



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05978

Fac ID: 1483980486

DATE: 9/6/2007

Barrett Paving Materials, Inc.
Andy Brockhaus
600 Shepherd Avenue
Cincinnati, OH 45215-0000

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 9/6/2007
Effective Date: 9/6/2007**

FINAL PERMIT TO INSTALL 14-05978

Application Number: 14-05978
Facility ID: 1483980486
Permit Fee: **\$600**
Name of Facility: Barrett Paving Materials, Inc.
Person to Contact: Andy Brockhaus
Address: 600 Shepherd Avenue
Cincinnati, OH 45215-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1466 West Mason Morrow Millgrove Road
South Lebanon, Ohio**

Description of proposed emissions unit(s):
Portable Roadways and Storage Piles, Standard PTI, following GPTI format (support activities for drum mix plant permitted in PTI 14-05959).

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

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

Barrett Paving Materials, Inc.
PTI Application: 14-05978
Issued: 9/6/2007

Facility ID: 1483980486

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)

Barrett Paving Materials, Inc.
PTI Application: 14-05978
Issued: 9/6/2007

Facility ID: 1483980486

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.

Barrett Paving Materials, Inc.
 PTI Application: 14-05978
 Issued: 9/6/2007

Facility ID: 1483980486

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	49.36
PM10	13.94

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) - Portable unpaved roadways and parking areas, with a maximum of 120,000 vehicles miles traveled per year

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Fugitive particulate emissions (PE) shall not exceed 18.18 tons per year (TPY).</p> <p>There shall be no visible PE from the unpaved roadways and/or parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.</p> <p>See term and condition A.2.a.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See sections A.2.b. through A.2.g.)</p>
OAC rule 3745-17-07(B)(5) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See terms and conditions A.2.b through A.2.g.

2. Additional Terms and Conditions

- 2.a Permit to Install 14-05978 for this air contaminant source takes into account the

Issued: 9/6/2007

following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for particulate matter emissions ten microns and less in diameter (PM10):

- i. a maximum of 120,000 vehicles miles traveled (VMT) per year; and
 - ii. a 95 % control efficiency for PM10 when employing the best available control measures as outlined in sections A.2.b through A.2.g and when implementing the inspection requirements outlined in sections C.1. through C.3.
- 2.b** 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.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 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.d** 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.e** Any unpaved roadway or parking area that is subsequently paved, will require a permit for paved roadways and parking areas.
- 2.f** Open-bodied vehicles transporting materials likely to become airborne shall

Emissions Unit ID: **F001**

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 permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate exemption requirements have been met and following the approval of the director. The director may issue a "Notice of Site Approval" if the portable source meets the following criteria pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
- a. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination and state and/or federal rules;
 - b. the portable source is operating pursuant to a currently effective PTI and/or any applicable permit to operate (PTO) and continues to comply with the requirements of the permit;
 - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
 - d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07; and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
 - e. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site.

Issued: 9/6/2007

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

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

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

B. Operational Restrictions

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

all roads and parking areas

daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a

Emissions Unit ID: **F001**

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.

4. The permittee shall collect and record the following information annually for the purpose of determining annual PE/PM10 emissions:
 - a. the actual VMT per year on each unpaved roadways/parking area segment as identified in the PTI application; and
 - b. the total PE and PM10 emissions, in tons, using the calculation methods provided in sections E.1.a and E.1.c and replacing the voluntary restriction amounts with the actual amounts as estimated in section C.4.a. The permittee may assume a control efficiency of 95% provided that the control measures outlined in sections A.2.b through A.2.g were implemented and recorded pursuant to the requirements in sections C.1 through C.3.

D. Reporting Requirements

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

Issued: 9/6/2007

- 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;
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
 - c. all exceedances of the annual VMT voluntary restriction and any exceedances of the annual PE limitation or PM10 emissions voluntary restriction .
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 limitation in section A.1 of the terms and conditions of this permit shall be determined in accordance with the following method:
 - a. Emission Limitations:
Fugitive particulate emissions (PE) shall not exceed 18.18 tons per year (TPY)

Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be determined by using the emission factor equation in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used.

