



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
HAMILTON 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: 14-05638**

**Fac ID: 1431232694**

**DATE: 2/17/2005**

Quickrete Cincinnati  
Steven Pettitt  
500 Marathon Parkway  
Lawrenceville, GA 30045

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

HCDES



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**Permit To Install  
Terms and Conditions**

**Issue Date: 2/17/2005  
Effective Date: 2/17/2005**

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**FINAL PERMIT TO INSTALL 14-05638**

Application Number: 14-05638  
Facility ID: 1431232694  
Permit Fee: **\$7900**  
Name of Facility: Quickrete Cincinnati  
Person to Contact: Steven Pettitt  
Address: 500 Marathon Parkway  
Lawrenceville, GA 30045

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**5425 Kilby Road  
Harrison, Ohio**

Description of proposed emissions unit(s):  
**concrete products bagging line.**

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

## 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 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

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representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

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

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

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#### 14. Construction Compliance Certification

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

#### 15. Fees

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

### B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	21.2
PM10	11.4
NOx	6.57
CO	5.52

**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>
F001 - paved and unpaved roadways and parking areas	
paved roadways and parking areas (see Section A.2.a)	unpaved roadways and parking areas (see Section A.2.b)
	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(B)(4)

Emissions Unit ID: F001

OAC rule 3745-17-08(B)	<p style="text-align: center;"><u>Applicable Emissions Limitations/Control Measures</u></p>	<p>exceed 4.45 tons/yr.</p> <p>Particulate matter emissions 10 microns and less (PM10) shall not exceed 1.25 tons/yr.</p>
OAC rule 3745-31-05(A)(3)	<p>from paved roadways:</p> <p>Particulate emissions (PE) shall not exceed 0.35 tons/yr.</p> <p>Particulate matter emissions 10 microns and less (PM10) shall not exceed 0.07 tons/yr.</p> <p>no visible particulate emissions except for one minute during any 60-minute period.</p>	<p>no visible particulate emissions except for 3 minutes during any 60-minute period</p> <p>best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.d through A.2.i)</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-07(B)(5)	<p>best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c, and A.2.e through A.2.i)</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-08(B)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>from unpaved roadways:</p> <p>Particulate emissions (PE) shall not</p>	

**2. Additional Terms and Conditions**

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

paved roadways:

all

paved parking areas:

all

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

unpaved roadways:

all

unpaved parking areas:

all

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas by 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.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust

Emissions Unit ID: F001

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

- 2.g 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.h 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.i Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

**B. Operational Restrictions**

None

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

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

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	once daily, during operation

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all	once daily, during operation

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

snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, 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 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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

Emission Limitation:

from paved roadways, 0.35 tons PE/yr, 0.07 tons PM10/yr;  
 from unpaved roadways, 4.45 tons PE/yr, 1.25 tons PM10/yr.

Applicable Compliance Method:

Compliance shall be determined using the following equations:

$$\begin{aligned} \text{tons PE/yr} &= (A) \times (B) \times (1 - C) \times 1 \text{ ton}/2,000 \text{ lbs} \\ \text{tons PM10/yr} &= (A) \times (B) \times (1 - C) \times 1 \text{ ton}/2,000 \text{ lbs} \end{aligned}$$

where:

- A = PE or PM10 emission factor, lb/VMT, calculated from AP-42, Sections 13.2.1 and 13.2.2 (December, 2003);
- B = annual vehicle miles traveled (VMT); and
- C = control efficiency, percent

2. Emission Limitation:

from paved roadways: no visible particulate emissions except for one minute during any 60-minute period;

from unpaved roadways: no visible particulate emissions except for 3 minutes during any 60-minute period.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede the terms and conditions for this emissions unit in Permit to Install 14-1915, as issued on February 14, 1990.

