



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-19973

Fac ID: 0247121008

DATE: 11/18/2004

OldcastleAPG Midwest, Inc.
Jim Jurgens
5190 Oster Rd.
Sheffield, OH 44054

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

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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

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

Sincerely,

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

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 11/18/2004
Effective Date: 11/18/2004**

FINAL PERMIT TO INSTALL 02-19973

Application Number: 02-19973
Facility ID: 0247121008
Permit Fee: **\$1800**
Name of Facility: OldcastleAPG Midwest, Inc.
Person to Contact: Jim Jurgens
Address: 5190 Oster Rd.
Sheffield, OH 44054

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5190 Oster Rd.
Sheffield, Ohio**

Description of proposed emissions unit(s):
Paved roadways, storage piles, material handling, mixer, tumbler, bagging operations.

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

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and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

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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>
PE (Particulate emissions)	31.5

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>
F001 - Paved Roadways	OAC rule 3745-31-05	<p>Particulate emissions (PE) shall not exceed 15.9 tons per year.</p> <p>There shall be no visible PE from any paved roadway except for a period of time not to exceed 1 minute during any 60-minute observation period.</p> <p>Employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Sections, A.I.2.b, d, e, and f.).</p>
	OAC rule 3745-17-07(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>
	OAC rule 3745-17-08(B)	<p>The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

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

Concrete paved roadways

- 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. The permittee shall employ vacuum assisted sweeping or flushing with water for the paved roadways and parking areas at sufficient 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 a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** 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** The permittee shall require that operators of open-bodied vehicles transporting materials likely to become airborne shall keep such materials covered.
- 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.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise specified in this section, the permittee shall perform daily inspections of the paved roadways and parking areas, as identified in Section A.2.a.

After the permittee has performed daily inspections of the paved roadways and parking areas for one calendar quarter and no visible particulate emissions of fugitive dust have been observed, the

permittee may begin inspections of the paved roadways and parking areas once per week. If visible particulate emissions of fugitive dust are observed during subsequent weekly inspections, the permittee shall return to a daily inspection frequency until no visible particulate emissions of fugitive dust are observed for another calendar quarter.

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

The information required in 3.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each instance when 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.a Emission Limitation:

There shall be no visible emissions except for a period of time not to exceed one minute in any hour.

Oldca:**PTI A****Issued: 11/18/2004**Emissions Unit ID: **F001****Applicable Compliance Method:**

Compliance with the visible emission limitation 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 ("Standard of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

1.b Emission Limitation:

PE from paved roadways and parking areas shall not exceed 15.9 tons per year.

Applicable Compliance Method:

Calculate the uncontrolled emission factor, E, from the following equation found in AP-42 section 13.2.1.3 (equation 2) for Paved Roads (dated 12/03).

$$EF(\text{lb/VMT}) = k(sL/2)^{0.65} (W/3)^{1.5} (1-P/4N) - C$$

where,

EF = particulate emission factor (pounds/VMT)

k = constant - 0.082 for PE (particle size multiplier for pounds/VMT)

sL = road surface silt loading of 12 g/m² as per the permit application

W = mean vehicle weight of 30 tons as per the permit application

P = number of days with at least 0.01 inches of precipitation per year = 168 days (based on 2003 data from Cleveland Hopkins International Airport)

N = number of days in the averaging period = 365 days/year

C = Emission factor for exhaust, brake wear, and tire wear = 0.00047 lb/VMT from Table 13.2.1-2.

The control efficiency for use of sweeping, watering, speed management, and good housekeeping of paved roadways is 95%. Control efficiency is an estimate based on lack of visible emissions from similar industries.

To calculate the annual particulate emissions in tons per year multiply the sum of all the vehicle miles traveled on the facility's roadways and parking areas that year by the uncontrolled emission factor E, multiply by (100% - 95%) / 100 (to account for the control measures), and divide by 2000 lbs per ton. If the calculated annual particulate emissions are less than 15.9 tons, then compliance with this limit is shown.

OldcastleAPG Midwest, Inc.
PTI Application: 02-10072
Issued

Facility ID: 0247121008

Emissions Unit ID: F001

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	<u>Applicable Rules/Requirements</u>	OAC rule 3745-17-08 (B),(B)(6)
F002 - Storage Piles (Sand/Aggregate)	OAC rule 3745-31-05(A)(3)	
Wind erosion from storage piles (see section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	
Load-in and load-out of storage piles, and wind erosion from storage piles	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07 (B)(6)	

Oldca:

PTI A

Issued: 11/18/2004

Emissions Unit ID: **F002**

Applicable Emissions
Limitations/Control Measures

There shall be no visible emissions except for a period of time not to exceed one minute in any hour.

