Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

5/8/2012

MICHAEL SMALL
Small's Sand and Gravel
10229 KILLDUFF RD
GAMBIER, OH 43022

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
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: 0142000058
Permit Number: P0105286
Permit Type: Renewal
County: Knox

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

The issuance of this PTI 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page,www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-CDO

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
Small's Sand and Gravel

Facility ID:	0142000058
Permit Number:	P0105286
Permit Type:	Renewal
Issued:	5/8/2012
Effective:	5/8/2012
Expiration:	5/8/2017

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
Small's Sand and Gravel

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Authorization

Facility ID: 0142000058
Application Number(s): A0037610
Permit Number: P0105286
Permit Description: Renewal FEPTIO to complete faciilty consolidation from three premise numbers into one. Includes internal combustion engines, sand and gravel plant, concrete batch plant, and asphalt plant. At the facility's request, general permit terms were used as templates for applicable units. Includes a revision to the existing synthetic minor restriction on NOx to avoid Title V permitting.
Permit Type: Renewal
Permit Fee: $0.00
Issue Date: 5/8/2012
Effective Date: 5/8/2012
Expiration Date: 5/8/2017
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Small's Sand and Gravel
10229 KILLDUFF RD
Gambier, OH 43022

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, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0105286
Permit Description: Renewal FEPTIO to complete faciilty consolidation from three premise numbers into one. Includes internal combustion engines, sand and gravel plant, concrete batch plant, and asphalt plant. At the facility's request, general permit terms were used as templates for applicable units. Includes a revision to the existing synthetic minor restriction on NOx to avoid Title V permitting.

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

Emissions Unit ID:	**F001**
Company Equipment ID:	Roadways and Parking Areas
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F003**
Company Equipment ID:	Mineral Extraction
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F005**
Company Equipment ID:	Crushing and Screening
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F007**
Company Equipment ID:	Storage Piles
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F008**
Company Equipment ID:	Port. Recycling Plt.
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	934 hp generator
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	Longline Dredge Motor
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	Dragline Dredge Motor
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P009**
Company Equipment ID:	175 hp diesel engine
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable

Emissions Unit ID:	**P010**
Company Equipment ID:	425 hp diesel motor
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P011**
Company Equipment ID:	275 hp diesel engine
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	450 hp generator #1
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	450 hp generator #2
Superseded Permit Number:	01-12174
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	Concrete Plant
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P903**
Company Equipment ID:	Asphalt Plant
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: ICE 115 hp

Emissions Unit ID:	**P005**
Company Equipment ID:	Pond Pump
Superseded Permit Number:	01-12174
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P006**
Company Equipment ID:	Topsoil Plant Engine
Superseded Permit Number:	01-12174
General Permit Category andType:	Not Applicable

Group Name: ICE 250 hp

Emissions Unit ID:	**P007**
Company Equipment ID:	HSI Crusher Engine
Superseded Permit Number:	01-12174
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P008**
Company Equipment ID:	VSI Crusher Engine
Superseded Permit Number:	01-12174
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

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

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is takenby 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, Central 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[1] 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.

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) The emissions of total Nitrogen Oxides (NOx) from all emissions units, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, and P903 shall not exceed 99 tons per year, based upon a rolling, 12-month summation of the emissions.

      (2) The emissions of total NOx from all internal combustion engines, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013 shall not exceed 86.6 tons per year, based upon a rolling, 12-month summation of the emissions.

      (3) The maximum annual total fuel usage from all internal combustion engines, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013 shall not exceed 375,182 gallons based upon a rolling, 12-month summation of the fuel usage figures.

   c) Monitoring and Recordkeeping Requirements

      (1) NOx emission shall be calculated from all emissions units P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013, and P903 per rolling 12-month period.

      (2) NOx emission shall be calculated from all internal combustion engines, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013 per rolling 12-month period.

      (3) Fuel usage shall be calculated from all internal combustion engines, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013 per rolling 12-month period.

   d) Reporting Requirements

      (1) The permittee shall identify in the quarterly deviation report any exceedance of the facility wide diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

e) Testing Requirements

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

a. Emission Limitations:

The emissions of total Nitrogen Oxides (NOx) from all emissions units P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, P013 and P903, shall not exceed 99 tons per year, based upon a rolling, 12-month summation of the emissions.

Applicable Compliance Method:

Compliance with the annual NO_x emissions limitation shall be demonstrated by a emission calculation utilizing the appropriate fuel heat content of natural gas and/or #2 diesel oil, the controlled emission factor listed in AP-42 and the fuel usage per rolling, 12-month summation as calculated in c)(3).

b. Emission Limitations:

NOx emission calculations shall be maintained for all diesel engine at the facility and document the NOx emissions to be less than 86.6 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with the annual NO_x emissions limitation shall be demonstrated by a emission calculation utilizing the fuel heat content of #2 diesel oil, the controlled emission factor listed in AP-42 Section 3 for large stationary diesel fuel engines and the fuel usage per rolling, 12-month summation as calculated in c)(3).

c. Emission Limitations:

The maximum annual total fuel usage for all internal combustion engines, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013, shall not exceed 375,182 gallons based upon a rolling, 12-month summation of the fuel usage figures.

Applicable Compliance Method:

Compliance with the fuel usage limitation shall be demonstrated by the record keeping requirements as specified in c)(3).

2. The Ohio EPA has determined that this facility may be subject to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html

C. Emissions Unit Terms and Conditions

1. F001, Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Facility Roadways and Parking Lots

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
UNPAVED ROADWAYS AND PARKING AREAS		
a.	OAC rule 3745-31-05(A)(3)	The emissions of fugitive particulate matter shall not exceed 10.6 tons of particulate matter (PM) per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM10) shall not exceed 3.8 tons per year. The permittee shall utilize best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)a through b)(2)e). There shall be no visible particulate emissions from any unpaved roadway or parking area except for 3 minutes during any 60-minute period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
PAVED ROADWAYS AND PARKING AREAS		
d.	OAC rule 3745-31-05(A)(3)	The emissions of fugitive particulate shall not exceed 1.15 tons of particulate matter (PM) per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM10) shall not exceed 0.3 tons per year. The permittee shall utilize best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)a through b)(2)f). There shall be no visible particulate emissions from any paved roadway or parking area except for one minute during any 60-minute period.
e.	OAC rule 3745-17-07(B)	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.	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(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 the 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 resuspension, earth and/or other material from streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

d. 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.

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 best available technology requirements of OAC rule 3745-31-05.

f. Any unpaved roadway or parking area that is subsequently paved will require a permit for paved roadways and parking areas.

g. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08.

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:

unpaved roadways and parking areas	minimum inspection frequency
all roads and parking areas	daily

paved roadways and parking areas	minimum inspection frequency
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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the 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. <u>Emission Limitations</u>:

10.6 tons fugitive PM/yr from the unpaved roadways and parking areas
3.8 tons fugitive PM_{10}/yr from the unpaved roadways and parking areas

1.15 tons fugitive PE/yr from the paved roadways and parking areas
0.3 tons fugitive PM_{10}/yr from the paved roadways and parking areas

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Sections 13.2.1 and 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for paved and unpaved roadways. Should further updates in AP-42 occur, the most current equations shall be used. These emission limits were based on a maximum of 25,000 vehicle miles traveled per year and 95 % control efficiency for PE.

b. Emission Limitation:

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

No visible PE from unpaved roadways and parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

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

2. F003, Mineral Extraction

Operations, Property and/or Equipment Description:

Mineral Extraction Operations

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.	ORC 3704.03(T)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average from mineral extraction activities.
b.	OAC 3745-31-05(A)(3), as effective 11/30/01	7.47 tons of fugitive PM10 per year; See b)(2)b.
c.	OAC 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c
d.	OAC rule 3745-17-07(B) and OAC rule 3745-17-03(B)(3)	See b)(2)a
e.	OAC rule 3745-17-08(B)	See b)(2)a

(2) Additional Terms and Conditions

a. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08.

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 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 the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has 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 revisions 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, then these emission limitations/control measures no longer apply.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the uncontrolled potential to emit for PM10 is less than 10 tons/yr.

c) Operational Restrictions

(1) The permittee shall not exceed the operational restrictions:

	Operations	Throughput (TPY unless noted otherwise)
a.	Overburden removal	500,000
b.	Soil removal	2000 miles/yr
c.	Overburden replacement	500,000
d.	Overburden loading	500,000
e.	Mineral loading	1,860,000
f.	Bulldozing	1000 hrs/yr
g.	Grading	500 miles/yr

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, for mineral extraction 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:

Mineral Extraction Operation	**Minimum Inspection Frequency**
overburden removal	once per day of operation
soil removal	once per day of operation
overburden replacement	once per day of operation
overburden loading	once per day of operation
mineral loading	once per day of operation
bulldozing	once per day of operation
grading	once per day of operation

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

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

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

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit.