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
F002 - material handling and storage silos with baghouse aggregate loading to wet hopper	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(B)
transfer points and pneumatic transfer to silos		OAC rule 3745-17-08(B)
		OAC rule 3745-17-11
	OAC rule 3745-17-07(A)	

**Quick**

**PTI A**

**Issued: 2/17/2005**

Emissions Unit ID: **F002**

Applicable Emissions  
Limitations/Control Measures

Fugitive particulate emissions (PE) shall not exceed 0.59 lb/hr and 2.57 TPY.

Fugitive particulate matter emissions 10 microns and less (PM10) shall not exceed 0.29 lb/hr and 1.28 TPY.

Particulate matter emissions (PE) from the baghouse outlet shall not exceed 0.03 lb/hr and 0.29 TPY.

Particulate matter emissions 10 microns and less (PM10) from the baghouse outlet shall not exceed 0.01 lb/hr and 0.13 TPY.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B).

See term and condition A.2.a.

Visible particulate emissions shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.

Visible particulate emissions of fugitive dust shall not exceed twenty percent (20%) opacity, as a

three minute average, except as specified by rule.

best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.f)

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

**2. Additional Terms and Conditions**

**2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

aggregate loading to wet hopper, transfer and loading to silos

**2.b** The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
aggregate loading to wet hopper	maintain moisture content of wet aggregate
transfer points and silo loading	enclosure with vent to baghouse

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

**2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

**2.d** The collection efficiency of the fugitive dust control system shall be sufficient to minimize or eliminate visible particulate emissions at the point of capture.

**2.e** The control equipment shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases.

**2.f** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

**B. Operational Restrictions**

None

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

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

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
aggregate loading to wet hopper, transfer points and silo loading	once daily, when operating

- 2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 3. The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- 4. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates 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 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

**D. Reporting Requirements**

1. 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; and
  - b. each instance when a control measure, that was to be performed 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 limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

0.59 lb/hr, 2.57 TPY fugitive PE;  
0.29 lb/hr, 1.28 TPY fugitive PM10 emissions.

Applicable Compliance Method:

The hourly emission limitations were established by the following methodology:

lb/hr of PE = (A) x (C)  
lb/hr of PM10 emissions = (B) x (C)

where:

- (A) = PE emission factor of 0.0069 lb/ton, from PTI application 14-05638, received October 27, 2004.  
 (B) = PM10 emission factor of 0.00345 lb/ton, from PTI application 14-05638, received October 27, 2004.  
 (C) = Maximum hourly throughput of 85 tons/hour

The annual emission rate was determined by multiplying the maximum hourly emission rate by 8760 hours per year and dividing by 2000 lb/ton.

Emission Limitation:

0.03 lb/hr, 0.29 TPY stack PE;  
 0.01 lb/hr, 0.13 TPY stack PM10 emissions.

Applicable Compliance Method:

The emission limitations were established by the following methodology:

TPY of PE = (A) x (C) x (D)  
 TPY of PM10 emissions = (B) x (C) x (D)

where:

(A) = PE emission factor of 0.003 lb/ton per transfer point multiplied by 12 transfer points; 0.72 lb/ton for the silo filling, from PTI application 14-05638, received October 27, 2004.

(B) = PM10 emission factor of the factor for PE times 0.5, from PTI application 14-05638, received October 27, 2004.

(C) = Maximum material throughput

(D) = Control factor of 99.9% (0.001)

The annual emission rate was determined by multiplying the maximum hourly emission rate by 8760 hours per year and dividing by 2000 lb/ton.

3. Emission Limitations:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule; Visible particulate emissions of fugitive dust shall not exceed twenty percent (20%) opacity, as a three minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

4. Compliance with OAC rule 3745-17-08(B) excluding 17-08(B)(9) shall be demonstrated by compliance with OAC rule 3754-17-07(B) utilizing the methods outlined in OAC rules 3745-17-03(B)(1) [ Method 9]and OAC rule 3745-17-03(B)(3)[Method 22].

5. Emissions limitation:

PE shall not exceed 0.030 gr/dscf

Applicable Compliance Method:

If required, emission testing shall be conducted to demonstrate compliance with the particulate emission limitation.

