State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
UNION COUNTY

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: 01-08208

DATE: 9/21/2000

Shelly Materials
Larry Shively
Post Office Box 266 8775 Blackbird Ln
Thornville, OH 43076

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

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

CC: **USEPA** **CDO**

FINAL PERMIT TO INSTALL 01-08208

Application Number:	01-08208
APS Premise Number:	0180000178
Permit Fee:	**$2400**
Name of Facility:	Shelly Materials
Person to Contact:	Larry Shively
Address:	Post Office Box 266 8775 Blackbird Ln Thornville, OH 43076

Location of proposed air contaminant source(s) [emissions unit(s)]:
8328 Watkins Rd
Ostrander, **Ohio**

Description of proposed emissions unit(s):
Conveyors, screens and crushers.

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

Environmental Protection Agency if the proposed sources are inadequate 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 prove to be inadequate 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.

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

Pollutant	Tons Per Year
PM	81.3

Emissions Unit ID: **F004**

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	Applicable Emissions Limitations/Control Measures
F004 - Material unloading	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 0.05 lb/hr and 0.4 ton per year. Visible emissions of fugitive dust shall not exceed 20% opacity as a 6 minute average, except as provided by rule. See II.A.2.a-b below.
	OAC rule 3745-17-11 (B)(1)	The emission limitation specified in this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

2.b The permittee shall employ best available control measures during material unloading operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. Compliance with OAC rule 3745-31-05 (A)(3) shall be demonstrated by applying water at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when material unloading is taking place and when the weather conditions allow, for any visible fugitive particulate emissions from any material unloading operations. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. whether the emissions are representative of normal operations;

   b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;

   c. the total duration of any visible emission incident; and

   d. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emission Limitation
   Particulate emissions shall not exceed 0.05 lb/hr.

   Applicable Compliance Method
   Compliance shall be demonstrated by summing the aggregate and limestone unloading

emissions. The aggregate emissions are found by multiplying the maximum capacity of 90 tons/hr (permit application, 6/22/00) by the emission factor of 0.0002 pound per hour (AP-42, 11.19.2-2, 1/95). The limestone emissions are found by multiplying the maximum capacity of 810 tons/hr (permit application, 6/22/00) by the emission factor of 0.000034 pound per hour (AP-42, 11.19.2-2, 1/95).

b. Emission Limitation
Particulate emissions shall not exceed 0.43 lb/hr.

Applicable Compliance Method
Compliance shall be demonstrated by summing the aggregate and limestone unloading emissions. The aggregate emissions are found by multiplying the maximum capacity of 270,000 tons/yr (permit application, 6/22/00) by the emission factor of 0.0002 pound per hour (AP-42, 11.19.2-2, 1/95) by 1 ton/2000 pounds. The limestone emissions are found by multiplying the maximum capacity of 2,430,000 tons/yr (permit application, 6/22/00) by the emission factor of 0.000034 pound per hour (AP-42, 11.19.2-2, 1/95) by 1 ton/2000 pounds.

c. Emission Limitation
Visible emissions of fugitive dust shall not exceed 20% opacity as a 6 minute average, except as provided by rule.

Applicable Compliance Method
When necessary, compliance shall be demonstrated by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(3) using the methods and procedures specified in USEPA Reference 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F005 - Crushing - 1-600 ton/hr (primary), 1-400 ton/hr (primary), 2-600 ton/hr (secondary), 2-400 ton/hr (tertiary)	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 3.54 lb/hr and 5.0 tons/yr. See II.A.2.a-c below.
	OAC rule 3745-17-11 (B)(1)	The emission limitation specified in this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).
	40 CFR Part 60, Subpart OOO	Visible emissions of fugitive dust shall not exceed 15% opacity, except as provided by rule.

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

2.b The permittee shall employ best available control measures during all crushing operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. Compliance with OAC rule 3745-31-05 (A)(3) shall be demonstrated by applying water at sufficient frequencies to maintain the material in a moist condition and ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control

measures to ensure compliance.

2.c The permittee shall install a wet suppression system on all tertiary crushing operations. The wet suppression system shall be installed in accordance with the following compliance plan and schedule:

Milestone	Completion Date
i. Award contracts for emission control systems or process modifications; or, issue orders for the purchase of component parts to accomplish emission control by	12/1/00
ii. Initiate on-site construction or installation of emission control equipment by	1/1/01
iii. Complete on-site construction or installation of emission control equipment or process change by	3/01
iv. Achieve final compliance by	4/01

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when each piece of crushing equipment is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from each crushing operation. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. whether the emissions are representative of normal operations;

   b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;

   c. the total duration of any visible emission incident; and

d. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from any crushing operation and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emission Limitation
   Particulate emissions shall not exceed 3.54 lbs/hr.

