



State of Ohio Environmental Protection Agency

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7/24/2009

JEREMY MACKALL  
SUBTROPOLIS MINING CO  
PO BOX 217  
10900 SOUTH AVE  
NORTH LIMA, OH 44452

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0250001002  
Permit Number: P0085686  
Permit Type: Renewal  
County: Mahoning

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final 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.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc), from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page [www.epa.state.oh.us/dapc](http://www.epa.state.oh.us/dapc).

Sincerely,

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

Cc: Ohio EPA-NEDO

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





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

**FINAL**

**Air Pollution Permit-to-Install and Operate  
for  
SUBTROPOLIS MINING CO**

Facility ID: 0250001002  
Permit Number: P0085686  
Permit Type: Renewal  
Issued: 7/24/2009  
Effective: 7/24/2009  
Expiration: 7/24/2014





**Air Pollution Permit-to-Install and Operate**  
for  
SUBTROPOLIS MINING CO

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Division of Air Pollution Control

**Final Permit-to-Install and Operate**  
**Permit Number:** P0085686  
**Facility ID:** 0250001002  
**Effective Date:** 7/24/2009

# Authorization

Facility ID: 0250001002  
Application Number(s): A0016361, A0036577  
Permit Number: P0085686  
Permit Description: Renewal permits for an aggregate processing plant (F001), facility-wide roadways and parking areas (F002), and facility-wide material storage piles (F003).  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 7/24/2009  
Effective Date: 7/24/2009  
Expiration Date: 7/24/2014  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

SUBTROPOLIS MINING CO  
GARFIELD RD  
PETERSBURG, OH 44454

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 43087  
(330)425-9171

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0085686  
Permit Description: Renewal permits for an aggregate processing plant (F001), facility-wide roadways and parking areas (F002), and facility-wide material storage piles (F003).

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

- |                                   |                            |
|-----------------------------------|----------------------------|
| <b>Emissions Unit ID:</b>         | <b>F001</b>                |
| Company Equipment ID:             | Aggregate processing plant |
| Superseded Permit Number:         | 02-22087                   |
| General Permit Category and Type: | Not Applicable             |
| <b>Emissions Unit ID:</b>         | <b>F002</b>                |
| Company Equipment ID:             | Roadways                   |
| Superseded Permit Number:         | 02-22087                   |
| General Permit Category and Type: | Not Applicable             |
| <b>Emissions Unit ID:</b>         | <b>F003</b>                |
| Company Equipment ID:             | Storage Piles              |
| Superseded Permit Number:         | 02-22087                   |
| General Permit Category and Type: | Not Applicable             |



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

**Permit Number:** P0085686

**Facility ID:** 0250001002

**Effective Date:** 7/24/2009

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** P0085686

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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.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

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**Facility ID:** 0250001002

**Effective Date:** 7/24/2009

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



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.
2. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart OOO: F001. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Ohio EPA Northeast District Office (NEDO).



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** P0085686

**Facility ID:** 0250001002

**Effective Date:** 7/24/2009

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



**1. F001, Aggregate processing plant**

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

Aggregate Processing Plant

- 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)d, c)(2), c)(3), d)(2), d)(3), e)(2), f)(1) and f)(2).
- 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 3745-17-07(B)	Exempt. See b)(2)a.
b.	OAC rule 3745-17-08(B)	Exempt. See b)(2)b.
c.	OAC rule 3745-31-05(A)(3) (PTI 02-22087)	Particulate emissions (PE) from this emissions unit shall not exceed 25.6 tons per year (tpy).  Permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.  See b)(2)c and c)(1).
d.	OAC rule 3745-31-05(D)(1)(b)	Carbon Monoxides (CO) emissions from detonating explosives shall not exceed 30.0 tpy.  Nitrogen oxides (NOx) emissions from detonating explosives shall not exceed 7.2 tpy.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See c)(2) and c)(3).
e.	40 CFR, Part 60, Subpart OOO (40 CFR 60.670 – 60.676)	See b)(2)d and b)(2)e.
f.	40 CFR 60.1 – 19 [40 CFR 60.670(f)]	See b)(2)f.

(2) Additional Terms and Conditions

- a. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive emissions units which are exempted from the requirements of OAC rule 3745-17-08(B).
- b. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08(A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- c. The permittee shall employ best available control measures for the material processing/handling operations identified below, for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to maintaining the inherent moisture content of materials processed/handled at a level which is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above-mentioned applicable requirements, the permittee shall employ best available control measures to ensure compliance.