The following test method shall be employed to demonstrate compliance with the particulate emission limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emissions unit shall be operated at or near the maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede the terms and conditions for this emissions unit in Permit to Install 14-1915, as issued on February 14, 1990.

**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>	storage piles	<u>Applicable Rules/Requirements</u>
F003 - aggregate storage piles		OAC rule 3745-31-05(A)(3)
load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)		
wind erosion from storage piles (see Section A.2.a for identification of storage piles)		
load-in and load-out of storage piles, and wind erosion from		OAC rule 3745-17-07(B)(6)

Applicable Emissions  
Limitations/Control Measures

OAC rule 3745-17-08(B)

Particulate Emissions (PE) shall not exceed 0.67 TPY and particulate matter emissions 10 microns and less (PM10) shall not exceed 0.34 TPY.

no visible particulate emissions except for one minute 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, A.2.c and A.2.f)

no visible particulate emissions except for one minute 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.d through A.2.f)

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

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

**2. Additional Terms and Conditions**

- 2.a** The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:
- all
- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintain moisture content of aggregate materials in order to ensure compliance. 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.
- 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 permittee's permit application, the permittee has committed to maintain moisture content of aggregate materials in order 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.

**B. Operational Restrictions**

None

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

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

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

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	weekly

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	weekly

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.

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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 may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

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

#### **D. Reporting Requirements**

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

Emission Limitation: no visible particulate emissions except for one minute during any 60-minute

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period.

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Applicable Compliance Method:

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

2. Emission Limitations: 0.67 TPY PE; 0.34 TPY PM10

Applicable Compliance Method:

The tons per year limit was established based upon emission calculations using AP-42, Chapter 13.2.4 (January, 1995) emission factors. Compliance shall be determined by using AP-42 emission factors and the appropriate operating information from the monitoring and record keeping requirements contained in this permit and the emission calculations detailed in PTI Application # 14-05638.

**F. Miscellaneous Requirements**

None

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Weigh hopper, mixer surge hopper and filling station with baghouse	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the fabric filter stack shall not exceed 0.45 lb/hr and 1.97 tons/yr.  Particulate matter emissions 10 microns and less (PM10) from the fabric filter stack shall not exceed 0.29 lb/hr and 1.26 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).  See terms and conditions A.2.a and B.1.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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Emissions Unit ID: **P001**

## **2. Additional Terms and Conditions**

- 2.a** Particulate emissions from emissions unit P001 shall be collected and vented to a baghouse having a control efficiency of at least 99%.
- 2.b** The hourly and annual emissions limitations outlined in Section A.1 are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- 2.c** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the mass emissions limitations, the visible emissions limitation and the use of a fabric filter.

## **B. Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 5.5 inches of water while the emissions unit is in operation.

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

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

## **D. Reporting Requirements**

- 1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term B.1.
- 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(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

2. Emission Limitation:

0.45 lb/hr PE, 0.29 lb/hr PM10

Applicable Compliance Method:

The hourly particulate emission limitation was established by the following methodology:

$$\text{lbs/hr PE} = (A) \times (C) \times (D)$$

$$\text{lbs/hr PM10} = (B) \times (C) \times (D)$$

where,

A = PE emission factor of 1.0 lb/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 0.64 lb/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum hourly production rate of 45 tons

D = 1 - control efficiency of 99% = (0.01)

If required, emission testing shall be conducted to demonstrate compliance with the particulate emission limitation.

The following test method shall be employed to demonstrate compliance with the particulate emission limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emissions unit shall be operated at or near the maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

3. Emission Limitation:

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1.97 tons/yr PE, 1.26 tons/yr PM10

Applicable Compliance Method:

The annual emission limitation was established by the following methodology:

tons/yr PE = (A) x (C) x (D) x 1 ton/2000 lbs  
 tons/yr PM10 = (B) x (C) x (D) x 1 ton/2000 lbs

where,

A = PE emission factor of 1.0 lb/ton, from PTI application 14-05638, received October 27, 2004.  
 B = PM10 emission factor of 0.64 lb/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum annual production rate

D = 1 - control efficiency of 99% = (0.01)

4. Compliance with the requirements of term and condition A.2.a. and B.1 shall be demonstrated by the record keeping required in term and condition C.1.