The permittee shall employ 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).

There shall be no visible emissions except for a period of time not to exceed one minute in any hour.

The permittee shall employ 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).

Particulate emissions (PE): 1.7
TPY

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

The control measure requirements established in this rule are less stringent than the requirements 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 material storage piles

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to apply water as a dust suppressant and minimize drop height for load-in and load-out operations 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 maintains that the inherent moisture content of the materials is at a level which is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall employ best available 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 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, 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.

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 appropriate Ohio EPA District Office or local air agency, 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 limitations specified in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission limitation:
1.7 tons of PE per year

Applicable compliance method:

Compliance shall be determined by the following equations:

Applicable Compliance Method:

Total Emissions = (1 - Control Efficiency) * (Load-In/Load-Out + Wind Erosion)

Load-In/Load-Out Emissions:

$E = k(0.0032) [(U/5)^{1.3} / (M/2)^{1.4}](W/2000)$ AP-42 (1/95) Equation 13.2.4

Where:

k = Particle Size Multiplier = 0.74 for particulate

U = Mean Wind Speed (mph) = 9.59 mph (Based on 2003 Cleveland Hopkins International Airport Data)

M = Material Moisture Content = 2% (Based on worst case moisture content and use of water suppression at the facility)

W = Weight of Material Processed (tpy) = 1800000 tpy

Wind Erosion Emissions:

$E = (1.7)(s/1.5)[(365 - p)/235](f/15)(365)(A/2000)$
 "Control of Open Fugitive Dust Sources" USEPA (1988)

Where:

s = Silt Content of Stored Material (wt %) = 4% (based on worst case estimated value)

p = # of days with >0.01 inch precipitation per year = 168 (based on 2003 data from Cleveland Hopkins International Airport)

f = percentage of time wind speed exceeds 12 mph = 23.6% (based on 2003 data from Cleveland Hopkins International Airport)

A = Total Surface Area of Storage Piles = 1.23 acres

1.b Emission limitation:

There shall be no visible emissions except for a period of time not to exceed one minute in any hour.

Applicable Compliance Method:

Compliance with the visible emission limitation 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 ("Standard of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

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Oldca:

PTI A

Issued: 11/18/2004

Emissions Unit ID: **F002**

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F003 - Truck and Rail Off-Loading Pits (Sand and Aggregate)	OAC rule 3745-31-05(A)(3)	7.50 TPY fugitive particulate emissions. Best available control measures that are sufficient to minimize or eliminate visible emission of fugitive dust (See sections A.2.a and A.2.b)
	OAC rule 3745-17-08(B)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The permittee shall employ best available control measures to minimize or eliminate visible emissions of fugitive dust from emissions unit F003. In accordance with the permittee's permit application, the permittee has committed to process aggregate material with

inherent moisture content, apply water as a dust suppressant , and to minimize drop height distance from front-end loaders to ensure compliance.

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

- 2.b** Visible emissions of fugitive dust resulting from the off-loading pit operations shall not exceed 10% opacity, as a 3-minute average.

B. Operational Restrictions

1. The maximum annual material throughput for this emissions unit shall not exceed 1,000,000 tons of aggregate.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the total tons per month of aggregate loaded; and
 - b. the annual, year to date, tons of aggregate loaded (sum of a.) for each calendar month to date from January through December.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit annual deviation (excursion) reports which identify any exceedances in the maximum material throughput of 1,000,000 tons per year. If no deviations occurred during the calendar year, the permittee shall submit an annual report which states that no deviations occurred

during the calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

2. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

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

- 1.a Emission Limitation:
7.50 TPY fugitive PE

Applicable Compliance Method:

The maximum potential uncontrolled emission rate was calculated using AP-42 emission factors from Table 11.19.2-2 (Version dated August 2004) and a maximum annual throughput of 1,000,000 tons per year. Compliance shall be demonstrated through the monitoring and recordkeeping requirements specified in Section C of the permit.

