Synthetic Minor Determination and/or ☐ Netting Determination

Permit To Install: 01-12174

A. Source Description

Small's Sand and Gravel, located in Gambier, Ohio (Knox County), is in the process of installing a new stationary sand and gravel processing plant that will replace the existing stationary sand and gravel processing plant. In addition to the new plant, several emissions units that had not been permitted are included in this application. The majority of these emissions units are #2 diesel fired generators and motors.

B. Facility Emissions and Attainment Status

Small's Sand and Gravel is located in Knox County, which is non-attainment for ozone and either attainment or not classified for other criteria pollutants. This facility will consist of a concrete batch plant (PTI 01-4257), an asphalt plant (04-1398), the new sand and gravel processing plant, and other miscellaneous and support equipment.

Emissions from this facility are mainly particulate matter and oxides of nitrogen. There are also some emissions of the products of combustion (CO, SO_2 and OC) from the operations of diesel generators.

C. Source Emissions

Operations at this facility have been voluntarily restricted to avoid title V permitting and major source status. For this permit, the potential and permitted emissions are listed below:

	Before Voluntary Restrictions	After Voluntary Restrictions	Difference
	tons per year	tons per year	tons per year
PM	66.3	47.5	-18.8
PM10	31.8	21.7	-10.0
NOx	229.5	81.2	-148.2
CO	66.7	23.6	-43.1
SO2	31.3	11.0	-20.3
VOC	14.5	5.4	-9.1

D. Conclusion

This synthetic minor permit to install will result in a restrictions on Potential to Emit for this facility and ensure that emissions of particulate matter and oxides of nitrogen are minimized.

State of Ohio Environmental Protection Agency

RE: DRAFT PERMIT TO INSTALL **CERTIFIED MAIL**
KNOX COUNTY

Street Address: Mailing Address: Lazarus Gov. Center
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Application No: 01-12174
Fac ID: 0142000058

DATE: 2/12/2008

Smalls Sand and Gravel
Michael Small
10229 Killduff Road
Gambier, OH 43022

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **$6575** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **CDO**

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **01-12174** FOR AN AIR CONTAMINANT SOURCE
FOR **Smalls Sand and Gravel**

On 2/12/2008 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Smalls Sand and Gravel**, located at **10229 Killduff Road, Gambier**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 01-12174:

Sand and gravel processing plant, roadways and parking areas, material storage piles, 6 diesel generators/motors.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Isaac Robinson, Ohio EPA, Central District Office, 122 South Front St, P.O. Box 1049, Columbus, OH 43216-1049 [(614)728-3778]

DRAFT PERMIT TO INSTALL 01-12174

Application Number:	01-12174
Facility ID:	0142000058
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Smalls Sand and Gravel
Person to Contact:	Michael Small
Address:	10229 Killduff Road Gambier, OH 43022

Location of proposed air contaminant source(s) [emissions unit(s)]:
10229 Killduff Road
Gambier, Ohio

Description of proposed emissions unit(s):
Sand and gravel processing plant, roadways and parking areas, material storage piles, 6 diesel generators/motors.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____

Chris Korleski
Director

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections,

conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available

Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
PM	48
PM_{10}	22
NOx	82
CO	24
SO2	11
VOC	6

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F001) - Facility Roadways and Parking Lots (terms and conditions in this permit supercede those identified in PTI 04-01398 issued 7/12/2005, PTI 01-4441 issued 11/16/1994 and PTI 01-4257 issued 3/24/1993).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
unpaved roadways and parking areas	
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 A.2.a and A.2.c through A.2.g). There shall be no visible particulate emissions from any unpaved roadway or parking area except for 3 minutes during any 60-minute period.
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).
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 lots	
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 A.2.b through A.2.g). There shall be no visible particulate emissions from any paved roadway or parking area except for one minute during any 60-minute period.
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).
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

2.a The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.b The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to sweeping, speed management, good housekeeping and treating the paved roadways and parking areas with water at sufficient treatment frequencies to ensure compliance.

2.c 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 a paved or unpaved 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.d Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

2.e The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.f 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.

2.g 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.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform daily

inspections of all roadways and parking areas.

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.

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 3.d. shall be maintained separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports, in accordance with the reporting requirements of the General Terms and Conditions of this permit, that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

   b. each instance when a control measure, that was to be implemented as a result

of an inspection, was not implemented.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation Method:

   There shall be no visible particulate emissions from any unpaved roadway or parking area except for 3 minutes during any 60-minute period.

   There shall be no visible particulate emissions from any paved roadway or parking area except for one minute during any 60-minute period.

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the visible emission limitation specified 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)(C) of OAC rule 3745-17-03.

   b. Emission Limitation

   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

   Applicable Compliance Method:

   Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual miles traveled (25,000), 95% control efficiency for adequate moisture and the emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.2.2 (11/2006) using the information provided by the permittee in PTI application 01-12174 (9/25/2007).

   c. Emission Limitation

   1.15 tons fugitive PE/yr from the paved roadways and parking areas

0.22 tons fugitive PM_{10}/yr from the paved roadways and parking areas

Applicable Compliance Method:

Compliance shall be demonstrated by a one-time emissions calculation utilizing the maximum annual miles traveled (25,000), 95% control efficiency for adequate moisture and the emissions factor calculated by AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.2.1 (11/2006) using the information provided by the permittee in PTI application 01-12174 (9/25/2007).

F. Miscellaneous Requirements

1. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 04-01398 as issued on July 12, 2005.

2. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 01-4441 as issued on November 16, 1994.

3. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 01-4257 as issued on March 24, 1993.

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F005) - Sand and Gravel Plant, includes crushing, screening, handling and conveying (terms and conditions in this permit supercede those identified in PTI 01-4441 issued 11/16/1994)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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. Visible particulate emissions from fugitive dust shall not exceed the opacity restrictions in II.A.2.g below. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart OOO. See II.A.2.a, II.A.2.b, II.A.2.c, II.A.2.d, II.A.2.e and II.A.2.f below.
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.
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.
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.

40 Code of Federal Regulations Part 60, Subpart OOO	See II.A.2.g, II.A.2.h, II.A.2.i, II.A.2.j and II.A.2.k below.

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

material handling operation(s)	control measure(s)
All crushers	wet spray system
All screens	wet spray system
All conveyors	wet spray system

2.b The permittee shall employ reasonably available control measures for the material handling operations listed above, for the purpose of ensuring compliance with the applicable requirements (see above). In accordance with the permittee's permit application, the permittee has committed maintain compliance with OAC rule 3745-31-05(A)(3) by the processing of only nonmetallic minerals from a wet mining operation (as defined in 40 CFR Part 60.671), and the use of additional water sprays as needed. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) 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 measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Except at times when sufficient rainfall or moisture intrinsic to the processed material exists to eliminate visible emissions of fugitive dust, the wet spray system shall be in operation at all times when this emission unit is operating in order to minimize or eliminate visible emissions of fugitive dust.