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

(3) The permittee shall identify the following information in the PER in accordance with the monitoring requirements for term numbers d) (1) and (2) above:

a. each day during which an inspection was not performed by the required frequency;

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented;

c. the total mineral throughput (i.e. the amount of stone loaded into trucks), in tons, for the previous calendar year.

f) Testing Requirements

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

a. Emission Limitations:

7.47 tons of fugitive PM10 per year

Applicable Compliance Method:

The annual fugitive dust emission limitations were developed by applying the following emission factors/equations and control efficiencies to the associated process weight rates:

Mineral Extraction Operation	**Maximum Process Weight Rate or Operations factor criteria**	**AP-42 Emission Factor**	**PM10 Emission Factor**	**Emission Factor Citation**
overburden removal	500,000 tons removed/year	0.058 lb/ton removed PM10 35%	0.02 lb PM10 / ton	AP-42 11.9-4 (7/98)
soil removal	2000 VMT silt = 10% W = 290 tons	$E=k(s/12)^a (W/3)^b$ k= 1.5 PM^{10} a =0.9 PM^{10} b = 0.45	9.96 lbs PM10 / VMT	AP-42 13.2.2-4 AP-42 13.2.2-2 (11/06)
overburden replacement	500,000 tons /year	0.012 lb/ton PM10 35%	0.0042 lb PM10/ ton	AP-42 11.9-4 (7/98)

overburden loading	500,000 tons /year	0.037 lb/ton PM10 43%	0.016 PM10/ ton	AP-42 11.9-4 (7/98)
mineral/stone loading	1,860,000 tons/year	0.000016 lb/ton PM10 43%	0.000007 PM10/ ton	AP-42 11.19-2-2 (08/04)
bulldozing	1000 dozer hours silt (s) = 10 % moisture = 5%	$1.0(s)^{1.5}/M^{1.4} \times 0.75$	2.49 lbs PM10/ hr	AP-42 11.9-1 (10/98) AP-42 13.2.2-1 (11/06) silt %
grading	500 VMT S= 2.5 mph (speed for grading only)	$0.051(S)^{2.0} \times 0.6$	0.19 lb PM10/ VMT	AP-42 11.9-1 (7/98)

* Vehicle miles traveled (VMT)

Provided compliance is shown with the operational restrictions of this permit and the requirement to apply best available control measures, compliance with the annual emission limitations shall be assumed.

b. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: overburden removal, soil removal, overburden replacement, overburden loading, mineral loading, bulldozing, and grading.

Applicable Compliance Method:

If required, 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 the line of

sight should be approximately perpendicular to the flow of fugitive dust and to the longer axis of the emissions; and

iv. the visible opacity observations shall be made for the point of highest opacity within the fugitive dust emitted from the source.

g) Miscellaneous Requirements

(1) None.

3. F005, Crushing and Screening

Operations, Property and/or Equipment Description:

Sand and Gravel Plant, includes crushing, screening, handling and conveying

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).

(2) 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.

(3) 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)	The emissions of fugitive particulate matter (PM) shall not exceed 7.7 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 2.9 pounds per hour. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO.
b.	OAC rule 3745-35-07(B) [Synthetic Minor to avoid PM_{10} modeling]	The emissions of fugitive particulate matter (PM) shall not exceed 11.9 tons as a rolling, 12-month summation. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 4.4 tons as a rolling, 12-month summation.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07	The emission limitation specified by this rule is less stringent than those established pursuant to 40 CFR Part 60, Subpart OOO.
d.	OAC rule 3745-17-08	The emission limitation specified by this rule is less stringent than those established pursuant to 40 CFR Part 60, Subpart OOO.
e.	40 CFR, Part 60, Subpart OOO (40 CFR 60.670-60.676) [In accordance with 40 CFR 60.670(a), this emissions unit is comprised of crushers, sceening operations, conveyors, and storage bins that are affected facilities subject to the emission limitations and requirements specified in this section.]	Visible emission restrictions See b)(2)c.

(2) Additional Terms and Conditions

a. The permittee has committed to employ the following control measures for this emissions unit for purposes of ensuring compliance with the above-mentioned applicable requirements:

Material Handling/Processing Operation	**Control Measures**
loading and unloading	reduced drop height, wet application, as necessary*
crushing and screening	wet application, as necessary*, or total enclosures
transfer and conveying	partial and/or total enclosures, wet application, as necessary*

* 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.

b. For each 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 material handling operations until further observation confirms that use of the control measures is unnecessary.

c. The permittee shall not cause to be discharged into the atmosphere, fugitive dust emissions which exhibit greater than the following:

Material Handling/Processing Operation	**Opacity limit***
wet screening and screening of saturated materials	no visible emissions
conveyor transfer points of saturated materials	no visible emissions
transfer points on belt conveyors or any other affected facility in a building	7%, as a 6-minute average
For affected facilities (as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008:	
Crushing/with no capture system	15%, as a 6-minute average
conveyor transfer points feeding and exiting crushers	15%, as a 6-minute average
grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, and any other affected facility as defined by this rule	10%, as a 6-minute average
For affected facilities (as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction on or after April 22, 2008:	
crushers with no capture system	12 %, as a 6-minute average
grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, and any other affected facility as defined by this rule	7%, as a 6-minute average

d. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08.

c) Operational Restrictions

(1) The maximum annual material throughput for this emissions unit shall not exceed 1,860,000 tons based on the material throughput of the primary feeder.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of material processed through the primary feeder of this emissions unit in (a) tons per month and (b) total tons, rolling, 12-month summation.

(2) Except as otherwise provided in this section, for aggregate processing 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:

Aggregate Processing Operation	**Minimum Inspection Frequency**
each loading operation (truck dumping into a feeder, hopper, or crusher)	once per day of operation
each plant conveyor & transfer point	once per day of operation
each screen	once per day of operation
each crusher	once per day of operation

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

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in (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.

(4) When using a wet suppression system to control fugitive dust, the permittee shall perform monthly periodic inspections for each piece of equipment constructed, modified, or reconstructed on or after April 22, 2008, to check that water is flowing to the discharge

spray nozzles. The permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if water is not flowing properly during an inspection of the water spray nozzles. The permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under d)(6).

(5) If the permittee, meeting the requirements of d(4) above, ceases operation of the water sprays or is using a control mechanism other than water sprays to reduce fugitive dust emissions during the monthly inspection (for example, water from recent rainfall), the logbook entry required under d)(6) must specify the control mechanism being used instead of the water sprays.

(6) The permittee must record each periodic inspection required under d)(4) and d)(5), including dates and any corrective actions taken, in a logbook (in written or electronic format). The permittee must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Ohio EPA upon request.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify the following information in the PER in accordance with the monitoring requirements in term numbers d)(1), (2) and (3) above:

a. the total mineral throughput (i.e. the amount of stone loaded into the primary feeder), in tons, for the previous calendar year;

b. all exceedances of the rolling, 12-month limitation on aggregate processing;

c. each day during which an inspection was not performed by the required frequency; and

d. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

(3) The permittee shall submit the following information for each piece of equipment that is replaced by a piece of equipment having the same function as the existing facility:

a. for a crusher:

i. the rated capacity in tons per hour of the existing facility being replaced; and

ii. the rated capacity in tons per hour of the replacement equipment.

b. for a screening operation:

i. the total surface area of the top screen of the existing screening operation being replaced; and

ii. the total surface area of the top screen of the replacement screening operation.

c. for a conveyor belt:

i. the width of the existing belt being replaced; and

ii. the width of the replacement conveyor belt.

d. for a storage bin;

i. the rated capacity in tons of the existing storage bin being replaced; and

ii. the rated capacity in tons of the replacement storage bins.

(4) The notification shall be submitted to the Ohio EPA, Central District Office (CDO) within 30 days after the equipment replacement pursuant to the general provisions of NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times for this emissions unit:

a. actual start-up date (within 15 days after such date); and

b. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to Ohio EPA, CDO:

The addresses for these offices are located at the following web page:

http://www.epa.ohio.gov/dapc/general/dolaa.aspx.

f) Testing Requirements

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

a. Emission Limitations:

The emissions of fugitive PM shall not exceed 7.7 pounds per hour.

The emissions of fugitive PM_{10} shall not exceed 2.9 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly mass emissions shall be demonstrated based on a one-time calculation using the following equations and variables, and the maximum aggregate processing capacity of the sand and gravel plant.

i. For emissions from crushing operations:
Ec = emissions factor for crushing (0.0054 lb PM / ton or 0.0024 lb PM_{10} / ton)
OR = operating rate (600 tons per hour)
CE = control efficiency (95% for saturated material or water sprays)
N = number of crushers operating (HSI crusher and VSI crusher)

Crusher Emissions = Ec * OR * (1-[CE/100]) * N

ii. For emissions from screening operations
Es = emissions factor for screening (0.025 lb PM / ton or 0.0087 lb PM_{10} / ton)
OR = operating rate (600 tons per hour)
CE = control efficiency (95% for saturated material or water sprays)
N = number of screens operating (Mesabi screen, JCI screen, 2 KPI screens)

Screening Emissions = Es * OR * (1-[CE/100]) * N

iii. For emissions from aggregate receiving
Fr = emissions factor for aggregate receiving (in lb / ton processed)
k = 0.74 for PM and 0.35 for PM_{10}
U = wind speed (15 mph)
M = moisture content (10%)
CE = control efficiency (95% for saturated material)
OR = operating rate (600 tons per hour)

The aggregate receiving emissions factor (Fr) for either PM or PM_{10} was derived using AP-42 Chapter 13.2.4-3 (Table 3) (11/2006) and the following equation:

Fr = k * (0.0032) * [(U/5)^1.3 / (M/2)^1.4]

Emissions from aggregate receiving (Er) for either PM or PM_{10} are calculated as follows:

Er = Fr *OR * (1-[CE/100])

iv. For emissions from transferring and conveying operations
Et = emissions factor for transferring or conveying (0.003 lb/ton PM or 0.0011 lb/ton PM_{10})
N = number of transfer points (41)
OR = operating rate (600 tons per hour)

CE = control efficiency (95% for saturated material or water sprays)

Transfer and conveying emissions = Et * OR * N * (1-[CE/100])

v. Total hourly emissions from this emissions units for PM or PM_{10} shall be calculated by the sum of calculated pounds per hour emissions rates from A.V.2.a.i through A.V.2.a.iv.

Emissions calculations from crushing and screening operations were based upon the most recent version of AP-42 Chapter 11.19.2 (8/2004). Emissions calculations for aggregate receiving were based upon the most recent version of AP-42 Chapter 13.2.4-3 (Table 3). Emissions calculations for aggregate transferring and conveying were based upon AP-42 Chapter 11.19.1 and 11.19.2 (8/2004).

b. Emission Limitations:

The emissions of fugitive PM shall not exceed 11.9 tons as a rolling, 12-month summation.

