

☒ **Synthetic Minor Determination and/or** ☐ **Netting Determination**

Permit To Install: **01-12078**

**A. Source Description**

Loveland Excavating of Columbus has installed a portable crushing facility located at 10283 Busey Road in Canal Winchester. This facility consists of three emission units: a portable crusher for the crushing of recycled asphalt and concrete, paved and unpaved roadways and parking lots and storage piles of materials. The portable crusher is powered by a 280 horsepower (h.p.) engine that utilizes #2 fuel oil.

Given the portable nature of this emission unit, the permittee has requested federally-enforceable limitations for the purpose of limiting any combined PTE when this emission unit (and associated roadways, parking area and storage piles) is located at a stationary source or at a source comprised of portable emissions units for NSPS applicability.

**B. Facility Emissions and Attainment Status**

This facility is located in Fairfield County, which is currently non-attainment for PM 2.5 and ozone. Facility emissions include emissions from the diesel engine and fugitive particulate emissions (PE) from crushing unit itself, roadways, parking lots and storage piles. Engine emissions are uncontrolled, fugitive PE from the crusher is controlled by a water bar that wets material down as it moved through the crusher unit. The applicant has committed to good housekeeping practices and watering of roadways and parking lots to control fugitive PE. The applicant asserts that moisture added to materials during the crushing process and the intrinsic moisture of the material is sufficient to minimize emissions of fugitive PE from load-out and storage pile wind erosion. Load - in operations are watered during the operation of the crusher water bar. Crushing and load - in to the storage piles occur nearly simultaneously.

Emission limit calculations for these emission units are based on AP-42 emission factors, material throughput, control equipment, and federally-enforceable operating restrictions. AP-42 has been updated recently, and the calculations in this document utilize the updated versions of AP-42 where necessary. The applicant utilized control efficiency factors based on RACM studies for roadways. The new general permit program allows for a better control efficiency than RACM, and the general permit control efficiencies have been utilized where applicable.

**C. Source Emissions**

The facility has requested a federally-enforceable restriction on hours of operation for the crusher of 5000 hours per rolling, 12-month summation, which effectively restricts the processing capacity of the facility. For emission unit P001, there are two sources of emissions. The diesel engine emissions calculations are based on AP-42 emission factors and the horsepower rating of the engine. Short-term and annual emission rates are calculated below, and annual emissions are shown taking into account the requested synthetic minor restrictions.

**P001 diesel engine:**

Calculated using AP-42 emission factors from AP-42 Table 3.3-1 (10/1996) and a federally-enforceable operating restriction of 5000 hours per rolling, 12-month summation.

	<b>Emissions Factor</b>	<b>Horsepower</b>	<b>Emissions</b>	<b>Potential to Emit</b>	<b>Proposed emissions limitation</b>
	<b>lb/HP-lb</b>	<b>HP</b>	<b>lb/hr</b>	<b>tons/year</b>	<b>5000 hours/year</b>
<b>PM</b>	0.0022	280	0.62	2.70	1.54
<b>NOx</b>	0.031	280	8.68	38.02	21.70
<b>CO</b>	0.00668	280	1.87	8.19	4.68
<b>SO2</b>	0.00205	280	0.57	2.51	1.44
<b>OC</b>	0.002514	280	0.71	3.11	1.78

Note that for the purposes of this permit, all particulate emissions (PE) from the diesel engine are considered PM10.

