



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
ERIE 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: 03-13633

DATE: 3/7/2002

Hanson Aggregates Midwest
Jeff Stoll
8130 Brint Road
Sylvania, OH 43560

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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

NWDO



**Permit To Install
Terms and Conditions**

**Issue Date: 3/7/2002
Effective Date: 3/7/2002**

FINAL PERMIT TO INSTALL 03-13633

Application Number: 03-13633
APS Premise Number: 0322020183
Permit Fee: **\$5700**
Name of Facility: Hanson Aggregates Midwest
Person to Contact: Jeff Stoll
Address: 8130 Brint Road
Sylvania, OH 43560

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

**9220 Portland Road
Castalia, Ohio**

Description of proposed emissions unit(s):

Roadways, Storage piles, Mineral extraction, Aggregate Processing Plant and Material Handling.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

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 Related to Monitoring and Recordkeeping 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

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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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 thirty (30) 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	178.39*
OC	39.42

* Fugitive PE emissions are 150.98 tons per year of the total

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Paved and Unpaved Roadways	OAC rule 3745-31-05(A)(3)	22.50 tons fugitive particulate matter (PE) per year Visible particulate emissions shall not exceed 5% opacity at any time Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.c through A.2.i)
	OAC 3745-17-07(B)	None (see A.2.j)
	OAC 3745-17-08(B)	None (see A.2.k)

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are subject to the terms and conditions of this permit are listed below:

paved roadways:
0.28 mile paved road segment

paved parking areas:
office parking

- 2.b The unpaved roadways and parking areas that are subject to the terms and conditions of this permit are listed below:

unpaved roadways:
7.7 mile unpaved road segment

unpaved parking areas:
employee parking

- 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 using a self-propelled sweeper and water truck with a flusher unit, 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 with water using a mobile water tank with spray bars, at sufficient treatment frequencies to ensure compliance. The permittee will also use liquid chlorine on an as needed basis. 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 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

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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(A)(3).
- 2.j This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.k The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

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

paved roadways and parking areas	minimum inspection frequency
All	Daily during operation
unpaved roadways and parking areas	minimum inspection frequency
All	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 appropriate Ohio EPA District

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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.

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 emissions limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Visible Emissions Restrictions:
Visible particulate emissions shall not exceed 5% opacity at any time

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Applicable Compliance Method:

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

- b. Emissions Limitation:
22.50 tons fugitive PE/yr
(all roadways and parking areas)

Applicable Compliance Method:

The permittee shall demonstrate compliance by applying a 95% control efficiency to AP-42 emission factors of 0.37 lb PE/VMT for paved and 3.61 lb PE for unpaved roadways [section 13.2.1.2 (10/97) and section 13.2.2.2 (9/98)], the following maximum vehicle miles traveled:

paved roadways - 129,545 miles
unpaved roadways - 236,000 miles

and dividing by 2000 lbs/ton.

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>
F003 - Storage piles	OAC rule 3745-31-05(A)(3)	3.06 tons fugitive PE/yr
load-in and load-out of storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	Visible particulate emissions shall not exceed 5% opacity at any time Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.b, A.2.c, & A.2.f)
wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05(A)	Visible particulate emissions shall not exceed 5% opacity at any time Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.d through A.2.f)
load-in and load-out of storage piles, and wind erosion from storage piles	OAC rule 3745-17-07(B) OAC rule 3745-17-08(B)	None (see A.2.g) None (see A.2.h)

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:
- i. berm storage pile

- ii. washed/course storage pile
 - iii. fine storage pile
- 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 treat load-in and load-out materials with water as needed to maintain material moisture content, reduce drop height of material, 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 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 control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is necessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of the storage pile 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 using high burden mounds to the east of the stockpile area, spray water on an as-needed basis, and maintaining as low a pile height as possible. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measures shall be employed for wind erosion from each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of additional 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 requirements of OAC rule 3745-31-05(A)(3).
- 2.g** This emissions unit is exempt from the visible particulate emission limitations specified in

OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

2.h The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	once during each day of operation

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

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
all	once during each day of operation

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	once during each day of operation

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

5. The purpose of the inspections is to determine the need for implementing control measures 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 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 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation
3.06 tons fugitive PE/yr

Applicable Compliance Method
Compliance shall be determined by combining the emissions from each load-in and