   Applicable Compliance Method
   Compliance shall be demonstrated by summing the calculated hourly emission rate for each crusher as determined by multiplying the maximum hourly production rate (application, 6/22/00) by the appropriate emission factor specified in USEPA reference document AP-42, 11.19.2-2 (1/95) by the quantity of the specific operation:
   primary crusher - 600 tons/hr * 0.0007 lb PM/ton * (1) = 0.42 lb PM/hr
   primary crusher - 400 ton/hr * 0.0007 lb/ton * (1) = 0.28 lb/hr
   secondary crusher - 600 ton/hr * 0.0013 lb/ton * (2) = 1.56 lb/hr
   tertiary crusher - 400 ton/hr * 0.0016 lb/ton * (2) = 1.28 lb/hr

   b. Emission Limitation
   Particulate emissions shall not exceed 5.0 tons/yr.

   Applicable Compliance Method
   Compliance shall be demonstrated by summing the calculated annual emission rate for each crusher as determined by multiplying the maximum annual production rate (application, 6/22/00) by the appropriate emission factor specified in USEPA reference document AP-42, 11.19.2-2 (1/95), converting to tons and multiplying by the quantity of the specific operation:
   primary crusher - 1,350,000 tons/yr * 0.0007 lb/ton * ton/2000 lb= 0.5 tons/yr
   primary crusher - 1,350,000 tons/yr * 0.0007 lb/ton * ton/2000 lb = 0.5 tons/yr
   secondary crusher - 1,350,000 tons/yr * 0.0013 lb/ton * ton/2000 lb * (2) = 1.8 tons/yr
   tertiary crusher - 1,350,000 tons/yr * 0.0016 lb/ton * ton/2000 lb * (2) = 2.2 tons/yr

   c. Emission Limitation
   Visible emissions of fugitive dust shall not exceed 15% opacity, except as provided by rule.

   Applicable Compliance Limitation
   The permittee shall conduct, or have conducted, emission testing for each crusher in accordance with the following requirements:

i. The emission testing shall be conducted within 60 days of issuance of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the opacity limitation.

iii. The following test method shall be employed to demonstrate compliance with the 40 CFR Part 60 Subpart OOO: 40 CFR Part 60, Appendix A, Method 9. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Central District Office shall be permitted to witness the test(s), 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 from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

F. Miscellaneous Requirements

1. The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Emissions Unit ID: **F005**

Source Number	Source Description	NSPS Regulation (Subpart)
F005	Crushing - 1-600 ton/hr (primary), 1-400 ton/hr (primary), 2-600 ton/hr (secondary), 2-400 ton/hr (tertiary)	Subpart OOO

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
3232 Alum Creek Drive
Columbus, Ohio 43207

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	Applicable Emissions Limitations/Control Measures
F006 - Screening: 2-600 ton/hr (primary), 2-100 ton/hr (secondary), 2-150 ton/hr (secondary), 1-100 ton/hr (fines)	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 14.73 lbs/hr and 31.6 tons/yr. See II.A.2.a-c below.
	OAC rule 3745-17-11 (B)(1)	The emission limitation specified in this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).
	40 CFR Part 60, Subpart OOO	Visible emissions of fugitive dust shall not exceed 10% opacity, except as provided by rule.

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

2.b The permittee shall employ best available control measures during screening operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. Compliance with OAC rule 3745-31-05 (A)(3) shall be demonstrated by applying water at sufficient frequencies to maintain the material in a moist condition and ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control

measures to ensure compliance.

2.c The permittee shall install a wet suppression system on all screening operations. The wet suppression system shall be installed in accordance with the following compliance plan and schedule:

Milestone	Completion Date
i. Award contracts for emission control systems or process modifications; or, issue orders for the purchase of component parts to accomplish emission control by	12/1/00
ii. Initiate on-site construction or installation of emission control equipment by	1/1/01
iii. Complete on-site construction or installation of emission control equipment or process change by	3/01
iv. Achieve final compliance by	4/01

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when each piece of equipment is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from any screening operation. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. whether the emissions are representative of normal operations;

   b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;

   c. the total duration of any visible emission incident; and

   d. any corrective actions taken to eliminate the visible emissions.

Emissions Unit ID: **F006**

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from any conveying or handling operation and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emission Limitation
   Particulate emissions shall not exceed 14.73 lbs/hr.

   Applicable Compliance Method
   Compliance shall be demonstrated by summing the calculated hourly emission rate for each
   conveying or handling operation as determined by multiplying the maximum hourly production rate (application, 6/22/00) by the appropriate emission factor specified in USEPA reference document AP-42, 11.19.2-2 (1/95) by the quantity of that specific operation:
   primary screening - 600 tons/hr * 0.0084 lb PM/ton * (2) = 10.08 lb PM/hr
   secondary screening - 100 ton/hr * 0.0084 lb/ton * (2) = 1.68 lb/hr
   secondary screening - 150 ton/hr * 0.0084 lb/ton * (2) = 2.52 lb/hr
   fines - 100 ton/hr * 0.0036 lb/ton * (2) =0.72 lb/hr

   b. Emission Limitation
   Particulate emissions shall not exceed 31.6 tons/yr.