2.e The hourly PM and PM_{10} emission limitation for this emission unit were established to reflect the maximum potential to emit. It is not necessary to

develop additional monitoring, record keeping and / or reporting requirements to ensure compliance with these limits.

2.f Fugitive particulate emissions from any transfer point on belt conveyors and from any other emissions point (excluding crushers and truck dumping) where process materials are not saturated, shall not exceed 10 percent opacity, except as provided by rule 40 CFR 60.672.

2.g Fugitive particulate emissions from any crusher shall not exceed 15 percent opacity.

2.h Fugitive particulate emissions from wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin shall not exceed 0 percent opacity.

2.i Fugitive particulate emissions from screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line shall not exceed 0 percent opacity.

2.j 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.

2.k Visible fugitive PE from the material processing equipment when shall not exceed the following opacity restrictions. Note that under the Emissions Point Description in parentheses is the facility identification for the applicable transfer point :

Emissions Point Description	Equipment Type	Opacity Limit as a 6-minute average, unless otherwise specified	Regulatory Basis for Limit
front-end loader to feeder hopper (H) and Mesabi screen (S1)	transfer point and screening	0%	40 CFR Part 60, Subpart OOO

Issued: To be entered upon final issuance

feeder hopper to KPI 44-36" x 200" conveyor (H and S1 - C1)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI 44-36" x 200" conveyor to JCI screen (C1-S2)	transfer point	0%	40 CFR Part 60, Subpart OOO
JCI screen to KPI 42-30" x 30' conveyor (S2-C7)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI 42-30" x 30' conveyor to VSI crusher (C7-VSI)	transfer point	0%	40 CFR Part 60, Subpart OOO
VSI crusher (VSI)	crushing	15%	40 CFR Part 60, Subpart OOO
VSI crusher to KPI 48-30" x 80' conveyor (VSI - C8)	transfer point	10%	40 CFR Part 60, Subpart OOO
KPI 48-30" x 80' conveyor to 44" x 32" single material washer #2 (C8 - W5)	transfer point	10%	40 CFR Part 60, Subpart OOO
44" x 32" single material washer #2 to 60' radial stacker (W5 - C9)	transfer point	0%	40 CFR Part 60, Subpart OOO
60' radial stacker to 1/8" 0 pile (C9 to 1/8" 0 pile)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI screen to 36" x 32" twin material washer (S4 - W1)	transfer point	0%	40 CFR Part 60, Subpart OOO
36" x 32" twin material washer to 60' radial stacker (W1 - C10)	transfer point	0%	40 CFR Part 60, Subpart OOO
60' radial stacker to 7/16" pile (C10 - 7/16" pile)	transfer point	0%	40 CFR Part 60, Subpart OOO

Emissions Unit ID: **F005**

36" x 32" twin material washer to 60' radial stacker (W1 - C11)	transfer point	0%	40 CFR Part 60, Subpart OOO
60' radial stacker to 1 7/15" pile (C11 - 1 7/15" pile)	transfer point	0%	40 CFR Part 60, Subpart OOO
36" x 32" twin material washer to 60' radial stacker (W1 - C12)	transfer point	0%	40 CFR Part 60, Subpart OOO
60' radial stacker to #4 x 1/8" pile (C12 - #4 x 1/8" pile)	transfer point	0%	40 CFR Part 60, Subpart OOO
JCI Screen to 40' misc. conveyor (S2 - C13)	transfer point	0%	40 CFR Part 60, Subpart OOO
40' misc. conveyor to KPI classifier (C13 - CL)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI classifier to 44" x 32" single material washer #1 (CL - W3)	transfer point	0%	40 CFR Part 60, Subpart OOO
44" x 32" single material washer #1 to 40' misc. conveyor (W3 to C16)	transfer point	0%	40 CFR Part 60, Subpart OOO
40' misc. conveyor to 100' radial stacker (C16 to C17)	transfer point	0%	40 CFR Part 60, Subpart OOO
100' radial stacker to concrete sand pile (C17 - concrete sand pile)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI classifier to wash plant (CL - W2)	transfer point	0%	40 CFR Part 60, Subpart OOO
wash plant to 40' misc. conveyor (W2 - C14)	transfer point	0%	40 CFR Part 60, Subpart OOO

Issued: To be entered upon final issuance

40' misc. conveyor to 60' radial stacker (C14 - C15)	transfer point	0%	40 CFR Part 60, Subpart OOO
60' radial stacker to fill sand pile (C15 - fill sand pile)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI classifier to 44" x 32" twin material washer (CL - W4)	transfer point	0%	40 CFR Part 60, Subpart OOO
44" x 32" twin material washer to 40' misc. conveyor (W4 - C18)	transfer point	0%	40 CFR Part 60, Subpart OOO
40' misc. conveyor to 100' radial stacker (C18 - C19)	transfer point	0%	40 CFR Part 60, Subpart OOO
100' radial stacker to mason sand pile (C19 - mason sand pile)	transfer point	0%	40 CFR Part 60, Subpart OOO
JCI screen to KPI 42" x 30' conveyor (S2 - C4)	transfer point	0%	40 CFR Part 60, Subpart OOO
KPI 42" x 30' conveyor to HSI crusher (C4 - HSI)	transfer point	0%	40 CFR Part 60, Subpart OOO
HSI crusher (HSI)	material crushing	15%	40 CFR Part 60, Subpart OOO
HSI crusher to KPI 42-36" x 60' conveyor (HSI - C5)	transfer point	10%	40 CFR Part 60, Subpart OOO
KPI 42-36" x 60' conveyor to KPI screen (C5 - S3)	transfer point	10%	40 CFR Part 60, Subpart OOO
KPI screen to 60' radial stacker (S3 - C20)	transfer point	10%	40 CFR Part 60, Subpart OOO

60' radial stacker to 304's pile or E17's pile (C20 - 304's pile or E17's pile)	transfer point	10%	40 CFR Part 60, Subpart OOO
KPI 44-36" x 200' conveyor to KPI 43-30" x 130' conveyor (C1 - C3)	transfer point	0%	40 CFR Part 60, Subpart OOO
feeder hopper and Measbi screen to 170' conveyor (H and S1 - C2)	transfer point	0%	40 CFR Part 60, Subpart OOO
170' conveyor to KPI 42" x 30' conveyor (C2 - C4)	transfer point	0%	40 CFR Part 60, Subpart OOO

B. Operational Restrictions

1. Water sprays shall be operated at points necessary to ensure compliance with the visible emission limitations specified in terms II.A.2.f through II.A.2.k (above) for crushing, transfer points, screening, and conveying operations.

2. Aggregate product loaded onto trucks shall have a moisture content sufficient to minimize visible emissions of fugitive dust, and the loading drop height and stacker drop height shall not exceed fifteen (15) feet.

3. The total amount of aggregate processed by emissions unit F005 shall not exceed 1,860,000 tons based upon a rolling, 12-month summation of aggregate processing (this figure is based on a maximum aggregate processing capacity of 600 tons per hour and 3,100 operating hours per year).