Emissions Unit ID: **F003**

load-out operation and from wind erosion from each storage pile as listed in the permittee's application and applying a 95% control efficiency. Load-in and load out operation emission rate is based on a maximum load-in and load-out rate of 4,400,000 tons per year and each wind erosion emission rate is based a maximum surface area of 84 acres for all storage piles as listed in the permit application:

The emission rate was determined as follows:

- i. Load-in - emissions associated with load-in operations were established by multiplying a maximum load-in rate of 4,400,000 tons per year by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [0.0013 lb PE/ton] applying a 95% control efficiency and dividing by 2000. (0.14 tons PE/yr)
- ii. Load-out - This emission limitation was established by multiplying the maximum load-out rate of 4,400,000 tons per year by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [0.0013 lb PE/ton] applying a 95% control efficiency and dividing by 2000. (0.14 tons PE/yr)
- iii. Wind Erosion - This portion of the emission limitation was established by combining the emissions from wind erosion from all storage piles. Each emission limitation is based total maximum storage pile surface area as listed in the permittee's application and was calculated as follows:

Aggregate Storage Pile - This emission limitation was established by multiplying a maximum surface area of 84 acres by the appropriate emission factor from USEPA's control of Open Fugitive Dust Sources (September 1988) [3.63 lb PE/day/acre] by a maximum operating schedule of 365 days per year and dividing by 2000 and applying a 95% control efficiency. (2.78 tons PE/yr)

- b. Emission Limitation
Visible particulate emissions shall not exceed 5% opacity at any time

Applicable Compliance Method

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9.

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>
F004 - Mineral Extraction Operations including Drilling, Blasting, and Overburden Removal	OAC rule 3745-17-08(B)	None (see A.2.a)
	OAC rule 3745-17-07(B)	None (see A.2.b)
	OAC rule 3745-31-05(A)(3)	9.82 tons PE/yr Use of best available control measures that are sufficient to minimize or eliminate visible emission of fugitive dust (see A.2.d through A.2.e) Opacity restrictions (see A.2.d)

2. Additional Terms and Conditions

- 2.a Hanson Aggregates Midwest, Sandusky Quarry, is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.c The mineral extraction operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Emissions Unit ID: F004

Overburden removal, blasting, drilling, and limestone/overburden loading into trucks

2.d The permittee shall employ best available control measures for the above-identified mineral extraction operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to perform the following control measures to ensure compliance:

<u>mineral extraction operation</u>	<u>control measure(s)</u>
overburden removal & reclamation reclaim land surface	minimize area of disturbed land surface,
blasting	minimize area to be blasted, prevention of overshooting
drilling	emissions vented to baghouse
limestone/overburden loading into trucks	prevent haul vehicle overloading, spray shot rock with water in extremely dry conditions

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

2.e 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 rule 3745-31-05.

2.f Visible particulate emissions shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: overburden removal and reclamation, drilling, and limestone/overburden loading into trucks.

B. Operational Restrictions

1. This facility shall perform no more than 322 blasts per year.
2. No "contract drilling" may occur at this plant without the facility first certifying, in writing, to the Ohio EPA, Northwest District Office, that the contractor's drilling rig employs reasonable available control measures sufficient to comply with the emission limitations of this permit.
3. The permittee shall not process more than 8,064,000 tons of stone per year.

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of drilling,

blasting, and overburden materials at a minimum frequency of once per week.

2. The purpose of the inspections is to determine the need for implementing control measures for mineral extraction activities. The inspections shall be performed during representative, normal blasting, drilling, and material removal procedures.
3. 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.
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 control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information required 5.d. shall be kept separately for (i) the drilling operations, (ii) the blasting operations, and (iii) the material removal operations, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. The permittee shall maintain the following monthly records for each blast:
 - a. the date the blast occurred;
 - b. the total number of blasting operations each month; and
 - c. the annual year to date, number of blasts (sum of 5.b. for each calendar month to date from January to December)
6. The permittee shall maintain monthly records of the quantity of stone processed at the quarry, in tons per month. For each month, the permittee shall also calculate the annual, year-to-date, amount of stone processed (cumulative total of each month to date from January to December).

D. Reporting Requirements

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

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

2. The permittee shall submit annual deviation reports that identify exceedances of the following:
 - a. the annual number of blasts per year;
 - b. the annual limit of the amount of stone processed.