   Applicable Compliance Method
   Compliance shall be demonstrated by summing the calculated annual emission rate for each screening operation as determined by multiplying the maximum annual production rate (application, 6/22/00) by the appropriate emission factor specified in USEPA reference document AP-42, 11.19.2-2 (1/95), converting to tons and multiplying by the number of units:
   primary screening - 1,350,000 tons/yr * 0.0084 lb/ton * ton/2000 lb * (2) = 11.3 tons/yr
   secondary screening - 876,000 tons/yr * 0.0084 lb/ton * ton/2000 lb * (2) = 7.4 tons/yr
   secondary screening - 1,314,000 tons/yr * 0.0084 lb/ton * ton/2000 lb * (2) = 11.0 tons/yr
   fines - 540,000 tons/yr * 0.0036 lb/ton * ton/2000 lb * (2) = 1.9 tons/yr

   c. Emission Limitation
   Visible emissions of fugitive dust shall not exceed 10% opacity, except as provided by rule.

Applicable Compliance Limitation
The permittee shall conduct, or have conducted, emission testing for each screening operation in accordance with the following requirements:

i. The emission testing shall be conducted within 60 days of issuance of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the opacity limitation.

iii. The following test method shall be employed to demonstrate compliance with the 40 CFR Part 60 Subpart OOO: 40 CFR Part 60, Appendix A, Method 9. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Central District Office shall be permitted to witness the test(s), 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 from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

F. Miscellaneous Requirements

Emissions Unit ID: **F006**

1. The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
F006	Screening: 2-600 ton/hr (primary), 2-100 ton/hr (secondary), 2-150 ton/hr (secondary), 1-100 ton/hr (fines)	Subpart OOO

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
3232 Alum Creek Drive
Columbus, Ohio 43207

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	Applicable Emissions Limitations/Control Measures
F007 - Conveying and handling - hoppers/feeders, conveying pts., transfer pts.	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 3.87 lbs/hr and 10.1 tons/yr. See II.A.2.a-d below.
	OAC rule 3745-17-11 (B)(1)	The emission limitation specified in this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).
	40 CFR Part 60, Subpart OOO	Visible emissions of fugitive dust shall not exceed 10% opacity, except as provided by rule.

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

2.b The permittee shall employ best available control measures during conveying and handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. Compliance with OAC rule 3745-31-05 (A)(3) shall be demonstrated by applying water at sufficient frequencies to maintain the material in a moist condition and ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing

other control measures to ensure compliance.

2.c The following conveying and handling operations are included in this emissions unit and subject to the above referenced applicable rules/requirements, applicable emission limitations and control measures:

Hopper/feeder maximum capacity (1) =	600 tons/hr
Hopper/feeder maximum capacity (1) =	400 tons/hr
Conveying pts. maximum capacity (11) =	600 tons/hr
Conveying pts. maximum capacity (7) =	400 tons/hr
Conveying pts. maximum capacity (7) =	300 tons/hr
Conveying pts. maximum capacity (2) =	200 tons/hr
Conveying pts. maximum capacity (8) =	100 tons/hr
Conveying pts. maximum capacity (1) =	350 tons/hr
Transfer pts. maximum capacity (12) =	600 tons/hr
Transfer pts. maximum capacity (7) =	400 tons/hr
Transfer pts. maximum capacity (7) =	300 tons/hr
Transfer pts. maximum capacity (2) =	200 tons/hr
Transfer pts. maximum capacity (8) =	100 tons/hr
Transfer pts. maximum capacity (1) =	350 tons/hr

2.d The permittee shall install a wet suppression system on all hoppers/feeders, conveying points and transfer points. The wet suppression system shall be installed in accordance with the following compliance plan and schedule:

	Milestone	Completion Date
i.	Award contracts for emission control systems or process modifications; or, issue orders for the purchase of component parts to accomplish emission control by	12/1/00
ii.	Initiate on-site construction or installation of emission control equipment by	1/1/01
iii.	Complete on-site construction or installation of emission control equipment or process change by	3/01
iv.	Achieve final compliance by	4/01

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when each conveying and/or handling point is operating and when the weather conditions allow, for any visible fugitive particulate emissions from each conveying and/or handling operation. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. whether the emissions are representative of normal operations;

   b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;

   c. the total duration of any visible emission incident; and

   d. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from any screening operation and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emission Limitation
   Particulate emissions shall not exceed 3.87 lbs/hr.