<b>Material Processing/Handling Operation</b>	<b>Control Measure(s)</b>
Loading	reduced drop height, water application, if needed
Crushing and Screening	water application, if needed.
Transfer/Conveying	partial enclosure, water application, if needed

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. The permittee shall comply with the applicable visible emission restrictions under 40 CFR 60.672(b) and Table 3 for crushers, at which a capture system is not used. The fugitive emissions from the following material processing equipment must meet 15 percent opacity limit:



Emission Point	MK <sup>1</sup>	Equipment Type	Fugitive Emissions Opacity Limit
1520 impactor station (HSI)	18	Secondary crusher	15%
103 VSI crusher station	24	Secondary crusher	15%

<sup>1</sup> MK relates to the Bill of Materials as found on the Flow Schematic, Drawing Number 5577-00-0002.

- e. The permittee shall comply with the applicable visible emission restrictions under 40 CFR 60.672(b) and Table 3 for any screening operations, bucket elevators, transfer point on belt conveyors or from any other affected facility, as defined in §§60.670 and 60.671. The fugitive emissions from the following material processing equipment must meet 10 percent opacity limit:

Emission Point	MK <sup>1</sup>	Equipment Type	Fugitive Emissions Opacity Limit
42"x700' xfer conveyor	1	xfer pt.	10%
42"x150' radial stacker	2	xfer pt.	10%
42"x150' radial stacker	3	xfer pt.	10%
Reclaim tunnel	4	xfer pt.	10%
36"x375' transfer conveyor	5	xfer pt.	10%
36"x890' transfer conveyor	6	xfer pt.	10%
36"x345' transfer conveyor	7	xfer pt.	10%
50 ton surge hopper with overflow chute	8	xfer pt.	10%
36"x205' screen feed conveyor	9	xfer pt.	10%
8'x20' scalping screen station	10	screening	10%
30"x205' transfer conveyor	14	xfer pt.	10%
36"x150' telestacker	15	xfer pt.	10%
36"x335' transfer conveyor	16	xfer pt.	10%
85 ton surge bin	17	xfer pt.	10%
48"x290' screen feed conveyor	19	xfer pt.	10%



<b>Emission Point</b>	<b>MK<sup>1</sup></b>	<b>Equipment Type</b>	<b>Fugitive Emissions Opacity Limit</b>
Dual 8'x20' TD dry screening station	20a	screening	10%
Dual 8'x20' TD dry screening station	20b	screening	10%
36"x40" overs gathering conveyor	21	xfer pt.	10%
36"x235' recirc conveyor	22	xfer pt.	10%
85 ton surge bin	23	xfer pt.	10%
30"x35' gathering conveyor	31	xfer pt.	10%
30"x615' transfer conveyor	33	xfer pt.	10%
30"x275' bypass conveyor	34	xfer pt.	10%
30"x275' bypass conveyor	35	xfer pt.	10%
36"x360 logwasher feed conveyor	36	xfer pt.	10%
30"x20' fines conveyor	56	xfer pt.	10%
30"x335' fines transfer conveyor	57	xfer pt.	10%
100' conveyor	58	xfer pt.	10%
100' stacker conveyor	59	xfer pt.	10%
dual 46"x35' logwasher station	37a	xfer pt.	10%
dual 46"x35' logwasher station	37b	xfer pt.	10%
dual 6'x20' wash screen station	38a	xfer pt.	10%
dual 6'x20' wash screen station	38b	xfer pt.	10%
54"x34' DSFMW (sand screw)	39	xfer pt.	10%
30"x340' transfer conveyor	40	xfer pt.	10%
30"x120' radial stacker	41	xfer pt.	10%
30"x40' gather conveyor	42	xfer pt.	10%
30"x395' transfer conveyor	43	xfer pt.	10%
30"x120' radial stacker	44	xfer pt.	10%



<b>Emission Point</b>	<b>MK<sup>1</sup></b>	<b>Equipment Type</b>	<b>Fugitive Emissions Opacity Limit</b>
30"x55' gathering conveyor	45	xfer pt.	10%
30"x175' transfer conveyor	46	xfer pt.	10%
30"x120' radial stacker	47	xfer pt.	10%
36"x85' gathering conveyor	48	xfer pt.	10%
36"x455' transfer conveyor	49	xfer pt.	10%
36"x150' radial stacker	50	xfer pt.	10%

<sup>1</sup> MK relates to the Bill of Materials as found on the Flow Schematic, Drawing Number 5577-00-0002.