**P001 crusher:**

Calculated using AP-42 emission factors from AP-42 Table 11.19.2-2 (8/2004) for controlled tertiary crushing and a federally-enforceable operating restriction of 5000 hours per rolling, 12-month summation and a maximum hourly processing rate of 100 tons per hour. In addition to emissions from the portable crusher, emissions from the loading of the crusher must be accounted for as well. Fugitive PE emissions of 0.92 tons per year and fugitive PM10 emissions of 0.44 tons per year from crusher loading are included in these totals (see F002 for discussion of load-in calculations).

	emission factor lb/ton	amount processed t/yr	emissions lb/yr	emissions tons/yr
Primary Crushing PM	0.00120	500000.00	600.00	0.30
Primary Crushing PM10	0.00054	500000.00	270.00	0.14

**Total Emissions from the P001:**

PM	2.76 tons per year
PM10	1.68 tons per year
NOx	21.7 tons per year
CO	4.68 tons per year
SO2	1.44 tons per year
OC	1.78 tons per year

**F001 Roadways and parking areas:**

For paved roadways and parking areas, emission factors were calculated using AP-42 emission factors from AP-42 Table 13.2.1 equation 1 (11/2006). The annual emission limitations take into account the 95% control efficiency from the watering of roadways established in the general permit program.

Ep=	$(k*(sL/2)^{0.65}*(W/3)^{1.5})$	
	PM	PM10
Ep (emissions factor)	7.03	1.37
sL (road surface silt loading)	70.00	70.00
W (mean vehicle weight)	12.50	12.50
k	0.08	0.02
VMT (vehicle miles traveled)	8000.00	8000.00
lb/year	56264.08	10978.36
tons/year	28.13	5.49
controlled tons/year	1.41	0.27

For unpaved roadways and parking areas, emissions were calculated using AP-42 emission factors from AP-42 Table 13.2.2 equation 1a (11/2006). The annual emission limitations take into account the 95% control efficiency from the watering of roadways established in the general permit program.

Eu=	$((k*(s/12)^a*(W/3)^b)*((365-p)/365))$	
	PM	PM10
where:		
Eu (lb PM / VMT)	5.05	1.49
s (silt content of surface material)	10.00	10.00
p (days per year with >0.1" of precipitation per year)	140.00	140.00
W (mean vehicle weight)	12.50	12.50
k (constant)	4.90	1.50
a (constant)	0.70	0.90
b (constant)	0.45	0.45
VMT (vehicle miles traveled per year)	8000.00	8000.00
lb/year	40425.35	11931.99
tons/year	20.21	5.97
controlled tons/year	1.01	0.30

**Total emissions from F001:**

PM	2.42
PM10	0.57

**F002 Storage piles:**

Calculation of the emissions factors for the load-in and load-out operations for the storage piles was per AP-42 13.2.4-4 equation 1 (11/2006). Calculations are as follows, note that it is assumed that the load-in and load-out of materials is assumed to be equal to the processing capacity of the P001 (500,000 tons per year [100 tons per hour, 5000 hours per year]).

Emissions from load-in and load-out of storage piles		
AP-42 13.2.4-4, Eq. 1		
	PM values	PM10 values
k (dimensionless)	0.74	0.35
U (mean wind speed in mph)	8.70	8.70
M (moisture content in %)	0.70	0.70
E for PM	0.00	XXX
E for PM10	XXX	0.00
Equation	$E = k*(0.0032)*((U/5)^{1.33}/(M/2)^{1.25})$	
U/5	1.74	
M/2	0.35	
(U/5) <sup>1.3</sup>	2.05	
(M/2) <sup>1.4</sup>	0.23	
((U/5) <sup>1.3</sup> )/((M/2) <sup>1.4</sup> )	8.93	
E (pounds per ton)	0.0212	0.0100
pounds per year	10577.19	5002.73
tons per year	5.29	2.50

This controlled tons per year figure needs to be doubled in order to account for both load-in and load-out, so the tons per year emissions limitations are 10.58 tons per year of PM and 5.0 tons per year of PM10.

Fugitive PE from the storage piles was calculated using based on the equation for unpaved roadways per AP-42 Chapter 13.2.4 guidance, accounting for silt percentages, precipitation and wind speed. Part of the equation was supplied by the facility and applies a more conservative silt content than suggested (biases emissions higher than actual). Emissions were calculated for PM and PM10 emissions based on constants for AP-42 Table 13.2.2-2 for PM10 and PM30 (which is equivalent to TSP).