   Applicable Compliance Method
   Compliance shall be demonstrated by summing the calculated hourly emission rate for each conveying or handling operation as determined by multiplying the maximum hourly production rate (application, 6/22/00) by the appropriate emission factor specified in

USEPA reference document AP-42, 11.19.2-2 (1/95) by the quantity of the specific operation:
Hopper/feeder 600 ton/hr * 0.00014 lb/ton * (1) = 0.08 lb/hr
Hopper/feeder 400 ton/hr * 0.00014 lb/ton * (1) = 0.0 6 lb/hr
Conveying pts. 600 ton/hr * 0.00014 lb/ton * (11) = 0.92 lb/hr
Conveying pts. 400 ton/hr * 0.00014 lb/ton * (7) = 0.39 lb/hr
Conveying pts. 300 ton/hr * 0.00014 lb/ton * (7) = 0.29 lb/hr
Conveying pts. 200 ton/hr * 0.00014 lb/ton * (2) = 0.06 lb/hr
Conveying pts. 100 ton/hr * 0.00014 lb/ton * (8) = 0.11 lb/hr
Conveying pts. 350 ton/hr * 0.00014 lb/ton * (1) = 0.05 lb/hr
Transfer pts. 600 ton/hr * 0.00014 lb/ton * (12) = 1.01 lb/hr
Transfer pts. 400 ton/hr * 0.00014 lb/ton * (7) = 0.39 lb/hr
Transfer pts. 300 ton/hr * 0.00014 lb/ton * (7) = 0.29 lb/hr
Transfer pts. 200 ton/hr * 0.00014 lb/ton * (2) = 0.06 lb/hr
Transfer pts. 100 ton/hr * 0.00014 lb/ton * (8) = 0.11 lb/hr
Transfer pts. 350 ton/hr * 0.00014 lb/ton * (1) = 0.05 lb/hr

b. Emission Limitation
Particulate emissions shall not exceed 10.1 tons/yr.

Applicable Compliance Method
Compliance shall be demonstrated by summing the calculated annual emission rate for each conveying and handling operation as determined by multiplying the maximum annual production rate (application, 6/22/00) by the appropriate emission factor specified in USEPA reference document AP-42, 11.19.2-2 (1/95), converting to tons and multiplying by the quantity of the specific operation:
Hopper/feeder 2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr
Hopper/feeder 2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr
Conveying pts. 2,700,000 * 0.00014 lb/ton * (11) * ton/2000 lb = 2.1 ton/yr
Conveying pts. 2,700,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Conveying pts. 2,628,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Conveying pts. 1,752,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.1 ton/yr
Conveying pts. 876,000 * 0.00014 lb/ton * (8) * ton/2000 lb = 0.5 ton/yr
Conveying pts. 2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr
Transfer pts. 2,700,000 * 0.00014 lb/ton * (12) * ton/2000 lb = 2.3 ton/yr
Transfer pts. 2,700,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Transfer pts. 2,628,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Transfer pts. 1,752,000 * 0.00014 lb/ton * (2) * ton/2000 lb = 0.25 ton/yr
Transfer pts. 876,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.1 ton/yr
Transfer pts. 2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr

c. Emission Limitation
Visible emissions of fugitive dust shall not exceed 10% opacity, except as provided by rule.

Applicable Compliance Limitation
The permittee shall conduct, or have conducted, emission testing for each screening operation in accordance with the following requirements:

i. The emission testing shall be conducted within 60 days of issuance of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the opacity limitation.

iii. The following test method shall be employed to demonstrate compliance with the 40 CFR Part 60 Subpart OOO: 40 CFR Part 60, Appendix A, Method 9. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Central District Office shall be permitted to witness the test(s), 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 from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where

warranted, with prior approval from the Central District Office.

F. Miscellaneous Requirements

1. The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
F007	Conveying and handling - hoppers/feeders, conveying pts., transfer pts.	Subpart OOO

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
3232 Alum Creek Drive
Columbus, Ohio 43207

Emissions Unit ID: **F007**

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	Applicable Emissions Limitations/Control Measures
F009 - Material loading	OAC rule 3745-31-05 (A)(3)	Particulate emissions shall not exceed 0.05 lb/hr and 0.4 ton per year. Visible emissions of fugitive dust shall not exceed 20% opacity as a 6 minute average, except as provided by rule. See II.A.2.a-b below.
	OAC rule 3745-17-11 (B)(1)	The emission limitation specified in this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05 (A)(3).

2. Additional Terms and Conditions

2.a The hourly and annual emission limitations were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limits.

2.b The permittee shall employ best available control measures during material loading operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. Compliance with OAC rule 3745-31-05 (A)(3) shall be

demonstrated by applying water at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

B. Operational Restrictions

1. Water shall be applied at all points necessary to ensure compliance with the visible emission limitations.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall perform daily checks, when any material loading is taking place and when the weather conditions allow, for any visible fugitive particulate emissions from material loading operations. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. whether the emissions are representative of normal operations;

   b. if the emissions are not representative of normal conditions, the cause of the abnormal emissions;

   c. the total duration of any visible emission incident; and

   d. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual reports which (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Central District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emission Limitation

Emissions Unit ID: **F009**

Particulate emissions shall not exceed 0.05 lb/hr.

Applicable Compliance Method
Compliance shall be demonstrated by summing the aggregate and limestone loading emissions. The aggregate emissions are found by multiplying the maximum capacity of 90 tons/hr (permit application, 6/22/00) by the emission factor of 0.0002 pound per hour (AP-42, 11.19.2-2, 1/95). The limestone emissions are found by multiplying the maximum capacity of 810 tons/hr (permit application, 6/22/00) by the emission factor of 0.000034 pound per hour (AP-42, 11.19.2-2, 1/95).

b. Emission Limitation

Particulate emissions shall not exceed 0.4 ton/yr.

Applicable Compliance Method
Compliance shall be demonstrated by summing the aggregate and limestone loading emissions. The aggregate emissions are found by multiplying the maximum capacity of 270,000 tons/yr (permit application, 6/22/00) by the emission factor of 0.0002 pound per hour (AP-42, 11.19.2-2, 1/95) by 1 ton/2000 pounds. The limestone emissions are found by multiplying the maximum capacity of 2,430,000 tons/yr (permit application, 6/22/00) by the emission factor of 0.000034 pound per hour (AP-42, 11.19.2-2, 1/95) by 1 ton/2000 pounds.

c. Emission Limitation

Visible emissions of fugitive dust shall not exceed 20% opacity as a 6 minute average, except as provided by rule.

Applicable Compliance Method
When necessary, compliance shall be demonstrated by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(3) using the methods and procedures specified in USEPA Reference 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F008 - 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)	No visible emissions except for one minute in any hour. 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).
Wind erosion from storage piles (see Section A.2.a for identification of storage piles)	OAC rule 3745-31-05 (A)(3)	No visible emissions except for one minute in any hour.

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

Particulate emissions from load-in, load-out and wind erosion shall not exceed 33.7 tons per year.

2. Additional Terms and Conditions

2.a The storage piles that are covered by this permit and subject to the above-mentioned requirements are all storage piles at this site.

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

2.c The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

2.d The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat with

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

2.e The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

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

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile on a daily basis.

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile on a daily basis.

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 on a weekly basis.

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

within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

6. The permittee may, upon receipt of written approval from the Central 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.

7. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

   c. the dates the control measures were implemented; and

   d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

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

D. Reporting Requirements

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

   a. each week 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. When necessary, 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"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

SIC CODE 2951 SCC CODE 30502506 EMISSIONS UNIT ID F004

EMISSIONS UNIT DESCRIPTION Material unloading

DATE INSTALLED 1/1/96

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.05	0.4	0.05	0.4
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR Part 60, Subpart OOO NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
See additional terms and conditions.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

3977.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

SIC CODE 2951 SCC CODE 30502003 EMISSIONS UNIT ID F005

EMISSIONS UNIT DESCRIPTION Crushing - 1-600 ton/hr (primary), 11-400 ton/hr (primary), 2-600 ton/hr (secondary), 2-400 ton/hr (tertiary)

DATE INSTALLED 1/1/96

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		3.54	5.0	3.54	5.0
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR Part 60, Subpart OOO NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
See additional terms and conditions.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

3977.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

SIC CODE 2951 SCC CODE 30502004 EMISSIONS UNIT ID F006

EMISSIONS UNIT DESCRIPTION Screening: 2-600 ton/hr (primary), 2-100 ton/hr (secondary), 2-150 ton/hr (secondary), 1-100 ton/hr (fines)

DATE INSTALLED 1/1/96

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		14.73	31.6	14.73	31.6
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR Part 60, Subpart OOO NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
See additional terms and conditions.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

3977.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

SIC CODE 2951 SCC CODE 30502006 EMISSIONS UNIT ID F007

EMISSIONS UNIT DESCRIPTION Conveying and handling - hopper/feeders, conveying pts., transfer pts.

DATE INSTALLED 1\1\96

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		3.87	10.1	3.87	10.1
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR Part 60, Subpart OOO NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
See additional terms and conditions.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

3977.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

SIC CODE 2951 SCC CODE 30502007 EMISSIONS UNIT ID F008

EMISSIONS UNIT DESCRIPTION Storage piles

DATE INSTALLED 1/1/96

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		9.23	33.7	9.23	33.7
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR Part 60, Subpart OOO NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
See additional terms and conditions.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

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NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

SIC CODE 2951 SCC CODE 305025506 EMISSIONS UNIT ID F009

EMISSIONS UNIT DESCRIPTION Material loading

DATE INSTALLED 1/1/96

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.05	0.4	0.05	0.4
PM_{10}					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? 40 CFR Part 60, Subpart OOO NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
See additional terms and conditions.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

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

AIR TOXICS MODELING PERFORMED*? _____ YES x NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit hard copy items to **Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	**Additional information** File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	☒	0000000**c**.wpd	☐	
Modeling form/results	☐	0000000**s**.wpd	☐	☐
PTI Application (complete or partial)*	☐	0000000**a**.wpd	☐	☐
BAT Study	☐	0000000**b**.wpd	☐	☐
Other/misc.	☐	0000000**t**.wpd	☐	☐

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

Shelly Materials is an aggregate operation located in Union County, Ostrander, Ohio. In the past, the site was occupied by multiple aggregate operations. Recently, Shelly Materials bought all other companies at the site or the companies simply decided to leave on their own. Either way, in 1996, Shelly Materials modified the equipment at the location and in many cases increased the throughput. This PTI is for all aggregate operations throughout the property.

Shelly Materials has installed an asphalt plant at the same site which has already been permitted.

Modeling was not performed for these emission units because Eng. Guide #69, question 4.1 specifies that fugitive sources do not need to be modeled.

The site is located in a non-Appendix A area therefore, OAC rule 17-07 and 17-08 do not apply. However, portions of the facility are subject to NSPS Subpart OOO.

Wet suppression in the form of water is required as BAT and water application system will be installed on the Tertiary Crushing, Primary, Secondary and Fines Screening, and the Hopper/Feeders. A compliance plan and schedule for the equipment is included where necessary.

All hourly and annual maximum capacities are from the application and based on either maximum rated capacity or physical limitations of the facility.

The calculations are categorized by the type of operation:

F004: Material unloading

Assumptions/emission factors:
Unloading aggregate = 0.0002 lb PM/ton of throughput (AP-42, 11.19.2-2, 1/95)

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

Unloading limestone = 0.000034 lb PM/ton of throughput (AP-42, 11.19.2-2, 1/95)

Aggregate unloading maximum capacity = 90 tons/hr

270,000 tons/yr

Limestone unloading maximum capacity = 810 tons/hr

2,430,000 tons/yr

Aggregate 90 tons/hr * 0.0002 lb/ton = 0.02 lb PM/hr

Limestone 810 tons/hr * 0.000034 lb/ton = 0.03 lb PM/hr

Aggregate 270,000 tons/yr * 0.0002 lb/ton * ton/2000 lb = 0.03 tons PM/yr

Limestone 2,430,000 tons/yr * 0.000034 lb/ton * ton/2000lb = 0.4 tons PM/yr

Totals:

0.02 + 0.03 = **0.05 lb PM/hr**

0.03 + 0.4 = **0.4 ton PM/yr**

F005: Crushing - 1-600 ton/hr 1°, 1-400 ton/hr 1°, 2-600 ton/hr 2°, 2-400 ton/hr 3°

Assumptions/emission factors:

Primary crushing = 0.0007 lb PM/ton of throughput (AP-42, 11.19.2-2, 1/95)

Secondary crushing = 0.0013 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)

Tertiary crushing (controlled) = 0.0016 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)

1° maximum capacity (1)= 600 tons/hr

1,350,000 tons/yr

1° maximum capacity (1)= 400 tons/hr

1,350,000 tons/yr

2° maximum capacity (2)= 600 tons/hr

1,350,000 tons/yr

3° maximum capacity (2)= 400 tons/hr

1,350,000 tons/yr

Calculations reflect this by using the highest emission factors for the tons/yr emission rate.

1° 600 ton/hr * 0.0007 lb/ton = 0.42 lb/hr

1,350,000 tons/yr * 0.0007 lb/ton * ton/2000 lb= 0.5 tons/yr

1° 400 ton/hr * 0.0007 lb/ton = 0.28 lb/hr

1,350,000 tons/yr * 0.0007 lb/ton * ton/2000 lb = 0.5 tons/yr

2° 600 ton/hr * 0.0013 lb/ton * (2) = 1.56 lb/hr

1,350,000 tons/yr * 0.0013 lb/ton * ton/2000 lb * (2) = 1.8 tons/yr

3° 400 ton/hr * 0.0016 lb/ton * (2) =1.28 lb/hr

1,350,000 tons/yr * 0.0016 lb/ton * ton/2000 lb * (2) = 2.2tons/yr

Totals: 0.42 + 0.28 +1.56 + 1.28 = **3.54 lbs PM/hr**

0.5 + 0.5 + 1.8 + 2.2= **5.0 tons PM/yr**

F006: Screening - 2-600 ton/hr 1°, 2-100 ton/hr 2°, 2-150 ton/hr 2°, 1-100 ton/hr (fines)

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

Assumptions/emission factors:
Primary screening (controlled) = 0.0084 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)
Secondary screening (controlled) = 0.0084 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)
Fines screening (controlled) = 0.0036 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)

1º maximum capacity (2)=	600 tons/hr	
		1,350,000 tons/yr
2º maximum capacity (2)=	100 tons/hr	
		1,350,000 tons/yr
2º maximum capacity (2)=	150 tons/hr	
		1,350,000 tons/yr
Fines maximum capacity (1)=	100 tons/hr	
		540,000 tons/yr

Calculations reflect this by using the highest emission factors for the tons/yr emission rate.

