



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
WAYNE COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 02-21495**

**Fac ID: 0285030261**

**DATE: 11/29/2005**

Wooster Aggregates, LLC  
Christopher L. Wagner  
4755 S. High St.  
Columbus, OH 43207

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

NEDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 11/29/2005  
Effective Date: 11/29/2005**

**FINAL PERMIT TO INSTALL 02-21495**

Application Number: 02-21495  
Facility ID: 0285030261  
Permit Fee: **\$3800**  
Name of Facility: Wooster Aggregates, LLC  
Person to Contact: Christopher L. Wagner  
Address: 4755 S. High St.  
Columbus, OH 43207

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**3001 Prairie Lane Rd.  
Wooster, Ohio**

Description of proposed emissions unit(s):  
**Crushing and screening plant, storage piles, roadways and parking areas, material handling.**

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

Director

Wooster Aggregates, LLC  
PTI Application: 02-21495  
Issued: 11/29/2005

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## 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 quarterly, i.e., 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

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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)**

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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.

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**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>
PE	37.3 tpy
PM10	14.2 tpy

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Material storage piles associated with a sand and gravel plant. Storage piles, including load-in, load-out and wind erosion for facilities with a maximum production of 500,000 tons/year and a maximum storage pile surface area less than or equal to 6 acres Modified	OAC rule 3745-31-05(A)(3)	5.0 tons/year of fugitive particulate matter of 10 microns or less (PM10)
	OAC rule 3745-17-07(B)	10.6 tons/year of fugitive particulate emissions (PE)
	OAC rule 3745-17-08(B)	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)
		This rule does not apply per OAC rule 3745-17-08 (A)(1), location in a non-Appendix A are..
		This rule does not apply to the fugitive dust emissions because OAC rule 3745-17-08 is not applicable.

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**Issue**

**Facility ID: 0285030261**

**Emissions Unit ID: F002**

**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).

## **II. Operational Restrictions**

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**Wooster Aggregates, LLC**  
**PTI Application: 02-21105**  
**Issue**

**Facility ID: 0285030261**

**Emissions Unit ID: F002**

None

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

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

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

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

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

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

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

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

such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 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.

#### IV. 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.

## V. 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. Emissions Limitations:  
5.0 tons/year of fugitive PM10  
10.6 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum production of 500,000 tons per year, a maximum storage surface area less than or equal to 6 acres, and a 95 % overall control efficiency for PE and PM10.

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

Applicable Compliance Method:

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

## VI. 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F003 - Unpaved service road, haul road and parking areas, with a maximum of 31,000 vehicle miles traveled per year . Modified	OAC rule 3745-31-05(A)(3)	2.7 tons/ year of fugitive particulate matter of 10 microns or less (PM10)
		9.3 tons/year of fugitive particulate emissions (PE)
		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.I.2.a through A.I.2.f.)
	OAC rule 3745-17-07(B)	This rule does not apply per OAC rule 3745-17-08 (A)(1), location in a non-Appendix A are..
	OAC rule 3745-17-08(B)	This rule does not apply to the fugitive dust emissions because OAC rule 3745-17-08 is not applicable.

**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 application, the permittee has committed to treat the unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.b** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.c** 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.d** Any unpaved roadway or parking area that is subsequently paved, will require a permit for paved roadways and parking areas.
- 2.e** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 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 best available technology 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 of the roadway segments and parking areas in accordance with the following frequencies:

unpaved roadways and parking areas	minimum inspection frequency
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all roads and parking areas	daily
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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 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 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 Limitations:  
2.7 tons/year of fugitive PM10  
9.3 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. These emission limits were based on a maximum of 18,000 vehicle miles traveled per year on the service roads and 13,000 vehicle miles traveled per year on the haul roads, and a 95 % control efficiency for PE and PM10.

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

Applicable Compliance Method:

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

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**Woos**

**PTI A**

**Issued: 11/29/2005**

Emissions Unit ID: **F003**

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F006 - Overburden removal and material loading by front-end loaders, excavators, draglines and trucks.	OAC rule 3745-31-05(A)(3)
all listed above mineral extraction operations	OAC rule 3745-17-07(B)(5)
	OAC rule 3745-17-08(B)
vehicle travel on unpaved areas	OAC rule 3745-31-05(A)(3)

