type and quantity of the binder used in this emission unit, in gallons; and



- c. type and quantity of mineral through the emissions unit, in tons.
- (7) The permittee shall properly install, operate, and maintain equipment to continuously monitor and the pressure drop, in inches of water, across the air classifier and baghouse during the operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- a. The permittee shall record the pressure drop on a daily basis.
 - b. Whenever the monitored value for the pressure drop deviates from the range(s) specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - i. the date and time the deviation began;
 - ii. the magnitude of the deviation at that time;
 - iii. the date(s) the investigation was conducted;
 - iv. the names of the personnel who conducted the investigation; and
 - v. the findings and recommendations.
 - c. In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary.
 - i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:
 - (a) the reason(s) corrective action was not necessary; and
 - (b) the date and time the deviation ended.
 - ii. The permittee shall maintain records of the following information for each corrective action taken:
 - (a) a description of the corrective action;
 - (b) the date it was completed;
 - (c) the date and time the deviation ended;
 - (d) the total period of time (in minutes) during which there was a deviation;



- (e) the pressure drop readings immediately after the corrective action;
and
 - (f) the names of the personnel who performed the work.
 - iii. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.
 - d. The acceptable range for the pressure drop across the baghouse is 2.5 to 6 inches of water
 - e. The acceptable range for the pressure drop across the air classifier is 4 to 8 inches of water
 - f. This range(s) is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- e) Reporting Requirements
 - (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. any exceedances of the rolling, 12-month summation of finished product processed as specified in c)(1) of this permit; and
 - ii. any exceedances of the rolling, 12-month summation of #6 fuel usage as specified in c)(2) of this permit.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).



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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31, April 30, July 31, and October 31, and shall cover the previous calendar quarters unless an alternative schedule has been established and approved by the Director (Ohio EPA- Northwest District Office).

- (3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the control equipment (air classifier and baghouse) during the 12-month reporting period for this/these emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the control equipment was outside of the acceptable range(s);
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the control equipment;
 - c. each incident of deviation described in e)(3)a. (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in e)(3)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range(s), was determined to be necessary and was not taken; and
 - e. each incident of deviation described in e)(3)a. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
 - (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions during the 12-month reporting period for this/these emissions unit(s):
 - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- f) Testing Requirements
- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months of utilizing #6 fuel oil.
 - b. The emission testing shall be conducted on the baghouse stack to demonstrate compliance with the maximum outlet grain loading and lb/hr emission rate for OC while burning #6 fuel oil.



- c. The following test method(s) shall be employed to demonstrate compliance with the PM10 and OC emission limitations: for PM10, Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M; and for OC, Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while emissions unit P901 is operating at or near its maximum capacity of 22.0 tons/hr, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- (2) Compliance with the emission limitations in the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:
1.32 tons fugitive PE/year, 0.53 ton fugitive PM10/year

Applicable Compliance Method:

The emission limitations were developed by multiplying the annual maximum production rate of 130,000 tons of material by emissions factors calculated from or found in AP-42 Chapters 13.2.4 (revised 11/06) and 11.19.2 (revised 8/04), applying a 70% control efficiency for the partial building enclosure, and applying an additional 90% capture efficiency to eight points that are controlled by either the air classifier or baghouse. Therefore, provided compliance is shown with the annual throughput limitation, compliance with the ton per year PE and tons per year PM10 limitations shall also be demonstrated.



b. Emission Limitation:

Visible PE from any fugitive dust source shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:

Compliance shall be determined in accordance with U.S. EPA Method 9, with the following modifications:

- i. the data reduction and average opacity calculation shall be based upon sets of twelve consecutive visible emission observations recorded at 15-second intervals;
- ii. opacity observations shall be made from a position that provides the observer a clear view of the emissions unit and the fugitive dust, with the sun behind the observer;
- iii. where possible, visible opacity observations shall be conducted at a position of at least fifteen feet from the source of emissions; and
- iv. the visible opacity observations shall be made for the point of highest opacity within the fugitive dust emitted from the source.

c. Emission Limitations:

0.03 grain PM10/dscf and 8.02 ton PM10/year from the air classifier stack

Applicable Compliance Method:

This emission limitation was established in accordance with a company agreed upon maximum outlet grain loading concentration. If required, compliance with the maximum outlet grain loading shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 51, Appendix M, Methods 201 and 202 (testing to show compliance with this limitation was performed on April 6, 2005).

The annual PM10 limitation was established by multiplying the maximum air classifier outlet concentration of 0.03 gr/dscf, the maximum volumetric air flow rate (7,100 acfm), and using the following conversion factors in order to convert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8760 hours/year and 1 ton/2000 lbs. Therefore, provided compliance is demonstrated with the 0.03 gr PE/dscf limitation, compliance with the annual limitation shall also be demonstrated.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

d. Emission Limitations:

0.60 lbNOx/hour, 2.63 tons NOx/year from air classifier stack



Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit was determined by multiplying an emission factor of 100 lbsNOx/MMscf divided by 1020 Btu/scf [AP 42, Chapter 1. Table 1.4-1 (7/98)], then multiplying by a maximum firing capacity of 6 MMBtu/hr. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix , Methods 1-4 and 7.