1º 600 ton/hr * 0.0084 lb/ton * (2) = 10.08 lb/hr
1,350,000 tons/yr * 0.0084 lb/ton * ton/2000 lb * (2) = 11.3 tons/yr
2º 100 ton/hr * 0.0084 lb/ton * (2) = 1.68 lb/hr
876,000 tons/yr * 0.0084 lb/ton * ton/2000 lb * (2) = 7.4 tons/yr
2º 150 ton/hr * 0.0084 lb/ton * (2) = 2.52 lb/hr
1,314,000 tons/yr * 0.0084 lb/ton * ton/2000 lb * (2) = 11.0 tons/yr
fines 100 ton/hr * 0.0036 lb/ton * (2) = 0.72 lb/hr
540,000 tons/yr * 0.0036 lb/ton * ton/2000 lb * (2) = 1.9 tons/yr

Totals: 10.08 + 1.68 + 2.52 + 0.72 = **14.73 lbs PM/hr**
11.3 + 7.4 + 11.0 + 1.9 = **31.6 tons PM/yr**

F007: Conveying and handling - 1-600 ton/hr hopper/feeder, 1-400 ton/hr hopper/feeder, 11-600 ton/hr conveying pts., 7-400 ton/hr conveying pts.,7-300 ton/hr conveying pts., 2-200 ton/hr conveying pts., 8-100 ton/hr conveying pts., 1-350 ton/hr conveying pts., 12-600 ton/hr transfer pts., 7-400 ton/hr transfer pts., 7-300 ton/hr transfer pts., 2-200 ton/hr transfer pts., 8-100 ton/hr transfer pts., 1-350 ton/hr transfer pts.

Assumptions/emission factors:
Hopper/feeder (controlled) = 0.00014 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)
Conveying pts.(controlled) = 0.00014 lb PM/ton of throughput (AP-42, 8.19.2-3, B.U., 1/91)
Transfer pts.(controlled) = 0.00014 lb PM/ton of throughput (AP-42, 11.19.2, B.U., 5/94)
Hopper/feeder maximum capacity (1) = 600 tons/hr
Hopper/feeder maximum capacity (1) = 400 tons/hr
Conveying pts. maximum capacity (11) = 600 tons/hr
Conveying pts. maximum capacity (7) = 400 tons/hr
Conveying pts. maximum capacity (7) = 300 tons/hr
Conveying pts. maximum capacity (2) = 200 tons/hr
Conveying pts. maximum capacity (8) = 100 tons/hr
Conveying pts. maximum capacity (1) = 350 tons/hr
Transfer pts. maximum capacity (12) = 600 tons/hr

Emissions Unit ID: **F008**

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Transfer pts. maximum capacity (7) = 400 tons/hr
Transfer pts. maximum capacity (7) = 300 tons/hr
Transfer pts. maximum capacity (2) = 200 tons/hr
Transfer pts. maximum capacity (8) = 100 tons/hr
Transfer pts. maximum capacity (1) = 350 tons/hr

Maximum capacity on an annual basis = 2,700,000 tons per year for each type of equipment unless the hourly capacity times 8760 hrs/yr is less than 2,700,000 tons.

Calculations:

Hopper/feeder 600 ton/hr * 0.00014 lb/ton * (1) = 0.08 lb/hr
2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr
Hopper/feeder 400 ton/hr * 0.00014 lb/ton * (1) = 0.0 6 lb/hr
2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr
Conveying pts. 600 ton/hr * 0.00014 lb/ton * (11) = 0.92 lb/hr
2,700,000 * 0.00014 lb/ton * (11) * ton/2000 lb = 2.1 ton/yr
Conveying pts. 400 ton/hr * 0.00014 lb/ton * (7) = 0.39 lb/hr
2,700,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Conveying pts. 300 ton/hr * 0.00014 lb/ton * (7) = 0.29 lb/hr
2,628,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Conveying pts. 200 ton/hr * 0.00014 lb/ton * (2) = 0.06 lb/hr
1,752,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.1 ton/yr
Conveying pts. 100 ton/hr * 0.00014 lb/ton * (8) = 0.11 lb/hr
876,000 * 0.00014 lb/ton * (8) * ton/2000 lb = 0.5 ton/yr
Conveying pts. 350 ton/hr * 0.00014 lb/ton * (1) = 0.05 lb/hr
2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr
Transfer pts. 600 ton/hr * 0.00014 lb/ton * (12) = 1.01 lb/hr
2,700,000 * 0.00014 lb/ton * (12) * ton/2000 lb = 2.3 ton/yr
Transfer pts. 400 ton/hr * 0.00014 lb/ton * (7) = 0.39 lb/hr
2,700,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Transfer pts. 300 ton/hr * 0.00014 lb/ton * (7) = 0.29 lb/hr
2,628,000 * 0.00014 lb/ton * (7) * ton/2000 lb = 1.3 ton/yr
Transfer pts. 200 ton/hr * 0.00014 lb/ton * (2) = 0.06 lb/hr
1,752,000 * 0.00014 lb/ton * (2) * ton/2000 lb = 0.25 ton/yr
Transfer pts. 100 ton/hr * 0.00014 lb/ton * (8) = 0.11 lb/hr
876,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.1 ton/yr
Transfer pts. 350 ton/hr * 0.00014 lb/ton * (1) = 0.05 lb/hr
2,700,000 * 0.00014 lb/ton * (1) * ton/2000 lb = 0.2 ton/yr