- 1.b Emission Limitation:
10% opacity, as a six- minute average for Off Loading Pits

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

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>
P901 - 1- 131 ton cement silo and 1 dual 131 ton cement/cement kiln dust silo controlled by a central cartridge pulse dust collector	OAC rule 3745-31-05(A)(3)	See sections A.2.a, A.2.b , and A.2.c below.
	OAC rule 3745-17-11(B)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07 (A)(1)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases, 0.21 pounds per hour, and 0.94 tons per year.
- 2.b The cement silos #1 and #2 shall be controlled by a bag-house or similar control device at all times the cement silos #1 and #2 are in operation.
- 2.c The visible emissions from the bag-house or similar control device shall not exceed 5% opacity, as a six-minute average.

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B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 and 8 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document:
 - a. The permittee shall properly 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 daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the bag-house exhaust stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

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 allowable range specified above.
2. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emissions limits in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission limitation:

- a. The baghouse serving this emissions unit shall achieve an outlet emission rate of no greater than 0.01 grain of PE per dry standard cubic foot of exhaust gases

Applicable compliance method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1 above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

- b. Emissions Limitation: 0.21 pounds per hour particulate emissions.

Applicable Compliance Method:

Compliance with the lbs per hour emission limitation shall be determined with the following equation:

$$PE \text{ (lbs/hr)} = Gr * Fr * M * W$$

Where:

G r= Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of the baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

- c. Emissions Limitation: 0.94 tons per year of particulate emissions.

$$PE \text{ (TPY)} = Gr * Fr * M * W * Y$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of baghouse.

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M = 60 minutes per hour.

W = 7000 grains equals 1 pound

Y = 8760 hours per year.

- d. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from bag-house or similar control device, on a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

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>
P902 - Haarup Planetary Counter Current Cement Mixer controlled by a building baghouse.	OAC rule 3745-31-05(A)(3)	See A.2.a, A.2.b, A.2.c, and A.2.d below.
	OAC rule 3745-17-11(A)(1)(f)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07 (A)(1)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases, 0.14 pounds per hour, and 0.60 tons per year.
- 2.b There shall be no visible emissions from any building opening.
- 2.c The cement mixer shall be controlled by a baghouse or similar control device at all times the cement mixer is loaded or in operation.
- 2.d The visible emissions from the bag-house or similar control device shall not exceed 5%

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opacity, as a six-minute average.

B. Operational Restrictions

1. The pressure drop across the baghouse serving this emissions unit shall be maintained within the range of 4 and 8 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document:
 - a. The permittee shall properly 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 daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse exhaust stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

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 allowable range specified above.
2. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA,

Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emissions limits in Sections, A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission limitation:

- a. The baghouse serving this emissions unit shall achieve an outlet emission rate of no greater than 0.01 grain of PE per dry standard cubic foot of exhaust gases

Applicable compliance method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1, above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

- b. Emissions Limitation: 0.14 pounds per hour particulate emissions.

Applicable Compliance Method:

Compliance with the lbs per hour emission limitation shall be determined with the following equation:

$$PE \text{ (lbs/hr)} = Gr * Fr * M * W$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of the baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

- c. Emissions Limitation: 0.60 tons per year of particulate emissions.

$$PE \text{ (TPY)} = Gr * Fr * M * W * Y$$

Where:

Gr = Rated grain outlet loading of baghouse

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Fr = Flow Rate in ACFM of baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

Y = 8760 hours per year.

- d. Emissions Limitation:
There shall be no visible emissions from any building opening.

Compliance shall be determined by US EPA Method 22, (40 CFR Part 60, Appendix A)., with the modification listed in OAC rule 3745-17-03 (B)(3)(a).

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- e. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from bag-house or similar control device, on a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

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>
P903 - 1 Paver machine controlled by a building baghouse.	OAC rule 3745-31-05(A)(3)	See A.2.a, A.2.b, A.2.c, and A.2.d below.
	OAC rule 3745-17-11(B)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07 (A)(1)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3)

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.002 grain per dry standard cubic foot (gr/dscf) of exhaust gases, 0.14 pounds per hour, and 0.60 tons per year.
- 2.b There shall be no visible emissions from any building opening.
- 2.c The paver machine shall be controlled by a bag-house or similar control device at all times the paver machine is in operation.
- 2.d There shall be no visible emissions from the bag-house or similar control device.

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Emissions Unit ID: **P903**

B. Operational Restrictions

1. The pressure drop across the baghouse serving this emissions unit shall be maintained within the range of 2 and 8 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document:
 - a. The permittee shall properly 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 daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse exhaust stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

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 allowable range specified above.
2. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA,

Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emissions limits in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission limitation:

- a. The baghouse serving this emissions unit shall achieve an outlet emission rate of no greater than 0.002 grain of PE per dry standard cubic foot of exhaust gases

Applicable compliance method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1, above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

- b. Emissions Limitation: 0.14 pounds per hour particulate emissions.