If no deviations occurred during a calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. The reports shall be submitted annually, by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
9.82 tons PE/yr

Applicable Compliance Method:

The annual particulate emission limitations were developed by applying the following emission factors/equations and control efficiencies to the associated process weight rates:

Mineral Extraction Operation	Maximum Process Weight Rate	Control Efficiency	Emission Factor	Emission Factor Citation
Production Stone Removal	8,064,000 tons/year	None Established	0.001 lb/ton removed	AP-42 Table 11.19.2-2, 1/95
Overburden Loading into Trucks by power shovel	326,000 tons/year	None Established	0.037 lb/ton removed	AP-42 Table 11.9-4, 7/98
Waste Loading into Trucks	200,000 tons/year	None Established	0.001 lb/ton removed	AP-42 Table 11.19.2-2, 1/95
Drilling	14,490 holes/year	90%	1.3 lbs/hole	AP-42 Table 11.9-4, 7/98
Blasting	322 blasts/year	None	0.000014 (A) ^{1.5} lb/blast	AP-42 Table 11.9-1, 7/98

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>
F005 - Aggregate Processing Plant (Previously permitted under PTI #03-10086 issued on 02/26/1997) PTI a modification to include 17 conveyors and 3 screens previously unpermitted	OAC rule 3745-31-05(A)(3)	115.55 tons fugitive PE per year Use of Best Available Control Measures (see A.2.a) Opacity Restrictions (see A.2.b) The requirements of this rule also include compliance with the requirements of 40 CFR 60 Subpart OOO
	40 CFR Part 60, Subpart OOO	Opacity Restrictions (see A.2.b)
	OAC Rule 3745-17-07(B)	None (see A.2.d)
	OAC Rule 3745-17-08(B)	None (see A.2.c)

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 F005. If the inherent moisture in the stone is not sufficient to comply with the opacity restrictions of this permit, the permittee shall install equipment to apply water, or any other suitable dust suppressant, at appropriate locations on the line.

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

- 2.b** Visible particulate emissions from the aggregate processing equipment included under this permit shall not exceed the following opacity restrictions:

Emissions Point (Company ID)	Equipment Type	Opacity Limit	Regulatory Basis for Limit
Grizzly Feeder to Primary	Transfer Point	10%	OAC Rule 3745-31-05
Feeder to Conveyor C-1	Transfer Point	10%	OAC Rule 3745-31-05
4860 HR Jaw Crusher	Crusher	15%	OAC Rule 3745-31-05
Jaw to Conveyor C-1	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-1 to Conveyor C-2	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-2 to HR 8X20 #1 Screen	Transfer Point	10%	OAC Rule 3745-31-05
HR 8X20 #1 Screen	Screen	10%	OAC Rule 3745-31-05
#1 Screen to Rip Rap Conveyor	Transfer Point	10%	OAC Rule 3745-31-05
#1 Screen to Symons 7' Standard Crusher	Transfer Point	10%	OAC Rule 3745-31-05
#1 Screen to 304 Conveyor	Transfer Point	10%	OAC Rule 3745-31-05
7' Symons Cone Crusher	Crusher	15%	OAC Rule 3745-31-05
7' Cone to Conveyor C-3	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-3 to Surge Bin	Transfer Point	10%	OAC Rule 3745-31-05
Surge Bin to Conveyor C-4	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-4 to #2 and #3 Screens	Transfer Point	10%	OAC Rule 3745-31-05
Diester 8X20 #2 Screen	Screen	10%	OAC Rule 3745-31-05
Diester 8X20 #3 Screen	Screen	10%	OAC Rule 3745-31-05
#2 Screen to Hazemag, #3	Transfer Point	10%	NSPS, Subpart OOO
#2 Screen to Conveyor C-5	Transfer Point	10%	OAC Rule 3745-31-05
#2 Screen to Conveyor C-4A	Transfer Point	10%	OAC Rule 3745-31-05
#3 Screen to Hazemag, #4	Transfer Point	10%	NSPS, Subpart OOO
#3 Screen to Conveyor C-5	Transfer Point	10%	OAC Rule 3745-31-05
#3 Screen to Conveyor C-4A	Transfer Point	10%	OAC Rule 3745-31-05
Hazemag AP51620 Tertiary Crusher CR-3	Crusher	15%	NSPS, Subpart OOO
Hazemag AP51620 Tertiary Crusher CR-4	Crusher	15%	NSPS, Subpart OOO
Crusher CR-3 to Conveyor C-13	Transfer Point	10%	OAC Rule 3745-31-05
Crusher CR-4 to Conveyor C-13	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-4A to Conveyor C-4B	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-4B to Conveyor C-4C	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-4C to Conveyor C-5	Transfer Point	10%	OAC Rule 3745-31-05