The emissions of fugitive PM_{10} shall not exceed 4.4 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual PM and PM_{10} emissions limitations shall be demonstrated based on the following equations and variables, and the rolling, 12-month summation of aggregate processing.

i. For emissions from crushing operations:
Ec = emissions factor for crushing (0.0054 lb PM / ton or 0.0024 lb PM_{10} / ton)
AP = total aggregate processed as a rolling, 12-month summation (in tons)
CE = control efficiency (95% for saturated material or water sprays)
N = number of crushers operating (HSI crusher and VSI crusher)

Annual Crusher Emissions = [Ec * AP * (1-[CE/100]) * N] / 2000

ii. For emissions from screening operations

Es = emissions factor for screening (0.025 lb PM / ton or 0.0087 lb PM_{10} / ton)
AP = total aggregate processed as a rolling, 12-month summation (in tons)
CE = control efficiency (95% for saturated material or water sprays)
N = number of screens operating (Mesabi screen, JCI screen, 2 KPI screens)

Annual Screening Emissions = [Es * AP * (1-[CE/100]) * N] / 2000

iii. For emissions from aggregate receiving

Fr = emissions factor for aggregate receiving (in lb / ton processed)
k = 0.74 for PM and 0.35 for PM_{10}
U = wind speed (15 mph)
M = moisture content (10%)
CE = control efficiency (95% for saturated material)
AP = total aggregate processed as a rolling, 12-month summation (in tons)

The aggregate receiving emissions factor (Fr) for either PM or PM_{10} was derived using AP-42 Chapter 13.2.4-3 (Table 3) (11/2006) and the following equation:

Fr = k * (0.0032) * [(U/5)^1.3 / (M/2)^1.4]

Annual emissions from aggregate receiving (Er) for either PM or PM_{10} are calculated as follows:

Er = [Fr *AP * (1-[CE/100])] / 2000

iv. For emissions from transferring and conveying operations

Et = emissions factor for transferring or conveying (0.003 lb/ton PM or 0.0011 lb/ton PM_{10})
N = number of transfer points (41)
AP = total aggregate processed as a rolling, 12-month summation (in tons)
CE = control efficiency (95% for saturated material or water sprays)

Annual transfer and conveying emissions = Et * AP * N * (1-[CE/100])

v. Total annual emissions (in tons per rolling, 12-month summation) from this emissions units for PM or PM_{10} shall be calculated by the sum of calculated tons per year emissions rates from A.V.2.b.i through A.V.2.b.iv.

Emissions calculations from crushing and screening operations were based upon the most recent version of AP-42 Chapter 11.19.2 (8/2004). Emissions calculations for aggregate receiving were based upon the most recent version of AP-42 Chapter 13.2.4-3 (Table 3). Emissions calculations for aggregate transferring and conveying were based upon AP-42 Chapter 11.19.1 and 11.19.2 (8/2004).

c. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any crusher, at which a capture system is not used; any visible emissions of fugitive dust which exhibit greater than 15% opacity, as a six minute average.

Applicable Compliance Method:

If required, 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. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any crusher constructed, modified, or reconstructed on or after April 22, 2008, any visible emissions offugitive dust which exhibit greater than 12 % opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.

e. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any of the following operations: transfer points, screens, grinding mills, bucket elevators, enclosed truck or railcar unloading, storage bins, and bagging operations, any visible emissions of fugitive dust which exhibit greater than 10% opacity, as a six minute average (unless otherwise specified).

Applicable Compliance Method:

If required, 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.

f. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading

stations that were constructed, modified, or reconstructed on or after April 22, 2008, and any transfer point or other affected facility enclosed in a building, any visible emissions of fugitive dust which exhibit greater than 7 % opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.Emission Limitation:

g. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere any visible emissions offugitive dust from wet screening operations and subsequent transfer points that process saturated materials.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Method 22 of 40 CFR Part 60, Appendix A, and the procedures specified in 40 CFR Part 60, Subpart OOO, section 60.675.

g) Miscellaneous Requirements

(1) None.

4. F007, Storage Piles

Operations, Property and/or Equipment Description:

Facility 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).

(2) 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.

(3) 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	7.5 tons/year of fugitive particulate matter of 10 microns or less (PM10), see b)(2)h.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)i.
c.	ORC 3704.03(T)	15.9 tons/year of fugitive particulate emissions (PE) no visible PE except for one minute during any 60-minute period Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust See b)(2)a. through b)(2)f.

d.	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than those established pursuant to ORC 3704.03(T).
e.	OAC rule 3745-17-08(B)	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.

b. 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.

c. 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.

d. 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 application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

e. 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.

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 requirements of OAC rule 3745-31-05(A)(3).

g. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08.

h. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 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 the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has 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 revisions 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, then these emission limitations/control measures no longer apply.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10 emissions from this air contaminant source since the uncontrolled potential to emit for PM10 is less than 10 tons/yr.

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:

storage pile identification	minimum load-in inspection frequency
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:

storage pile identification	minimum load-out inspection frequency
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:

storage pile identification	minimum wind erosion inspection frequency
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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit.

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

f) Testing Requirements

(1) Compliance with the 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 Limitations:

7.5 tons/year of fugitive PM10

15.9 tons/year of fugitive PE

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 were based on a maximum production of 5,256,000 tons per year, a maximum storage surface area of 0.75 acres, and a 95% overall control efficiency for PE and PM10.

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.

5. F008, Port. Recycling Plt.

Operations, Property and/or Equipment Description:

Recycling Plant (portable)

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).

(2) 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.

(3) 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)	The emissions of fugitive particulate matter (PM) shall not exceed 0.8 pounds per hour and 3.6 tons per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.4 pounds per hour and 1.5 tons per year Visible particulate emissions from fugitive dust emissions shall not exceed ten percent opacity as a three-minute average. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO. See b)(2)a through b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR, Part 60,Subpart OOO (40 CFR 60.670-60.676) [In accordance with 40 CFR 60.670(a), this emissions unit is comprised of crushers, screening operations, conveyors, and storage bins that are affected facilities subject to the emission limitations and requirements specified in this section.]	The emission limitation specified by this rule is less stringent than those established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)d.
e.	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-08(B)	See b)(2)e.

(2) Additional Terms and Conditions

a. The permittee has committed to employ the following control measures for this emissions unit for purposes of ensuring compliance with the above-mentioned applicable requirements:

Material Handling Operation	Control Measures
loading and unloading	reduced drop height, wet application, as necessary*
crushing and screening	wet application, as necessary*, or total enclosures
transfer and conveying	partial and/or total enclosures, wet application, as necessary*

* 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.

b. For each 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 material handling operations until further observation confirms that use of the control measures is unnecessary.

c. The BAT requirements under ORC 3704.03(T) have been determined to be compliance with the ton per year limit contained in b)(1)a.

d. The permittee shall not cause to be discharged into the atmosphere, fugitive dust emissions which exhibit greater than the following:

Material Handling/Processing Operation	**Opacity limit***
wet screening and screening of saturated materials	no visible emissions
conveyor transfer points of saturated materials	no visible emissions
transfer points on belt conveyors or any other affected facility in a building	7%, as a 6-minute average
For affected facilities (as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008:	
Crushing/with no capture system	15%, as a 6-minute average
conveyor transfer points feeding and exiting crushers	15%, as a 6-minute average
grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations, and any other affected facility as defined by this rule	10%, as a 6-minute average
For affected facilities (as defined in 60.670 and 60.671) that commenced construction, modification, or reconstruction on or after April 22, 2008:	
crushers with no capture system	12 %, as a 6-minute average
grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations,	7%, as a 6-minute average

storage bins, enclosed truck or railcar loading stations, and any other affected facility as defined by this rule	

e. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08.

c) Operational Restrictions

(1) The total amount of aggregate processed by emissions unit F008 shall not exceed 926,700 tons per year.

(2) This permit restricts the permittee to up to: 1 crusher (e.g. primary, secondary and tertiary), 1 screen, and 5 transfer points.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the amount of material processed through the primary feeder of this emissions unit in (a) tons per month and (b) total tons, to date, for the calendar year.

(2) Except as otherwise provided in this section, for aggregate processing 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:

Aggregate Processing Operation	**Minimum Inspection Frequency**
each loading operation (truck dumping into a feeder, hopper, or crusher)	once per day of operation
each plant conveyor & transfer point	once per day of operation
each screen	once per day of operation
each crusher	once per day of operation

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

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in (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.

(4) When using a wet suppression system to control fugitive dust, the permittee shall perform monthly periodic inspections for each piece of equipment constructed, modified, or reconstructed on or after April 22, 2008, to check that water is flowing to the discharge spray nozzles. The permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if water is not flowing properly during an inspection of the water spray nozzles. The permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under d)(6).

(5) If the permittee, meeting the requirements of d(4) above, ceases operation of the water sprays or is using a control mechanism other than water sprays to reduce fugitive dust emissions during the monthly inspection (for example, water from recent rainfall), the logbook entry required under d)(6) must specify the control mechanism being used instead of the water sprays.

(6) The permittee must record each periodic inspection required under d)(4) and d)(5), including dates and any corrective actions taken, in a logbook (in written or electronic format). The permittee must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Ohio EPA upon request.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify the following information in the PER in accordance with the monitoring requirements in term numbers d)(1), (2) and (3) above:

a. the total mineral throughput (i.e. the amount of stone loaded into the primary feeder), in tons, for the previous calendar year.

b. each day during which an inspection was not performed by the required frequency; and

c. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

(4) The permittee shall submit the following information for each piece of equipment that is replaced by a piece of equipment having the same function as the existing facility:

a. for a crusher:

i. the rated capacity in tons per hour of the existing facility being replaced; and

ii. the rated capacity in tons per hour of the replacement equipment.

b. for a screening operation:

i. the total surface area of the top screen of the existing screening operation being replaced; and

ii. the total surface area of the top screen of the replacement screening operation.

c. for a conveyor belt:

i. the width of the existing belt being replaced; and

ii. the width of the replacement conveyor belt.

d. for a storage bin;

i. the rated capacity in tons of the existing storage bin being replaced; and

ii. the rated capacity in tons of the replacement storage bins.