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

1. The terms and conditions in this permit to install supersede the terms and conditions for this emissions unit in Permit to Install 14-1915, as issued on February 14, 1990.

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Weigh hopper, mixer surge hopper and filling station with baghouse	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the fabric filter stack shall not exceed 0.45 lb/hr and 1.97 tons/yr.  Particulate matter emissions 10 microns and less (PM10) from the fabric filter stack shall not exceed 0.29 lb/hr and 1.26 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).  See terms and conditions A.2.a and B.1.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule

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3745-31-05(A)(3).

Emissions Unit ID: **P002**

## **2. Additional Terms and Conditions**

- 2.a** Particulate emissions from emissions unit P002 shall be collected and vented to a baghouse having a control efficiency of at least 99%.
- 2.b** The hourly and annual emissions limitations outlined in Section A.1 are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- 2.c** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the mass emissions limitations, the visible emissions limitation and the use of a fabric filter.

## **B. Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 5.5 inches of water while the emissions unit is in operation.

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

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

## **D. Reporting Requirements**

- 1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term B.1.
- 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(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

## Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.

## Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

## 2. Emission Limitation:

0.45 lb/hr PE, 0.29 lb/hr PM10

## Applicable Compliance Method:

The hourly particulate emission limitation was established by the following methodology:

$$\text{lbs/hr PE} = (A) \times (C) \times (D)$$

$$\text{lbs/hr PM10} = (B) \times (C) \times (D)$$

where,

A = PE emission factor of 1.0 lb/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 0.64 lb/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum hourly production rate of 45 tons

D = 1 - control efficiency of 99% = (0.01)

If required, emission testing shall be conducted to demonstrate compliance with the particulate emission limitation.

The following test method shall be employed to demonstrate compliance with the particulate emission limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emissions unit shall be operated at or near the maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

## 3. Emission Limitation:

1.97 tons/yr PE, 1.26 tons/yr PM10

Applicable Compliance Method:

The annual emission limitation was established by the following methodology:

tons/yr PE = (A) x (C) x (D) x 1 ton/2000 lbs  
tons/yr PM10 = (B) x (C) x (D) x 1 ton/2000 lbs

where,

A = PE emission factor of 1.0 lb/ton, from PTI application 14-05638, received October 27, 2004.  
B = PM10 emission factor of 0.64 lb/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum annual production rate

D = 1 - control efficiency of 99% = (0.01)

4. Compliance with the requirements of term and condition A.2.a. and B.1 shall be demonstrated by the record keeping required in term and condition C.1.

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

1. The terms and conditions in this permit to install supersede the terms and conditions for this emissions unit in Permit to Install 14-1915, as issued on February 14, 1990.

**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>	
P003 - natural gas-fired rotary dryer with baghouse	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-11(B)
		OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)

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<u>Applicable Emissions Limitations/Control Measures</u>	emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
Particulate emissions (PE) from the fabric filter stack shall not exceed 0.80 lb/hr and 3.50 tons/yr.	See term A.2.c
Particulate matter emissions 10 microns and less (PM10) from the fabric filter stack shall not exceed 0.51 lb/hr and 2.24 tons/yr.	See term A.2.d
Nitrogen oxide (NO <sub>x</sub> ) emissions from this emissions unit shall not exceed 1.50 lbs/hr and 6.57 tons/yr.	
Carbon Monoxide (CO) emissions from this emissions unit shall not exceed 1.26 lbs/hr and 5.52 tons/yr.	
The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-08(B), and OAC rule 3745-23-06(B).	
See terms and conditions A.2.a, A.2.b, and B.1.	
Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.	
The emission limitation specified by this rule is less stringent than the	

## 2. Additional Terms and Conditions

- 2.a** Particulate emissions from the rotary dryer shall be collected and vented to a baghouse having a control efficiency of at least 99.9%.
- 2.b** The rotary dryer shall utilize only natural gas as fuel.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

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

- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.
- 2.e** The hourly and annual emissions limitations outlined in Section A.1 are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- 2.f** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the mass emissions limitations, the visible emissions limitation, the use of a fabric filter and the exclusive use of natural gas for fuel.