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Conveyor C-5 to #4 and #5 Diester 8X20 TD Screens	Transfer Point	10%	OAC Rule 3745-31-05
Diester 8X20 TD #4 Screen	Screen	10%	OAC Rule 3745-31-05
Diester 8X20 TD #5 Screen	Screen	10%	OAC Rule 3745-31-05
#4 Screen to Conveyor C-8	Transfer Point	10%	OAC Rule 3745-31-05
#4 Screen to Conveyor C-25	Transfer Point	10%	OAC Rule 3745-31-05
#4 Screen to Conveyor C-21	Transfer Point	10%	OAC Rule 3745-31-05
#4 Screen to Conveyor C-6	Transfer Point	10%	OAC Rule 3745-31-05
#5 Screen to Conveyor C-8	Transfer Point	10%	OAC Rule 3745-31-05
#5 Screen to Conveyor C-7	Transfer Point	10%	OAC Rule 3745-31-05
#5 Screen to Conveyor C-21	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-25 to 4's Stacker	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-21 to Conveyor C-9	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-8 to Bin/Feeder	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-7 to #8 & #9 Screens	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-6 to #6 & #7 Screens	Transfer Point	10%	OAC Rule 3745-31-05
HR 8X20 TD #6 Screen	Screen	10%	OAC Rule 3745-31-05
HR 8X20 TD #7 Screen	Screen	10%	OAC Rule 3745-31-05
#6 Screen to Conveyor C-16	Transfer Point	10%	OAC Rule 3745-31-05
#6 Screen to Conveyor C-19	Transfer Point	10%	OAC Rule 3745-31-05
#6 Screen to Conveyor C-20	Transfer Point	10%	OAC Rule 3745-31-05
#7 Screen to Conveyor C-16	Transfer Point	10%	OAC Rule 3745-31-05
#7 Screen to Conveyor C-19	Transfer Point	10%	OAC Rule 3745-31-05
#7 Screen to Conveyor C-20	Transfer Point	10%	OAC Rule 3745-31-05
#7 Screen to Bin	Transfer Point	10%	OAC Rule 3745-31-05
HR 8X20 TD #8 Screen	Screen	10%	OAC Rule 3745-31-05
HR 8X20 TD #9 Screen	Screen	10%	OAC Rule 3745-31-05
#8 Screen to Conveyor C-36	Transfer Point	10%	OAC Rule 3745-31-05
#8 Screen to Conveyor C-18	Transfer Point	10%	OAC Rule 3745-31-05
#8 Screen to Conveyor C-20	Transfer Point	10%	OAC Rule 3745-31-05
#9 Screen to Conveyor C-36	Transfer Point	10%	OAC Rule 3745-31-05
#9 Screen to Conveyor C-20A	Transfer Point	10%	OAC Rule 3745-31-05
#9 Screen to Conveyor C-20A	Transfer Point	10%	OAC Rule 3745-31-05
#9 Screen to Bin	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-19 to Conveyor C-11	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-16 to Bin	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-9 to Conveyor C-20	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-18 to Conveyor C-10	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-20A to Conveyor C-10	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-10 to #10 Screen	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-11 to #11 Screen	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-8 to Bin/Feeder	Transfer Point	10%	OAC Rule 3745-31-05