The annual limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hrs/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:

0.48 lb CO/hour, 2.10 tons CO/year from air classifier stack

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit was determined by multiplying an emission factor of 84 lbs CO/MMscf divided by 1020 Btu/scf [AP 42, Chapter 1. Table 1.4-1 (7/98)], then multiplying by a maximum firing capacity of 6 MMBtu/hr. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix , Methods 1-4 and 10.

The annual limitation was developed by multiplying the lb/hr limitation by a maximum operating schedule of 8760 hrs/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

f. Emission Limitations:

0.03 grain PM10/dscf and 46.17 tons PM10/year from baghouse stack

Applicable Compliance Method:

This emission limitation was established in accordance with a company agreed upon maximum outlet grain loading concentration. If required, compliance with the maximum outlet grain loading while burning natural gas shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 51, Appendix M, Methods 201 and 202 (testing to show compliance with this limitation while burning natural gas was performed on April 6, 2005).

Compliance with the maximum grain loading while burning #6 fuel oil shall be shown in accordance with the test methods and procedures of 40 CFR Part 60, Appendix M, Methods 201 and 202 (see Testing Requirements in section E.1).



The annual PM₁₀ limitation was established by multiplying the maximum baghouse outlet concentration of 0.03 gr/dscf, the maximum volumetric air flow rate (41,000 acfm), and using the following conversion factors in order to convert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8760 hours/year and 1 ton/2000 lbs. Therefore, provided compliance is demonstrated with the 0.03 gr PE/dscflimitation, compliance with the annual limitation shall be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

- g. Emission Limitation:
10.16 tons CO/year from the baghouse stack

Applicable Compliance Method:

The annual CO limitation was developed by multiplying the lb/hr limitation of 2.32 lbs/hr while burning natural gas, by a maximum operating schedule of 8760 hrs/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

- h. Emission Limitation:
25.74 lbs OC/hour from the baghouse stack

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be determined based on the results of emission testing conducted in accordance with the test methods and procedures of 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A [see Testing Requirements in section f)(1)].

- i. Emission Limitation:
2.90 lbsNO_x/hour from the baghouse stack while burning natural gas

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit was determined by multiplying an emission factor of 100 lbsNO_x/MMscf divided by 1020 Btu/scf [AP 42, Chapter 1. Table 1.4-1 (7/98)], then multiplying by a maximum firing capacity of 29 MMBtu/hr. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

- j. Emission Limitation:
2.32 lbs CO/hour from the baghouse stack while burning natural gas



Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit was determined by multiplying an emission factor of 84 lbs CO/MMscf divided by 1020 Btu/scf [AP 42, Chapter 1. Table 1.4-1 (7/98)], then multiplying by a maximum firing capacity of 29 MMBtu/hr. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A , Methods 1-4 and 10.

k. Emission Limitation:

19.00 lbs SO₂/hour from the baghouse stack while burning #6 fuel oil

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit was determined by multiplying a calculated emission factor of 172.7 lbs SO₂/1000 gal, based on maximum fuel sulfur content of 1.10% [AP 42, Chapter 1. Table 1.3-1 (9/98)], then multiplying by a maximum hourly fuel usage of 110 gallons per hour. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A , Methods 1-4 and 6.

l. Emission Limitation:

6.05 lbsNO_x/hour from the baghouse stack while burning #6 fuel oil

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit was determined by multiplying an emission factor of 55 lbsNO_x/1000 gal [AP 42, Chapter 1. Table 1.3-1 (9/98)], then multiplying by a maximum hourly fuel usage of 110 gallons per hour. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A , Methods 1-4 and 7.

m. Emission Limitations:

0.55 lbs CO/hour from the baghouse stack while burning #6 fuel oil

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.



*The potential to emit was determined by multiplying an emission factor of 5 lbs CO/1000 gal [AP 42, Chapter 1. Table 1.3-1 (9/98)], then multiplying by a maximum hourly fuel usage of 110 gallons per hour. If required, compliance with the lb/hr limitation shall be demonstrated in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

n. Emission Limitation:

76.05 tons OC per rolling, 12-month period from baghouse stack while burning natural gas, #6 fuel oil, or a combination of natural gas/#6 fuel oil.

Applicable Compliance Method:

Compliance with the above limitation shall be demonstrated through monitoring and record keeping requirements in term d)(4).

o. Emission Limitation:

19.43 tons SO₂ per rolling, 12-month period from baghouse stack while burning natural gas, #6 fuel oil, or a combination of natural gas/#6 fuel oil.

Applicable Compliance Method:

Compliance with the above limitation shall be demonstrated through monitoring and record keeping requirements in term d)(5).

p. Emission Limitation:

15.93 tons NO_x per rolling, 12-month period

Applicable Compliance Method:

Compliance with the above limitation shall be demonstrated through monitoring and record keeping requirements in term d)(5).

q. Emission Limitation:

Visible PE from the classifier and baghouse stacks shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(1); or other U.S. EPA approved test method, with prior approval from the Ohio EPA.

g) Miscellaneous Requirements

(1) None.