**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 5.5 inches of water while the emissions unit is in operation.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

**D. Reporting Requirements**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term B.1.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
3. 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(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

2. Emission Limitation:

0.80 lb/hr PE, 0.51 lb/hr PM10

Applicable Compliance Method:

The hourly dryer particulate emission limitation was established by the following methodology:

$$\text{lbs/hr PE} = (A) \times (C) \times (D)$$

$$\text{lbs/hr PM10} = (B) \times (C) \times (D)$$

where,

A = PE emission factor of 10.0 lbs/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 6.4 lbs/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum hourly production rate of 80 tons

D = 1 - control efficiency of 99.9% = (0.001)

If required, emission testing shall be conducted to demonstrate compliance with the particulate emission limitation.

The following test method shall be employed to demonstrate compliance with the particulate emission limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emissions unit shall be operated at or near the maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

3. Emission Limitation:

3.50 tons/yr PE, 2.24 tons/yr PM10

Applicable Compliance Method:

The annual emission limitation was established by the following methodology:

$$\begin{aligned} \text{tons/yr PE} &= (A) \times (C) \times (D) \times 1 \text{ ton}/2000 \text{ lbs} \\ \text{tons/yr PM}_{10} &= (B) \times (C) \times (D) \times 1 \text{ ton}/2000 \text{ lbs} \end{aligned}$$

where,

A = PE emission factor of 10.0 lbs/ton, from PTI application 14-05638, received October 27, 2004.

B = PM<sub>10</sub> emission factor of 6.4 lbs/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum annual production rate

D = 1 - control efficiency of 99.9% = (0.001)

4. Emission Limitations from natural gas combustion:

NO<sub>x</sub> - 1.50 lbs/hr, 6.57 tons/yr;

CO - 1.26 lbs/hr, 5.52 tons/yr;

Applicable Compliance Method:

The hourly and annual emission limitations were established by the following methodology:

$$\begin{aligned} \text{lbs/hr} &= (A) \times (B) \\ \text{tons/yr} &= (A) \times (C) \times 1 \text{ ton}/2000 \text{ lbs} \end{aligned}$$

where,

A = emission factor from AP-42, Table 1.4-1 (July, 1998).

B = hourly natural gas usage, million cubic feet

C = annual natural gas usage, million cubic feet

5. Compliance with the requirements of term and condition A.2.a. and B.1 shall be demonstrated by the record keeping required in term and condition C.1.
6. Compliance with the requirements of term and condition A.2.b. shall be demonstrated by the record keeping required in term and condition C.2.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install supersede the terms and conditions for this emissions unit in Permit to Install 14-376, as issued on January 20, 1982.

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - fluid bed cooler with baghouse	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the fabric filter stack shall not exceed 0.80 lb/hr and 3.50 tons/yr.
		Particulate matter emissions 10 microns and less (PM10) from the fabric filter stack shall not exceed 0.51 lb/hr and 2.24 tons/yr.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
		See terms and conditions A.2.a and B.1.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established

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**Emissions Unit ID: P004**

pursuant to OAC rule  
3745-31-05(A)(3).

## **2. Additional Terms and Conditions**

- 2.a** Particulate emissions from the fluid bed cooler shall be collected and vented to a baghouse having a control efficiency of at least 99.9%.
- 2.b** The hourly and annual emissions limitations outlined in Section A.1 are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- 2.c** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the mass emissions limitations, the visible emissions limitation and the use of a fabric filter.

## **B. Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 5.5 inches of water while the emissions unit is in operation.