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Bin/Feeder to 7' SH East Cone Crusher	Transfer Point	10%	OAC Rule 3745-31-05
CR-5 Crusher to Conveyor C-13	Transfer Point	10%	OAC Rule 3745-31-05
Bin/Feeder to 7' SH West Cone Crusher	Transfer Point	10%	OAC Rule 3745-31-05
CR-6 Crusher to Conveyor C-14	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-14 to Conveyor C-5	Transfer Point	10%	OAC Rule 3745-31-05
Symons 7' SH Cone Crusher CR-5	Crusher	15%	OAC Rule 3745-31-05
Symons 7' SH Cone Crusher CR-6	Crusher	15%	OAC Rule 3745-31-05
Conveyor C-36 to Cemco VSI Crusher	Transfer Point	10%	NSPS, Subpart OOO
Cemco VSI Crusher CR-7	Crusher	15%	NSPS, Subpart OOO
VSI Crusher to Conveyor C-37	Transfer Point	10%	NSPS, Subpart OOO
Conveyor C-37 to Conveyor C-30	Transfer Point	10%	NSPS, Subpart OOO
Conveyor C-18A to Conveyor C-30	Transfer Point	10%	NSPS, Subpart OOO
Bins to Conveyor C-29	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-20 to Twin 6X18 PEP Screens	Transfer Point	10%	OAC Rule 3745-31-05
6X18 PEP Screen #14	Screen	10%	NSPS, Subpart OOO
6X18 PEP Screen #15	Screen	10%	NSPS, Subpart OOO
Auxiliary Conveyor #1	Transfer Point	10%	NSPS, Subpart OOO
Auxiliary Conveyor #2	Transfer Point	10%	NSPS, Subpart OOO
Auxiliary Conveyor #3	Transfer Point	10%	NSPS, Subpart OOO
Conveyor C-20 to Conveyor C-33A	Transfer Point	10%	NSPS, Subpart OOO
Conveyor C-33A to Conveyor C-33B	Transfer Point	10%	NSPS, Subpart OOO
Conveyor C-33B to #13 Screen	Transfer Point	10%	NSPS, Subpart OOO
#13 Screen	Screen	10%	NSPS, Subpart OOO
#13 Screen to Bin	Transfer Point	10%	NSPS, Subpart OOO
#13 Screen to Bin	Transfer Point	10%	NSPS, Subpart OOO
#13 Screen to Conveyor C-26	Transfer Point	10%	NSPS, Subpart OOO
Conveyor C-26 to Bin	Transfer Point	10%	NSPS, Subpart OOO
#14 & #15 Screens to Conveyor C-22	Transfer Point	10%	OAC Rule 3745-31-05
#14 & #15 Screens to Conveyor C-23	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-22 to Bin	Transfer Point	10%	OAC Rule 3745-31-05
Conveyor C-23 to Bin	Transfer Point	10%	OAC Rule 3745-31-05

Note: Compliance with the opacity restrictions for these emissions points shall be achieved on and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup.

- 2.c** Hanson Aggregates Midwest, Sandusky Quarry, is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- 2.d** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

- 2.e** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR Part 60 are also federally enforceable.

B. Operational Restrictions

1. The maximum annual aggregate throughput for this emission unit shall not exceed 8,024,000 tons. This restriction is based on the aggregate throughput of the Grizzly Feeder.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for emissions unit F005:
- a. The total tons per month of material processed through the primary crusher of emissions unit F005.
 - b. The annual, year to date tons of material processed through the primary crusher of emissions unit F005 (sum of (a) for each calendar month to date from January to December).
2. 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 frequencies:

<u>Material Handling Operation(s)</u>	<u>Minimum Inspection Frequency</u>
aggregate processing including crushing, screening, conveying	daily

3. The above mentioned inspections shall be performed during representative, normal operating conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northwest District Office, 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.
5. 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 5.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit annual deviation (excursion) reports that identify any exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. The reports shall be submitted annually, by January 31 of each year and shall cover the previous calendar year.
2. Pursuant to the general provisions of NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times for emissions unit F005:
 - a. construction date (no later than 30 days after such date);
 - b. actual start-up date (within 15 days after such date); and
 - c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

and Ohio EPA, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitations:
115.55 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying the actual material throughput with the appropriate AP-42 emission factors, Section 11.19.2 (1/95).

- b. Emission Limitation:
10% opacity for transfer points and screens

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

- c. Emission Limitation:
15% opacity for crushers

Applicable Compliance Method:

Method 9 of 40 CFR Part 60, Appendix A

2. Emission Testing Requirements:

The permittee shall conduct, or have conducted, emission testing for all transfer points, screens, and crushers of emission units F005.

Testing shall be conducted in accordance with the provisions of 40 CFR Part 60, Subpart A, Section 60.8 and 40 CFR Part 60, Subpart OOO, Section 60.675.

The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, by not later than 180 days after initial startup of such facility and at such other times as may be required by the Ohio Environmental Protection Agency, Division of Air Pollution Control. The emission testing shall be conducted to demonstrate compliance with the allowable visible emission rates for particulate emissions.

The following test methods shall be employed to demonstrate compliance with the allowable visible emissions rates:

- a. Method 9 of 40 CFR Part 60, Appendix A shall be used to determine opacity.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air

Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's air agency's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA District Office's air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.

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>
P001 - South System Mill consisting of one grinding mill and 2 GE classifiers (27 tons per hour)	OAC rule 3745-31-05(A)(3)	Control requirements (see A.2.b) 2.74 pounds PE per hour and 12.00 tons PE per year 5.00 pounds organic compounds (OC) per hour and 21.90 tons OC per year Visible particulate emissions shall not exceed 10 percent opacity, as a six-minute average.
	OAC 3745-17-07(A)	See A.2.a
	OAC 3745-17-11(B)	See A.2.a

2. Additional Terms and Conditions

- 2.a 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.b Best Available Technology (BAT) for this emissions unit has been determined to be use of a baghouse control system with a maximum outlet concentration of 0.02 grains PE/dry standard cubic foot.

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B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 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 daily basis.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:
2.74 pounds PE per hour
12.00 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying a maximum grain loading of 0.02 grains per standard cubic foot with a maximum baghouse volumetric flow rate of 16,000 ft³ per minute and converting by multiplying with 60 minutes per hour and dividing by 7000 grains per pound. If required, compliance with the hourly rate shall be demonstrated through stack testing using methods and procedures as specified in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- b. Emission Limitation:

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5.00 pounds OC per hour
21.90 tons OC per year

Applicable Compliance Method:

The pounds per hour emissions limitation is based on stack testing data of a similar source. The permittee shall demonstrate compliance with the pound per hour limitation by the testing specified in section E.2.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 10 percent opacity, as a six-minute average

Applicable Compliance Method:

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

2. Emission Testing Requirements:

The emission testing shall be conducted within 60 days after achieving the maximum capacity at which the emissions unit will be operated, but not later than 180 days after the emission unit is placed into operation for any purpose.

Testing shall be conducted for the purpose of demonstrating compliance with the 5.00 lb OC/hr emission limitation.

The following test methods shall be employed to demonstrate compliance with the allowable emission rates:

a. Method 18, 25, or 25A of 40 CFR Part 60, Appendix A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of

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the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's air agency's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA District Office's air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.

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>
P002 - North System Mill consisting of one grinding mill and 2 GE classifiers (27 tons per hour)	OAC rule 3745-31-05(A)(3)	Control requirements (see A.2.b) 2.96 pounds PE per hour and 12.96 tons PE per year 4.00 pounds organic compounds (OC) per hour and 17.52 tons OC per year Visible particulate emissions shall not exceed 10 percent opacity, as a six-minute average.
	OAC 3745-17-07(A)	See A.2.a
	OAC 3745-17-11(B)	See A.2.a

2. Additional Terms and Conditions

- 2.a 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.b Best Available Technology (BAT) for this emissions unit has been determined to be use of a baghouse control system with a maximum outlet concentration of 0.02 grains PE/dry standard cubic foot.

B. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 5.0 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 daily basis.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:
2.96 pounds PE per hour
12.96 tons PE per year

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying the maximum grain loading of 0.02 grains per standard cubic foot from the baghouse exhaust and a maximum volumetric flow rate of 17,288 ft³ per minute and converting by multiplying 60 minutes per hour and dividing by 7000 grains per pound. If required, compliance with the hourly rate shall be demonstrated through the stack testing using methods and procedures as specified in 40 CFR Part 60, Appendix A, Methods 1-5.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- b. Emission Limitation:

Hanson Aggregates Midwest
PTI Application: 02 13622
Issued

Facility ID: 0322020183

Emissions Unit ID: **P002**

4.00 pounds OC per hour
17.52 tons OC per year

Applicable Compliance Method:

The pounds per hour emissions limitation is based on stack testing data of a similar source. The permittee shall demonstrate compliance with the pound per hour limitation by the testing specified in section E.2.

The tons per year limitation was developed by multiplying the pounds per hour limitation by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:

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

2. Emission Testing Requirements:

The emission testing shall be conducted within 60 days after achieving the maximum capacity at which the emissions unit will be operated, but not later than 180 days after the emission unit is placed into operation for any purpose.

Testing shall be conducted for the purpose of demonstrating compliance with the 5.00 lb OC/hr emission limitation.

The following test methods shall be employed to demonstrate compliance with the allowable emission rates:

a. Method 18, 25, or 25A of 40 CFR Part 60, Appendix A

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operation parameters, the times and dates of

the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's air agency's refusal to accept the results of the emission tests.

Personnel from the Ohio EPA District Office's air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.

