



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

6/28/2013

Ms. Barbara Nielsen  
Cyprus Amax Minerals Company  
333 North Central Avenue  
Phoenix, AZ 85004

**RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE**

Facility ID: 0641000060  
Permit Number: P0114196  
Permit Type: Initial Installation  
County: Jefferson

Certified Mail

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

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](http://www.ohioairquality.org/clean_air)

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

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

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

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

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 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-SEDO

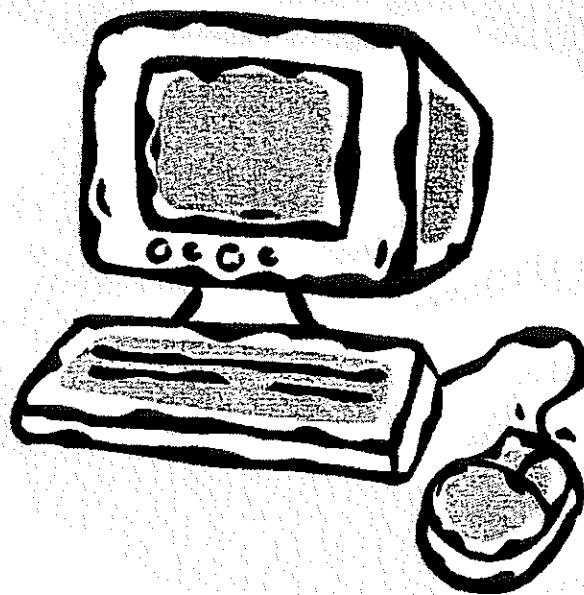
***Tell us about your air permitting experience!***

We want to know if you are a satisfied customer. Please take an online survey designed to give us feedback on how we did processing your permit application.

[www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx)

Please use this opportunity to tell us what you liked, what difficulties you encountered, and how we can improve your air permitting experience.

Thanks!







**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Cyprus Amax Minerals Company**

Facility ID:	0641000060
Permit Number:	P0114196
Permit Type:	Initial Installation
Issued:	6/28/2013
Effective:	6/28/2013
Expiration:	4/26/2023





**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Cyprus Amax Minerals Company**

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**Final Permit-to-Install and Operate**  
Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
**Facility ID:** 0641000060  
**Effective Date:** 6/28/2013

## Authorization

Facility ID: 0641000060  
Application Number(s): A0047551  
Permit Number: P0114196  
Permit Description: This is an initial installation PTIO for a 400 TPH crusher with load-in, Grizzly screener and conveyor.  
Permit Type: Initial Installation  
Permit Fee: \$200.00  
Issue Date: 6/28/2013  
Effective Date: 6/28/2013  
Expiration Date: 4/26/2023  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Cyprus Amax Minerals Company  
4243 County Road 74  
Cross Creek Twp., OH 43938

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

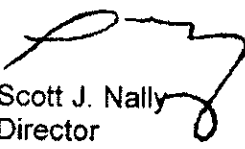
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



**Final Permit-to-Install and Operate**  
Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
**Facility ID:** 0641000060  
**Effective Date:** 6/28/2013

## **Authorization (continued)**

**Permit Number:** P0114196

**Permit Description:** This is an initial installation PTIO for a 400 TPH crusher with load-in, Grizzly screener and conveyor.

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

**Emissions Unit ID:**

**F004**

Company Equipment ID:

Concrete Crushing

Superseded Permit Number:

General Permit Category and Type:

Not Applicable



**Final Permit-to-Install and Operate**  
Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
**Facility ID:** 0641000060  
**Effective Date:** 6/28/2013

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



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

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

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

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

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

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

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

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

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

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

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

**Annual emissions fee.** Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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



**Final Permit-to-Install and Operate**  
Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
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**Effective Date:** 6/28/2013

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, Southeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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



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Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
**Facility ID:** 0641000060  
**Effective Date:** 6/28/2013

**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**  
Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
**Facility ID:** 0641000060  
**Effective Date:** 6/28/2013

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





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

Cyprus Amax Minerals Company

**Permit Number:** P0114196

**Facility ID:** 0641000060

**Effective Date:** 6/28/2013

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 unit contained in this permit is subject to 40 CFR Part 60, Subpart OOO: F004. 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 appropriate Ohio EPA District office or local air agency.