(5) The notification shall be submitted to the Ohio EPA, Central District Office (CDO) within 30 days after the equipment replacement pursuant to the general provisions of NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times for this emissions unit:

a. actual start-up date (within 15 days after such date); and

b. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to Ohio EPA, CDO:

The addresses for these offices are located at the following web page:

http://www.epa.ohio.gov/dapc/general/dolaa.aspx.

f) Testing Requirements

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

a. Emission Limitation:

The emissions of PM shall not exceed 0.8 pounds per hour and 3.6 tons per year.

The emissions of fugitive PM_{10} shall not exceed 0.4 pounds per hour and 1.5 tons per year.

Applicable Compliance Method:

The annual fugitive dust emission limitations were developed by multiplying the following controlled emission factors from Ap-42 Section 11.19.2-2 (8/04) by the annual throughput restriction of 1,314,000 tons/year, added to the product of the throughput multiplied by AP-42 Section 13.2.4 (11/06) emission factor with a control efficiency of 80% and then dividing by 2000 pounds/ton

Aggregate Processing Operation	PM10 Emission Factor
up to 1 screen	0.00074 lb/ton processed
up to 1 crusher	0.00054 lb/ton processed
up to 5 conveyor transfer points	0.000046 lb/ton processed

Provided compliance is shown with the operational restrictions of this permit and the requirement to apply best available control measures, compliance with the annual emission limitations shall be demonstrated.

b. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, visible emissions of fugitive dust which exhibit greater than 15% opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.

c. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any crusher constructed, modified, or reconstructed on or after April 22, 2008, any visible emissions offugitive dust which exhibit greater than 12 % opacity, as a six minute average.

Applicable Compliance Method:

If required, 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. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any of the following operations: transfer points, screens, grinding mills, bucket elevators, enclosed truck or railcar unloading, storage bins, and bagging operations, any visible emissions of fugitive dust which exhibit greater than 10% opacity, as a six minute average (unless otherwise specified).

Applicable Compliance Method:

If required, 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.

e. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere from any grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations that were constructed, modified, or reconstructed on or after April 22, 2008, and any transfer point or other affected facility enclosed in a building, any visible emissions of fugitive dust which exhibit greater than 7 % opacity, as a six minute average.

Applicable Compliance Method:

If required, 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.Emission Limitation:

f. Emission Limitation:

The permittee shall not cause to be discharged into the atmosphere any visible emissions offugitive dust from wet screening operations and subsequent transfer points that process saturated materials.

Applicable Compliance Method:

If required, compliance shall be demonstrated using Method 22 of 40 CFR Part 60, Appendix A, and the procedures specified in 40 CFR Part 60, Subpart OOO, section 60.675.

g) Miscellaneous Requirements

(1) None.

6. P002, 934 hp generator

Operations, Property and/or Equipment Description:

934 horsepower diesel powered generator, installed 2005

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)c., d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 16.2 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 7.3 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 4.3 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.6 pound per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The emissions of organic compounds (OC) shall not exceed 0.8 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 24.6 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 11.1 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 6.6 tons per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.9 ton per year. The emissions of organic compounds (OC) shall not exceed 1.2 tons per year. See b(2)c.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 183,960 gallon per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 183,960 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

[OAC rule 3745-17-07(A)(1)]

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.6 pound per hour and 0.9 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (60.4 gallons/hour)

EF_{PM} =PM emissions factor (0.062 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.062 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 183,960 gal/yr) / 1,000,000) * 0.062 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 16.2 pounds per hour and 24.6 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (60.4 gallons/hour)
EF_{NOx} = NO_x emissions factor (1.9 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (1.9 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 183,960 gal/yr) / 1,000,000) * 1.9 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 7.3 pounds per hour and 11.1 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (60.4 gallons/hour)
EF_{CO} = CO emissions factor (0.85 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.85 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 183,960 gal/yr) / 1,000,000) * 0.85 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.8 pound per hour and 1.2 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (60.4 gallons/hour)

EF_{OC} =OC emissions factor (0.09 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.09 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 183,960 gal/yr) / 1,000,000) * 0.09 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 4.3 pounds per hour and 6.6 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (60.4 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.505 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.505 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 183,960 gal/yr) / 1,000,000) * 0.505 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

7. P003, Longline Dredge Motor

Operations, Property and/or Equipment Description:

600 horsepower longline dredge diesel fired motor, installed 2004

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)c., d)(1), and e)(3)

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)	<u>dredging operations emissions:</u> There shall be no emissions of particulate matter from this wet mining operation. <u>diesel engine emissions:</u> The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.0 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.3 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.8 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		diameter (PM_{10}) shall not exceed 0.1 pound per hour. The emissions of organic compounds (OC) shall not exceed 0.2 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	<u>diesel engine emissions only:</u> The emissions of NO_x from this emissions unit shall not exceed 7.7 tons per year. The emissions of CO from this emissions unit shall not exceed 2.0 tons per year. The emissions of SO_2 from this emissions unit shall not exceed 1.2 tons per year. The emissions of fugitive PM_{10} shall not exceed 0.2 ton per year. The emissions of OC shall not exceed 0.3 ton per year. See b)(2)c below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 33,726 gallon per rolling, 12-month summation.

d. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by mining of only wet materials in this wet mining operation (as defined in 40 CFR Part 60.671).

e. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 33,726 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. Opacity Limitation:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

[OAC rule 3745-17-07(A)(1)]

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.1 pound per hour and 0.2 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (11 gallons/hour)

EF_{PM} =PM emissions factor (0.062 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.062 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 33726 gal/yr) / 1,000,000) * 0.062 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 5.0 pounds per hour and 7.7 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (11 gallons/hour)
EF_{NOx} = NO_x emissions factor (3.2 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (3.2 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 33726 gal/yr) / 1,000,000) * 3.2 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 1.3 pounds per hour and 2.0 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (11 gallons/hour)
EF_{CO} = CO emissions factor (0.85 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000

Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.85 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 33726 gal/yr) / 1,000,000) * 0.85 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.2 pound per hour and 0.3 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (11 gallons/hour)

EF_{OC} =OC emissions factor (0.09 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.09 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 33726 gal/yr) / 1,000,000) * 0.09 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.8 pound per hour and 1.2 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (11 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.505 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.505 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 33726 gal/yr) / 1,000,000) * 0.505 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

8. P004, Dragline Dredge Motor

Operations, Property and/or Equipment Description:

300 horsepower dragline dredge diesel fired motor, installed 2002

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)c., d)(1), and e)(3)

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)	<u>dredging operations emissions:</u> There shall be no emissions of particulate matter from this wet mining operation. <u>diesel engine emissions:</u> The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 3.5 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.8 pound per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.3 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		diameter (PM_{10}) shall not exceed 0.3 pound per hour. The emissions of organic compounds (OC) shall not exceed 0.3 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	<u>diesel engine emissions only:</u> The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.3 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.2 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.4 ton per year. The emissions of organic compounds (OC) shall not exceed 0.4 ton per year. See b)(2)c below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 16,863 gallon per rolling, 12-month summation.

d. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by mining of only wet materials in this wet mining operation (as defined in 40 CFR Part 60.671).

e. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 16,863 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. Opacity Limitation:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.3 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (5.5 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 16,863 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 3.5 pounds per hour and 5.3 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (5.5 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 16,863 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 0.8 pound per hour and 1.2 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (5.5 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000

Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 16,863 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.3 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (5.5 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 16,863 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.3 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (5.5 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 16,863 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

9. P009, 175 hp diesel engine

Operations, Property and/or Equipment Description:

175 horsepower screen plant diesel fired engine, installed 2002

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)c., d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 2.0 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.5 pound per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 pound per hour. The emissions of organic compounds (OC) shall not exceed 0.2 pound per

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 3.1 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.7 ton per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.3 ton per year. The emissions of organic compounds (OC) shall not exceed 0.3 ton per year. See b)(2)c below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 9,689 gallon per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 9689 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.2 pound per hour and 0.3 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (3.16 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 9689 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 2.0 pounds per hour and 3.1 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (3.16 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 9689 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 0.5 pound per hour and 0.7 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (3.16 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 9689 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.2 pound per hour and 0.3 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (3.16 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 9689 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.2 pound per hour and 0.2 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (3.16 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 9689 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

10. P010, 425 hp diesel motor

Operations, Property and/or Equipment Description:

425 horsepower recycling plant diesel-fired motor, installed 2002

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)c., d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 4.9 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.4 pound per hour. The emissions of organic compounds (OC) shall not exceed 0.4 pound per

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.5 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.6 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.5 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.6 ton per year. The emissions of organic compounds (OC) shall not exceed 0.7 ton per year. See b)(2)c below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 23,972 gallons per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 23,972 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.4 pound per hour and 0.6 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (7.76 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 23,972 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 4.9 pounds per hour and 7.5 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (7.76 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 23,972 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 1.1 pound per hour and 1.6 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (7.76 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 23,972 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.4 pound per hour and 0.7 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (7.76 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 23,972 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.4 pound per hour and 0.5 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (7.76 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 23,972 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

11. P011, 275 hp diesel engine

Operations, Property and/or Equipment Description:

275 horsepower recycling plant diesel-fired engine, installed 2002

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)c., d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 3.2 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.7 pound per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.3 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.3 pound per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The emissions of organic compounds (OC) shall not exceed 0.3 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 4.8 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.4 ton per year. The emissions of organic compounds (OC) shall not exceed 0.4 ton per year. See b)(2)c below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 15,422 gallons per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 15,422 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.3 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (5.03 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 15,422 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 3.2 pounds per hour and 4.8 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (5.03 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 15,422 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 0.7 pound per hour and 1.1 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (5.03 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 15,422 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.3 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (5.03 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 15,422 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.3 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (5.03 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 15,422 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

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g) Miscellaneous Requirements

(1) None.

