



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

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

Lazarus Gov.
Center

**RE: DRAFT PERMIT TO INSTALL MODIFICATION
STARK COUNTY
Application No: 15-01466**

CERTIFIED MAIL

DATE: 6/27/2002
American Sand & Gravel - Plant Four
Chris Scala
8188 Wales Avenue NW
North Canton, OH 44720

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **\$ 550** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA

Canton LAA

Stark Co. Area Trans. Study

WV

PA



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT MODIFICATION OF PERMIT TO INSTALL 15-01466

Application Number: 15-01466
APS Premise Number: 1576001801
Permit Fee: **To be entered upon final issuance**
Name of Facility: American Sand & Gravel - Plant Four
Person to Contact: Chris Scala
Address: 8188 Wales Avenue NW
North Canton, OH 44720

Location of proposed air contaminant source(s) [emissions unit(s)]:
**9500 Forty Corners Road
Massillon, Ohio**

Description of proposed emissions unit(s):
Administrative Modification of Aggregate Processing Plant.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

American Sand & Gravel - Plant Four

Facility ID: 1576001801

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Issued: To be entered upon final issuance

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

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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

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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 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

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

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- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit..

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM (F001)	58.2
PM (F002)	7.3
PM (F003)	14.6
PM (Total)	80.1
PM ₁₀ (F001)	13.0
PM ₁₀ (F002)	6.8
PM ₁₀ (F003)	7.0
PM ₁₀ (Total)	26.8

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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

Applicable Rules/Requirements

F001 - Paved Roadways and OAC rule 3745-31-05(A)(3)
 Parking Areas
 Non-Appendix A Area
 Chapter 31 Modification
 This PTI supersedes PTI 15-1150
 which was issued 6/14/95.

MODIFICATION

OAC rule 3745-17-08(A)

OAC rule 3745-17-07(B)(11)(e)

Unpaved Roadways and Parking OAC rule 3745-31-05(A)(3)
 Areas

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Applicable Emissions Limitations/Control Measures	eliminate visible emissions of fugitive dust. (See sections A.2.e., A.2.g., A.2.i., and A.2.j)
Total PM emissions from paved roadways and parking areas shall not exceed 52.0 tons/yr.	See section A.2 k. See section A.2.1.
Total PM ₁₀ emissions from paved roadways and parking areas shall not exceed 10.2 tons/yr.	
There shall be no visible emissions of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period.	
Best available control measures that are sufficient to minimize or eliminate visible emission of fugitive dust. (See sections A.2.c., A.2.d., A.2.f., A.2.g., A.2.h., A.2.i., and A.2. j.)	
Total PM emissions from unpaved roadways and parking areas shall not exceed 6.2 tons/yr.	
Total PM ₁₀ emissions from unpaved roadways and parking areas shall not exceed 2.8 tons/yr.	
There shall be no visible emissions of fugitive dust except for a period of time not to exceed three minutes during any sixty-minute observation period.	
Best available control measures that are sufficient to minimize or	

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2. Additional Terms and Conditions

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

paved roadways:

All

paved parking areas:

All

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

unpaved roadways:

All

unpaved parking areas:

All

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing 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 the unpaved shoulders of all paved roadways 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 shoulders of all paved roadways with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.e** The 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

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Emissions Unit ID: **F001**

committed to treat the paved roadways and parking areas by watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

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

None

C. Monitoring and/or Recordkeeping Requirements

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

<u>paved roadways and parking areas</u>	<u>minimum inspection frequency</u>
All	Daily

<u>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
All	Daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a 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 Canton 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 updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

Ame**PTI**Emissions Unit ID: **F001****Issued: To be entered upon final issuance**

1. The permittee shall submit deviation (excursion) reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emissions Limitation
There shall be no visible emissions of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period from paved roadways and parking areas.

Applicable Compliance Method
Compliance with the emission limitation for the paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix A on Test Methods" found 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)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.
 - b. Emissions Limitation
There shall be no visible emissions of fugitive dust except for a period of time not to exceed three minutes during any sixty-minute observation period from unpaved roadways and parking lots.