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the aggregate processing levels specified in the following table:

Month(s)	Maximum Allowable Aggregate Processing (tons)
1	432,000
1-2	864,000

Issued: To be entered upon final issuance

1-3	1,296,000
1-4	1,728,000
1-5	1,860,000
1-6	1,860,000
1-7	1,860,000
1-8	1,860,000
1-9	1,860,000
1-10	1,860,000
1-11	1,860,000
1-12	1,860,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual aggregate processing limitation shall be based upon a rolling,12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the tons of aggregate processed for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the aggregate processed.

   Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative tons of aggregate processed for each calendar month.

2. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All crushers	daily
All screens	daily
All conveyors	daily

3. The permittee may, upon receipt of written approval from Ohio EPA, CDO, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the

above-mentioned applicable requirements.

4. 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 when excess visible fugitive particulate emissions were observed and 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 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. A screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to 40 CFR 60.672(h) and subsequently processes unsaturated material shall submit a report of this change within 30 days following such change to the Ohio EPA Central District Office, Division of Air Pollution Control. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11 and 60.675. A screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in 40 CFR 60.672(h).

2. 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. The reporting requirements indicated in this section shall be initiated by the first instance when this emissions unit operates as an affected facility at a nonmetallic mineral processing plant as specified in 60.670(a)(1).

   a. Construction date (no later than 30 days after such date);

b. Actual start-up date (within 15 days after such date); and

c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

and

Ohio EPA, Central District Office
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

3. Each owner or operator seeking to comply with 60.670(d) shall submit to the Administrator (see D.3 above) the following information about the existing facility being replaced and the replacement piece of equipment.

a. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

i. the rated capacity in megagrams or 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.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on aggregate processing; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable aggregate processing. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

5. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following occurrences:

   a. each day when excess visible fugitive particulate emissions were observed;

   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.

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

E. Testing Requirements

1. The permittee shall conduct, or have conducted, fugitive visible particulate emission testing for emissions unit F005 in accordance with the following requirements:

   a. The emission testing shall be conducted within 60 days after achieving maximum production but no later than 180 days after initial startup.

   b. Compliance with the opacity limits of this permit shall be determined by using US EPA Reference Test Method 9 (40 CFR Part 60). The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

   c. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

d. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office;

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.

2. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. <u>Emissions limitation:</u> The emissions of fugitive particulate 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

<u>Applicable compliance method:</u> 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. Emissions limitation: 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 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).

F. Miscellaneous Requirements

1. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 01-4441 as issued on November 16, 1994.

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F007) - Facility Storage Piles (terms and conditions in the permit supercede those identified in PTI 04-01398 issued 7/12/2005 and PTI 01-4441 issued 11/16/1994.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	7.5 tons/year of fugitive particulate matter of 10 microns or less (PM10) 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 Sections A.2.a through A.2.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).
OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

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

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

2.b The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

2.c The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the 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.

2.d The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

2.e Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

None

C. 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 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.

Emissions Unit ID: **F007**

D. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

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

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission limitation: 7.5 tons/year of fugitive particulate matter of 10 microns or less (PM_{10}). 15.9 tons/year of fugitive particulate emissions (PE).

      Applicable compliance method: Compliance with the fugitive particulate emissions limitations for load-in and load-out operations, and wind erosion shall be demonstrated by using the emissions factors calculations from the most recent version of AP-42 Chapter 13.2.4 (11/2006) and data supplied by the permittee for permit to install application 01-12174 (submitted on July 30, 2007).

      i. Load-in and load-out emissions were calculated using the following variables and calculations:

         k = particle size multiplier (0.74 for PM and 0.35 for PM_{10})
         U = average daily wind speed (10 miles per hour)
         M = moisture content (10%)
         OR = maximum load-in and load-out rate (600 tons per hour)

         The emissions factor for PM or PM_{10} in pounds/ton was calculated using the following equation:

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

Annual emissions of PM or PM_{10} from load-in and load-out were calculated using the following equation:

Annual emissions of PM or PM_{10} = (OR * EF * 8760 hr/yr) / (2000 lb/ton)

ii. Wind erosion emissions were calculated using the following variables and equations:

k = particle size multiplier (0.74 for PM and 0.35 for PM_{10})
s = material silt content (10%)
p = number of days/year with greater than 0.1" of precipitation (165 days)
f = wind speed exceeds average for area (16.2% of time)
A = total area of storage piles (9 piles at 0.75 acres per pile = 6.75 acres)
t = total storage time (in days, 365 in this case)

The emissions factor for PM or PM_{10} in pounds/acre/day was calculated using the following equation:

EF=k*(s/1.5)*[(365-p)/235]*(f/15)

Annual emissions of PM and PM_{10} from wind erosion were calculated using the following equation:

Annual emissions of PM or PM_{10} = (EF * A * t) / (2000 lb/ton)

iii. The addition of results of the calculations for tons per year in terms II.E.1.a.i and II.E.1.a.ii above are the total storage pile emissions per year.

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").

F. Miscellaneous Requirements

Issued: To be entered upon final issuance

1. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 04-01398 as issued on July 12, 2005.

2. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 01-4441 as issued on November 16, 1994.

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (F008) - Recycling Plant (portable) (terms and conditions in this permit to install supercede those identified in PTI 14-05156 issued 6/14/2001).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3) [Emissions unit installed prior to August 3, 2006]	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 II.A.2.a, II.A.2.b., II.A.2.c, II.A.2.d and II.A.2.e below.
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).
OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
40 Code of Federal Regulations Part 60, Subpart OOO.	The emission limitation specified by this rule is less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to

the above-mentioned requirements are listed below:

material handling operation(s)	control measure(s)
All crushers	wet spray system
All screens	wet spray system
All conveyors	wet spray system
Load in / load out	wet spray system

2.b The permittee shall employ reasonably available control measures for the material handling operations listed above, for the purpose of ensuring compliance with the applicable requirements (see above). In accordance with the permittee's permit application, the permittee has committed maintain compliance with OAC rule 3745-31-05(A)(3) by use of water sprays. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) 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 measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Except at times when sufficient rainfall exists to eliminate visible emissions of fugitive dust, the wet spray system shall be in operation at all times when this emission unit is operating in order to minimize or eliminate visible emissions of fugitive dust. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of water sprays and compliance with opacity limitations.

2.e Fugitive particulate emissions from any transfer point on belt conveyors and from any other emissions point where process materials are not saturated, shall not exceed 10 percent opacity.

2.f 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.