Applicable Compliance Method:

Compliance with the lbs per hour emission limitation shall be determined with the following equation:

$$PE \text{ (lbs/hr)} = Gr * Fr * M * W$$

Where:

G r= Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of the baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

- c. Emissions Limitation: 0.60 tons per year of particulate emissions.

$$PE \text{ (TPY)} = Gr * Fr * M * W * Y$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

Y = 8760 hours per year.

- d. Emissions Limitation:
There are shall be no visible emissions from any building opening.

Compliance shall be determined by US EPA Method 22, (40 CFR Part 60, Appendix A), with the modification listed in OAC rule 3745-17-03 (B)(3)(a).

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- e. Emissions Limitation:
There are shall be no visible emissions from bag-house or similar control.

Applicable Compliance Method:

Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

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>
P904 - Pallet Cleaning Brushes (Dry/Wet) controlled by a building baghouse.	OAC rule 3745-31-05(A)(3)	See sections, A.2.a, A.2.b, A.2.c, and A.2.d below.
	OAC rule 3745-17-11(B)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07 (A)(1)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.002 grain per dry standard cubic foot (gr/dscf) of exhaust gases, 0.11 pounds per hour, and 0.50 tons per year.
- 2.b There shall be no visible emissions from any building open.
- 2.c The pallet cleaning operation shall be controlled by a baghouse or similar control device at all times the pallet cleaner is in operation.

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Emissions Unit ID: **P904**

2.d There shall be no visible emissions baghouse or similar control device.

B. Operational Restrictions

1. The pressure drop across the baghouse serving this emissions unit shall be maintained within the range of 2 and 8 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document:
 - a. The permittee shall properly 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 daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse exhaust stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

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 allowable range specified above.
2. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA,

Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emissions limits in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission limitation:

- a. The baghouse serving this emissions unit shall achieve an outlet emission rate of no greater than 0.002 grain of PE per dry standard cubic foot of exhaust gases

Applicable compliance method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1, above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

- b. Emissions Limitation: 0.11 pounds per hour particulate emissions.

Applicable Compliance Method:

Compliance with the lbs per hour emission limitation shall be determined with the following equation:

$$PE \text{ (lbs/hr)} = Gr * Fr * M * W$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of the baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

- c. Emissions Limitation: 0.50 tons per year of particulate emissions.

$$PE \text{ (TPY)} = Gr * Fr * M * W * Y$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

Y = 8760 hours per year.

- d. Emissions Limitation:
There are shall be no visible emissions from any building opening.

Compliance shall be determined by US EPA Method 22, (40 CFR Part 60, Appendix A)., with the modification listed in OAC rule 3745-17-03 (B)(3)(a).

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- e. Emissions Limitation:
There are shall be no visible emissions from bag-house or similar control device.

Applicable Compliance Method:

Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

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>
P905 - Bagging operation (Sand/Aggregate) controlled by a building baghouse.	OAC rule 3745-31-05 (A)(3)	See sections A.2.a, A.2.b, A.2.c, A.2.d , and A.2.e below.
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
Outside hopper and conveyer operations	OAC rule 3745-17-08(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified in OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the requirement specified

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Emissions Unit ID: **P905**

in OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

- 2.a** Particulate stack emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases, 0.43 pounds per hour , and 1.9 tons per year
- 2.b** There shall be no visible emissions from any building open.
- 2.c** The bagging operation shall be controlled by a baghouse or similar control device at all times the bagging operation is in operation.
- 2.d** The visible emissions from the baghouse or similar control device shall not exceed 5% opacity, on a six-minute average.
- 2.e** Particulate fugitive emissions shall not exceed 0.06 tons per year

B. Operational Restrictions

- 1. The pressure drop across the baghouse serving this emissions unit shall be maintained within the range of 4 and 8 inches of water while the emissions unit is in operation.
- 2. The maximum annual material throughput for this emissions unit shall not exceed 394200 tons of aggregate.

C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect and record the following information each month:
 - a. the total tons per month of aggregate loaded; and
 - b. the annual, year to date, tons of aggregate loaded (sum of a.) for each calendar month to date from January through December.
- 2. The permittee shall maintain daily records that document:
 - a. The permittee shall properly 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 daily basis.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit annual reports that identify any exceedances of the annual production rate limitation, as well as the corrective actions taken to achieve compliance. These reports shall be submitted by January 31 of each year.
2. 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 allowable range specified above.
3. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.