Applicable Compliance Method
Compliance with the emission limitation for the unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix A on Test Methods" found in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the modifications listed in paragraphs (B)(4)(a) through

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(B)(4)(d) of OAC rule 3745-17-03.

c. Emissions Limitation

Total PM emissions from paved roadways and parking areas shall not exceed 52.0 tons/yr.

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the estimated vehicle miles traveled (VMT) per year on all paved roadways and parking areas for all vehicles times the pounds/VMT emission factor, calculated in accordance with AP-42, Section 13.2.1.3, and dividing by 2,000 pounds/ton.

AP-42, Section 13.2.1.3, the calculation for paved roadways:

$$E \text{ (lb/VMT)} = (k) \times (sL/2)^{0.65} \times (W/3)^{1.5} \times (1-CE)$$

where:

E = Particulate Emission Factor (lbs PM/Vehicle Mile Traveled or lb/VMT)

k = Base Emission Factor for Particle Size range (lb/VMT) = 0.082 lb/VMT (PM)

sL = Silt Loading (g/m²) = 70 g/m²

W = Average Weight (tons) of the Vehicles Traveling the Road = 35 tons

CE = Control Efficiency = Watering 95% reduction

d. Emissions Limitation

Total PM₁₀ emissions from paved roadways and parking areas shall not exceed 10.2 tons/yr.

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the estimated vehicle miles traveled (VMT) per year on all paved roadways and parking areas for all vehicles times the pound/VMT emission factor, calculated in accordance with AP-42, Section 13.2.1.3, and dividing by 2,000 pounds/ton.

AP-42, Section 13.2.1.3, the calculation for paved roadways:

$$E \text{ (lb/VMT)} = (k) \times (sL/2)^{0.65} \times (W/3)^{1.5} \times (1-CE)$$

where:

E = Particulate Emission Factor (lbs PM/Vehicle Mile Traveled or lb/VMT)

k = Base Emission Factor for Particle Size range (lb/VMT) = 0.016 lb/VMT (PM₁₀)sL = Silt Loading (g/m²) = 70 g/m²

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Emissions Unit ID: **F001**

W = Average Weight (tons) of the Vehicles Traveling the Road = 35 tons

CE = Control Efficiency = Watering 95% reduction

e. Emissions Limitation

Total PM emissions from unpaved roadways and parking areas shall not exceed 6.2 tons/yr.

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the vehicle miles traveled (VMT) per year on all unpaved roadways and parking areas for all vehicles times the 9.34 pounds/VMT emission factor, calculated in accordance with AP-42, Section 13.2.2, and dividing by 2,000 pounds/ton.

AP-42, Section 13.2.2.2, the calculation for unpaved roadways:

$$E(\text{lb/VMT}) = [k(s/12)^a(W/3)^b / (M_{\text{dry}}/0.2)^c] [(365-p)/365]$$

where:

E = Particulate Emission Factor (lbs PM/Vehicle Mile Traveled or lb/VMT)

k, a, b, c = empirical constants from Table 13.2.2-2:

k = 10 for PM

a = 0.8 for PM

b = 0.5 for PM

c = 0.4 for PM

s = surface material silt content = 7.1%

W = mean vehicle weight (tons)

M_{dry} = surface material moisture content under dry, uncontrolled conditions %

p = number of days with at least 0.01 inch of precipitation

CE = Control efficiency (watering) = 95% reduction

f. Emissions Limitation

Total PM₁₀ emissions from unpaved roadways and parking areas shall not exceed 2.8 tons/yr.

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the vehicle miles traveled (VMT) per year on all unpaved roadways and parking areas for all vehicles times the pounds/VMT emission factor, calculated in accordance with AP-42, Section 13.2.2, and dividing by 2,000 pounds/ton.