12. P012, 450 hp generator #1

Operations, Property and/or Equipment Description:

450 horsepower Caterpillar Model 3408-T (1985) generator No. 1, installed 1985

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)c., d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.1 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.4 pound per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The emissions of organic compounds (OC) shall not exceed 0.5 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.9 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.7 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.6 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.6 tons per year. The emissions of organic compounds (OC) shall not exceed 0.7 ton per year. See b)(2)c. below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 25,110 gallon per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 25,110 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.4 pound per hour and 0.6 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 5.1 pounds per hour and 7.9 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (8.19 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 1.1 pound per hour and 1.7 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (8.19 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.5 pound per hour and 0.7 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.4 pound per hour and 0.6 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

13. P013, 450 hp generator #2

Operations, Property and/or Equipment Description:

450 horsepower Caterpillar Model 3408-T (1984) generator No. 2, installed 1985

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)c., d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.1 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.4 pounds per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The emissions of organic compounds (OC) shall not exceed 0.5 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.9 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.7 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.6 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.6 ton per year. The emissions of organic compounds (OC) shall not exceed 0.7 ton per year. See b)(2)c. below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 25,110 gallon per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 25,110 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.4 pound per hour and 0.6 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 5.1 pounds per hour and 7.9 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 1.1 pound per hour and 1.7 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (8.19 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.5 pound per hour and 0.7 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.4 pound per hour and 0.6 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (8.19 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 25,110 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

14. P901, Concrete Plant

Operations, Property and/or Equipment Description:

Concrete Batch 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. 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
(Transfer of Sand and Aggregate to Elevated Bins)		
a.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 2.85 tons/yr. Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 3-minute average. At all times during the transfer of sand and aggregate, the drop height of the front-end bucket shall be minimized to the extent possible to minimize or eliminate visible emissions of fugitive dust. Sand and aggregate loaded into the elevated bins shall, at all times, have an inherent moisture content sufficient to minimize or eliminate visible emissions of fugitive dust.

(Portland Cement, Fly Ash and Slag Silos)		
b.	OAC rule 3745-31-05(A)(3)	PE shall not exceed 0.18 ton/yr. Each fabric filter(s) serving a silo shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the outlet(s). See b)(2)b.
c.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)	See b)(2)a.
(Weigh Hopper Loading of Cement, Fly Ash, Slag, and possibly Sand and Aggregate)		
d.	OAC rule 3745-31-05(A)(3)	PE shall not exceed 1.02 tons/yr. The fabric filter serving the weigh hopper shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the outlet. See b)(2)c.
e.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)	See b)(2)a.
(Truck Loading of Aggregate, Sand, Cement and Cement Supplement)		
f.	OAC rule 3745-31-05(A)(3)	PE shall not exceed 7.35 tons/yr. Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 3-minute average. The fabric filter serving truck loading shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the outlet. See b)(2)d.
g.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B)	See b)(2)a.

(2) Additional Terms and Conditions

a. The requirements established pursuant to OAC rule 3745-17-07(A) and OAC rule 3745-17-11(B) are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

b. The permittee shall employ the following best available control measures for the above-identified cement and cement supplement silos for the purpose of ensuring compliance with the above-mentioned applicable requirements:

i. Cement and cement supplement shall be transferred pneumatically to the cement and cement supplement silos. The pneumatic system shall be adequately enclosed so as to eliminate at all times visible emissions of fugitive dust. Any visible emissions of cement and/or cement supplement dust emanating from the delivery vehicle during transfer shall be cause for the immediate halt of the unloading process and the refusal of the cement and/or cement supplement load until the situation is corrected.

ii. Each cement and cement supplement silo vent shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust at the point of capture.

c. The permittee shall employ the following best available control measures for the above-identified weigh hoppers for the purpose of ensuring compliance with the above-mentioned applicable requirements:

i. The weigh hoppers shall be sufficiently enclosed so as to minimize or eliminate at all times visible emissions of fugitive dust.

ii. The transfer of cement/cement supplement/sand/aggregate to the concrete batching weigh hoppers shall be enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to minimize or eliminate at all times visible emissions of fugitive dust at the point of capture.

d. The permittee shall employ the following best available control measures for the above-identified truck mix loading process for the purpose of ensuring compliance with the above-mentioned applicable requirements:

The permittee shall install and employ a fabric filter dust collection system for the purpose of controlling fugitive dust emissions from the truck mix loading process. The fabric filter dust collection system shall be installed and operational prior to initial start-up of this facility. The control system shall be operated at all times that trucks are being loaded and shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point of capture.

c) Operational Restrictions

(1) The maximum hourly production rate for this truck mix concrete facility shall not exceed 200 cubic yards of concrete (400 tons) per hour.

(2) The maximum annual production rate for this truck mix concrete facility shall not exceed 250,000 cubic yards of concrete (500,000 tons) per year.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain annual records of the cubic yards or tons of concrete produced at this facility.

(2) The permittee shall perform weekly checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible particulate emissions from the fabric filters serving this emissions unit. No inspections are required on days the material handling operations are not in operation. The presence or absence of any visible particulate emissions shall be recorded electronically or in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the total duration of any visible emission incident; and

b. any corrective actions taken to eliminate the visible emissions.

The information above shall be kept separately for each fabric filter serving this emissions unit.

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from each sand and/or aggregate transfer point and truck loading serving this emissions unit. No inspections are required on days the material handling operations are not in operation. The presence or absence of any visible emissions shall be noted in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in the operations log:

a. whether the emissions are representative of normal operations;

b. if the emissions are not representative of normal operations, the cause of the visible emissions;

c. the total duration of any visible emission incident; and

d. any corrective actions taken to eliminate the visible emissions.

The information above shall be kept separately for each sand and/or aggregate transfer point and truck loading serving this emissions unit.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness

Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emission Limitation:

Each fabric filter shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

Transfer of Sand and Aggregate to Elevated Bins Emission Limitation: PE shall not exceed 2.85 tons/yr.

Applicable Compliance Method:

Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement supplement (slag/fly ash) and 6% water.

Aggregate emission factor = 0.0069 lb PE/ton (AP-42, 11.12, 10/01)

Sand emission factor = 0.0021 lb PE/ton (AP-42, 11.12, 10/01)

Aggregate feed hopper loading = 220,000 tons/yr max transfer rate
220,000 tons/yr x 0.0069 lb/ton x ton/2000 lbs = 0.76 ton PE/yr
Aggregate feed hopper to conveyor = 220,000 tons/yr max transfer rate
220,000 tons/yr x 0.0069 lb/ton x ton/2000 lbs = 0.76 ton PE/yr
Aggregate conveyor to bin = 220,000 tons/yr max transfer rate
220,000 tons/yr x 0.0069 lb/ton x ton/2000 lbs = 0.76 ton PE/yr
Sand feed hopper loading = 180,000 tons/yr max transfer rate
180,000 tons/yr x 0.0021 lb/ton x ton/2000 lbs = 0.19 ton PE/yr
Sand feed hopper to conveyor = 180,000 tons/yr max transfer rate
180,000 tons/yr x 0.0021 lb/ton x ton/2000 lbs = 0.19 ton PE/yr
Sand conveyor to bin = 180,000 tons/yr max transfer rate
180,000 tons/yr x 0.0021 lb/ton x ton/2000 lbs = 0.19 ton PE/yr

Aggregate & sand transfer total = 2.85 tons PE/yr

c. Emission Limitation:

Portland Cement, Fly Ash and Slag Silos Emission Limitation: PE shall not exceed 0.18 ton/yr.

Applicable Compliance Method:

Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement supplement (slag/fly ash) and 6% water.

Cement emission factor = 0.00099 lb PE/ton (AP-42, 11.12, 10/01)
Supplement emission factor = 0.0089 lb PE/ton (AP-42, 11.12, 10/01)

Truck to cement silo = 35,000 tons/yr max transfer rate
35,000 tons/yr x 0.00099 lb/ton x ton/2000 lbs = 0.02 ton PE/yr
Truck to cement sup silo = 35,000 tons/yr max transfer rate
35,000 tons/yr x 0.0089 lbs/ton x ton/2000 lbs = 0.16 ton PE/yr

Cement & cement supplement unloading total = 0.18 ton PE/yr

d. Emission Limitation:

Weigh Hopper Loading of Cement, Fly Ash, Slag, and possibly Sand and Aggregate Emission Limitation: PE shall not exceed 1.02 tons/yr.

Applicable Compliance Method:

Maximum throughput and calculations are based on a mix design consisting of 44% aggregate, 36% sand, 7% cement, 7% cement supplement (slag/fly ash) and 6% water.

Emission factor = 0.0051 lb PE/ton (AP-42, 11.12, 10/01)

Bins to weigh hopper = 400,000 tons/yr max transfer rate
400,000 tons/yr x 0.0051 lb/ton x ton/2000 lbs = 1.02 tons PE/yr

Weigh hopper loading total = 1.02 tons PE/yr

e. Emission Limitation:

Truck Loading of Aggregate, Sand, Cement and Cement Supplement Emission Limitation: PE shall not exceed 7.35 ton/yr.

Applicable Compliance Method:

Emission factor = 0.21 lb PE/ton (AP-42, 11.12, 10/01)

Weigh hopper to truck = 70,000 tons/yr max transfer rate

70,000 tons/yr x 0.21 lb/ton x ton/2000 lbs = 7.35 tons PE/yr

Truck loading total = 7.35 tons PE/yr

f. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 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, 1997.

g. Emission Limitation:

There shall be no visible particulate emissions from the fabric filters serving this emissions unit.

Applicable Compliance Method:

If required, compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 22 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, 1997.

g) Miscellaneous Requirements

(1) None.

15. P903, Asphalt Plant

Operations, Property and/or Equipment Description:

225 TPH Counterflow Drum Mixer Asphalt 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).

(2) 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. d(10)

(3) 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(1)h., b)(1)k., b)(1)o., b(2)i., c(3), d(3) and e(2)ii.