	<p style="text-align: center;"><u>Applicable Emissions Limitations/Control Measures</u></p>	
OAC rule 3745-17-07(B)		This rule does not apply to the fugitive dust emissions because OAC rule 3745-17-08 is not applicable.
OAC rule 3745-17-08(B)	Visible particulate emissions shall not exceed 20 percent opacity as a three- minute average	0.85 tons/ year of fugitive particulate matter of 10 microns or less (PM10) (see Section A.2.d)
OAC rule 3745-31-05(A)(3)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.a)	2.3 tons/year of fugitive particulate emissions (PE) (see Section A.2.d)
	This rule does not apply per OAC rule 3745-17-08 (A)(1), location in a non-Appendix A area.	
	This rule does not apply to the fugitive dust emissions because OAC rule 3745-17-08 is not applicable.	
	no visible PE except for 3 minutes during any 60 minute period	
	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b )	
	This rule does not apply per OAC rule 3745-17-08 (A)(1), location in a non-Appendix A are..	

## 2. Additional Terms and Conditions

- 2.a** The permittee shall control fugitive dust by using precautionary operation practices, by minimization of disturbed land surface, and by use of water sprays at all reasonable times.
- 2.b** The permittee shall employ best available control measures on all unpaved areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The permittee shall not overload the haul trucks with extracted aggregate material, in order to minimize spillage and windage losses. 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.

## B. Operational Restrictions

None

## C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for mineral extraction operations, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Operations:	Minimum Inspection Frequency:
Overburden removal	daily
Material loading	daily
Vehicle travel	daily

2. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for the overburden removal, material loading

operations, and vehicle travel. The inspections shall be performed during representative, normal operating conditions.

3. 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 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.

The information required in 3.d. shall be kept separately for (i) the overburden removal operations, (ii) the material loading operations, and (iii) the vehicle travel on unpaved 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 quarterly deviation reports, in accordance with 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; 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 limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:  
 Visible particulate emissions shall not exceed 20 percent opacity as a three-minute average, for overburden removal, and material loading operations

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC Rule 3745-17-03(B)(3) using the methods and procedures specified in U.S.EPA Reference Method 9.

- b. Emission Limitation:  
 No visible PE from vehicle travel on unpaved areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

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

- c. Emissions Limitation:  
 0.85 tons/year of fugitive PM10  
 2.33 tons/year of fugitive PE

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using:

for vehicle travel on unpaved areas - the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03). Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. The vehicle travel emission limits were based on a maximum of 5,000 vehicle miles traveled per year, and a 95 % control efficiency for PE and PM10;

for material loading - the emission factor equation in Section 13.2.4.3, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95). Should further updates in AP-42 occur, the most current equations for material loading shall be used. The material handling emission limits were based on a maximum of 9.9 mph wind speed, 100,000 ton per year material handled and moisture content of 4.0%; and

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for overburden removal - the emission factor in RACM Table 2.1.4-3, 9/88, 0.004 pounds per ton of overburden removed for area stripping with scraper. The overburden removal emission limits were based upon a maximum of 100,000 tons per year of material and a PE to PM10 ratio of 2.11:1 from AP-42.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F005 - Dredge, feeder, crushers, screens and conveyors of a sand and gravel plant	<p>OAC rule 3745-31-05 (A)(3)</p> <p>OAC rule 3745-17-07(B)</p> <p>OAC rule 3745-17-08</p>
	40 CFR Part 60 Subpart OOO

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**Issued: 11/29/2005**

Emissions Unit ID: **F005**

Applicable Emissions  
Limitations/Control Measures

3.45 lbs/hour and 15.1 tons/year of Particulate emissions (PE) and 1.26 lb/hour and 5.6 tons/year of Particulate matter emissions 10 microns or less (PM<sub>10</sub>).

Visible emissions of fugitive dust shall not exceed ten percent opacity, as a six-minute average from any transfer point or piece of equipment except the two crushers.

Visible emissions of fugitive dust shall not exceed fifteen percent opacity, as a six-minute average from the two crushers.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.a and A.2.b) from any fugitive dust emission point listed below in Section A.2.c.

The emission limitation specified by this rule is equivalent to or less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). (See Sections A.2.e and D.3.)

This rule does not apply per OAC rule 3745-17-08 (A)(1), location in a non-Appendix A are..

This rule does not apply to the fugitive dust emissions because OAC rule 3745-17-08 is not applicable.

## 2. Additional Terms and Conditions

- 2.a** The permittee shall employ best available control measures for the aggregate processing operation for the purpose of ensuring compliance with the applicable requirements. In accordance with the permittee's permit application, the permittee has committed to employing water sprays within the process to ensure compliance. The permittee shall also minimize the free fall distance of the processed material. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.b** For each phase of the aggregate processing operation that is not adequately enclosed, the control measure(s) shall be implemented if the permittee determined, 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 applicable requirements. Any required implementation of the control measure(s) shall continue during the operation until further observation confirms that use of the control measure(s) is unnecessary.
- 2.c** The aggregate processing plant that is covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
- Two 400 ton per hour crushers
  - Three wet screening operations
  - Two dry screening operations
  - Truck load-in to feeder
  - Belt conveyors
  - One sand section
- 2.d** 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.e** Open bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times the materials are being transported.