Emissions from wind erosion of storage piles		
Equation	$k*(s/1.5)*((365-p)/235)*(f/15)*365*A$	
k (dimensionless constant dependant on particle size)	4.9	1.5
s (% silt in stored material)	1.6	1.6
p (# days with >0.01" precip.)	140	140
f (wind speed exceeds Columbus average % of time)	30	30
A (total surface area of storage piles)	2	2
s/1.5	1.07	1.07
365-p	225.00	225.00
f/15	2.00	2.00
(365-p)/235	0.96	0.96
	PM	PM10
emissions (pounds per year)	7306.21	2236.60
emissions (tons per year)	3.65	1.12

**Total emissions from F002:**

PM 14.13  
PM10 6.12

**D. Conclusion**

Total emissions from this facility are as follows:

PM 19.31 tons per year  
PM10 8.37 tons per year  
NOx 21.7 tons per year  
CO 4.68 tons per year  
SO2 1.44 tons per year  
OC 1.78 tons per year

Permits for similar portable sources utilize the calculation approach employed above, as does the general permit program. The control measures to be employed are standard in the aggregate processing industry.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
50 West Town Street, Suite 700  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**CERTIFIED MAIL**

**RE: DRAFT PERMIT TO INSTALL**

**FAIRFIELD COUNTY**

**Application No: 01-12078**

**Fac ID: 0123950298**

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
OOO	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE: 1/23/2007**

Loveland Excavating of Columbus Inc  
Dan Romine  
10283 Busey Road  
Canal Winchester, OH 43110

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 or 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 **\$3300** 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, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

CDO

KY

**FAIRFIELD COUNTY**

PUBLIC NOTICE  
ISSUANCE OF DRAFT PERMIT TO INSTALL **01-12078** FOR AN AIR CONTAMINANT SOURCE FOR  
**Loveland Excavating of Columbus Inc**

On 1/23/2007 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Loveland Excavating of Columbus Inc**, located at **10283 Busey Road, Canal Winchester, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 01-12078:

**Portable concrete asphalt crushing equipment, storage piles and roadways.**

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]



**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT PERMIT TO INSTALL 01-12078**

Application Number: 01-12078

Facility ID: 0123950298

Permit Fee: **To be entered upon final issuance**

Name of Facility: Loveland Excavating of Columbus Inc

Person to Contact: Dan Romine

Address: 10283 Busey Road  
Canal Winchester, OH 43110

Location of proposed air contaminant source(s) [emissions unit(s)]:

**10283 Busey Road  
Canal Winchester, Ohio**

Description of proposed emissions unit(s):

**Portable concrete asphalt crushing equipment, storage piles and roadways.**

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

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Laura Powell  
Acting Director

## **Part I - GENERAL TERMS AND CONDITIONS**

### **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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	19.31
PM10	8.37
NOx	21.7
CO	4.68
SO2	1.44
OC	1.78

## 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) - Roadways and parking areas

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	2.5 tons/year of fugitive particulate emissions (PE)
	0.60 tons/ year of fugitive particulate matter of 10 microns or less (PM10)
	no visible PE except for 3 minutes 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.1.2.g.)
OAC rule 3745-17-07(B)(5)	See A.2.h. below
OAC rule 3745-17-08(B)	See A.2.h. below

### 2. Additional Terms and Conditions

- 2.a The paved and unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways: all unpaved roadways

unpaved parking areas: all unpaved parking areas

paved roadways: all paved roadways

paved parking areas: all paved parking areas

- 2.b The permittee shall employ best available control measures on all paved and unpaved roadways 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 employ good housekeeping practices and watering at sufficient treatment frequencies to ensure compliance. Nothing

in this paragraph shall prohibit the permittee from employing other control equally-effective measures 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 an 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 paved or 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.
- 2.h** The paved and unpaved roadways and parking areas are associated with the portable crushing operation (emissions unit P001) permitted under facility ID 0123950298. The emission limitations in Section A.1 above represent the maximum emissions which will be emitted from the roadways and parking areas for any proposed site for relocation of the portable crushing operation.