AP-42, Section 13.2.2.2, the calculation for unpaved roadways:

$$E(\text{lb/VMT}) = [k(s/12)^a(W/3)^b / (M_{\text{dry}}/0.2)^c] [(365-p)/365]$$

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where:

E = Particulate Emission Factor (lbs PM/Vehicle Mile Traveled or lb/VMT)

k, a, b, c = empirical constants from Table 13.2.2-2:

k = 2.6 for PM₁₀

a = 0.8 for PM₁₀

b = 0.4 for PM₁₀

c = 0.3 for PM₁₀

s = surface material silt content = 7.1%

W = mean vehicle weight (tons)

M_{dry} = surface material moisture content under dry, uncontrolled conditions %

p = number of days with at least 0.01 inch of precipitation

CE = Control efficiency (watering) = 95% reduction

F. Miscellaneous Requirements

None

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Emissions Unit ID: **F002**

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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.

Operations, Property, <u>and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
F002 - Storage Piles Non-Appendix A Area Chapter 31 Modification. This PTI supersedes PTI 15-1150, which was issued 6/14/95.	OAC rule 3745-31-05(A)(3)
MODIFICATION 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)
wind erosion from storage piles (See section A.2.a for identification of storage piles.)	OAC rule 3745-17-08(A) OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745- 31-05 (A)(3)

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PTI Application 15-01466

Issue**Facility ID: 1576001801**Emissions Unit ID: **F002**

Applicable Emissions
Limitations/Control Measures

PM emissions shall not exceed 7.3 tons/yr from wind erosion and load-in and load-out operations.

PM₁₀ emissions shall not exceed 6.8 tons/yr from wind erosion and load-in and load-out operations.

There shall be no visible emissions of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period.

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 of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period.

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.)

See section A.2.g.

See section A.2.h.

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Emissions Unit ID: **F002****Issued: To be entered upon final issuance****2. Additional Terms and Conditions**

- 2.a** The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:
- crushed gravel
 - washed gravel
 - washed sand
- 2.b** The permittee shall employ best available control measures for 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 using a mobile conveyor/ stacker and watering the storage piles as needed 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 measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measure is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to watering the storage piles as needed to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measures 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

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OAC rules 3745-17-08 and 3745-31-05.

- 2.g** This 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).
- 2.h** 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

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>frequency</u>	<u>minimum</u>	<u>load-in</u>	<u>inspection</u>
- crushed gravel		daily	
- washed gravel		daily	
- washed sand		daily	

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

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
- crushed gravel	daily
- washed gravel	daily
- washed sand	daily

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

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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- | | |
|------------------|-------|
| - crushed gravel | daily |
| - washed gravel | daily |
| - washed sand | daily |
4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
 5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile and for 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 Canton 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 measure(s);
 - c. the dates the control measure(s) were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) 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 measures.

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

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1. The permittee shall submit deviation (exceedance) 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.

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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:

- a. Emissions Limitation

There shall be no visible emissions of fugitive dust except for a period of time not to exceed one minute during any sixty-minute observation period.

Applicable Compliance Method

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

- b. Emissions Limitation

PM emissions shall not exceed 7.3 tons/yr from wind erosion and load-in and load-out operations.

Applicable Compliance Method

Compliance with the above annual particulate emission limitation shall be determined using the equations from AP-42, Chapter 13.2.4, Aggregate Handling and Storage Piles, Fifth Edition, dated 1/1995, for load -in and load-out operations and from USEPA's Control of Open Fugitive Dust Sources September 1988 for wind erosion from storage piles. The calculated worst-case emissions shall document compliance as follows:

AP-42, Chapter 13.2.4, Aggregate Handling and Storage Piles:

$$E = k(0.0032) \times ((U/5)^{1.3})/(M/2)^{1.4}$$

where:

E = lbs PM/ton produced

k = Base emission factor for particle size range (lb/ton) = 0.74 lb/ton (PM)

U = Mean wind speed = 9.5 mph

M = Mean material moisture content:

Crushed Gravel = 2%

Washed Gravel = 15%

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Issue

Facility ID: 1576001801

Emissions Unit ID: F002

Washed Sand = 15%

Tons produced

Crushed Gravel = 200,000 tons/yr

Washed Gravel = 500,000 tons/yr

Washed Sand = 1,500,000 tons/yr

Crushed Gravel:

$$E = k(0.0032) \times ((U/5)^{1.3}) / (M/2)^{1.4}$$

$$E = 0.74(0.0032) \times (9.5/5)^{1.3} / (2/2)^{1.4}$$

$$E = 0.74(0.0032) \times (9.5/5)^{1.3} / (1)^{1.4}$$

$$E = 0.74(0.0032) \times (1.9)^{1.3} / 1$$

$$E = 0.00545 \text{ lb PM/ton}$$

$$PE = 200,000 \text{ tons/yr} \times 0.00545 \text{ lb PM/ton} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.55 \text{ ton PM/yr}$$

Washed Gravel:

$$E = k(0.0032) \times ((U/5)^{1.3}) / (M/2)^{1.4}$$

$$E = 0.74(0.0032) \times (9.5/5)^{1.3} / (15/2)^{1.4}$$

$$E = 0.74(0.0032) \times (9.5/5)^{1.3} / (7.5)^{1.4}$$

$$E = 0.74(0.0032) \times (1.9)^{1.3} / 16.79$$

$$E = 0.74(0.0032) \times 0.137$$

$$E = 0.00032 \text{ lb PM/ton}$$

$$E = 500,000 \text{ tons/yr} \times 0.00032 \text{ lb PM/ton} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.08 \text{ ton PM/yr}$$

Washed Sand:

$$E = k(0.0032) \times ((U/5)^{1.3}) / (M/2)^{1.4}$$

$$E = 0.74(0.0032) \times (9.5/5)^{1.3} / (15/2)^{1.4}$$

$$E = 0.74(0.0032) \times (9.5/5)^{1.3} / (7.5)^{1.4}$$

$$E = 0.74(0.0032) \times (1.9)^{1.3} / 16.79$$

$$E = 0.74(0.0032) \times 0.137$$

$$E = 0.00032 \text{ lb PM/ton}$$

$$E = 1,500,000 \text{ tons/yr} \times 0.00032 \text{ lb PM/ton} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.24 \text{ ton PM/yr}$$

Total:

0.55 Crushed Gravel

0.08 Washed Gravel

+0.24 Washed Sand

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0.87 Total

USEPA's Control of Open Fugitive Dust Sources September 1988 for wind erosion from storage piles:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A/2,000$$

where:

E_w = total annual particulate emission rate;

s = silt content of the stored material, weight percent

for crushed gravel: 6%

for washed gravel: 5%

for washed sand: 0.9%

p = number of days with > 0.01 inch of precipitation per year, 149 days;

f = percentage of time wind speed exceeds 12 mph, 20%; and

A = total surface area of storage piles:

for crushed gravel: 1.7.

for washed gravel: 2.55

for washed sand: 2.55

Crushed Gravel:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A/2,000$$

$$E_w = 1.7 \times (6/1.5) \times [(365-149)/235] \times (20/15) \times 365 \times 1.7/2,000$$

$$E_w = 1.7 \times (4) \times [(216)/235] \times 1.33 \times 365 \times 0.00085$$

$$E_w = 2.58 \text{ tons PM/yr}$$

Washed Gravel:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A / 2,000$$

$$E_w = 1.7 \times (5/1.5) \times [(365-149)/235] \times (20/15) \times 365 \times 2.55/2,000$$

$$E_w = 1.7 \times (3.33) \times [(216)/235] \times 1.33 \times 365 \times 0.001275$$

$$E_w = 3.22 \text{ tons PM/yr}$$

Washed Sand:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A/2,000$$

$$E_w = 1.7 \times (0.9/1.5) \times [(365-149)/235] \times (20/15) \times 365 \times 2.55/2,000$$

$$E_w = 1.7 \times (0.6) \times [(216)/235] \times 1.33 \times 365 \times 0.001275$$

$$E_w = 0.58 \text{ ton PM/yr}$$

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Emissions Unit ID: **F002****Issued: To be entered upon final issuance**

Total	
2.58	Crushed Gravel
3.22	Washed Gravel
<u>+0.58</u>	Washed Sand
6.38	Total

Load in and load out	0.87 ton PM/yr
Wind Erosion	6.38 tons PM/yr
Total	7.25 tons PM/yr

For total particulate emissions $E = [\text{sum of particulate emissions from each load-in/load-out operation (EI)}] + [\text{total annual particulate emissions from wind erosion (Ew)}]$

- c. Emissions Limitation
 PM_{10} emissions shall not exceed 6.8 tons/yr from wind erosion and load-in and load-out operations.