E. Testing Requirements

1. Compliance with the emissions limits in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission limitation:

- a. The baghouse serving this emissions unit shall achieve an outlet stack emission rate of no greater than 0.01 grain of PE per dry standard cubic foot of exhaust gases,

Applicable compliance method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1, above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

- b. Emissions Limitation: 0.43 pounds per hour particulate emissions.

Applicable Compliance Method:

Compliance with the lbs per hour emission limitation shall be determined with the following equation:

$$PE \text{ (lbs/hr)} = Gr * Fr * M * W + PE_f$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of the baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

PE_f =

- c. Emissions Limitation: 1.9 tons per year of particulate emissions.

$$PE \text{ (TPY)} = Gr * Fr * M * W * Y$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

Y = 8760 hours per year.

- d. Emissions Limitation:
 There shall be no visible emissions from any building opening.

Compliance shall be determined by US EPA Method 22, (40 CFR Part 60, Appendix A), with the modification listed in OAC rule 3745-17-03 (B)(3)(a).

- e. Emissions Limitation:
Visible emissions shall not exceed 5% opacity from the bag-house or similar control device, on a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

- f. Emission Limitation:
0.06 TPY fugitive PE

Oldca:

PTI A

Issued: 11/18/2004

Emissions Unit ID: **P905**

Applicable Compliance Method:

The maximum potential uncontrolled emission rate was calculated using AP-42 emission factors from Table 11.19.2-2 (Version dated August 2004) and a maximum annual throughput of 394200 tons per year. Compliance shall be demonstrated through the monitoring and recordkeeping requirements specified in Section C of the permit.

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>
P906 - Tumbler controlled by a building baghouse.	OAC rule 3745-31-05(A)(3)	See A.2.a, A.2.b, A.2.c, and A.2.d below.
	OAC rule 3745-17-07 (A)(1)	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11	The control requirements established pursuant to this rule are equivalent or less stringent than the control requirements established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases, 0.43 pounds per hour, and 1.9 Tons per year.
- 2.b The tumbler shall be controlled by a baghouse or similar control device at all times the tumbler is in operation.
- 2.c There shall be no visible emissions from any building opening.
- 2.d The visible emissions from the baghouse or similar control device shall not exceed 5%

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opacity, as a six-minute average.

B. Operational Restrictions

1. The pressure drop across the baghouse serving this emissions unit shall be maintained within the range of 4 and 8 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document:
 - a. The permittee shall properly 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 daily basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust and for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

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 allowable range specified above.
 - a. The permittee shall submit deviation reports that identify any of the following occurrences:
 - b. each instance when an inspection was not performed by the required frequency.

The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.

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E. Testing Requirements

1. Compliance with the emissions limits in Sections, A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission limitation:

- a. The baghouse serving this emissions unit shall achieve an outlet stack emission rate of no greater than 0.01 grain of PE per dry standard cubic foot of exhaust gases,

Applicable compliance method:

Compliance shall be demonstrated through Monitoring Requirement C.1 and Reporting Requirement D.1 above.

If required, compliance with this mass emission limitation shall be based on stack testing per OAC rule 3745-17-03(B)(10).

- b. Emissions Limitation: 0.43 pounds per hour particulate emissions.

Applicable Compliance Method:

Compliance with the lbs per hour emission limitation shall be determined with the following equation:

$$PE \text{ (lbs/hr)} = Gr * Fr * M * W + PEf$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of the baghouse.

M = 60 minutes per hour.

W = 7000 grains equals 1 pound

PEf =

- c. Emissions Limitation: 1.88 tons per year of particulate emissions.

$$PE \text{ (TPY)} = Gr * Fr * M * W * Y$$

Where:

Gr = Rated grain outlet loading of baghouse

Fr = Flow Rate in ACFM of baghouse.

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M = 60 minutes per hour.

W = 7000 grains equals 1 pound

Y = 8760 hours per year.

d. Emissions Limitation:

There shall be no visible emissions from any building opening.

Compliance shall be determined by US EPA Method 22, (40 CFR Part 60, Appendix A), with the modification listed in OAC rule 3745-17-03 (B)(3)(a).

e. Emissions Limitation:

Visible emissions shall not exceed 5% opacity from bag-house or similar control device, as a six-minute average.

Applicable Compliance Method:

Compliance shall be determined by US EPA Method 9, (40 CFR Part 60, Appendix A).

F. Miscellaneous Requirements

None.