The paved and unpaved roadways and parking areas are associated with a portable source and are subject to the requirements of OAC rule 3745-17-07(B) and 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. Best Available Technology (BAT) for the roadways and parking areas, as set forth by the requirements/emissions limitations of this permit under

OAC 3745-31-05(A)(3), are more stringent than any requirements/emissions limitations as may be applicable under OAC 3745-17-07(B) and OAC 3745-17-08(B).

**B. Operational Restrictions**

None

**C. Monitoring and/or Recordkeeping Requirements**

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	once during each day of operation

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	once during each day of operation

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee shall maintain records of the following information:
- a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. The dates the control measures were implemented; and
  - d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 3.d. shall be kept 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.

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**Loveland Excavating of Columbus Inc**

**PTI Application: 01-12078**

**Issued: To be entered upon final issuance**

**Facility ID: 0123950298**

**Emissions Unit ID: F001**

#### **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.

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

#### **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 Limitations:  
2.5 tons/year of fugitive particulate emissions (PE)/yr  
0.60 tons/ year of fugitive particulate matter of 10 microns or less (PM10)

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in AP-42 (11/2006) Section 13.2.2 (for unpaved roadways) and Section 13.2.1 (for paved roadways) using the silt content, precipitation and vehicle weight information supplied by the applicant. Should further updates in AP-42 occur, the most current equations shall be used. These emission limits were based on the maximum vehicle miles traveled per year, and a 95% control efficiency for PE and PM10 from watering.

- b. Emission Limitation:  
No visible PE from the unpaved and paved roadways and parking areas, except for three minutes during any 60-minute period.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22 and the procedures specified in OAC rule 3745-17-03(B)(4).

#### **F. Miscellaneous Requirements**

None

**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 - (F002) - Four storage piles**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	14.2 tons of fugitive particulate emissions (PE) / year.
	6.2 tons/ year of fugitive particulate matter of 10 microns or less (PM10).
	No visible fugitive PE, except for a period of time not to exceed one minute during any 60-minute observation period from load - in operations, load - out operations, or from wind erosion of the storage piles.
	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from load - in operations, load - out operations, or from the storage piles.
OAC rule 3745-17-07 (A)	See A.2.g.
OAC rule 3745-17-07 (B)	See A.2.g.

**2. Additional Terms and Conditions**

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

all storage piles

- 2.b 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 permit application, the permittee has committed to minimizing drop heights as needed and watering material prior to loading into storage piles as needed to ensure compliance. The permittee asserts in their application that moisture inherent in the material will provide adequate control of fugitive dust from load-out operations and for the prevention of wind erosion from the storage piles. If the moisture inherent in the material does not provide

adequate control of fugitive dust from load-out operations or for the prevention of wind erosion from the storage piles, watering shall be instituted for the control of fugitive dust. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

- 2.c** The above-mentioned control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measures is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee shall apply water as needed to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.
- 2.e** The above-mentioned control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measures 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.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.g** The storage piles are associated with the portable crusher operation (emissions unit P001) permitted under facility ID 0123950298. The emission limitations in Section A.1 above represent the maximum emissions which will be emitted from the storage pile operations for any proposed site for relocation of the portable crusher operation.

The storage piles are associated with a portable source and are subject to the requirements of OAC rule 3745-17-07(B) and 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. Best Available Technology (BAT) for the storage piles, as set forth by the requirements/emissions limitations of this permit under OAC 3745-31-05(A)(3), are more stringent than any requirements/emissions limitations as may be applicable under OAC 3745-17-07(B) and OAC 3745-17-08(B).

