

PROCESS DESCRIPTION

This permit to install is for the modification of an Aggregate Crushing Plant (PTI 04-1014) of 750 tons per hour maximum rated capacity. A 170 TPH secondary crusher and 2 conveyors have been added. The PM10 PTE emissions increase is 0.51 tons per year(from 11.47 to 11.98).

B.A.T. DETERMINATION

F002: B.A.T. is 10 % opacity from any screening operation, transfer point on belt conveyors, and 15% opacity from any crusher, based on NSPS Subpart OOO requirements.

APPLICABLE RULES & REGULATIONS

- 3745-31-05 Criteria for decision by the director.
- 3745-17-07 Control of visible particulate emissions from stationary sources.
- 3745-17-08 Restriction of emissions of fugitive dust.
- NSPS Subpart OOO Standards of Performance For Nonmetallic Mineral Processing Plants

CALCULATIONS

Permit Allowable Emissions (Potential to Emit)

F002 Emission factors are from AP-42, dated 1/95, Section 11.19.2, table 11-19.2-2 "Emission Factors for Crushed Stone Processing Operation".

Secondary Crusher2: The maximum production rate is 170 tons/hr. This source is controlled by wet suppression and the inherent moisture content of the stone.

$$\begin{aligned} ER_{PM10} &= 0.00059 \text{ lbs/ton} * 170 \text{ tons/hr} \\ &= \mathbf{0.10 \text{ lbs/hr}} \\ &= \mathbf{0.44 \text{ tons/yr}} \end{aligned}$$

$$\begin{aligned} 2 \text{ Transfer Points: } 170 \text{ tons per hour} * 2 * 4.8 * 10^{-5} \text{ lb/ton} &= \mathbf{0.016 \text{ pounds/hour}} \\ &= \mathbf{0.071 \text{ tons/year}} \end{aligned}$$

INCREASE IN POTENTIAL EMISSIONS for F002

$$\begin{aligned} ER_{PM10} &= \mathbf{0.10 + 0.016} \\ &= \mathbf{0.116 \text{ pounds/hr}} \end{aligned}$$

$$\begin{aligned} ER_{PM10} &= \mathbf{0.44 + 0.071} \\ &= \mathbf{0.51 \text{ tpy}} \end{aligned}$$

Actual Emissions

FEES

F002 - 1 Permit to install, process weight rate > 50,000 lb/hr @ \$1000 = \$1000

TOTAL = \$1000

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for France Stone located in Lucas County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification/Description	BAT Determination	Applicable Federal and OAC Rules	Permit Allowable Mass Emissions and/or Control & Usage Requirements
F002	750 TPH Aggregate Plant	Opacity limits. Water spray or wet suppression	NSPS OOO	Less than or equal to 15 percent opacity, as a 6-minute average, from any crusher. Less than or equal to 10 percent opacity, as a 6-minute average, from any conveying or screening operation.
			3745-17-07 (B), (B)(1)*	
			3745-17-08 (B), (B)(3)*	
			3745-31-05	PM10: 2.83 lb/hr, 11.98 tons/yr

*This applicable regulation is less stringent than, or equal in stringency to, the regulation that resulted in the emission limitation.

**SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons/Year</u>
PM10	11.98 (0.51 increase)

Additional Special Terms & Conditions

1. a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
- (1) 750 TPH Primary Crusher
 - (1) 490 TPH Secondary Crusher
 - (1) 170 TPH Secondary Crusher
 - (1) 400 TPH Tertiary Crusher
- All Associated Conveying & Screening

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

<u>material handling operation(s)</u>	<u>control measure(s)</u>
Crushing & Screening	Maintain or apply sufficient moisture at the crushing station(s) to control dust emissions from all conveyors and transfer points.
Plant conveyors & transfer points	Maintain or apply sufficient moisture at the crushing station(s) to control dust emissions from all conveyors and transfer points.

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

- c. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- d. 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 3745-17-08.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

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

<u>material handling operation(s)</u>	<u>m i n i m u m i n s p e c t i o n f r e q u e n c y</u>
Primary Crusher	Weekly
Secondary Crushers	Weekly
Tertiary Crushers	Weekly
All Associated Conveying & Screening	Weekly

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
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;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted quarterly (January 15, April 15, July 15, and October 15) or in accordance with the reporting requirements of the General Terms and Conditions of the permit to operate for this

emissions unit.

E. Testing Requirements

1. Compliance with the visible emission limitation for the material handling operation(s) identified 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.
2. As required by NSPS §60.675, the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:
 - a. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - b. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g. road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
 - c. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

(REVISED 5/1/89)

PTI NUMBER 04-1152 PREMISE NO. 0448040003
 FACILITY NAME France Stone Sylvania Quarry COUNTY Lucas
 FACILITY DESCRIPTION Quarry with aggregate processing CITY/TWP Sylvania
 SIC CODE 1422 SCC CODE 3-05-020-,01,02,03,05
 SOURCE DESCRIPTION 750 TPH Aggregate Plant
 START-UP DATE March 1999

Pollutants	Air Quality Designation	Actual Emissions		PTI Allowable Emissions	
		lb/hr	TPY	lb/hr, etc.	TPY
Particulate Matter	N/A				
PM ₁₀	Unclassified	2.83	6.8	2.83 (0.12 lb/hr increase)	11.98 (0.51 new emissions)
Sulfur Dioxide					
Organic Compounds	Attainment				
Nitrogen Oxides	Attainment				
Carbon Monoxide					
Lead	Attainment				
Other: Air Toxics (See Other Side)	Unclassified				

APPLICABLE FEDERAL RULES: X NSPS NESHAPS PSD OFFSET POLICY
 WHAT IS THE BAT DETERMINATION AND WHAT IS THE BASIS FOR THE DETERMINATION?
NSPS OOO, opacity limits, use of wet suppression for PM10

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? _____
 PERSON COMPLETING FORM Adam Zolciak DATE 11/24/98

*IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? YES X NO
 ((If yes, turn to other side and complete "Toxic Air Contaminants" Section))

ADDITIONAL COMMENTS

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TOXIC AIR CONTAMINANTS

Ohio EPA's air toxic policy applies to contaminants for which the American Conference of Governmental Hygienists (ACGIH) has a listed threshold limit value.

WAS AIR TOXICS MODELING PERFORMED*? _____ YES _____ NO

*IF YES, ATTACH MODELING RESULTS IF NO, ATTACH NEW SOURCE CODING FORM

IDENTIFY AIR CONTAMINANTS: _____