2.g At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate exemption requirements have been met. Pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the director may issue a "Notice of Site Approval" for any pre-disclosed location(s) if the portable source meets the requirements of OAC rule 3745-31-05(E), as follows:

i. the portable source is operating pursuant to a currently effective permit to install (PTI) and/or any applicable permit to operate (PTO) and continues to comply with the requirements of this permit and any applicable state and/or federal rules;

ii. the portable source has been issued a PTI and the permittee continues to comply with the requirements of the permit including any applicable best available technology (BAT) determination;

iii. the portable source owner has identified the proposed site(s) to the Ohio EPA;

iv. the Ohio EPA has determined that the portable source will have an acceptable environmental impact at the proposed site(s);

v. a public notice, meeting the requirements OAC rule 3745-47, is published in the county where the proposed site(s) is/are located;

vi. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s); and

vii. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation*.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site. Any site approval(s) issued by the Ohio EPA, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), shall be valid for no longer than 3 years and are subject to renewal. Pursuant to OAC rule 3745-31-05(F), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

2.h If the relocation of the portable source would result in the installation of a major

source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745- 77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

B. Operational Restrictions

1. Water sprays shall be operated at points necessary to ensure compliance with the visible emissions limitation specified in II.A.2.b above.

2. Aggregate product loaded onto trucks shall have a moisture content sufficient to minimize visible emissions of fugitive dust, and the loading drop height and stacker drop height shall not exceed fifteen (15) feet.

3. The total amount of aggregate processed by emissions unit F006 shall not exceed 2,628,000 tons per year.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the amount of aggregate processed in this emissions unit.

2. The permittee shall maintain monthly records of the number of hours operated per month.

3. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation(s)	minimum inspection frequency
All crushers	daily
All screens	daily
All conveyors	daily
Load in / load out	daily

4. The permittee may, upon receipt of written approval from Ohio EPA, CDO, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

5. 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 when excess visible fugitive particulate emissions were observed and 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 5.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit annual reports that identify any exceedances of the annual aggregate production rate limitation in term B.3., as well as the corrective actions that were taken to achieve compliance. If no exceedances occurred, then the permittee shall state so in the report. These reports shall be submitted by January 31 of each year to the Ohio EPA Central District Office, Division of Air Pollution Control.

2. 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. The reporting requirements indicated in this section shall be initiated by the first instance when this emissions unit operates as an affected facility at a nonmetallic mineral processing plant as specified in 60.670(a)(1).

a. Construction date (no later than 30 days after such date);

b. Actual start-up date (within 15 days after such date); and

c. Date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

and

Ohio EPA, Central District Office
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

3. Each owner or operator seeking to comply with 60.670(d) shall submit to the Administrator (see D.2 above) the following information about the existing facility being replaced and the replacement piece of equipment.

a. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

i. the rated capacity in megagrams or 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.

4. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following occurrences:

a. each day when excess visible fugitive particulate emissions were observed;

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.

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

E. Testing Requirements

1. The permittee shall conduct, or have conducted, fugitive visible particulate emission testing for emissions unit F008 in accordance with the following requirements:

a. The emission testing shall be conducted within 60 days after achieving maximum production but no later than 180 days after initial startup.

b. Compliance with the opacity limits of this permit shall be determined by using US EPA Reference Test Method 9 (40 CFR Part 60). The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

c. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

d. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office;

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.

2. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emissions limitation: The emissions of fugitive particulate shall not exceed 0.8 pounds 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 compliance method: Compliance with the hourly mass emissions shall be demonstrated using the following variables and calculations.

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 (monthly total of tons of aggregate processed divided by the number of hours of operation per month)
CE = control efficiency (95% for water sprays)
N = Number of crushers operating (one 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 (monthly total of tons of aggregate processed divided by the number of hours of operation per month)
CE = control efficiency (95% for saturated material or water sprays)
N = Number of screens operating (one screen)

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 (0%)
OR = operating rate (monthly total of tons of aggregate processed divided by the number of hours of operation per month)

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

Emissions Unit ID: **F008**

Et = emissions factor for transferring or conveying (0.003 lb/ton PM or 0.0011 lb/ton PM_{10})

N = number of transfer points (3)
CE = control efficiency (95% for saturated material or water sprays)

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

v. Total hourly emissions from this emissions units for PM or PM_{10} per month shall be calculated by the sum of 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. Emissions limitation: The emissions of fugitive particulate shall not exceed 3.6 tons of particulate matter (PM) per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 1.5 tons per year.

Applicable compliance method: Compliance with the annual PM and PM10 emissions limitations shall be demonstrated by multiplying the average monthly hourly emissions rate for PM or PM10 from A.2.a.v above by 8760 hours per year and dividing by 2000 pounds per ton.

F. Miscellaneous Requirements

1. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 14-05156 as issued on June 15, 2001.

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P002) - 934 horsepower diesel powered generator (terms and conditions in this permit to install supercede those identified in PTI 04-01409 issued 7/12/2005)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.8 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 tons per year. The emissions of organic compounds (OC) shall not exceed 1.2 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

2.d 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.

Emissions Unit ID: **P002**

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 183,960 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	43,200
1-2	83,400
1-3	129,600
1-4	172,800
1-5	183,960
1-6	183,960
1-7	183,960
1-8	183,960
1-9	183,960
1-10	183,960
1-11	183,960
1-12	183,960

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

4. The permittee shall utilize injection timing retard as a NO_x control method.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

   b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. <u>Emissions limitation:</u> Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 16.2 pounds per hour.

      <u>Applicable compliance method:</u> 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}

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.

b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 24.6 tons per year

Applicable compliance method: 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

c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 4.3 pounds per hour.

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}

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 6.6 tons per year

Applicable compliance method: 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

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 7.3 pounds per hour.

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}

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 11.1 tons per year

Applicable compliance method: 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

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.6 pounds per hour.

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}

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.9 tons per year

Applicable compliance method: 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

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.8 pounds per hour.

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}

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 1.2 tons per year

Applicable compliance method: 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

1. The terms and conditions contained in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in the permit to install 04-01409 as issued on July 12, 2005.

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P003) - 600 horsepower longline dredge diesel fired motor

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.1 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.2 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 7.7 tons per year. The emissions of carbon monoxide (CO) from this emissions unit shall not exceed 2.0 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 1.2 tons per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 tons per year. The emissions of organic compounds (OC) shall not exceed 0.3 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

2.d 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.

Emissions Unit ID: **P003**

2.e 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).

Issued: To be entered upon final issuance

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 33,726 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	8,000
1-2	16,000
1-3	24,000
1-4	32,000
1-5	33,726
1-6	33,726
1-7	33,726
1-8	33,726
1-9	33,726
1-10	33,726
1-11	33,726
1-12	33,726

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

   Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit or from dredging operations and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.0 pounds per hour.

      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 (11.0 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}

      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.

   b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.7 tons per year

      Applicable compliance method: 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 * 183,960 gal/yr) / 1,000,000) * 3.2 lb/MMBtu] / 2000 lb/ton

   c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.8 pounds per hour.

      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}

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 1.2 tons per year

Applicable compliance method: 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 * 33,726 gal/yr) / 1,000,000) * 0.505 lb/MMBtu] / 2000 lb/ton

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.4 pounds per hour.