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
Baghouse Emissions		
a.	OAC rule 3745-31-05(A)(3)	Carbon monoxide (CO) emissions from burning any approved fuel shall not exceed 22.5 pounds per hour or 0.10 pound per ton of asphalt produced. Nitrogen oxides (NOx) emissions from burning natural gas shall not exceed 5.85 pounds per hour or 0.026 pound per ton of asphalt produced. Nitrogen oxides (NOx) emissions from burning any approved fuel shall not exceed 12.4 pounds per hour or 0.055 pound per ton of asphalt produced.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Particulate emissions (PE) from burning any approved fuel shall not exceed 5.54 pounds per hour or 0.030 grains per dry standard cubic foot (gr/dscf) The emissions of particulate matter equal to or less than 10 microns in diameter (PM10) from burning any approved fuel shall not exceed 5.18 pounds per hour of 0.023 pound per ton of asphalt produced. Sulfur dioxide (SO2) emissions from burning natural gas shall not exceed 2.48 pounds per hour or 0.011 pound per ton of asphalt produced. SO2 emissions from burning #2 fuel oil or on-spec used oil shall not exceed 14.9 pounds per hour or 0.066 pound per ton of asphalt produced. Volatile organic compound (VOC) emissions from burning any approved fuel shall not exceed 22.5 pounds per hour or 0.10 pound per ton of asphalt produced. The permittee shall utilize best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections b)(2)a, b)(2)b and b)(2)d). Arsenic, cadmium, chromium, and lead emissions are limited by the fuel specifications in section b)(2)e. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 60, Subpart I. See sections b)(2)c and b)(2)f through b)(2)h.
b.	OAC rule 3745 31 05(D) [Federally-Enforceable Limitations to avoid Title V Permitting]	CO emissions shall not exceed 22.5 tons per rolling, 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		NOx emissions shall not exceed 12.4 tons per rolling, 12-month period. PE emissions shall not exceed 5.54 tons per rolling, 12-month period. PM10 emissions shall not exceed 5.18 tons per rolling, 12-month period. SO2 emissions shall not exceed 29.7 tons per rolling, 12-month period. VOC emissions shall not exceed 22.5 tons per rolling, 12-month period. see section b)(2)i
c.	OAC rule 3745-17-07(A)(1)	see section b)(2)j
d.	OAC rule 3745-17-07(B)(1)	see sections b)(2)j
e.	OAC rule 3745-18-06(E)	see section b)(2)j
f.	40 CFR Part 60, Subpart I	see section b)(2)k
Load-in of aggregates, RAP, sand and other adjuncts to the elevated bins		
g.	OAC rule 3745-31-05(A)(3)	see sections b)(2)d, b)(2)l and b)(2)m
h.	OAC rule 3745-31-05(D)	Emissions of fugitive dust associated with the cold end transfer operations shall not exceed 0.38 ton of PE per rolling, 12-month period. Emissions of fugitive dust associated with the cold end transfer operations shall not exceed 0.12 ton of PM10 per rolling, 12-month period. see sections b)(2)i
i.	OAC rule 3745 17 07(B)(1)	see section b)(2)j
Asphalt silo filling		
j.	OAC rule 3745-31-05(A)(3)	see sections b)(2)d
k.	OAC rule 3745-31-05(D)	The emissions of CO from the silo filling operations shall not exceed 0.27 ton per rolling, 12-month period. The emissions of PE from the silo filling operations shall not exceed 0.08 ton per rolling, 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The emissions of PM10 from the silo filling operations shall not exceed 0.13 ton per rolling, 12-month period. The emissions of VOC from the silo filling operations shall not exceed 2.74 tons per rolling, 12-month period. see section b)(2)i
l.	OAC rule 3745-17-07(B)(1)	see sections b)(2)j
m.	OAC rule 3745-17-08(B), (B)(3)	see sections b)(2)j
Asphalt truck load-out		
n.	OAC rule 3745-31-05(A)(3)	see section b)(2)d
o.	OAC rule 3745-31-05(D)	The emissions of CO from the truck loading operations shall not exceed 0.32 ton per rolling, 12-month period. The emissions of PE from the truck loading operations shall not exceed 0.04 ton per rolling, 12-month period. The emissions of PM10 from the truck loading operations shall not exceed 0.12 ton per rolling, 12-month period. The emissions of VOC from the truck loading operations shall not exceed 0.90 ton per rolling, 12-month period. see section b)(2)i
p.	OAC rule 3745-17-07(B)(1)	see section b)(2)j
q.	OAC rule 3745-17-08(B), (B)(3)	see section b)(2)j

(2) Additional Terms and Conditions

a. The permittee shall ensure that the baghouse is operated with sufficient air volume to eliminate visible fugitive emissions from the rotary drum.

b. There shall be no visible emissions of fugitive dust from the rotary drum except for a period of time not to exceed 3 minutes in any 60-minute observation period.

c. Visible particulate emissions from the baghouse stack shall not exceed 10% opacity, as a 6-minute average.

d. Visible emissions of fugitive dust shall not exceed 10% opacity, as a 3-minute average.

e. All on-spec used oil burned in this emissions unit shall meet the following specifications:

Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	less than 2 ppm, maximum
total halogens	4000 ppm maximum
mercury	1 ppm, maximum
flash point	100°F, minimum
heat content	135,000 Btu/gallon, minimum

f. Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR Part 266.40(c) and OAC rule 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the supplier [marketer in 40 Part CFR 266.43(a)] has demonstrated to the Ohio EPA's Division of Hazardous Waste Management that the used oil does not contain any hazardous waste.

g. All number 2 and on-spec used oil burned in this emission unit shall have a sulfur content equal to or less than 0.5%, by weight.

h. The hourly emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to be maintained to demonstrate compliance with these limitations.

i. The annual emission limitations specified above are based upon the emissions unit's potential to emit at an annual throughput restriction of 450,000 tons of asphaltic concrete.

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

k. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

l. The drop height of the front end loader bucket shall be minimized to the extent possible in order to minimize or eliminate visible emissions of fugitive dust from the aggregate storage bins.

m. The aggregate loaded into the storage bins shall have a moisture content sufficient to minimize the visible emissions of fugitive dust from conveyors and all transfer points to the dryer.

c) Operational Restrictions

(1) The pressure drop across the fabric filter shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation.

(2) The permittee may not receive or burn any used oil which does not meet the specifications listed in b)(2)e of this permit without first obtaining a permit to install that authorizes the burning of off-specification used oil. The burning of off-specification used oil is subject to OAC rule 3745-279-60 through 67.

(3) The maximum annual asphalt production rate for this emissions unit shall not exceed 450,000 tons per year, based upon a rolling, 12-month summation of the asphalt production.

(4) The permittee shall operate and maintain the fuel burner in accordance with the manufacturer's recommendations to ensure efficient combustion of the fuel(s) and to ensure compliance with the applicable emission limitations for VOC, CO and NOx.

(5) The permittee may substitute reclaimed asphalt pavement (RAP) in the raw material feed mix in amounts not to exceed 50 per cent of all aggregate materials.

(6) The permittee shall utilize shingles containing no asbestos in this emissions unit.

(7) The permittee shall be restricted to the combustion of natural gas, propane, #2 fuel oil and/or on-spec used oil in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall receive a chemical analysis with each shipment of on-spec used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's U.S. EPA's identification number, and the following information:

a. date of shipment or delivery;

b. quantity of on-spec used oil received;

c. the Btu value of the on-spec used oil;

d. the flash point of the on-spec used oil;

e. the arsenic content, in ppm;

f. the cadmium content, in ppm;

g. the chromium content, in ppm;

h. the lead content, in ppm;

i. he PCB content, in ppm;

j. the total halogen content, in ppm; and

k. the mercury content, in ppm;.

Each analysis shall be kept in a readily accessible location for at least 5 years and shall be made available to the Director (the Ohio EPA Central District Office) upon verbal or written request. The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment received by this facility, of any used oil stored at this facility, or of any used oil sampled at the dryer.

(2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer s recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.

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

a. the asphalt production for each month;

b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of the asphalt production;

c. the maximum percentage of RAP used for any mix.

(4) The permittee shall maintain annual records of the following information:

a. the asphalt production for each calendar year; and

b. the total CO, NOx, PM10, SO2 and VOC emissions from this emissions unit for the previous calendar year.

(5) For each shipment of number 2 fuel oil and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier s analyses for sulfur content and heat content.

(6) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

(7) The permittee shall perform daily visible emission checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the operations comprising this emissions unit, including but not limited to, the rotary drum, hot aggregate elevator, aggregate storage bins, scalping screens, conveyors and the conveyor transfer points. If visible emissions are observed, the permittee shall note the following in the operation log:

a. the location and color of the visible emissions;

b. the cause of the visible particulate emissions;

c. the total duration of any visible emissions incident; and

d. any corrective actions taken to minimize or eliminate the visible emissions.

(8) The permittee shall properly operate and maintain portable devices to monitor the concentration of CO, NOx, and oxygen (O_2) in the stack exhaust gases from this emissions unit at the frequency specified under section E.3. - Burner Tuning. The permittee is not required to purchase these monitoring devices and may either hire a contractor to perform the monitoring or the permittee may rent this monitoring equipment. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

(9) While performing each burner tuning, the permittee shall record the results of the burner tuning using the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in term f)(3). An alternative form may be used upon approval of the Ohio EPA, Central District Office.

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

(11) The permittee shall maintain records demonstrating that the shingles received for utilization in this emissions unit contain no asbestos. These records may consist of the permittee's test results or of statements from the waste supplier adequate to demonstrate that the materials received have no asbestos content.

(12) For each day during which the permittee burns a fuel other than natural gas, propane, number two fuel oil and/or on-spec used oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(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. pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above;

ii. all exceedances of the rolling 12-month asphalt production limitation;

iii. all exceedances of the RAP limitation specified above; and

iv. all exceedances of the sulfur content limit specified above.

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 Central District Office).

(3) The permittee shall submit semi-annual 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. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and describe any corrective actions taken to eliminate the visible particulate emissions; and

ii. identify all days during which any visible fugitive particulate emissions were observed from the operations comprising this emissions unit, including but not limited to, the rotary drum, hot aggregate elevator, aggregate storage bins, scalping screens, conveyors and the conveyor transfer points, and describe any corrective actions taken to eliminate the visible particulate emissions.

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 this time frame, the permittee shall submit a report that states that no deviations (excursions) occurred.