## B. Operational Restrictions

None

### C. Monitoring and/or Record keeping Requirements

1. Except as otherwise provided in this section, for concrete/asphalt recycling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operations</u>	<u>minimum inspection frequency</u>
grinding	daily
screening	daily
truck load-in to hopper	daily
conveyors	daily

2. The above mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measure(s) was (were) implemented; and
  - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 3.d shall be kept separately for each material handling operation, 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; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

These deviation (excursion) reports shall be submitted in accordance with the general terms and conditions of this permit.

2. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
  - a. construction date (no later than 30 days after such date);
  - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - c. actual start-up date (within 15 days after such date), including a description of each affected emissions unit, equipment manufacturer, and serial number of the equipment if available as well as the home office and the current address or location of the portable plant; and
  - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency  
DAPC - Air Quality Modeling and Planning  
P. O. Box 1049  
Columbus, Ohio 43216-1049

and

Ohio Environmental Protection Agency

Northeast District Office  
2110 East Aurora Road  
Twinsburg, Ohio 44087

## E. Testing Requirements

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

- a. Emission Limitations:  
3.45 lbs/hour and 15.1 tons/year of PE emissions  
1.26 lb/hour and 5.6 tons/year of PM<sub>10</sub> emissions

### Applicable Compliance Method

Compliance with the hourly PE/PM<sub>10</sub> emission limitations shall be determined using the emission factors for crushing, screening, and material handling operations in AP-42, Chapter 11.19.2, Table 11.19.2-2, Crushed Stone Processing and Pulverized Mineral Processing, Fifth Edition, (8/04). The emission factors, 0.000016 lb/ton for PE and 0.000016 lb/ton for PM<sub>10</sub> for truck unloading to hopper, 0.0012 lb/ton for PE and 0.00054 lb/ton for PM<sub>10</sub> for crushing, 0.0022 lb/ton for PE and 0.00074 lb/ton for PM<sub>10</sub> for screening, and 0.00014 lb/ton for PE and 0.000046 lb/ton for PM<sub>10</sub> for conveyors, shall be multiplied by the maximum process weight rate, in tons/hour, for each operation identified in A.2.c and summed. For conveyor loading, multiply by the number of conveyor transfer points (13). For crushing, multiply by the number of crushers (2). For screening, multiply by the number of dry screens (2).

The tons/year limitations were developed by multiplying the pound/hour by the maximum operating hours of 8,760 hours/year, and dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly emission limitations and the annual operating hours restriction, compliance will also be shown with the annual limitation.

- b. Emission Limitation:  
Visible emissions of fugitive dust shall not exceed ten percent opacity as a

six-minute average from any transfer point or piece of equipment except the two crushers

Applicable Compliance Method:

The permittee shall conduct, or have conducted, fugitive visible particulate emission testing for emissions unit P005 in accordance with requirements in E.2 below.

- c. Emission Limitation:  
Visible emissions of fugitive dust shall not exceed fifteen percent opacity as a six-minute average from the two crushers

Applicable Compliance Method:

The permittee shall conduct, or have conducted, fugitive visible particulate emission testing for emissions unit F005 in accordance with requirements in E.2 below.

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

Compliance with the opacity limits of this permit shall be determined by using US EPA Reference Test Method 9 (40 CFR Part 60) and the procedures specified in OAC rule 3745-17-03 (B)(1) with the following additions per 40 CFR Part 60 Subpart 000:

- (1) the minimum distance between the observer and the emission source shall be 4.57 meters (15 feet);
  - (2) 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; and
  - (3) 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 emission is to be made at a point in the plume where the mist is no longer visible.
- iv. The duration of the Method 9 observations shall be 3 hours (30 six-minute averages). However, the duration of the Method 9 observations can be reduced to 1 hour (10 six-minute averages) if the following conditions apply: (1) there are no individual readings greater than 10 % opacity and (2) there are no more than 3 readings of 10 % opacity for the one-hour period.

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards in 40 CFR 60.672 of Subpart OOO , including reports of observations using Method 9 to demonstrate compliance with 60.672(b) and the BAT limits for fugitive opacity contained in this permit.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

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

None