**Final Permit-to-Install and Operate**  
Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
**Facility ID:** 0641000060  
**Effective Date:** 6/28/2013

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



1. F004, Concrete Crushing and Material Handling

Operations, Property and/or Equipment Description:

400 TPH Crusher, Hopper Load-in, Grizzly Passive Screen and Conveyor with 2 Transfer Points with a maximum annual throughput of 3,504,000 tons of concrete per year.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 7.5 tons per year (TPY).  Fugitive PE from hopper load-in shall not exceed 10% opacity, as a 3-minute average.  See b)(2)a. below.  Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust.  See b)(2)c. through b)(2)e. below.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)b. below.



**Final Permit-to-Install and Operate**  
 Cyprus Amax Minerals Company  
**Permit Number:** P0114196  
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**Effective Date:** 6/28/2013

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	<p>40 CFR Part 60, Subpart OOO (40 CFR 60.670-60.676)</p> <p>[In accordance with 40 CFR 60.670(a)(1) and 60.670(e), this emissions unit is a fixed nonmetallic mineral processing plant with a capacity over 25 TPH and commenced construction after August 31, 1983. All operations are subject to the emissions limitations specified in this section except for truck dumping of nonmetallic minerals into the feed hopper per 40 CFR 60.672(d).]</p>	<p><u>Transfer Points:</u> Fugitive PE shall not exceed 7%, as a 6-minute average.</p> <p><u>Crushing Compartment:</u> Fugitive PE shall not exceed 12%, as a 6-minute average.</p> <p>[40 CFR 60.672(b), Table 3 of 40 CFR Part 60 Subpart OOO]</p>
d.	<p>40 CFR 60.1-19 [40 CFR 60.670(f)]</p>	<p>Table 1 of Subpart OOO of 40 CFR Part 60 – Applicability of General Provisions to Subpart OOO, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.</p>
e.	<p>OAC rule 3745-17-07(B)(1)</p>	<p>Fugitive PE shall not exceed 20% as a 3-minute average, except as provided by 40 CFR Part 60 Subpart OOO.</p> <p>This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.</p>
f.	<p>OAC rule 3745-17-08(B)</p>	<p>Reasonably available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust</p> <p>See b)(2)c. through b)(2)e. below.</p>

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has

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

Cyprus Amax Minerals Company

**Permit Number:** P0114196**Facility ID:** 0641000060**Effective Date:** 6/28/2013

not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP.

PTIO P0114196 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. Watering at load-in (50% control efficiency) and use of wet suppression (direct water-sprays) at transfer points (78% control efficiency); and
  - ii. Fugitive PE shall not exceed 7.5 TPY.
- c. The permittee has committed to employ the following best/reasonably available control measures for this emissions unit for purposes of ensuring compliance with the above-mentioned applicable requirements:

Material Handling Operation	Control Measures
load-in with passive screen	reduced drop height, wet application*
crushing	wet application*
transfer and conveying	wet application*

\*If at any time the moisture content of the material processed or handled is not sufficient to meet the above applicable requirements, the permittee shall employ a wet suppression control system to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- d. For each crushing and material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the crushing and/or material handling process until further observation confirms that use of the control measures is unnecessary.



- e. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC 3745-31-05(A)(3) and/or 3745-17-08(B).

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions under 40 CFR Part 60, Subpart OOO, including the following sections:

60.672(d)	truck dumping exemption
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d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the following applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart OOO, including the following sections:

60.674	(b): monthly inspections of wet suppression spray nozzles and corrective actions  and  (b)(2): alternate controls
60.676	(b)(1): monthly inspections and corrective actions logbook

- (2) Except as otherwise provided in this section, for concrete crushing and material handling operations that are not adequately enclosed, the permittee shall perform visible emission inspections of such operations during representative, normal operating conditions in accordance with the following minimum frequencies:

<u>Crushing Operations</u>	<u>Minimum inspection Frequency</u>
Hopper Load-in with Passive Screen	Daily
Crushing	Daily
Conveyor Transfer Points (2)	Daily

- (3) The above-mentioned inspections shall be performed only on days the emissions unit is in operation. The permittee shall perform daily observations for any visible particulate emissions from the emission unit, other than water vapor. The presence or absence of any visible emissions shall be recorded in an operations log. When visible emissions are observed in excess of the allowable opacity rate(s), corrective actions shall be taken to correct the problem and these action(s) shall be recorded in the operations log.



- (4) The permittee shall maintain daily records of the following information:
- the date and reason any required inspection was not performed;
  - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - the dates the control measure(s) was (were) implemented; and
  - on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in (4)d. shall be kept separately for each aggregate processing operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- (5) Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

e) Reporting Requirements

- (1) The permittee shall comply with the following applicable reporting requirements under 40 CFR Part 60, Subpart OOO, including the following sections:

60.676	(f): written performance test results  (h): construction commencement date notification waiver  (i)(1): notification of initial startup date postmarked within 15 days  and  (k): report submission to delegated authority
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- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (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 permit evaluation report shall



cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) The permittee shall comply with the following applicable testing requirements under 40 CFR Part 60, Subpart OOO, including the following sections:

60.675	(a) test methods [pursuant to 40 CFR 60.8]  (c) additional test procedures [pursuant to 40 CFR 60.672]  (e) alternative methods  and  (g) testing notifications
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- (2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Fugitive PE from hopper load-in shall not exceed 10%, as a 3-minute average.

Applicable Compliance Method:

Visible PE shall be determined according to USEPA Method 9.

b. Emissions Limitation:

Fugitive PE shall not exceed 7.5 TPY.

Applicable Compliance Method:

The annual TPY emissions limitation was established based upon emission factors in AP-42 Section 13.2.4 (11/06) for crusher load-in and the controlled emission factors in AP-42 Section 11.19.2 (8/04) for crushing and conveyor transfer points and a maximum annual throughput of 3,504,000 tons per year.

Crusher load-in:

$$EF = k \times (0.0032) \times [(U/5)^{1.3}/(M/2)^{1.4}]$$

Where:





EF = PM emission factor expressed in pounds per ton  
k = particle size multiplier for PM (dimensionless) = 0.74  
U = mean wind speed expressed in miles per hour (MPH) = 9.7  
M = material moisture content (%) = 2.0

Therefore, EF = 0.0056 lb PM/ton

PE = [(# load-in points)(maximum annual throughput)(load-in EF)]/2,000 lbs/ton  
= [(1)(3,504,000 tons)(0.0056 lb PM/ton)]/2,000 lb/ton  
= 9.8 TPY uncontrolled PM

Assume 50% control efficiency for watering at crusher load-in (RACM Table 2.1.3-3)

9.82 TPY x (1 - 0.50) = 4.91 tons per year controlled PE

Crushing and conveyor transfer points:

PE = [(# of crushers)(maximum annual throughput)(crusher EF (controlled)) +  
[(# of conveyor transfer points)(maximum annual throughput)(transfer point EF  
(controlled))]/2,000 lbs/ton  
= [(1)(0.0012 lb/ton)(30,000 TPY)  
+ [(2)(0.00014)(3,504,000 TPY)] X 1 ton/2,000 lbs  
= 2.59 TPY controlled PE

Totals:

4.91 + 2.59 = 7.5 TPY PE

c. Emissions Limitation:

Fugitive PE, as a 6-minute average, shall not exceed:

Transfer Points and Screening	7% Opacity
Crushing Compartment	12% Opacity

Applicable Compliance Method:

Compliance shall be demonstrated using Method 9 of 40 CFR Part 60, Appendix A, and the procedures specified in 40 CFR Part 60, Subpart OOO, section 60.675.

d. Emissions Limitation:

Fugitive PE shall not exceed 20%, as a 3-minute average.



**Applicable Compliance Method:**

If required, visible particulate emissions shall be determined according to USEPA Method 9, with the modifications found in OAC rule 3745-17-03(B)(3)(a) and (b). Miscellaneous Requirements

- (3) Testing shall be conducted in accordance with the provisions of 40 CFR Part 60, Subpart A, section 60.8 and 40 CFR Part 60, Subpart OOO, section 60.675 in accordance with the following requirements:
- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, by not later than 180 days after initial startup of such facility and at such other times as may be required by the Ohio Environmental Protection Agency, Division of Air Pollution Control. The emission testing shall be conducted to demonstrate compliance with the allowable visible emission rates for particulate emissions.
  - b. The following test methods shall be employed to demonstrate compliance with the allowable visible emissions rates:
    - i. Method 9 of 40 CFR Part 60, Appendix A shall be used to determine opacity.
  - c. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
  - d. 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 unit 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).
  - e. 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.



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

Cyprus Amax Minerals Company

**Permit Number:** P0114196

**Facility ID:** 0641000060

**Effective Date:** 6/28/2013

- f. 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 of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