**Loveland Excavating of Columbus Inc**

**PTI Application: 01-12078**

**Issued: To be entered upon final issuance**

**Facility ID: 0123950298**

**Emissions Unit ID: F002**

**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  
all storage piles

Minimum Load-In Inspection Frequency  
Once During Each Day of Operation

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  
all storage piles

Minimum Load-Out Inspection Frequency  
Once During Each Day of Operation

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  
all storage piles

Minimum Wind Erosion Inspection Frequency  
Once During Each Day of Operation

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.

#### **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.
- 2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **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:  
14.2 tons of fugitive particulate emissions (PE) / year  
6.2 tons/ year of fugitive particulate matter of 10 microns or less (PM10).

Applicable Compliance Method:

These emission limitations were established by combining the emissions from load-in and load out operations and from wind erosion from each storage pile as listed in the permittee's application. Load -in and load - out operation emissions are based on a maximum load-in and load-out rate of 500,000 tons per year of product. Wind erosion emissions are based on a maximum storage pile surface area of 0.5 acres for each of the four storage piles as listed in the permit application:

The emission rates were determined as follows:

- i. Load - in and load - out emissions associated with load - in and load - out operations were established by multiplying the maximum load - in and load - out rate of 500,000 tons of product per year by the appropriate emission factor derived from AP-42 section 13.2.4.3 equation 1 (11/2006) utilizing the mean wind speed and moisture content values provided by the applicant [0.0037 lb PE / ton product or 0.0017 lb PM10 / ton product] and dividing by 2000 lbs/ton. (1.84 ton fugitive PE per year or 0.88 ton fugitive PM10 per year)
- ii. Wind erosion emissions were established by multiplying a maximum storage pile surface area of 2.0 acres and the emission factor derived from AP-42 Chapter 13.2.4 guidance utilizing a AP-42 Table 13.2.2-2 constant (4.9 for PE as total suspended particulate or 1.5 for PM10) and utilizing the mean wind speed and silt content values provided by the applicant, and dividing by 2000 (3.65 tons fugitive PE per year or 1.12 tons fugitive PM10 per year).

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be assumed.

- b. Emission Limitation:  
No visible fugitive PE, except for a period of time not to exceed one minute during any 60-minute observation period from load - in operations, load - out operations, or from wind erosion of the storage piles.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22 and the procedures specified in OAC rule 3745-17-03(B)(4).

**F. Miscellaneous Requirements**

None

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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 - (P001) - KDS PR1000 crusher equipped with a 280 h.p. Volvo TD1030CE four-stroke, fuel - injected engine combusting No. 2 fuel oil

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<u>Emissions from diesel engine:</u>
OAC rule 3745-31-05	8.68 lbs nitrogen oxides (NOx) per hour
	1.87 lb carbon monoxide (CO) per hour
	0.57 lb sulfur dioxide (SO2) per hour
	0.71 lb organic compounds (OC) per hour
	0.62 lb particulate matter 10 microns or less in size (PM10) per hour (See A.2.a)
	See A.2.d
	Visible particulate emissions (PE) shall not exceed 10% opacity, as a 6-minute average, except during start-up and shutdown.
OAC rule 3745-31-05(C)	21.7 tons NO <sub>x</sub> per rolling, 12-month period
	4.7 tons CO per rolling, 12-month period
	1.5 tons SO2 per rolling, 12-month period
	1.8 tons OC per rolling, 12-month period
	1.55 ton PM10 per rolling, 12-month period
	See A.2.b.
	<u>Emissions from crusher unit:</u>
OAC rule 3745-31-05	1.12 tons fugitive particulate emissions (PE).
	0.58 tons fugitive particulate matter emissions 10 microns or less in size (PM10).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	No visible fugitive PE, except for a period of time not to exceed one minute during any 60-minute observation period.
	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.2.c.)
OAC rule 3745-17-11(B)	See A.2.e
OAC rule 3745-17-07(A)	See A.2.e
OAC rule 3745-18-06(G)	See A.2.f
OAC rule 3745-17-07(B)	See A.2.g
OAC rule 3745-17-08(B)	See A.2.g
OAC rule 3745-21-07 (B)	See A.2.h
OAC rule 3745-21-08 (B)	See A.2.h
OAC rule 3745-23-06(B)	See A.2.i
40 CFR, Part 60, Subpart 000	See A.2.j