Totals:
0.08 + 0.06 + 0.92 + 0.39 + 0.29 + 0.06 + 0.11 + 0.05 + 1.01 + 0.39 + 0.29 + 0.06 + 0.11 + 0.05 = **3.87 lbs PM/hr**

0.2 + 0.2 + 2.1+ 1.3 + 1.3 + 0.1 + 0.5 + 0.2 + 2.3 + 1.3 + 0.25 + 0.1 +0.2 = **10.1 tons PM/yr**

NEW SOURCE REVIEW FORM B

PTI Number: 01-08208 Facility ID: 0180000178

FACILITY NAME Shelly Materials

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Emissions Unit ID: **F008**

F008: Storage piles

Wind erosion:

Assumptions/emission factors:
s = 7.0% (Application, 6/22/00)
p = 140 (Control of Open Fugitive Dust Sources, 1999)
f = 30% (Control of Open Fugitive Dust Sources, 1999)

Calculations:
E = 1.7*(s/1.5)*[(365-p)/235]*(f/15)
E = 1.7*(7/1.5)*[(365-140)/235]*(30/15)
E = 1.53 lb/day/acre

Area of stockpiles:
Pile surface area = 92.5 acres

Stockpile wind erosion emissions:
1.53 lb/day/acre * 92.5 acres * day/24 hrs = 5.90 lbs/hr
1.53 lb/day/acre * 92.5 acres * 365 day/yr * ton/2000 lbs = 28.8 tons/yr

Load-in and Load-out:

Assumptions/emission factors:
k = 0.74 (AP-42, 13.2.4-3, 1/95)
U = 8.7 mph (Control of Open Fugitive Dust Sources, 1999)
M = 4.0% (application, 6/00)

Calculations:
$E = k(0.0032)[(U/5)^{1.3}/(M/2)^{1.4}]$
$E = 0.74(0.0032)[(8.7/5)^{1.3}/(4.0/2)^{1.4}]$
E = 0.0018 pound per ton loaded or unloaded

Maximum load-in rate = 900 tons/hr
2,700,000 tons/yr

Maximum load-out rate = 900 tons/hr
2,700,000 tons/yr

Loading emissions:
0.0018 lb/ton * 1800 tons/hr = 3.24
0.0018 lb/ton * 5,400,000 tons/hr * ton/2000 = 4.9 tons/yr

Total Stockpile Emissions = **5.9 + 3.24 = 9.23 lbs PM/hr**
28.8 + 4.9 = 33.7 tons PM/yr

F009: Material loading

50 **NEW SC**
PTI Num
FACILIT

Emissions Unit ID: **F008**

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

Assumptions/emission factors:
Loading aggregate = 0.0002 lb PM/ton of throughput (AP-42, 11.19.2-2, 1/95)
Loading limestone = 0.000034 lb PM/ton of throughput (AP-42, 11.19.2-2, 1/95)
Aggregate loading maximum capacity = 90 tons/hr
270,000 tons/yr
Limestone loading maximum capacity = 810 tons/hr
2,430,000 tons/yr

Aggregate 90 tons/hr * 0.0002 lb/ton = 0.02 lb PM/hr
Limestone 810 tons/hr * 0.000034 lb/ton = 0.03 lb PM/hr

Aggregate 270,000 tons/yr * 0.0002 lb/ton * ton/2000 lb = 0.03 tons PM/yr
Limestone 2,430,000 tons/yr * 0.000034 lb/ton * ton/2000lb = 0.4 tons PM/yr

Totals:
0.02 + 0.03 = **0.05 lb PM/hr**
0.03 + 0.4 = **0.4 ton PM/yr**

If you have any questions, feel free to give me a call at 8-3811.

Thank you,

Adam Ward
DAPC/CDO/Ohio EPA

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

☐ **Synthetic Minor Determination and/or** ☐ **Netting Determination**
Permit To Install ENTER PTI NUMBER HERE

A. Source Description

B. Facility Emissions and Attainment Status

C. Source Emissions

D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:

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5 **NEW SC**

PTI Num

FACILIT

Emissions Unit ID: **F008**

FACILITY DESCRIPTION Conveyors, screens and crushers. CITY/TWP Ostrander

NONE

Please complete:

SUMMARY (for informational purposes only)

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
PM	81.3