The semi-annual reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering July to December), and July 31 (covering January to June), unless an alternative schedule has been established and approved by the Director (the Central District Office).

(4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(5) The permittee shall submit a copy of the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form to the appropriate Ohio EPA district office or local air agency to summarize the results of each burner tuning procedure. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 of each year and shall cover the previous calendar year.

(6) The permittee shall notify the U.S. EPA and the Ohio EPA if any of the used oil exceeds the on-spec used oil specifications found in OAC rule 3745-279-11. If the permittee is burning used oil which exceeds the specifications found in OAC rule 3745-279-11, the permittee is subject to that rule and must comply with all provisions of that rule. The required notification shall be submitted within 30 days of the date in which the exceedance occurred.

(7) The permittee shall submit deviation (excursion) reports that identify each day when a material containing asbestos was received for utilization in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

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

a. Emission Limitation: There shall be no visible emissions of fugitive dust from the rotary drum except for a period of time not to exceed 3 minutes in any 60-minute observation period.

Applicable Compliance Method: Compliance 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)(c) of OAC rule 3745-17-03.

b. Emission Limitation: Visible emissions of fugitive dust shall be less than or equal to 10% opacity, as a 3-minute average.

Applicable Compliance Method: Compliance shall be determined through visible emission observations performed in accordance with Method 9 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)(3)(a) through (B)(3)(d) of OAC rule 3745-17-03.

c. Emission Limitation: Visible particulate emissions from the baghouse stack shall not exceed 10% opacity, as a 6-minute average.

d. Applicable compliance method: Compliance shall be determined through visible emission observations performed in accordance with Method 9 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 OAC rule 3745-17-03(B)(1).

e. Emission limitation: CO emissions from burning any approved fuel shall not exceed 22.5 pounds per hour or 0.10 pound per ton of asphalt produced.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A.

f. Emission limitation: NO_x emissions from burning natural gas shall not exceed 5.85 pounds per hour or 0.026 pound per ton of asphalt produced, or NO_x emissions from burning any approved fuel shall not exceed 12.4 pounds per hour or 0.055 pound per ton of asphalt produced.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 7 of 40 CFR Part 60, Appendix A.

g. Emission limitation: Particulate emissions (PE) from burning any approved fuel shall not exceed 5.54 pounds per hour or 0.030 grain per dry standard cubic foot (gr/dscf).

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 5 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission limitation: The emissions of PM10 from burning any approved fuel shall not exceed 5.18 pounds per hour or 0.023 pound per ton of asphalt produced.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 201 and 202 of 40 CFR Part 51, Appendix M.

i. Emission limitation: SO_2 emissions from burning natural gas shall not exceed 2.48 pounds per hour or 0.011 pound per ton of asphalt produced, or SO_2 emissions from burning on-spec used oil or #2 fuel oil shall not exceed 14.9 pounds per hour or 0.066 pound per ton of asphalt produced.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 6 of 40 CFR Part 60, Appendix A.

j. Emission limitation: Volatile organic compound (VOC) emissions from burning any approved fuel shall not exceed 22.5 pounds per hour or 0.10 pound per ton of asphalt produced.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Method 25 of 40 CFR Part 60, Appendix A

k. Emission limitation: CO emissions shall not exceed 22.5 tons per rolling, 12-month period, NO_x emissions shall not exceed 12.4 tons per rolling, 12-month period, PE emissions shall not exceed 5.54 tons per rolling, 12-month period, PM10 emissions shall not exceed 5.18 tons per rolling, 12-month period, SO_2 emissions shall not exceed 29.7 tons per rolling 12-month period, VOC emissions shall not exceed 22.5 tons per rolling 12-month period.

Applicable compliance method: These emissions limitations were established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of determined during the most recent stack test which demonstrated compliance (in pounds of emissions per ton of asphalt produced) by the maximum annual production of asphalt (450,000 tons per year) and divide by 2,000 pounds per ton.

l. Emission limitation: Emissions of fugitive dust associated with the transfer operations shall not exceed 0.38 ton of PE per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons), an maximum of 12 transfer points and an emissions factor from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.19, Table 11.19.2-2, dated 3/04 (0.00014 lb PE/ton-transfer for a process controlled by adequate moisture) as follows:

450,000 tons/yr (12 transfers)(0.00014 lb/ton-transfer)(1 ton/2,000 lb) = 0.38 ton PE/year

m. Emission limitation: Emissions of fugitive dust associated with the transfer operations shall not exceed 0.12 ton of PM10 per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons), an maximum of 12 transfer points and an emissions factor from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 11.19, Table 11.19.2-2, dated 3/04 (0.000046 lb PE/ton-transfer for a process controlled by adequate moisture) as follows:

450,000 tons/yr (12 transfers)(0.000046 lb/ton-transfer)(1 ton/2,000 lb) = 0.12 ton PM10/year

n. Emission limitation: The emissions of CO from the silo filling operations shall not exceed 0.27 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 as follows:

450,000 tons/yr (1.18×10^{-3} lb/ton)(1 ton/2,000 lb) = 0.27 ton CO/yr

with

$EF = 0.00488(-V)e^{((0.0251)(T+460)-20.43)} = 1.18 \times 10^{-3}$ lb/ton

where

V = asphalt volatility = -0.5

T = HMA mix temperature in F = 325

o. Emission limitation: The emissions of PE from the silo filling operations shall not exceed 0.08 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 as follows:

450,000 tons/yr (0.000332 lb/ton)(1 ton/2,000 lb) = 0.08 ton PE/yr

p. Emission limitation: The emissions of PM10 from the silo filling operations shall not exceed 0.13 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 as follows:

450,000 tons/yr (0.000586 lb/ton)(1 ton/2,000 lb) = 0.13 ton PE/yr

q. Emission limitation: The emissions of VOC from the silo filling operations shall not exceed 2.74 tons per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 as follows:

450,000 tons/yr (0.0122 lb/ton)(1 ton/2,000 lb) = 2.74 ton VOC/yr

with

$EF = 0.0504(-V)e^{((0.0251)(T+460)-20.43)} = 0.0122$ lb/ton

where

V = asphalt volatility = -0.5

T = HMA mix temperature in F = 325

r. Emission limitation: The emissions of CO from truck loading operations shall not exceed 0.32 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 as follows:

450,000 tons/yr (0.00142 lb/ton)(1 ton/2,000 lb) = 0.32 ton CO/yr

with

$EF = 0.00588(-V)e^{((0.0251)(T+460)-20.43)} = 0.00142$ lb/ton

where

V = asphalt volatility = -0.5

T = HMA mix temperature in F = 325

s. Emission limitation: The emissions of PE from the truck loading operations shall not exceed 0.04 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04, (0.000181 lb/ton) as follows:

450,000 tons/yr (0.000181 lb/ton)(1 ton/2,000 lb) = 0.04 ton PE/yr

t. Emission limitation: The emissions of PM10 from the truck loading operations shall not exceed 0.12 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor from AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 (0.000523 lb/ton) as follows:

450,000 tons/yr (0.000523 lb/ton)(1 ton/2,000 lb) = 0.12 ton PM10/yr

u. Emission limitation: The emissions of VOC from the truck loading operations shall not exceed 0.90 ton per rolling, 12-month period.

Applicable compliance method: Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual throughput rate (450,000 tons) and an emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 11.1-14, dated 3/04 as follows:

94% (450,000 tons/yr)(0.00416 lb/ton)(1 ton/2,000 lb) = 0.88 ton VOC/yr

with

$EF = 0.0172(-V)e^{((0.0251)(T+460)-20.43)} = 0.00416$ lb TOC/ton

where

V = asphalt volatility = -0.5

T = HMA mix temperature in F = 325

VOC = 94% TOC (AP-42, Table 11.1-16)

(2) 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 120 days after issuance of the permit and every third year, thereafter.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, VOC, CO, NOx and SO_2 for the primary fuel. Prior to secondary fuel emissions testing, the permittee shall consult the appropriate Ohio EPA District Office or local air agency to determine which pollutants should be tested.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for:

PE, Methods 1-5 of 40 CFR Part 60, Appendix A.

NOx, Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

SO_2, Methods 1-4 and 6 or 6C of 40 CFR Part 60, Appendix A

CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A

VOC, Methods 1-4 and 25, 25A, and/or 18 of 40 CFR Part 60, Appendix A

The VOC pounds per hour emission rate observed during the emissions test shall be calculated in accordance with OAC paragraph 3745-21-10(C)(7). In lieu of this the permittee shall convert the mass emission value from VOC as carbon to VOC using the molecular weight of propane, i.e., the VOC as carbon emission rate observed during testing shall be converted to the appropriate units by multiplying the VOC emission rate observed during testing (in lbs./hr) by 44 (propane) and dividing by 36 (3 atoms of carbon).

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 this emissions unit is operating at or near its maximum capacity and burning natural gas, number 2 fuel oil, number 4 fuel oil or on-spec used oil for PE, VOC, CO, NOx and SO_2 and employing RAP to verify VOC emissions, 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 Ohio EPA Central District Office. 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 Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Central District Office 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 of the written report, where warranted, with prior approval from the Ohio EPA Central District Office.

(3) Burner Tuning

a. Introduction

The permittee is required to conduct periodic tuning of the asphalt plant burner. The purpose of this tuning is to ensure that the burner is adjusted properly so that air pollution emissions remain in compliance with allowable emissions rates and are minimized.

b. Qualifications for Burner Tuning

Technicians who conduct the burner tuning must be qualified to perform the expected tasks. The permittee is required to provide training to the technicians who perform the burner tuning procedure. Technicians who are qualified shall, at a minimum, have passed manufacturer's training concerning burner tuning, or have been trained by someone who has completed the manufacturer's training concerning burner tuning.

c. Portable Monitor Requirements

The permittee shall properly operate and maintain portable device(s) to monitor the concentration of NOx, O_2 and CO in the stack exhaust gases from this emissions unit. The monitor(s) shall be capable of measuring the expected concentrations of the measured gases. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall maintain records of each portable monitoring device's calibration.

d. Burner Tuning Procedure

The first steps concerning burner tuning involve setting the pollutant baseline levels (concentrations) utilizing the portable monitor. These baselines shall be set during the initial U.S. EPA approved emissions testing that demonstrated the emissions unit was in compliance with all applicable emissions limitations as described in f)(1). The baselines shall be determined for NOx, and CO.

Sampling should measure the exhaust gas values exiting the dryer or the baghouse. The duration of each sample shall follow the portable monitor manufacture's recommendations. Record these values on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form (as found in g)(3)) in the "Recent Stack Test Basis Values" column.

Once the pollutant baseline levels are set, the burner shall be next tuned based on the frequency described in f)(1) The general procedure for tuning the burner involves the following steps:

i. Review the plant operations to ensure the plant is operating normally.

ii. Confirm that the portable monitor is calibrated per the manufacture's specifications.

iii. Using the calibrated monitor and the monitor manufacturer's recommended sampling duration, measure the stack exhaust gas values for O_2, NOx, and CO. These measurements shall be taken at the same location as the location where the baseline samples were taken. Record the values in the "Pre Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.

iv. Compare the measured stack exhaust gas values with the pollutant baseline values. If all of the measured stack exhaust gas values are equal to or less than 115 per cent of the pollutant baseline values, then it is not necessary to tune the burner. Go on to Section v. below.

The permittee shall have the burners tuned within two calendar weeks of any measured stack exhaust values greater than 115 per cent of the baseline values. Make any necessary adjustments and repairs. Repeat Sections iii. and iv. until the measured stack exhaust gas values are equal to or less than 115 per cent of the pollutant baseline values.

v. Once all of the measured stack exhaust gas values are within the 115 per cent of the pollutant baseline values, record the measured stack exhaust gas values in the "Post Tuning" results column on the *Burner Tuning Reporting Form for Asphalt Concrete Plants* form.

vi. By January 31 of each year, submit a copy of all *Burner Tuning Reporting Form for Asphalt Concrete Plants* forms produced during the past calendar year to the appropriate Ohio EPA District Office or local air agency responsible for the permitting of the facility.

e. Burner Tuning Frequency

The permittee shall conduct the burner tuning procedure within 20 production days after commencement of the production season in the State of Ohio. The permittee shall conduct another burner tuning procedure within 10 production days before or after June 1st of each year and within 10 production days before or after September 1st of each year. For purposes of this permit, the production

season is defined as the time period between the date the first ton of asphalt is produced and the date that the last ton of asphalt is produced during the same calendar year. A burner tuning is not required if the production season ends prior to the associated tuning due date. If the baseline level testing or the initial season tuning is done within 30 days prior to June 1 or September 1, the tuning associated with that due date is not required.

In addition to the burner tuning procedure required above, the permittee shall conduct the burner tuning procedure within 20 production days from the date the facility switches to a fuel that is different than the fuel burned during the initial emissions tests that establish the pollutant baseline levels or the fuel burned during the most recent burner tuning procedure, whichever is later.

g) Miscellaneous Requirements

(1) None.

16. Emissions Unit Group -ICE 115 hp: P005,P006, installed 1985 and 1995

EU ID	Operations, Property and/or Equipment Description
P005	115 horsepower diesel fired pond pump
P006	115 horsepower topsoil plant diesel fired engine

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)c, d)(1), and e)(3)

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)	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 1.4 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.3 pound per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.1 pound per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.1 pound per hour. The emissions of organic compounds

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		(OC) shall not exceed 0.1 pound per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See b)(2)a below.
b.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 2.1 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.5 ton per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 ton per year. The emissions of organic compounds (OC) shall not exceed 0.2 ton per year. See b)(2)c. below.
c.	OAC rule 3745-17-07(A)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)	The emissions limitation specified in this rule is less stringent that the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. All particulate emissions from diesel engine emissions are considered PM10.

b. The sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

c. The annual emissions limitations listed above were based upon the emissions unit's potential to emit based on an annual fuel usage restriction of 6,561 gallon per rolling, 12-month summation.

d. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 6561 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit’s diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. <u>Opacity Limitation</u>:

Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 10 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.1 pound per hour and 0.2 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (2.14 gallons/hour)

EF_{PM} =PM emissions factor (0.31 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.31 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 6561gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 1.4 pounds per hour and 2.1 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (2.14 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 6561 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 0.3 pound per hour and 0.5 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (2.14 gallons/hour)
EF_{CO} = CO emissions factor (0.95 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.95 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 6561 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.1 pound per hour and 0.2 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (2.14 gallons/hour)

EF_{OC} =OC emissions factor (0.36 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.36 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 6561 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.1 pound per hour and 0.2 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (2.14 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.29 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.29 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 6561 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

17. Emissions Unit Group -ICE 250 hp: P007,P008, installed 2008

EU ID	Operations, Property and/or Equipment Description
P007	250 horsepower HSI crusher diesel-fired engine
P008	250 horsepower VSI crusher diesel-fired engine

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)c., b(2)d., d)(1), and e)(3)

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-(A)(3), as effective 11/30/01	The emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 2.9 pounds per hour. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.61 pound per hour and 0.94 ton per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.19 pound per hour and 0.29 ton per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 pound per hour and 0.31 ton per year.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The emissions of organic compounds (OC) shall not exceed 0.22 pound per hour and 0.34 ton per year. See b)(2)a.
b.	OAC rule 3745-31-(A)(3), as effective 12/01/06	See b)(2)b.
c.	3745-31-05(D) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	Emissions of NO_x from this engine shall not exceed 4.4 tons per year, as a rolling 12-month average. See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-11(B)(5)	Emissions of particulate matter from the combustion of #2 diesel oil in this emissions unit shall not exceed 0.310 lb/MMBtu.
f.	OAC rule 3745-18-06(E)	See b)(2)c. below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 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 the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has 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 revisions 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, then these emission limitations/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 State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM10, CO, OC, and SO_2 emissions from this air

contaminant source since the uncontrolled potential to emit for PM10, CO, OC, and SO_2 is less than 10 tons/yr.

c. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

d. The maximum #2 diesel oil usage for this emissions unit shall not exceed 14,104 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

e. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the annual fuel usage restriction, upon issuance of this permit. The maximum annual fuel usage for this emissions unit shall not exceed 14,104 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the fuel usage for each month; and

b. the rolling, 12-month summation of the fuel usage.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the quarterly deviation report any exceedance of the emission unit's diesel fuel oil usage restriction, to include the amount of diesel fuel usage recorded for each such rolling 12-month period and any exceedance of the facility wide NOx emission limitation, to the amount of NOx emissions recorded for each such rolling 12-month period.

f) Testing Requirements

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

a. Opacity Limitation:

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

Applicable Compliance Method:

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

b. Emission Limitations:

The emissions of fugitive PM_{10} shall not exceed 0.2 pound per hour and 0.31 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly PM emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (4.6 gallons/hour)

EF_{PM} =PM emissions factor (0.062 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly PM emissions = ([HC * FC] / 1,000,000) * EF_{PM}

Compliance with the annual PM emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.062 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual PM Emissions (in tons) =

[((141,000 Btu/gal * 14,104 gal/yr) / 1,000,000) * 0.062 lb/MMBtu] / 2000 lb/ton

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

c. Emission Limitations:

The emissions of NO_x from this emissions unit shall not exceed 2.9 pounds per hour and 4.4 tons per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly NO_x emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (4.6 gallons/hour)
EF_{NOx} = NO_x emissions factor (4.41 lb/MMBtu from AP-43, Chapter 3.3, Table 3.3-1 (10/1996))

Hourly NO_x emissions = ([HC * FC] / 1,000,000) * EF_{NOx}

Compliance with the annual NO_x emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the controlled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (4.41 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual NOx Emissions (in tons) =

[((141,000 Btu/gal * 14,104 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 7E of 40 CFR Part 60 Appendix A.

d. Emission Limitations:

The emissions of CO from this emissions unit shall not exceed 0.61 pound per hour and 0.94 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly CO emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)
FC = fuel consumption (4.6 gallons/hour)
EF_{CO} = CO emissions factor (0.85 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly CO emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual CO emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.85 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual CO Emissions (in tons) =

[((141,000 Btu/gal * 14,104 gal/yr) / 1,000,000) * 0.85 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 10 of 40 CFR Part 60 Appendix A.

e. Emission Limitations:

The emissions of OC shall not exceed 0.22 pound per hour and 0.34 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (4.6 gallons/hour)

EF_{OC} =OC emissions factor (0.09 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly OC emissions = ([HC * FC] / 1,000,000) * EF_{OC}

Compliance with the annual OC emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.09 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual OC Emissions (in tons) =

[((141,000 Btu/gal * 14,104 gal/yr) / 1,000,000) * 0.09 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 25A of 40 CFR Part 60 Appendix A.

f. Emission Limitations:

The emissions of SO_2 from this emissions unit shall not exceed 0.19 pound per hour and 0.29 ton per year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly SO_2 emissions limitation by a one-time calculation using the following variables and equation:

HC = heat content of #2 diesel oil (141,000 Btu/gallon)

FC = fuel consumption (4.6 gallons/hour)

EF_{SO2} = SO_2 emissions factor (0.505 lb/MMBtu from AP-43, Chapter 3.4, Table 3.4-1 (10/1996))

Hourly SO_2 emissions = ([HC * FC] / 1,000,000) * EF_{SO2}

Compliance with the annual SO_2 emissions limitation shall be demonstrated by a one-time emission calculation utilizing the fuel heat content of 141,000 Btu/gallon, the uncontrolled emission factor listed in AP-42 Section 3.4 for large stationary diesel fuel engines (0.505 lb/MMBtu) and the maximum allowable fuel usage per rolling, 12-month summation.

Annual SO_2 Emissions (in tons) =

[((141,000 Btu/gal * 14,104 gal/yr) / 1,000,000) * 0.505 lb/MMBtu] / 2000 lb/ton

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Method 6C of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.