## 2. Additional Terms and Conditions

- 2.a** All PE from the diesel engine emissions are considered PM10.
- 2.b** The unrestricted PTE from emissions unit P001 and the associated roadways, parking areas and storage piles does not exceed major source thresholds for Title V or New Source Review. Given the portable nature of this emissions unit, the permittee has requested federally enforceable limitations for the purpose of limiting any combined PTE when this emissions unit (and the associated roadways/parking areas and storage piles) is located at a stationary source or at a source comprised of portable emissions units.
- 2.c** The permittee shall employ best available control measures on the crusher unit for the purpose of ensuring compliance with the above - mentioned applicable requirements. The permittee has committed to reduction of drop heights and watering the material as it moves through the crusher. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

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

- 2.d** The hourly emission limitations represent the potential to emit for this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure compliance with these emission limitations.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.f** This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).
- 2.g** This emissions unit is a portable source and is applicable to the requirements of OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B) when located in an "Appendix A" area as identified in OAC rule 3745-17-08. Best Available Technology (BAT) for this emissions unit, as set forth by the requirements/emissions limitations of this permit under OAC 3745-31-05(A)(3) are more stringent than any requirements/emissions limitations as may be applicable under OAC 3745-17-07(B) and OAC 3745-17-08(B).
- 2.h** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.i** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 14, 2005, OAC rule 3745-23-06 was rescinded; therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revision to OAC rule 3745-23-06, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.j The portable crusher is applicable to the requirements of 40 CFR Part 60 Subpart OOO when the emissions unit operates as an affected facility at a nonmetallic mineral processing plant as specified in 60.670(a)(1). The provisions of 40 CFR Part 60 Subpart OOO do not apply to the crusher when operated as part of a stand-alone crushing operation as specified in 60.670(a)(2). Best Available Technology (BAT) for this emissions unit, as set forth by this permit under OAC 3745-31-05(A)(3) are equivalent to or more stringent than any requirements or emissions limitations as may be applicable under 40 CFR Part 60 Subpart OOO.

The application and enforcement of the provisions of 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.

**B. Operational Restrictions**

- 1. The maximum annual operating hours for this emissions unit shall not exceed 5000 hours, based upon a rolling, 12-month summation of the operating hours.

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 operating hours levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Operating Hours</u>
1	720
1-2	1440
1-3	2160
1-4	2880
1-5	3600
1-6	4320
1-7	5000
1-8	5000
1-9	5000
1-10	5000
1-11	5000
1-12	5000

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

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

3. The crusher water spray shall be in operation at all times when this emission unit is operating to minimize or eliminate visible emissions from fugitive dust.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information:
  - a. the operating hours for each month; 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 operating hours.

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 operating hours for each calendar month.

2. For each day during which the permittee burns a fuel other than distillate fuel 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 B.2. 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 B.2.
4. The permittee shall maintain records that identify any instance of the water spray not operating when the crusher is in operation.

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all of the following:
  - a. Exceedances of the rolling, 12-month limitation on the hours of operation; 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 cumulative hours of operation; and
  - b. Exceedances of the sulfur content fuel restriction specified in B.2; and
  - c. Instances of the water spray not operating when the crusher is in operation

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**Emissions Unit ID: P001**

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

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 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.c 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 conveyor belt:
    - i. the width of the existing belt being replaced; and

- ii. the width of the replacement conveyor belt.