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>	OAC rule 3745-17-07(B)
P902 - Fine Grind Product and Waste Truck Loadout Operations	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-11(B)	
	OAC rule 3745-17-08(B)	

Applicable Emissions
Limitations/Control Measures

Control requirements (see A.2.a)

Stack Emissions:

Visible particulate emissions shall not exceed 0% as a six-minute average from baghouse stack exhausts

emission limitations (see A.2.b)

Fugitive Emissions:

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

0.05 ton fugitive PE/yr from truck loading (product & waste material)

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

See A.2.d

See A.2.d

See A.2.e

See A.2.f

2. Additional Terms and Conditions

2.a Best Available Technology (BAT) for this emissions unit has been determined to be the

use of a baghouse control system with a maximum outlet concentration of 0.02 gr/dscf (control system will consists of 4 baghouses)

- 2.b** The emission limitations for stack exhausts from emissions unit P902 shall not exceed the following:
- i. PE from the baghouse controlling product & weigh bin designated as Load 1 South shall not exceed 0.17 lb PE/hr.
 - ii. PE from the baghouse controlling product & weigh bin designated as Load 2 North shall not exceed 0.17 lb PE/hr.
 - iii. PE from the two baghouses controlling the waste silo bin and truck loading operation shall not exceed 0.22 lb PE/hr.
 - iv. PE from all baghouses shall not exceed 2.45 tons PE/yr.
- 2.c** Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust has been determined to be use of a telescoping chute for truck loading of waste material.
- 2.d** 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.e** Hanson Aggregates Midwest facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).
- 2.f** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

B. Operational Restrictions

1. The maximum annual material throughput for this emission unit shall not exceed 481,800 tons. This restriction is based on the combined material throughput for all three truck loading spouts.
2. The pressure drop across each baghouse shall be maintained within the range of 0.5 to 5.0 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for emissions unit P902:
 - a. The total tons per month of material processed through all three truck loading spouts.
 - b. The annual, year to date, tons of material processed through all three truck loading spouts (sum of C.1.a for each calendar month to date from January to December).
2. 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 daily basis.

D. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
2. The permittee shall submit annual deviation (excursion) reports that identify any exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. The reports shall be submitted annually, by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
PE from the baghouse controlling product & weigh bin designated as Load 1 South shall not exceed 0.17 lb PE/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying the maximum outlet concentration of 0.02 grains per standard cubic foot from the baghouse exhaust, a maximum volumetric flow rate of 1000 ft³ per minute, 60 minutes per hour and dividing by 7000 grains per pound. If required, compliance with the hourly rate shall be demonstrated through the stack testing using methods and procedures as specified in 40 CFR Part 60, Appendix A, Methods 1-5.

b. Emission Limitation:

PE from the baghouse controlling product & weigh bin designated as Load 2 North shall not exceed 0.17 lb PE/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying the maximum outlet concentration of 0.02 grains per standard cubic foot from the baghouse exhaust, a maximum volumetric flow rate of 1000 ft³ per minute, 60 minutes per hour and dividing by 7000 grains per pound. If required, compliance with the hourly rate shall be demonstrated through the stack testing using methods and procedures as specified in 40 CFR Part 60, Appendix A, Methods 1-5.

c. Emission Limitation:

PE from the two baghouses controlling the waste silo bin and truck loading operation shall not exceed 0.22 lb PE/hr.

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying the maximum outlet concentration of 0.02 grains per standard cubic foot from the baghouse exhaust, a maximum combined volumetric flow rate of 1300 ft³ per minute, 60 minutes per hour and dividing by 7000 grains per pound. If required, compliance with the hourly rate shall be demonstrated through the stack testing using methods and procedures as specified in 40 CFR Part 60, Appendix A, Methods 1-5.

d. Emission Limitation:

PE from all baghouses shall not exceed 2.45 tons PE/yr.

Applicable Compliance Method:

The tons per year limitation was developed by adding all the pound per hour emission limitations (0.17 lb/hr + 0.17 lb/hr + 0.22 lb/hr = 0.56 lb/hr) and multiplying by the maximum operating schedule of 8760 hours/year, and dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitations, compliance will also be shown with the annual limitation.

e. Emission Limitation:

Emissions Unit ID: P902

0.05 ton fugitive PE/yr from truck loading (product & waste material)

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.00021 lb PE/ton (Table 11.19.2-2, 1/95), actual material throughput per year, and dividing by 2000 lb/ton.

f. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above 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, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

None