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

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

## **D. Reporting Requirements**

- 1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term B.1.
- 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(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

2. Emission Limitation:

0.80 lb/hr PE, 0.51 lb/hr PM10

Applicable Compliance Method:

The hourly particulate emission limitation was established by the following methodology:

$$\text{lbs/hr PE} = (A) \times (C) \times (D)$$

$$\text{lbs/hr PM10} = (B) \times (C) \times (D)$$

where,

A = PE emission factor of 10.0 lbs/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 6.4 lbs/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum hourly production rate of 80 tons

D = 1 - control efficiency of 99.9% = (0.001)

If required, emission testing shall be conducted to demonstrate compliance with the particulate emission limitation.

The following test method shall be employed to demonstrate compliance with the particulate emission limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emissions unit shall be operated at or near the maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

3. Emission Limitation:

3.50 tons/yr PE, 2.24 tons/yr PM10

Applicable Compliance Method:

The annual emission limitation was established by the following methodology:

tons/yr PE = (A) x (C) x (D) x 1 ton/2000 lbs

tons/yr PM10 = (B) x (C) x (D) x 1 ton/2000 lbs

where,

A = PE emission factor of 10.0 lbs/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 6.4 lbs/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum annual production rate

D = 1 - control efficiency of 99.9% = (0.001)

4. Compliance with the requirements of term and condition A.2.a. and B.1 shall be demonstrated by the record keeping required in term and condition C.1.

**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>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Weigh hopper, bulk mixer surge hopper and bulk filling station with baghouse	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the fabric filter stack shall not exceed 0.45 lb/hr and 1.97 tons/yr.  Particulate matter emissions 10 microns and less (PM10) from the fabric filter stack shall not exceed 0.29 lb/hr and 1.26 tons/yr.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).  See terms and conditions A.2.a and B.1.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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**Quick  
PTI A**

**Issued: 2/17/2005**

Emissions Unit ID: **P005**

## **2. Additional Terms and Conditions**

- 2.a** Particulate emissions from emissions unit P005 shall be collected and vented to a baghouse having a control efficiency of at least 99%.
- 2.b** The hourly and annual emissions limitations outlined in Section A.1 are based upon the emissions unit's Potential to Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.
- 2.c** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the mass emissions limitations, the visible emissions limitation and the use of a fabric filter.

## **B. Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 3.0 to 5.5 inches of water while the emissions unit is in operation.

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

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

## **D. Reporting Requirements**

- 1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in term B.1.
- 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(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six minute average, except as specified by rule.

Applicable Compliance Method:

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002.

2. Emission Limitation:

0.45 lb/hr PE, 0.29 lb/hr PM10

Applicable Compliance Method:

The hourly particulate emission limitation was established by the following methodology:

$$\text{lbs/hr PE} = (A) \times (C) \times (D)$$
$$\text{lbs/hr PM10} = (B) \times (C) \times (D)$$

where,

A = PE emission factor of 1.0 lb/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 0.64 lb/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum hourly production rate of 45 tons

D = 1 - control efficiency of 99% = (0.01)

If required, emission testing shall be conducted to demonstrate compliance with the particulate emission limitation.

The following test method shall be employed to demonstrate compliance with the particulate emission limitation: Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The emissions unit shall be operated at or near the maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

3. Emission Limitation:

1.97 tons/yr PE, 1.26 tons/yr PM10

Applicable Compliance Method:

The annual emission limitation was established by the following methodology:

tons/yr PE = (A) x (C) x (D) x 1 ton/2000 lbs

tons/yr PM10 = (B) x (C) x (D) x 1 ton/2000 lbs

where,

A = PE emission factor of 1.0 lb/ton, from PTI application 14-05638, received October 27, 2004.

B = PM10 emission factor of 0.64 lb/ton, from PTI application 14-05638, received October 27, 2004.

C = maximum annual production rate

D = 1 - control efficiency of 99% = (0.01)

4. Compliance with the requirements of term and condition A.2.a. and B.1 shall be demonstrated by the record keeping required in term and condition C.1.

**F. Miscellaneous Requirements**

None