Applicable Compliance Method

Compliance with the above annual particulate emission limitation shall be determined using equations from AP-42, Chapter 13.2.4, Aggregate Handling and Storage Piles, Fifth Edition, dated 1/1995, for load -in and load-out operations and from USEPA's Control of Open Fugitive Dust Sources September 1988 for wind erosion from storage piles. The calculated worst-case emissions shall document compliance as follows:

AP-42, Chapter 13.2.4, Aggregate Handling and Storage Piles:

$$E = k(0.0032) \times ((U/5)^{1.3}) / (M/2)^{1.4}$$

where:

E = lbs PM/ton produced

k = Base emission factor for particle size range (lb/ton) = 0.35 lb/ton (PM_{10})

U = Mean wind speed = 9.5 mph

M = Mean material moisture content:

Crushed Gravel = 2%

Washed Gravel = 15%

Washed Sand = 15%

Tons produced

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Crushed Gravel = 200,000 tons/yr

Washed Gravel = 500,000 tons/yr

Washed Sand = 1,500,000 tons/yr

Crushed Gravel:

$$E = k(0.0032) \times ((U/5)^{1.3})/(M/2)^{1.4}$$

$$E = 0.35(0.0032) \times (9.5/5)^{1.3}/(2/2)^{1.4}$$

$$E = 0.35(0.0032) \times (9.5/5)^{1.3}/(1)^{1.4}$$

$$E = 0.35(0.0032) \times (1.9)^{1.3}/1$$

$$E = 0.35(0.0032) \times 2.3/1$$

$$E = 0.0026 \text{ lb PM/ton}$$

$$PE = 200,000 \text{ tons/yr} \times 0.0026 \text{ lb PM/ton} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.26 \text{ ton PM/yr}$$

Washed Gravel:

$$E = k(0.0032) \times ((U/5)^{1.3})/(M/2)^{1.4}$$

$$E = 0.35(0.0032) \times (9.5/5)^{1.3}/(15/2)^{1.4}$$

$$E = 0.35(0.0032) \times (9.5/5)^{1.3}/(7.5)^{1.4}$$

$$E = 0.35(0.0032) \times (1.9)^{1.3}/16.79$$

$$E = 0.35(0.0032) \times 0.137$$

$$E = 0.00015 \text{ lb PM/ton}$$

$$E = 500,000 \text{ tons/yr} \times 0.00015 \text{ lb PM/ton} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.04 \text{ ton PM/yr}$$

Washed Sand:

$$E = k(0.0032) \times ((U/5)^{1.3})/(M/2)^{1.4}$$

$$E = 0.35(0.0032) \times (9.5/5)^{1.3}/(15/2)^{1.4}$$

$$E = 0.35(0.0032) \times (9.5/5)^{1.3}/(7.5)^{1.4}$$

$$E = 0.35(0.0032) \times (1.9)^{1.3}/16.79$$

$$E = 0.35(0.0032) \times 0.137$$

$$E = 0.00015 \text{ lb PM/ton}$$

$$E = 1,500,000 \text{ tons/yr} \times 0.00015 \text{ lb PM/ton} \times 1 \text{ ton}/2,000 \text{ lbs} = 0.11 \text{ ton PM/yr}$$

Total

0.26 Crushed Gravel

0.04 Washed Gravel

+0.11 Washed Sand

0.41

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USEPA's Control of Open Fugitive Dust Sources September 1988 for wind erosion from storage piles:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A/2,000$$

where:

E_w = total annual particulate emission rate;

s = silt content of the stored material, weight percent

for crushed gravel: 6%

for washed gravel: 5%

for washed sand: 0.9%

p = number of days with > 0.01 inch of precipitation per year, 149 days;

f = percentage of time wind speed exceeds 12 mph, 20%; and

A = total surface area of storage piles:

for crushed gravel: 1.7.

for washed gravel: 2.55

for washed sand: 2.55

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Crushed Gravel:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A/2,000$$

$$E_w = 1.7 \times (6/1.5) \times [(365-149)/235] \times (20/15) \times 365 \times 1.7/2,000$$

$$E_w = 1.7 \times (4) \times [(216)/235] \times 1.33 \times 365 \times 0.00085$$

$$E_w = 2.58 \text{ tons PM/yr}$$

Washed Gravel:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A / 2,000$$

$$E_w = 1.7 \times (5/1.5) \times [(365-149)/235] \times (20/15) \times 365 \times 2.55/2,000$$

$$E_w = 1.7 \times (3.33) \times [(216)/235] \times 1.33 \times 365 \times 0.001275$$

$$E_w = 3.22 \text{ tons PM/yr}$$

Washed Sand:

$$E_w = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15) \times 365 \times A/2,000$$

$$E_w = 1.7 \times (0.9/1.5) \times [(365-149)/235] \times (20/15) \times 365 \times 2.55/2,000$$

$$E_w = 1.7 \times (0.6) \times [(216)/235] \times 1.33 \times 365 \times 0.001275$$

$$E_w = 0.58 \text{ ton PM/yr}$$

Total

2.58 Crushed Gravel

3.22 Washed Gravel

+0.58 Washed Sand

6.38 Total

Load in and load out	0.41 ton PM ₁₀ /yr
Wind Erosion	6.38 tons PM ₁₀ /yr

Total	6.79 tons PM ₁₀ /yr
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For total PM₁₀ emissions E = [sum of particulate emissions from each load-in/load-out operation (EI)] + [total annual particulate emissions from wind erosion (E_w)]

F. Miscellaneous Requirements

None

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Emissions Unit ID: **F003**

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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 - sand and aggregate processing, including crushing, screening, material handling, and truck dumping of raw material into crusher hopper.	OAC rule 3745-31-05(A)(3)	Visible particulate emissions of fugitive dust shall not exceed 10% opacity, as a six-minute average. Particulate emissions shall not exceed 14.6 tons/yr.
Non-Appendix A Area Chapter 31 Modification This PTI supersedes PTI 15-1150, which was issued 6/14/95.		PM ₁₀ emissions shall not exceed 7.0 tons/yr.
MODIFICATION	OAC rule 3745-17-08(A)	See section A.2.b.
	OAC rule 3745-17-07(B)(11)(e)	See section A.2.c.
	40 CFR, Part 60, Subpart OOO	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a During sand and aggregate processing, including crushing, screening, material handling, and truck dumping of raw material into the crusher hopper, the material should be kept sufficiently moist to ensure compliance with the visible emission limitation specified above.

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- 2.b** This 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).
- 2.c** 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

None

C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall conduct visible emission evaluations in accordance with USEPA's Reference Method 9 of 40 CFR, Part 60, Appendix A at a minimum annually or upon relocation of the emissions unit. The visible emission evaluations shall be performed during the period of May 1 through September 30. The duration of the Method 9 observations shall be 3 hours (30 six-minute averages). However, the duration of the Method 9 observations can be reduced to 1 hour (10 six-minute averages) if the following conditions apply: (1) there are no individual readings greater than 10% opacity and (2) there are no more than 3 readings of 10% opacity for the one-hour period.

D. Reporting Requirements

- 1. The permittee shall notify the Canton local air agency (Canton LAA) of any Method 9 evaluation that did not demonstrate compliance with the opacity limitation specified above. The notification shall be in writing and shall include a copy of such record and shall be sent to Canton LAA within 30 days after the exceedance occurs.

E. Testing Requirements

- 1. This permittee shall conduct, or have conducted, visible emission tests at a minimum annually or upon relocation of this emissions unit in order to demonstrate compliance with the specified allowable visible emission limitation. The visible emission tests shall be conducted in accordance with USEPA's Reference Method 9 of 40 CFR, Part 60, Appendix A.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test notification to Canton LAA. The Intent to Test notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such

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notification for review and approval prior to the test may result in Canton LAA's refusal to accept the results of the visible emissions test.

Personnel from Canton LAA shall be permitted to witness the test and examine the testing equipment. The permittee shall acquire data and information regarding the emissions unit's operating parameters.

A comprehensive written report on the results of the visible emissions test (including opacity readings and the emissions unit's operating parameters) shall be signed by the person(s) responsible for the test and submitted to Canton LAA within 30 days following the completion of the test.

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

a. Emissions Limitation

Visible particulate emissions of fugitive dust shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method

Compliance with the above-mentioned visible emission limitation shall be determined by USEPA's Reference Method 9 in 40 CFR, Part 60, Appendix A.

b. Emissions Limitation

PM emissions shall not exceed 14.6 tons/yr; and
PM₁₀ emissions shall not exceed 7.0 tons/yr.

Applicable Compliance Method

Compliance with the above yearly particulate emission limitation shall be determined using the emission factors for crushing, screening, and material handling operations in AP-42, Chapter 11.19.2, Crushed Stone Processing, Fifth Edition, dated 1/1995 and for truck dumping operations in AP-42, Chapter 13.2.4, Aggregate Handling and Storage Piles, Fifth Edition, dated 1/1995. The calculated emission factors shall be multiplied by the maximum facility production rate of 2,190,000 tons/yr. The calculated worst-case emissions shall document compliance as follows:

Screening with wet suppression, three screening equipment

Controlled emission factor AP-42 Table 11.19.2-2 = 0.0084 lb PM₁₀/ton x 2.1 = 0.01764 lb PM/ton

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$$2,190,000 \text{ tons/yr} \times 0.00084 \text{ lb PM}_{10}/\text{ton} \times 1 \text{ ton}/2,000 \text{ lbs} \times 3 = 2.76 \text{ tons PM}_{10}/\text{yr}$$

$$2,190,000 \text{ tons/yr} \times 0.00176 \text{ lb PM}/\text{ton} \times 1 \text{ ton}/2,000 \text{ lbs} \times 3 = 5.78 \text{ tons PM/yr}$$

Primary, Secondary and Tertiary crushing with wet suppression

$$\text{Controlled emission factor from AP-42 Table 11.19.2-2} = 0.00059 \text{ lb PM}_{10}/\text{yr} \times 2.1 = 0.00124 \text{ lb PM}/\text{ton}$$

$$2,190,000 \text{ tons/yr} \times 0.00059 \text{ lb PM}_{10}/\text{ton} \times 1 \text{ ton}/2,000 \text{ lbs} \times 3 = 1.94 \text{ tons PM}_{10}/\text{yr}$$

$$2,190,000 \text{ tons/yr} \times 0.00124 \text{ lb PM}/\text{ton} \times 1 \text{ ton}/2,000 \text{ lbs} \times 3 = 4.07 \text{ tons PM/yr}$$

Conveyor Transfer Point (43) with wet suppression

$$\text{Controlled emission factor from AP-42, Table 11.19.2-2} = 0.000048 \text{ lb PM}_{10}/\text{ton} \times 2.1 = 0.0001 \text{ lb PM}/\text{ton}$$

43 transfer points (7 transfer points are handling totally saturated material.)

$$2,200,000 \text{ tons/yr} \times 0.000048 \text{ lb PM}_{10}/\text{ton} \times 1 \text{ ton}/2,000 \text{ lbs} \times 43 = 2.27 \text{ tons PM}_{10}/\text{yr}$$

$$2,200,000 \text{ tons/yr} \times 0.0001 \text{ lb PM}/\text{ton} \times 1 \text{ ton}/2,000 \text{ lbs} \times 43 = 4.73 \text{ tons PM/yr}$$

Total	PM ₁₀	PM
screening	2.76	5.78
crushing	1.94	4.07
transfer points	+ <u>2.27</u>	+ <u>4.73</u>
Total F003	6.97	14.58

F. Miscellaneous Requirements

None