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}

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 2.0 tons per year

Applicable compliance method: 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 * 33,726 gal/yr) / 1,000,000) * 0.85 lb/MMBtu] / 2000 lb/ton

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.1 pounds per hour.

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}

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 * 33,726 gal/yr) / 1,000,000) * 0.062 lb/MMBtu] / 2000 lb/ton

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.2 pounds per hour.

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}

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.3 tons per year

Applicable compliance method: 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Emissions Unit ID: **P004**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P004) - 300 horsepower dragline dredge diesel fired motor

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.3 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.3 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.3 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 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 tons per year. The emissions of organic compounds (OC) shall not exceed 0.4 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c the sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

2.d 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.

2.e 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).

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 16,863 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	8,000
1-2	16,000
1-3	16,863
1-4	16,863
1-5	16,863
1-6	16,863
1-7	16,863
1-8	16,863
1-9	16,863
1-10	16,863
1-11	16,863
1-12	16,863

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

Emissions Unit ID: **P004**

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

a. the #2 diesel oil usage for each month, in gallons;

b. during the first 12 calendar months of operation, the

c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit or from dredging operations and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

Emissions Unit ID: **P004**

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 3.5 pounds per hour.

   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}

   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.

   b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.3 tons per year

   Applicable compliance method: 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 3.3 for 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

   c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.3 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 tons per year

Applicable compliance method: 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 3.3 for 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

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.8 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.2 tons per year

Applicable compliance method: 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 3.3 for 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

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.3 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.4 tons per year

Applicable compliance method: 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 3.3 for 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

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.3 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.5 tons per year

Applicable compliance method: 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 3.3 for 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Emissions Unit ID: **P005**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P005) - 115 horsepower diesel fired pond pump

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.1 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.1 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.1 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 tons per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 tons per year. The emissions of organic compounds (OC) shall not exceed 0.1 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c the sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

2.d 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.

Issued: To be entered upon final issuance

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 6,561 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	1,541
1-2	3,082
1-3	4,622
1-4	6,164
1-5	6,561
1-6	6,561
1-7	6,561
1-8	6,561
1-9	6,561
1-10	6,561
1-11	6,561
1-12	6,561

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

   b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

   Also, during the first 12 calendar months of operation the permittee shall record the

cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 1.4 pounds per hour.

      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}

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.

b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 2.1 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.1 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.3 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.5 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.1 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.1 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.1 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P006) - 115 horsepower topsoil plant diesel fired engine

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.1 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.1 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.1 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

Emissions Unit ID: **P006**

OAC rule 3745-31-05(C) [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 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 tons per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 tons per year. The emissions of organic compounds (OC) shall not exceed 0.2 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c the sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

2.d 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.

Emissions Unit ID: **P006**

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 6,561 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	1,541
1-2	3,082
1-3	4,622
1-4	6,164
1-5	6,561
1-6	6,561
1-7	6,561
1-8	6,561
1-9	6,561
1-10	6,561
1-11	6,561
1-12	6,561

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

   b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. <u>Emissions limitation:</u> Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 1.4 pounds per hour.

      <u>Applicable compliance method:</u> 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}

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.

b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 2.1 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.1 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.3 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.5 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.1 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.1 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 3.3 for 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 * 6,561 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Emissions Unit ID: **P007**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P007) - 250 horsepower HSI crusher diesel-fired engine

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
3745-31-05(C) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	Emissions of nitrogen oxides (NO_x) from this engine shall not exceed 2.9 pounds per hour and 4.4 tons per year. See II.A.2.a below.
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.
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.
OAC rule 3745-18-06(E)	See II.A.2.b below.
ORC 3704.03(T)(4)	See II.A.2.c below.

2. Additional Terms and Conditions

2.a The maximum annual #2 diesel oil usage for this emissions unit shall not exceed 14,104 gallons, based upon a rolling, 12-month summation of #2 diesel oil usage.

2.b This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

2.c The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the sulfur dioxide (SO_2), carbon monoxide (CO) and volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for SO_2, CO and VOC is less than 10 tons per year.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter (PM) emissions from this air contaminant source since the uncontrolled potential to emit for PM is less than 10 tons per year. taking into account the federally enforceable rule limit of 0.310 lb/MMBtu under OAC rule 3745-17-11(B)(5).

B. Operational Restrictions

1. 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.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	3,500
1-2	7,000
1-3	10,500
1-4	14,000
1-5	14,104
1-6	14,104
1-7	14,104
1-8	14,104
1-9	14,104
1-10	14,104
1-11	14,104
1-12	14,104

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

Emissions Unit ID: **P007**

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

Issued: To be entered upon final issuance

C. Monitoring and Recordkeeping

1. 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 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 minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

a. the #2 diesel oil usage for each month, in gallons;

b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

Emissions Unit ID: **P007**

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this engine 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 using the following variables and calculation:

   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 3.3 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

   b. Emissions limitation: Emissions of particulate matter from the combustion of #2 diesel oil in this emissions unit shall not exceed 0.310 lb/MMBtu.

   Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1, 2, 3, 4 and 5.

   c. Emissions limitation: Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

   Applicable compliance method: If required, the permittee shall demonstrate

compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P008) - 250 horsepower VSI crusher diesel-fired engine

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
3745-31-05(C) [Synthetic Minor to avoid Title V and Nonattainment New Source Review]	Emissions of nitrogen oxides (NO_x) from this engine shall not exceed 2.9 pounds per hour and 4.4 tons per year. See II.A.2.a below.
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.
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.
OAC rule 3745-18-06(E)	See II.A.2.b below.
ORC 3704.03(T)(4)	See II.A.2.c below.

2. Additional Terms and Conditions

2.a The maximum annual #2 diesel oil usage for this emissions unit shall not exceed 14,104 gallons, based upon a rolling, 12-month summation of #2 diesel oil usage.

2.b This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

2.c The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the sulfur dioxide (SO_2), carbon monoxide (CO) and volatile organic compound (VOC) emissions from this air contaminant source since the uncontrolled potential to emit for SO_2, CO and VOC is less than 10

tons per year.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter (PM) emissions from this air contaminant source since the uncontrolled potential to emit for PM is less than 10 tons per year. taking into account the federally enforceable rule limit of 0.310 lb/MMBtu under OAC rule 3745-17-11(B)(5).

B. Operational Restrictions

1. 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.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	3,500
1-2	7,000
1-3	10,500
1-4	14,000
1-5	14,104
1-6	14,104
1-7	14,104
1-8	14,104
1-9	14,104
1-10	14,104
1-11	14,104
1-12	14,104

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and Recordkeeping

1. 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 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 minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier

certification shall include the following information:

a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

a. the #2 diesel oil usage for each month, in gallons;

b. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions

unit.

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this engine 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 using the following variables and calculation:

   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 3.3 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

   b. Emissions limitation: Emissions of particulate matter from the combustion of #2 diesel oil in this emissions unit shall not exceed 0.310 lb/MMBtu.

   Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1, 2, 3, 4 and 5.

c. Emissions limitation: Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P009) - 175 horsepower screen plant diesel fired engine

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.2 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.2 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

Emissions Unit ID: **P009**

OAC rule 3745-31-05(C) [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 tons per year. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 tons per year. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.3 tons per year. The emissions of organic compounds (OC) shall not exceed 0.3 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

2.d 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.

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 9,689 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	2,276
1-2	4,551
1-3	6,827
1-4	9,103
1-5	9,689
1-6	9,689
1-7	9,689
1-8	9,689
1-9	9,689
1-10	9,689
1-11	9,689
1-12	9,689

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

Issued: To be entered upon final issuance

1. 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 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 minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

   b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

   Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

Issued: To be entered upon final issuance

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 2.0 pounds per hour.

      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}

      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.

   b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 3.1 tons per year

      Applicable compliance method: 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 3.3 for 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 * 9,689 gal/yr) / 1,000,000) * 4.41 lb/MMBtu] / 2000 lb/ton

   c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 pounds per hour.

      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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.2 tons per year

Applicable compliance method: 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 3.3 for 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 * 9,689 gal/yr) / 1,000,000) * 0.29 lb/MMBtu] / 2000 lb/ton

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.5 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.7 tons per year

Applicable compliance method: 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 3.3 for 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 * 9,689 gal/yr) / 1,000,000) * 0.95 lb/MMBtu] / 2000 lb/ton

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.2 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.3 tons per year

Applicable compliance method: 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 3.3 for 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 * 9,689 gal/yr) / 1,000,000) * 0.31 lb/MMBtu] / 2000 lb/ton

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.2 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.3 tons per year

Applicable compliance method: 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 3.3 for 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 * 9,689 gal/yr) / 1,000,000) * 0.36 lb/MMBtu] / 2000 lb/ton

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P010) - 425 horsepower recycling plant diesel-fired motor

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds 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. The emissions of organic compounds (OC) shall not exceed 0.4 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 tons 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 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

2.d 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.

Emissions Unit ID: **P010**

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 23,972 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	5,588
1-2	11,176
1-3	16,764
1-4	22,352
1-5	23,972
1-6	23,972
1-7	23,972
1-8	23,972
1-9	23,972
1-10	23,972
1-11	23,972
1-12	23,972

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

   Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 4.9 pounds per hour.

      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}

      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.

   b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.5 tons per year

      Applicable compliance method: 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 3.3 for 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

   c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 pounds per hour.

      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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.5 tons per year

Applicable compliance method: 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 3.3 for 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

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.6 tons per year

Applicable compliance method: 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 3.3 for 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

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.4 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.6 tons per year

Applicable compliance method: 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 3.3 for 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

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.4 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.7 tons per year

Applicable compliance method: 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 3.3 for 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P011) - 275 horsepower recycling plant diesel-fired engine

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds per hour. The emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.3 pounds per hour. The emissions of fugitive particulate matter equal to or less than 10 microns in diameter (PM_{10}) shall not exceed 0.3 pounds per hour. The emissions of organic compounds (OC) shall not exceed 0.3 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 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 tons per year. The emissions of organic compounds (OC) shall not exceed 0.4 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

2.d 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.

Emissions Unit ID: **P011**

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 15,422 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	3,622
1-2	7,244
1-3	10,866
1-4	14,488
1-5	15,422
1-6	15,422
1-7	15,422
1-8	15,422
1-9	15,422
1-10	15,422
1-11	15,422
1-12	15,422

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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 minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

   Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

Emissions Unit ID: **P011**

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 3.2 pounds per hour.

   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}

   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.

   b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 4.8 tons per year

   Applicable compliance method: 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 3.3 for 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

   c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.3 pounds per hour.

   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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 tons per year

Applicable compliance method: 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 3.3 for 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

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 0.7 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 tons per year

Applicable compliance method: 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 3.3 for 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

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.3 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.4 tons per year

Applicable compliance method: 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 3.3 for 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

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.3 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.4 tons per year

Applicable compliance method: 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 3.3 for 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Emissions Unit ID: **P012**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P012) - 450 horsepower Caterpillar Model 3408-T (1985) generator No. 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds 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. The emissions of organic compounds (OC) shall not exceed 0.5 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

OAC rule 3745-31-05(C) [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 tons 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 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

2.d 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.

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 25,110 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	5,897
1-2	11,794
1-3	17,691
1-4	23,588
1-5	25,110
1-6	25,110
1-7	25,110
1-8	25,110
1-9	25,110
1-10	25,110
1-11	25,110
1-12	25,110

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: **P012**

1. 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 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 minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

   a. the name of the fuel supplier; and

   b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

   a. the #2 diesel oil usage for each month, in gallons;

   b. during the first 12 calendar months of operation, the

   c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

   Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

Emissions Unit ID: **P012**

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.1 pounds per hour.

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}

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.

b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.9 tons per year

Applicable compliance method: 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 3.3 for 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

c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.6 tons per year

Applicable compliance method: 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 3.3 for 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

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.7 tons per year

Applicable compliance method: 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 3.3 for 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

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.4 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.6 tons per year

Applicable compliance method: 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 3.3 for 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

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.5 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.7 tons per year

Applicable compliance method: 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 3.3 for 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Issued: To be entered upon final issuance
PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P013) - 450 horsepower Caterpillar Model 3408-T (1984) generator No. 2

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
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 pounds 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. The emissions of organic compounds (OC) shall not exceed 0.5 pounds per hour. Visible emissions of particulate shall not exceed 10% opacity as a six-minute average from the diesel engine exhaust. See II.A.2.a below.

Emissions Unit ID: **P013**

OAC rule 3745-31-05(C) [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 tons 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 tons per year. See II.A.2.d below.
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).
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).
OAC rule 3745-21-07(B)	See II.A.2.b below.

2. Additional Terms and Conditions

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

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c the sulfur content of the distillate oil shall not exceed 0.5 weight percent sulfur.

2.d 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.

Emissions Unit ID: **P013**

B. Operational Restrictions

1. The maximum #2 diesel oil usage for this emissions unit shall not exceed 25,110 gallons per year, based upon a rolling, 12-month summation of the monthly fuel usage.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the fuel usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Usage of #2 diesel oil
1	5,897
1-2	11,794
1-3	17,691
1-4	23,588
1-5	25,110
1-6	25,110
1-7	25,110
1-8	25,110
1-9	25,110
1-10	25,110
1-11	25,110
1-12	25,110

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual fuel usage limitation for #2 diesel oil shall be based upon a rolling, 12-month summation of the monthly emissions.

2. The oil combusted in this emissions unit shall only be number 2 diesel fuel oil, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils".

3. The permittee shall combust only #2 diesel oil with a sulfur content of no more than 0.5 weight percent sulfur in this emission unit.

C. Monitoring and/or Recordkeeping Requirements

1. 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 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; and

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

2. For each day during which the permittee burns a fuel other than #2 diesel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emission unit.