- f. Table 1 to Subpart 000 of 40 CFR Part 60 – “Applicability of Subpart A to Subpart 000” identifies which parts of the General Provisions in 40 CFR 60.1 – 19 apply.
  
- c) **Operational Restrictions**
  - (1) The permittee shall operate this emissions unit in such a manner, at minimum, but not be limited to, keep sufficient moisture on aggregate processing materials to minimize or eliminate visible particulate emissions of fugitive dust.
  - (2) The maximum annual aggregate throughput of this facility shall not exceed 2,174,400 tons, as measured at the scale affixed to the reclaim tunnel located below the surge pile.
  - (3) The maximum annual explosives usage rate shall not exceed 64 tons of dynamite gelatin and 812 tons of ammonium nitrate and fuel oil (ANFO) facility-wide.
  
- d) **Monitoring and/or Recordkeeping Requirements**
  - (1) The permittee shall comply with the applicable monitoring and record keeping requirements necessary to demonstrate compliance with 40 CFR Part 60, Subpart 000 (40 CFR 60.670 – 676).
  - (2) The permittee shall maintain the following monthly records facility-wide to ensure compliance with the operational restrictions in sections c)(2) and c)(3):
    - a. the aggregate throughput, as measured at the scale affixed to the reclaim tunnel located below the surge pile, in tons per month;
    - b. the total aggregate throughput, as measured at the scale affixed to the reclaim tunnel located below the surge pile, in tons to date for the calendar year;
    - c. the amount of dynamite gelatin used, in tons per month;
    - d. the total facility-wide dynamite gelatin usage, in tons to date for the calendar year;



- e. the amount of ANFO used, in tons per month; and
- f. the total facility-wide ANFO usage, in tons to date for the calendar year.

e) Reporting Requirements

- (1) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, Subpart OOO (40 CFR 60.670 – 676).
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following operational restrictions 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. annual aggregate throughput of 2,174,400 tons; and
    - ii. annual explosives usage rate of not exceeding 64 tons of dynamite gelatin and 812 tons of ammonium nitrate and fuel oil (ANFO);
  - b. the probable cause of each deviation (excursion);
  - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
  - d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations specified in b)(1) and b)(2) above shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
PE from this emissions unit shall not exceed 25.6 tpy.



Applicable Compliance Method:

The annual PE limitation was established by summing the fugitive PE rates from the crushing, screening, and transfer operations associated with this emissions unit, and then dividing by 2,000 lbs/ton. The emission rate was based on the maximum allowable facility production rate (2,174,400 TPY) and emission factors pursuant to AP-42 Chapter 11.19.2, 8/04 edition. Provided compliance is shown with the maximum annual throughput restriction and the requirements of this permit to apply best available control measures, compliance with the annual PE limitation will be assumed.

b. Emission Limitation:

CO emissions from detonating explosives shall not exceed 30.0 tpy.

Applicable Compliance Method:

The annual CO emission limitation was established based on the maximum allowable explosives usage rate (64 tons of dynamite gelatin and 812 tons of ANFO per year) and emission factors pursuant to AP-42 Chapter 13.3, 2/80 edition (reformatted 1/95). Provided compliance is shown with the maximum annual explosive material usage restrictions for dynamite gelatin and ANFO, and the requirements of this permit to apply best available control measures, compliance with the annual CO emission limitation will be assumed.

c. Emission Limitation:

NOx emissions from detonating explosives shall not exceed 7.2 tpy.

Applicable Compliance Method:

The annual NOx limitation was established based on the maximum allowable explosives usage rate (64 tons of dynamite gelatin and 812 tons of ANFO per year) and emission factors pursuant to AP-42 Chapter 13.3, 2/80 edition (reformatted 1/95). Provided compliance is shown with the maximum annual explosive material usage restrictions for dynamite gelatin and ANFO, and the requirements of this permit to apply best available control measures, compliance with the annual NOx limitation will be assumed.

d. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 15% opacity for crushers at which a capture system is not used.

Visible particulate emissions of fugitive dust shall not exceed 10% opacity for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671).

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with the methods and procedures specified in 40 CFR



Part 60, Appendix A, Method 9 and the procedures specified in 40 CFR Part 60.675 of Subpart OOO.

(2) Compliance with the operation restrictions specified in c)(2) and c)(3) above shall be determined in accordance with the following methods:

a. Operational Restriction:

The maximum annual aggregate throughput of this facility shall not exceed 2,174,400 tons, as measured at the scale affixed to the reclaim tunnel located below the surge pile.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2) of this permit.

b. Operational Restriction:

The maximum annual explosives usage rate shall not exceed 64 tons of dynamite gelatin and 812 tons of ammonium nitrate and fuel oil (ANFO) facility-wide.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2) of this permit.

(3) The permittee shall comply with the applicable testing requirements necessary to demonstrate compliance with 40 CFR Part 60, Subpart OOO (40 CFR 60.670 – 676).

g) Miscellaneous Requirements

(1) None.



**2. F002, Roadways**

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

Facility-wide Roadways and Parking Areas

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-22087)	<p>Fugitive particulate emissions (PE) shall not exceed 162.1 tons per year (tpy).</p> <p>There shall be no visible PE except for three minutes during any 60-minute period from unpaved roadways and parking areas.</p> <p>There shall be no visible PE except for one minute during any 60-minute period from paved roadways and parking areas.</p> <p>The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.</p> <p>See b)(2)a, b)(2)b, b)(2)c, b)(2)d, b)(2)e and b)(2)f.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(B)(4)	Exempt. See b)(2)g.
c.	OAC rule 3745-17-07(B)(5)	Exempt. See b)(2)h.
d.	OAC rule 3745-17-08(B)	Exempt. See b)(2)i.

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat all roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- c. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- d. Any unpaved roadway or parking area that is subsequently paved, shall be subject to the requirements specific to paved roadways and parking areas in this permit.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- g. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07(B)(4) shall not apply to any fugitive emissions units which are exempted from the requirements of OAC rule 3745-17-08(B).



- h. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07(B)(5) shall not apply to any fugitive emissions units which are exempted from the requirements of OAC rule 3745-17-08(B).
- i. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08(A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

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

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:



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

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

Fugitive PE shall not exceed 162.1 tpy.

Applicable Compliance Method:

Compliance with fugitive PE limitation shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved and unpaved roadways, respectively. Should further updates in AP-42 occur, the most current equations for paved and/or unpaved roads shall be used.

	<u>paved roads</u>	<u>unpaved roads</u>
vehicle miles traveled, miles/yr	18,060	76,755
control efficiency, %	67	67
silt content	9%	40 gr/SF

b. Emission Limitation:

There shall be no visible PE except for one minute during any 60-minute period from paved roadways and parking areas.

There shall be no visible PE except for three minutes during any 60-minute period from unpaved roadways and parking areas.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

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

**Permit Number:** P0085686

**Facility ID:** 0250001002

**Effective Date:** 7/24/2009

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

- (1) None.



**3. F003, Storage Piles**

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

Facility-wide Material Storage Piles

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-22087)	Fugitive particulate emissions (PE) shall not exceed 240 tons per year (tpy).  There shall be no visible PE except for a period of time not to exceed one minute during any 60-minute observation period.  The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust.  See b)(2)a, b)(2)b, b)(2)c, b)(2)d and b)(2)e.
b.	OAC rule 3745-17-07(B)(6)	Exempt. See b)(2)f.
c.	OAC rule 3745-17-08(B)	Exempt. See b)(2)g.



(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- c. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to perform one or more of the following: chemical stabilization, watering/sprinkling systems/hoses, and covering the storage piles, to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- e. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).
- f. In accordance with OAC rule 3745-17-07 (B)(11)(d), OAC rule 3745-17-07(B)(6) shall not apply to any fugitive emissions units which are exempted from the requirements of OAC rule 3745-17-08(B).
- g. The facility is not located at an Appendix A area of OAC rule 3745-17-08. In accordance with OAC rule 3745-17-08(A)(1), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).



c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	daily

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
all	daily

- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
all	daily

- (4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

- (5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

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

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and



- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(6)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

- (2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
  - a. Emissions Limitations:

Fugitive PE shall not exceed 240 tpy.

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Sections 13.2.4 and 13.2.5 in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits in this permit were based on a maximum production of 2,174,400 TPY, a maximum storage surface area of 9.3 acres, and the following control efficiencies (CEs) for PE:



Source	% CE for material handling	% CE for wind erosion
Surge	50	50
1's, 2's, & 4's	50	50
304's & 617's	50	50
57's	95	75
8's	95	75
9's	95	75
Sand	95	75

b. Emission Limitation:

There shall be no visible PE except for a period of time not to exceed one minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

- (1) None.