The annual PE emissions limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-05978, submitted on July 30, 2007, and information in AP-42. This emissions limit was based on a maximum of 120,000 vehicle miles traveled per year and a 95 % control efficiency for PE:

$$\text{Equation 1a} \quad E = k(s/12)^a(W/3)^b$$

where k, a and b are empirical constants given in Table 13.2.2-2, and

Emissions Unit ID: **F001**

E = size specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

$$E = 4.9(4.8/12)^{0.7}(20/3)^{0.45} = 6.0594 \text{ lb PE/VMT}$$

$$6.0594 \text{ lb PE/VMT} \times 120,000 \text{ VMT/year} \times 1 \text{ Ton}/2000 \text{ lbs} \times (1-0.95) = 18.18 \text{ TPY PE}$$

b. Emission Limitation:

There shall be no visible PE from the unpaved roadways and/or 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").

c. Emission Limitation:

Voluntary restrictions which maintain the PM10 emissions to less than 10 tons per year

Applicable Compliance Method:

The annual PM10 emissions voluntary restriction established through OAC rule 3745-31-05(C) was developed from the following equations using the information submitted by the permittee in PTI Application 14-05978, submitted on July 30, 2007, and information in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways. This emissions voluntary restriction was also based on a maximum of 120,000 vehicle miles traveled per year and a 95% control efficiency for PM10:

$$\text{Equation 1a} \quad E = k(s/12)^a(W/3)^b$$

where k, a and b are empirical constants given in Table 13.2.2-2, and

E = size specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

Issued: 9/6/2007

$$E = 1.5(4.8/12)^{0.9}(20/3)^{0.45} = 1.5442 \text{ lb PM10/VMT}$$

$$1.5442 \text{ lb PM10/VMT} \times 120,000 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.95) = 4.63 \text{ TPY PM10}$$

F. Miscellaneous Requirements

None

Issued: 9/6/2007

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) - Portable paved roadways and parking areas, with less than or equal to 40,000 vehicle miles traveled per year and a silt content less than or equal to 120 g/m²

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Fugitive particulate emissions (PE) shall not exceed 20.21 tons per year (TPY).</p> <p>There shall be no visible PE from the paved roadways and/or parking areas except for a period of time not to exceed 1 minute during any 60-minute observation period.</p> <p>See term and condition A.2.a.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See terms and conditions A.2.b through A.2.f.)</p>
OAC rule 3745-17-07(B)(5) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See terms and conditions A.2.b through A.2.f.

Issued: 9/6/2007**2. Additional Terms and Conditions**

- 2.a** Permit to Install 14-05978 for this air contaminant sources takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best

Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for particulate matter emissions ten microns and less in diameter (PM10):

- i. a maximum of 40,000 vehicles miles traveled (VMT) per year; and
 - ii. a 95 % control efficiency for PM10 when employing the best available control measures as outlined in terms and conditions A.2.b through A.2.f. and when implementing the inspection requirements outlined in terms and conditions C.1 through C.3.
- 2.b** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved 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.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 paved 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.d** 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

Emissions Unit ID: F002

erosion by water or other means.

- 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.
- 2.g** The permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate exemption requirements have been met and following the approval of the director. The director may issue a "Notice of Site Approval" if the portable source meets the following criteria pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
- a. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination and state and/or federal rules;
 - b. the portable source is operating pursuant to a currently effective PTI and/or any applicable permit to operate (PTO) and continues to comply with the requirements of the permit;
 - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
 - d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07; and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
 - e. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

Issued: 9/6/2007

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site.

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

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

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

B. Operational Restrictions

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:

paved roadways and parking areas

minimum inspection frequency

all roads and parking areas

daily

Emissions Unit ID: **F002**

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.

4. The permittee shall collect and record the following information annually for the purpose of determining annual PE/PM10 emissions:
 - a. the actual VMT per year on each paved roadways/parking area segment as identified in the PTI application; and
 - b. the total PE and PM10 emissions, in tons, using the calculation methods provided in sections E.1.a and E.1.c and replacing the voluntary restriction amounts with the actual amounts as estimated in section C.4.a. The permittee may assume a control efficiency of 95% provided that the control measures outlined in sections A.2.b through A.2.f were implemented and recorded pursuant to the requirements in sections C.1 through C.3.

D. Reporting Requirements

Issued: 9/6/2007

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;
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
 - c. all exceedances of the annual VMT voluntary restriction and any exceedances of the annual PE limitation or PM10 emissions voluntary restriction .
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.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:

Fugitive particulate emissions (PE) shall not exceed 20.21 tons per year (TPY)

Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used.