3. The permittee shall maintain records of fuel supplier certification to demonstrated compliance with the operational restriction in II.B.3 (above). Records of fuel supplier certification shall include the following information:

a. the name of the fuel supplier; and

b. a statement from the fuel supplier that the fuel is in compliance with the operational restriction in II.B.3 (above).

4. The permittee shall maintain monthly records of the following information:

a. the #2 diesel oil usage for each month, in gallons;

b. during the first 12 calendar months of operation, the

c. beginning after the first 12 calendar months of operation, the rolling, 12-month summation of #2 diesel oil usage figures; and

Also, during the first 12 calendar months of operation the permittee shall record the cumulative #2 diesel oil usage for each calendar month.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Central District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following information:

   a. all exceedances of the rolling, 12-month #2 diesel oil usage limitation for this emissions unit;

   b. all exceedances of the rolling,12-month summation of #2 diesel oil usage limitations and/or limitations established for the first 12 calendar months of operation following issuance of this permit;

   c. all exceedances of the #2 diesel oil 0.5 weight percent sulfur content restriction; and

   d. any instance when a fuel other than #2 diesel oil fuel is burned in this emissions unit.

   These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. <u>Emissions limitation:</u> Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 5.1 pounds per hour.

      <u>Applicable compliance method:</u> 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}

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.

b. Emissions limitation: Emissions of nitrogen oxides (NO_x) from this emissions unit shall not exceed 7.9 tons per year

Applicable compliance method: 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 3.3 for 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

c. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.4 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

d. Emissions limitation: Emissions of sulfur dioxide (SO_2) from this emissions unit shall not exceed 0.6 tons per year

Applicable compliance method: 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 3.3 for 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

e. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.1 pounds per hour.

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 3.3, Table 3.3-1 (10/1996))

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

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.

f. Emissions limitation: Emissions of carbon monoxide (CO) from this emissions unit shall not exceed 1.7 tons per year

Applicable compliance method: 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 3.3 for 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

g. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.4 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

h. Emissions limitation: Emissions of particulate matter (PM) from this emissions unit shall not exceed 0.6 tons per year

Applicable compliance method: 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 3.3 for 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

i. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.5 pounds per hour.

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-42, Chapter 3.3, Table 3.3-1 (10/1996))

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

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.

j. Emissions limitation: Emissions of organic compounds (OC) from this emissions unit shall not exceed 0.7 tons per year

Applicable compliance method: 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 3.3 for 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

k. Emissions limitation: Visible particulate emissions from any stack shall not exceed 10 percent opacity as a six-minute average, except as provided by rule.

Applicable compliance method: If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Method 9.

F. Miscellaneous Requirements

None

Smalls Sand and Gravel **Facility ID: 0142000058**
PTI Application: 01-12174
Issued: To be entered upon final issuance

Emissions Unit ID: **P013**

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	F001

EMISSIONS UNIT DESCRIPTION: Facility Roadways and Parking Lots (terms and conditions in this permit supercede those identified in PTI 04-01398 issued 7/12/2005, PTI 01-4441 issued 11/16/1994 and PTI 01-4257 issued 3/24/1993).

DATE INSTALLED: existing

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment		235.5		11.8
PM_{10}	attainment		79.9		4.0
Sulfur Dioxide	attainment				
Organic Compounds	non-attainment				
Nitrogen Oxides	non-attainment				
Carbon Monoxide	attainment				
Lead	attainment				
Other: Air Toxics	not classified				

APPLICABLE FEDERAL RULES:

NSPS? N/A NESHAP? OOO PSD?N/A OFFSET POLICY? N/A

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
wet suppression for dust control, other control measures as needed

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

3551.wpd

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	F005

EMISSIONS UNIT DESCRIPTION: Sand and Gravel Plant, includes crushing, screening, handling and conveying (terms and conditions in this permit supercede those identified in PTI 01-4441 issued 11/16/1994)

DATE INSTALLED: 3/2007 (began construction)

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	7.7 lb/hr	33.5	7.7 lb/hr	11.9
PM_{10}	attainment	2.9 lb/hr	12.5	2.9 lb/hr	4.4
Sulfur Dioxide	attainment				
Organic Compounds	non-attainment				
Nitrogen Oxides	non-attainment				
Carbon Monoxide	attainment				
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
processing of wet dredged material only and water sprays as needed

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

Emissions Unit ID: **P013**

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	F007

EMISSIONS UNIT DESCRIPTION: Facility Storage Piles (terms and conditions in the permit supercede those identified in PTI 04-01398 issued 7/12/2005 and PTI 01-4441 issued 11/16/1994.

DATE INSTALLED: existing

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment		15.9		15.9
PM_{10}	attainment		7.6		7.6
Sulfur Dioxide	attainment				
Organic Compounds	non-attainment				
Nitrogen Oxides	non-attainment				
Carbon Monoxide	attainment				
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
wet dust suppression, other measures as needed

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	F008

EMISSIONS UNIT DESCRIPTION: Recycling Plant (terms and conditions in this permit to install supercede those identified in PTI 14-05156 issued 6/14/2001).

DATE INSTALLED: 2002

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	0.81 lb/hr	3.6	0.81 lb/hr	3.6
PM_{10}	attainment	0.33 lb/hr	1.5	0.33 lb/hr	1.5
Sulfur Dioxide	attainment				
Organic Compounds	non-attainment				
Nitrogen Oxides	non-attainment				
Carbon Monoxide	attainment				
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
water sprays

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	P002

EMISSIONS UNIT DESCRIPTION: 934 horsepower diesel powered generator (terms and conditions in this permit to install supercede those identified in PTI 04-01409 issued 7/12/2005)

DATE INSTALLED: 2005

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.84 lb/hr	3.68	0.84 lb/hr	0.81
Sulfur Dioxide	attainment	4.28 lb/hr	18.75	4.28 lb/hr	6.6
Organic Compounds	non-attainment	0.76 lb/hr	3.33	0.76 lb/hr	1.2
Nitrogen Oxides	non-attainment	15.96 lb/hr	69.9	15.96 lb/hr	24.7
Carbon Monoxide	attainment	7.14 lb/hr	31.27	7.14 lb/hr	11.1
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
injection timing retard for NOx control

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	P003

EMISSIONS UNIT DESCRIPTION 600 horsepower longline dredge diesel fired motor

DATE INSTALLED 2005

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.15 lb/hr	0.7	0.15 lb/hr	0.2
Sulfur Dioxide	attainment	0.78 lb/hr	3.5	0.78 lb/hr	1.2
Organic Compounds	non-attainment	0.14 lb/hr	0.6	0.14 lb/hr	0.3
Nitrogen Oxides	non-attainment	4.9 lb/hr	21.5	4.9 lb/hr	7.7
Carbon Monoxide	attainment	1.3 lb/hr	5.7	1.3 lb/hr	2.0
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION 300 horsepower dragline dredge diesel fired motor