## **E. Testing Requirements**

1. In 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), the permittee shall conduct, or have conducted, emission testing for all crushing operations and transfer points of emissions units P001. The emissions testing requirements of 40 CFR Part 60 Subpart OOO do not apply to this emissions unit when operated as part of a stand-alone crushing operation as specified in 60.670(a)(2).
2. Testing shall be conducted in accordance with the provisions of 40 CFR Part 60, Subpart A, Section 60.8 and 40 CFR Part 60, Subpart OOO, Section 60.675.
3. The testing time frame 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). The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Ohio Environmental Protection Agency, Division of Air Pollution Control. The emission testing shall be conducted to demonstrate compliance with the allowable visible emission rates for particulate emissions.
4. The following test methods shall be employed to demonstrate compliance with the allowable visible emissions rates:
  - a. Method 9 of 40 CFR Part 60, Appendix A shall be used to determine opacity.
5. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. 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, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's air agency's refusal to accept the results of the emission tests.
6. Personnel from the Ohio EPA District Office's air agency shall be permitted to witness the test, 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 unit and / or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by

the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.

7. Compliance with the emissions limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission limitation:

8.68 lbs nitrogen oxides (NO<sub>x</sub>) per hour  
1.87 lb carbon monoxide (CO) per hour  
0.57 lb sulfur dioxide (SO<sub>2</sub>) per hour  
0.71 lb organic compounds (OC) per  
0.62 lb particulate matter 10 microns or less in size (PM<sub>10</sub>) per hour

Applicable compliance method:

These hourly emission limitations represents the potential to emit for this emissions unit using AP-42 Table 3.3-1 emission factors and an engine rating of 280 h.p. Therefore no hourly record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with these limitation.

b. Emission limitation:

Visible particulate emissions (PE) shall not exceed 10% opacity, as a 6-minute average, except during start-up and shutdown.

Applicable compliance method:

If required, compliance shall be demonstrated using Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission limitation:

21.7 tons NO<sub>x</sub> per rolling, 12-month period  
4.7 tons CO per rolling, 12-month period  
1.5 tons SO<sub>2</sub> per rolling, 12-month period  
1.8 tons OC per rolling, 12-month period  
1.55 ton PM<sub>10</sub> per rolling, 12-month period

Applicable compliance method:

The annual emission limitations above were established by multiplying the hourly emission limitation for each pollutant above by a maximum allowable operating schedule of 5000 hours per rolling, 12-month period, and then dividing by 2000 lbs/ton. Therefore provided compliance is shown with the 5000 hours per rolling 12-month period operational restriction, compliance with the annual limitation shall be assumed.

d. Emission limitation:

1.22 tons fugitive particulate emissions (PE) (from the crusher)  
0.58 tons fugitive particulate matter emissions 10 microns or less in size (PM<sub>10</sub>)

Applicable compliance method:

Fugitive dust emissions associated with crushing operations were established by multiplying the maximum operating rate of 100 tons of product per hour by maximum annual operating hours of 5000 hours. The result of this calculation was multiplied by the appropriate emission factors derived from AP-42 section 19.2.2 Table 19.2.2-2 (11/2006) [0.0012 lb PE / ton product or 0.00054 lb PM10 / ton product] and dividing by 2000 lbs/ton. (0.30 ton fugitive PE per year and 0.14 tons fugitive PM10 per year)

Added to these emissions are emissions from the loading of material into the crusher. Loading emissions associated with the loading of the crusher were established by multiplying the maximum annual capacity of 500,000 tons of material per year by the appropriate emission factor derived from AP-42 section 13.2.4.3 equation 1 (11/2006) utilizing the mean wind speed and moisture content values provided by the applicant [0.0037 lb PE / ton product or 0.0017 lb PM10 / ton product] and dividing by 2000 lbs/ton. (0.92 tons fugitive PE per year and 0.44 tons fugitive PM10 per year)

- e. Emission limitation:  
No visible fugitive PE, except for a period of time not to exceed one minute during any 60-minute observation period

Applicable compliance method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22 and the procedures specified in OAC rule 3745-17-03(B)(4).

**F. Miscellaneous Requirements**

None