The annual PE emissions limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-05978, submitted on July 30, 2007, and information in AP-42. This emissions limit was based on a maximum of 40,000 vehicle miles traveled per year, and a 95% control efficiency for PE:

Equation 1 $E = k(sL/2)^{0.65}(W/3)^{1.5} - C$

Emissions Unit ID: **F002**

where k is the particle size multiplier given in Table 13.2-1.2, and

E = particulate emission factor (having units matching the units of k)

sL = road surface silt loading (g/m²)

W = average weight (tons) of the vehicles traveling the road, and

C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear

$$E = 0.082(120/2)^{0.65} \times (20/3)^{1.5} - 0.00047 = 20.2053 \text{ lb PE/VMT}$$

$$20.2053 \text{ lb PE/VMT} \times 40,000 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.95) = 20.21 \text{ TPY PE}$$

b. Emission Limitation:

There shall be no visible PE from the paved roadways and/or parking areas except for a period of time not to exceed 1 minute 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. Emission Limitation:

Voluntary restrictions which maintain the PM10 emissions to less than 10 tons per year

Applicable Compliance Method:

The annual PM10 emissions voluntary restriction established through OAC rule 3745-31-02(A) was developed from the following equations using the information submitted by the permittee in PTI Application 14-05978, submitted on July 30, 2007, and information in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved roadways. This emissions voluntary restriction was also based on a maximum of 40,000 vehicle miles traveled per year, and a 95% control efficiency for PM10:

$$\text{Equation 1} \quad E = k(sL/2)^{0.65}(W/3)^{1.5} - C$$

where k is the particle size multiplier given in Table 13.2-1.2, and

Issued: 9/6/2007

E = particulate emission factor (having units matching the units of k)
sL = road surface silt loading (g/m^2)
W = average weight (tons) of the vehicles traveling the road, and

Issued: 9/6/2007

C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear

$$E = 0.016(120/2)^{0.65} \times (20/3)^{1.5} - 0.00047 = 3.9421 \text{ lb PM10/VMT}$$

$$3.9421 \text{ lb PM10/VMT} \times 40,000 \text{ VMT/year} \times 1 \text{ Ton/2000 lbs} \times (1-0.95) = 3.94 \text{ TPY PM10}$$

F. Miscellaneous Requirements

None

Issued: 9/6/2007

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 -(F003) - Portable storage piles, including load-in, load-out and wind erosion activities for facilities with a maximum production of 3,000,000 tons/year and a maximum storage pile surface area less than or equal to 15 acres

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Fugitive particulate emissions (PE) shall not exceed 10.97 tons per year (TPY).</p> <p>There shall be no visible particulate emissions from material storage piles except for a period of time not to exceed 1 minute during any 60-minute observation period.</p> <p>See term and condition A.2.a.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See terms and conditions A.2.b through A.2.f.)</p>
OAC rule 3745-17-07(B)(5) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See terms and conditions A.2.b through A.2.f.

Emissions Unit ID: **F003****2. Additional Terms and Conditions**

- 2.a** Permit to Install 14-05978 for this air contaminant sources takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best

Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for particulate matter emissions ten microns and less in diameter (PM10):

- i. a maximum load-in/load-out rate of 3,000,000 tons per year;
 - ii. a maximum storage surface area greater than 6 acres but less than or equal to 15 acres; and
 - iii. a 95% control efficiency for PM10 when employing the best available control measures as outlined in terms and conditions A.2.b through A.2.f and when implementing the inspection requirements outlined in terms and conditions C.1 through C.3.
- 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 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.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

Issued: 9/6/2007

- 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. 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.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 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(A)(3).
- 2.g** The permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) providing the appropriate exemption requirements have been met and following the approval of the director. The director may issue a "Notice of Site Approval" if the portable source meets the following criteria pursuant to OAC rule 3745-31-03(A)(1)(p)(i):
- a. the portable source has been issued a permit to install (PTI) and the permittee continues to comply with any applicable best available technology (BAT) determination and state and/or federal rules;
 - b. the portable source is operating pursuant to a currently effective PTI and/or any applicable permit to operate (PTO) and continues to comply with the requirements of the permit;
 - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;

Emissions Unit ID: F003

- d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance in violation of OAC rule 3745-15-07; and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and
- e. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07 and the relocation will not result in the installation of a major stationary source or a modification of an existing major stationary source.

The portable source can be relocated upon receipt of the director's "Notice of Site Approval" for the site.

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

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

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

B. Operational Restrictions

Issued: 9/6/2007

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:

<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:

Emissions Unit ID: **F003**storage pile identificationminimum wind erosion inspection frequency

all

daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

7. The permittee shall collect and record the following information annually for the purpose of determining annual PE/PM10 emissions:

Issued: 9/6/2007

- a. the actual load-in/load-out rate, in tons per year;
- b. the actual storage surface area of all storage piles as identified in the PTI application; and
- c. the total PE and PM10 emissions, in tons, using the calculation methods provided in terms and conditions E.1.a and E.1.c and replacing the voluntary restriction amounts with the actual amounts as estimated in terms and conditions C.7.a and C.7.b. The permittee may assume a control efficiency of 95% provided that the control measures outlined in terms and conditions A.2.b through A.2.f were implemented and recorded pursuant to the requirements in terms and conditions C.1 through C.6.

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;
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented; and
 - c. all exceedances of the annual load-in/load-out rate voluntary restriction, all exceedances of the storage pile surface area voluntary restriction and any exceedances of the annual PE limitation or PM10 emissions voluntary restriction.
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.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emissions Limitations:

Issued: 9/6/2007

Fugitive particulate emissions (PE) shall not exceed 10.97 tons per year (TPY)

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 11/06), for load-in operations, load-out operations, and wind erosion.

The annual PE emissions limitation established through OAC rule 3745-31-05(A)(3) was developed from the following equations using the information submitted by the permittee in PTI Application 14-05978, submitted on July 30, 2007, and information in AP-42. This emissions limit was based on a maximum production of 3,000,000 tons per year, a maximum storage surface area greater than 6 acres but less than or equal to 15 acres, and a 95% overall control efficiency for PE:

Emissions Unit ID: F003

$$\text{Equation 1} \quad E = k(0.0032)(U/5)^{1.3}/(M/2)^{1.4}$$

where k is the particle size multiplier 0.74, and

E = particulate emission factor (lb/ton)

U = mean wind speed, (miles per hour, mph), and

M = material moisture content (%)

$$E = (0.74)(0.0032)(15/5)^{1.3}/(1/2)^{1.4} = 0.0261 \text{ lb PE/ton}$$

$$0.0261 \text{ lb PE/ton} \times 3,000,000 \text{ tons/year} \times 1 \text{ Ton}/2000 \text{ lbs} \times (1-0.95) = 1.96 \text{ TPY PE}$$

$$1.96 \text{ TPY PE} \times 2 \text{ for considering load-in and load-out operations} = 3.92 \text{ TPY PE}$$

$$\text{Equation 2} \quad k \sum_{i=1}^N P_i$$

which results in an uncontrolled emission factor of 9.4 tons PE/acre/year

$$9.4 \text{ tons PE/acre/yr} \times 15 \text{ acres} \times (1-0.95) = 7.05 \text{ TPY PE}$$

$$3.92 \text{ TPY PE} + 7.05 \text{ TPY PE} = 10.97 \text{ TPY PE}$$

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").

c. Emission Limitation:

Voluntary restrictions which maintain the PM10 emissions to less than 10 tons per year

Applicable Compliance Method:

Issued: 9/6/2007

The annual PM10 emissions voluntary restriction established through OAC rule 3745-31-02(A) was developed from the following equations using the information submitted by the permittee in PTI Application 14-05978, submitted on July 30, 2007, and information in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06), for load-in operations, load-out operations, and wind erosion. This emissions voluntary restriction was also based on a maximum production of 3,000,000 tons per year, a maximum storage surface area greater than 6 acres but less than or equal to 15 acres, and a 95% overall control efficiency for PM10:

$$\text{Equation 1} \quad E = k(0.0032)(U/5)^{1.3}/(M/2)^{1.4}$$

where k is the particle size multiplier 0.35, and

E = particulate emission factor (lb/ton)

U = mean wind speed, (miles per hour, mph), and

M = material moisture content (%)

$$E = (0.35)(0.0032)(15/5)^{1.3}/(1/2)^{1.4} = 0.0261 \text{ lb PM10/ton}$$

$$0.0261 \text{ lb PM10/ton} \times 3,000,000 \text{ tons/year} \times 1 \text{ Ton}/2000 \text{ lbs} \times (1-0.95) = 0.92 \text{ TPY PM10}$$

$$0.92 \text{ TPY PM10} \times 2 \text{ for considering load-in and load-out operations} = 1.84 \text{ TPY PM10}$$

$$\text{Equation 2} \quad k \sum_{i=1}^N P_i$$

which results in an uncontrolled emission factor of 4.7 tons PM10/acre/year

$$4.7 \text{ tons PM10/acre/yr} \times 15 \text{ acres} \times (1-0.95) = 3.53 \text{ TPY PM10}$$

$$1.84 \text{ TPY PM10} + 3.53 \text{ TPY PM10} = 5.37 \text{ TPY PM10}$$

F. Miscellaneous Requirements

None