DATE INSTALLED pre-2006

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.3 lb/hr	1.1	0.3 lb/hr	0.4
Sulfur Dioxide	attainment	0.3 lb/hr	1.0	0.3 lb/hr	0.4
Organic Compounds	non-attainment	0.3 lb/hr	1.2	0.3 lb/hr	0.5
Nitrogen Oxides	non-attainment	3.4 lb/hr	14.9	3.4 lb/hr	5.3
Carbon Monoxide	attainment	0.8 lb/hr	3.2	0.8 lb/hr	1.3
Lead	attainment				
Other: Air Toxics	non-attainment				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P005

EMISSIONS UNIT DESCRIPTION 115 horsepower diesel fired pond pump

DATE INSTALLED pre-2006

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.1 lb/hr	0.5	0.1 lb/hr	0.2
Sulfur Dioxide	attainment	0.1 lb/hr	0.4	0.1 lb/hr	0.2
Organic Compounds	non-attainment	0.1 lb/hr	0.5	0.1 lb/hr	0.2
Nitrogen Oxides	non-attainment	1.4 lb/hr	5.8	1.4 lb/hr	2.1
Carbon Monoxide	attainment	0.3 lb/hr	1.3	0.3 lb/hr	0.5
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P006

EMISSIONS UNIT DESCRIPTION 115 horsepower topsoil plant diesel fired engine

DATE INSTALLED pre-2006

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.1 lb/hr	0.5	0.1 lb/hr	0.2
Sulfur Dioxide	attainment	0.1 lb/hr	0.4	0.1 lb/hr	0.2
Organic Compounds	non-attainment	0.1 lb/hr	0.5	0.1 lb/hr	0.2
Nitrogen Oxides	non-attainment	1.3 lb/hr	5.8	1.3 lb/hr	2.1
Carbon Monoxide	attainment	0.3 lb/hr	1.3	0.3 lb/hr	0.5
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P007

EMISSIONS UNIT DESCRIPTION 250 horsepower HSI crusher diesel-fired engine

DATE INSTALLED 3/2007

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.2 lb/hr	0.9	0.2 lb/hr	0.4
Sulfur Dioxide	attainment	0.2 lb/hr	0.9	0.2 lb/hr	0.3
Organic Compounds	non-attainment	0.3 lb/hr	1.0	0.3 lb/hr	0.4
Nitrogen Oxides	non-attainment	2.9 lb/hr	12.4	2.9 lb/hr	4.4
Carbon Monoxide	attainment	0.7 lb/hr	1.0	0.7 lb/hr	1.0
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P008

EMISSIONS UNIT DESCRIPTION 250 horsepower VSI crusher diesel-fired engine

DATE INSTALLED 3/2007

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.2 lb/hr	0.9	0.2 lb/hr	0.4
Sulfur Dioxide	attainment	0.2 lb/hr	0.9	0.2 lb/hr	0.3
Organic Compounds	non-attainment	0.3 lb/hr	1.0	0.3 lb/hr	0.4
Nitrogen Oxides	non-attainment	2.9 lb/hr	12.4	2.9 lb/hr	4.4
Carbon Monoxide	attainment	0.7 lb/hr	1.0	0.7 lb/hr	1.0
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	P009

EMISSIONS UNIT DESCRIPTION: 175 horsepower screen plant diesel fired engine

DATE INSTALLED: 2002

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.2 lb/hr	0.7	0.2 lb/hr	0.2
Sulfur Dioxide	attainment	0.2 lb/hr	0.6	0.2 lb/hr	0.3
Organic Compounds	non-attainment	0.2 lb/hr	0.7	0.2 lb/hr	0.3
Nitrogen Oxides	non-attainment	2.0 lb/hr	8.5	2.0 lb/hr	3.1
Carbon Monoxide	attainment	0.5 lb/hr	1.9	0.5 lb/hr	0.7
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	P010

EMISSIONS UNIT DESCRIPTION: 425 horsepower recycling plant diesel-fired motor

DATE INSTALLED: pre-2006

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.4 lb/hr	1.5	0.4 lb/hr	0.6
Sulfur Dioxide	attainment	0.4 lb/hr	1.4	0.4 lb/hr	0.5
Organic Compounds	non-attainment	0.4 lb/hr	1.7	0.4 lb/hr	0.7
Nitrogen Oxides	non-attainment	4.8 lb/hr	20.9	4.8 lb/hr	7.5
Carbon Monoxide	attainment	1.1 lb/hr	4.6	1.1 lb/hr	1.7
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P011

EMISSIONS UNIT DESCRIPTION 275 horsepower recycling plant diesel-fired engine

DATE INSTALLED pre-2006

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.3 lb/hr	1.0	0.3 lb/hr	0.4
Sulfur Dioxide	attainment	0.2 lb/hr	0.9	0.2 lb/hr	0.4
Organic Compounds	non-attainment	0.3 lb/hr	1.1	0.3 lb/hr	0.4
Nitrogen Oxides	non-attainment	3.1 lb/hr	13.6	3.1 lb/hr	4.8
Carbon Monoxide	attainment	0.7 lb/hr	3.0	0.7 lb/hr	1.1
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE	1442	SCC CODE		EMISSIONS UNIT ID	P012
EMISSIONS UNIT DESCRIPTION	450 horsepower Caterpillar Model 3408-T (1985) emergency generator No. 1				
DATE INSTALLED	1985				

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.4 lb/hr	1.6	0.4 lb/hr	0.6
Sulfur Dioxide	attainment	0.4 lb/hr	1.5	0.4 lb/hr	0.6
Organic Compounds	non-attainment	0.4 lb/hr	1.8	0.4 lb/hr	0.7
Nitrogen Oxides	non-attainment	5.1 lb/hr	22.1	5.1 lb/hr	7.1
Carbon Monoxide	attainment	1.1 lb/hr	4.8	1.1 lb/hr	1.7
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
good operating practices

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N/A

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES XX NO

IDENTIFY THE AIR CONTAMINANTS: N/A

Emissions Unit ID: **P013**

Emissions Unit ID: **P013**

Issued: To be entered upon final issuance

SIC CODE 1442 SCC CODE EMISSIONS UNIT ID P013

EMISSIONS UNIT DESCRIPTION 450 horsepower Caterpillar Model 3408-T (1984) emergency generator No. 2

DATE INSTALLED 1984

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment				
PM_{10}	attainment	0.4 lb/hr	1.6	0.4 lb/hr	0.6
Sulfur Dioxide	attainment	0.4 lb/hr	1.5	0.4 lb/hr	0.6
Organic Compounds	non-attainment	0.4 lb/hr	1.8	0.4 lb/hr	0.7
Nitrogen Oxides	non-attainment	5.1 lb/hr	22.1	5.1 lb/hr	7.9
Carbon Monoxide	attainment	1.1 lb/hr	4.8	1.1 lb/hr	1.7
Lead	attainment				
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? OOO PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY?

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? YES NO

IDENTIFY THE AIR CONTAMINANTS: