



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 16-02335

DATE: 12/16/2003

LaFarge North America Shalersville Plant
Rick Cole
300 E Joppa Rd Suite 200
Towson, MD 21286

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

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

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

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

Sincerely,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

ARAQMD



**Permit To Install
Terms and Conditions**

**Issue Date: 12/16/2003
Effective Date: 12/16/2003**

FINAL PERMIT TO INSTALL 16-02335

Application Number: 16-02335
APS Premise Number: 1667000072
Permit Fee: **\$1300**
Name of Facility: LaFarge North America Shalersville Plant
Person to Contact: Rick Cole
Address: 300 E Joppa Rd Suite 200
Towson, MD 21286

Location of proposed air contaminant source(s) [emissions unit(s)]:
**3700 Beck Rd
Shalersville, Ohio**

Description of proposed emissions unit(s):
Sand and Gravel Operation, Replaces PTI 16-01948 Issued 9/29/99.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping 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 record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

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Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

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14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
particulate	98.4

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>
600 TPH aggregate processing/crushing plant with washing system	OAC rule 3745-31-05(A)(3)
Crushing and screening operations - primary jaw crusher, primary screen, and secondary cone crusher	Material handling - conveyors, transfer points (4 belt conveyors), front-end loading onto grizzly feeder OAC rule 3745-31-05(A)(3) 40 CFR Part 60 Subpart OOO

Applicable Emissions
Limitations/Control Measures

The requirements on this rule also include compliance with the requirements of 40 CFR Part 60 Subpart OOO.

15.98 tpy particulate emissions (PE)
See A.2.a below.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Section A.2.b below.)

No permittee shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.(see Section A.2.g).

No permittee shall cause to be discharged into the atmosphere from any screening operation any fugitive emissions which exhibit greater than 10 percent opacity (see Section A.2.g).

No permittee shall cause to be discharged into the atmosphere any visible emissions from wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding

mill, or
storage bin (see Section A.2.g).

10% opacity as a 3-minute average
(front-end loading onto grizzly feeder)

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See Section A.2.b below.)

No permittee shall cause to be discharged into the atmosphere from any transfer point any fugitive emissions which exhibit greater than 10 percent opacity (see Section A.2.g).

No permittee shall cause to be discharged into the atmosphere any visible emissions from wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill, or storage bin (see Section A.2.g).

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

40 CFR Part 60 Subpart OOO

2. Additional Terms and Conditions

2.a The 15.98 tpy PE limitation was established for PTI purposes to reflect the potential to emit for this emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

2.b The permittee shall employ reasonably available control measures to minimize or eliminate visible emissions of fugitive dust from emissions unit F001. If the inherent moisture in the sand and gravel is not sufficient to comply with the opacity restrictions of this permit, the permittee shall install equipment to apply water, or any other suitable dust suppressant, at appropriate locations in the production line.

2.c The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

- Front end loader - dump hopper (600TPH)
- Dump hopper - grizzly feeder (600 TPH)
- Grizzly feeder - belt (4" plus material) (9TPH)
- Grizzly feeder - primary crusher
- Grizzly feeder - C1 belt (591 TPH)
- C1 belt - C2 belt (591 TPH)
- Secondary crusher - C1 belt
- C2 belt - primary screen (591 TPH)
- Primary screen - C5 belt (515 TPH)
- Primary screen - C3 belt (37 TPH)
- C3 belt - C4 belt (37 TPH)

2.d The permittee shall employ best 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:

material handling operation(s)

control measure(s)

front-end loading onto grizzly feeder

maintain a low drop height and a high moisture content for the material being processed

all conveyors and transfer points maintain a high moisture content for the material being processed or employ wet screening

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

- 2.e 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.
- 2.f Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.g Compliance with the opacity limitations shall have been achieved on and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup.

B. Operational Restrictions

None

C. Monitoring and/or Record keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the crushing and screening 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. The color of the emissions;
- b. Whether the emissions are representative of normal operations;
- c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. The total duration of any visible emission incident; and,
 - e. Any corrective actions taken to eliminate the visible emissions.
2. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:
- | <u>material handling operation(s)</u> | <u>minimum inspection frequency</u> |
|---------------------------------------|-------------------------------------|
| all | daily |
3. The above-mentioned inspections shall be performed during representative, normal operating conditions.
4. The permittee may, upon receipt of written approval from the 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.
5. The permittee shall maintain records of the following information:
- a. The date and reason any required inspection was not performed;
 - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):
 - c. The dates the control measure(s) was (were) implemented; and,
 - d. On a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 5.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar 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 in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the crushing and screening operations serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR Part 60, Subpart OOO, including the reports of opacity observations made using Method 9 to demonstrate compliance with this subpart.
5. The permittee of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to the no visible emission limit and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit and the emission test requirements of Section 60.11 of 40 CFR Part 60, subpart A and 40 CFR Part 60, subpart OOO. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit.
6. The permittee shall submit the following information for each piece of equipment that is replaced by a piece of equipment of equal or smaller size having the same function as the existing facility:
 - a. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
 - i. The rated capacity in tons per hour of the existing facility being replaced, and,
 - ii. The rated capacity in tons per hour of the replacement equipment;

- b. For a screening operation:
 - i. The total surface area of the top screen of the existing screening operation being replaced, and,
 - ii. The total surface area of the top screen of the replacement screening operation;
- c. For a conveyor belt:
 - i. The width of the existing belt being replaced, and
 - ii. The width of the replacement conveyor belt.

The notification shall be submitted within 30 days after equipment replacement.

7. The permittee shall submit a notification of the actual date of initial startup of each affected facility to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

E. Testing Requirements

- 1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 90 days after startup of the emissions unit.
 - b. The emission testing shall be conducted to demonstrate compliance with opacity emission limitations for the crushers, screener, and the transfer points listed in Section A.2.c of these terms and conditions with an emission limitation of 10% opacity and subject to 40 CFR Part 60, subpart OOO. The emission testing is not required for wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin, or for screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.
 - c. The following test method(s) shall be employed to demonstrate compliance: for

Emissions Unit ID: **F001**

particulate emissions Method 9 of 40 CFR Part 60, Appendix A and the procedures in Section 60.11 of 40 CFR Part 60, subpart A, with the following additions:

- i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
 - ii. 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.
 - iii. 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 to be 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.
- d. When demonstrating compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under Section 60.672(c) of 40 CFR Part 60, subpart OOO, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
- i. There are no individual readings greater than 15 percent opacity; and
 - ii. There are no more than 3 readings of 15 percent for the 1-hour period.
- e. When demonstrating compliance with the fugitive emissions standard for the primary screening operation, the surge bin, and the transfer points listed in Section A.2.c of these terms and conditions with an emission limitation of 10% opacity and subject to 40 CFR Part 60, subpart OOO, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
- i. There are no individual readings greater than 10 percent opacity; and
 - ii. There are no more than 3 readings of 10 percent for the 1-hour period.
- f. 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 appropriate Ohio EPA District Office or local air agency.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.
4. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.
5. The initial performance tests required in Sections E.1 through E.4 of these terms and conditions is not required for wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill, or storage bin.
6. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

a. **Emission Limitation:**

15.98 tpy particulate emissions

Applicable Compliance Method:

Total Emissions = \sum crushing + screening + transfer points

Crushing: for primary crusher, multiply the AP-42 (9/95, Table 11.19.2-2) emission factor of 0.0007 lb PE/ton by the maximum process weight rate and divide the result by 2,000.
for secondary crusher, multiply the AP-42 (9/95, Table 11.19.2-2) emission factor of 0.0012 lb PE/ton by the maximum process weight rate and divide the result by 2,000.

Screening: for each screen, multiply the AP-42 (9/95, Table 11.19.2-2) emission factor of 0.0018 lb PE/ton by the maximum process weight rate and divide the result by 2,000.

Conveyor transfer points: for each transfer point, multiply the AP-42 (9/95, Table 11.19.2-2) PE emission factor of $2.1 \times (4.8 \times 10^{-5} \text{ lb PM-10/ton})$ by the maximum process weight rate and divide the result by 2,000.

b. **Emission Limitation:**

10% opacity as a three-minute average
(front-end loading onto grizzly feeder)

Applicable Compliance Method:

OAC rule 3745-17-03(B)(3)

c. **Emission Limitation:**

15% opacity for crushing operations
10% opacity for screening operations
10% opacity for material handling operations

Applicable Compliance Method:

Compliance shall be demonstrated using US EPA Method 9 of 40 CFR Part 60, Appendix A and the procedures in 40 CFR Part 60, Subpart OOO as specified in sections E.1 through E.5 above.

d. **Emission Limitation:**

No visible particulate emissions

Applicable Compliance Method:

Method 22 of 40 CFR Part 60, Appendix A

F. **Miscellaneous Requirements**

None

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LaFar

PTI A

Issued: 12/16/2003

Emissions Unit ID: **F001**

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>
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)	2.45 tpy particulate emissions (combined emissions from load-in, load-out, and wind erosion from all storage piles) See A.2.g below. 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)

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:

Surge Pile 2 ½"
Surge Pile 1" (#1)
Surge Pile 1" (#2)

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the load-in material(s) with sufficient dust suppression chemicals via the spray nozzles on the load-in conveyor to control dust emissions during both load-in and load-out operations to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintain a low pile height as possible, and treat each storage pile with water and/or any other suitable dust suppression chemicals via the spray tower 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 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

LaFarge North America Shalersville Plant

PTI Application: 16-02225

Issued

Facility ID: 1667000072

Emissions Unit ID: **F002**

and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

- 2.g** The 2.45 tpy particulate limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

B. Operational Restrictions

None

C. Monitoring and/or Record keeping Requirements

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
Surge Pile 2 ½"	daily
Surge Pile 1" (#1)	daily
Surge Pile 1" (#2)	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>
Surge Pile 2 ½"	daily
Surge Pile 1" (#1)	daily
Surge Pile 1" (#2)	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>
Surge Pile 2 ½"	daily
Surge Pile 1" (#1)	daily
Surge Pile 1" (#2)	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 wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

Emissions Unit ID: **F002**

6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
7. The permittee shall maintain records of the following information:
 - a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. The dates the control measures were implemented; and
 - d. On a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

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

D. Reporting Requirements

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

E. Testing Requirements

1. Compliance with the 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.

2. 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):

Emission Limitation:

2.45 tpy particulate emissions

Applicable Compliance Method:

Emissions = Material Handling + Wind Erosion

Material Handling: AP-42 (1/95) Section 12.2.4 Equation 1

$$E = k(0.0032) * (U/5)^{1.3} / (M/2)^{1.4} = 0.001236 \text{ \#/ton}$$

Multiply the derived emission factor by the maximum loaded amount of material per year (3,040,000 tons/yr load in) and divide by 2000 to obtain material handling emissions.

Wind Erosion: USEPA'S Control of Open Fugitive Dust Sources (9/88)

$$E = 1.7 * (s/1.5) * [(365 - p)/235] * (f/15) = 4.15 \text{ lbs /day/acre}$$

Multiply the derived emissions factor by the maximum acreage (0.76) by 365 days per year and divide by 2000 to convert to tons.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
unpaved roadways and parking areas	OAC rule 3745-31-05(A)(3)	79.96 tpy particulate emissions (PE) See A.2.a below. No visible particulate emissions except for 3 minutes during any 60-minute period Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.c through A.2.h)

2. Additional Terms and Conditions

2.a The 79.96 tpy PE limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

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:

entrance and stockpile

unpaved parking areas:

none

- 2.c** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals 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 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 an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.e** 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 using appropriate dust control measures 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 a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
- 2.f** 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.g** 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.h** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available

technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

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

<u>unpaved roadways</u>	<u>minimum inspection frequency</u>
entrance and stockpile	daily
<u>unpaved parking areas</u>	<u>minimum inspection frequency</u>
none	n/a

- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- 3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- 4. The permittee shall maintain records of the following information:
 - a. The date and reason any required inspection was not performed, including those

inspections that were not performed due to snow and/or ice cover or precipitation;

- b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. The dates the control measures were implemented; and,
- d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

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

E. Testing Requirements

1. Compliance with the emission limitation for the unpaved roadways and parking areas 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)(d) of OAC rule 3745-17-03.
2. 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):

Emission Limitation:

79.96 tpy particulate emissions

Applicable Compliance Method:

Multiply the AP-42 (9/98) (Chapter 13.2.2, Equation 2) derived emission factor of 4.44 lb PE per vehicle miles traveled by the total number of vehicle miles traveled per year (36,000) and divide by 2000 to convert to tons..

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 16-02335 Facility ID: 1667000072

FACILITY NAME LaFarge North America Shalersville Plant

FACILITY DESCRIPTION Sand and Gravel Operation, Replaces PTI 16-01948 Issued 9/29/99. CITY/TWP Shalersville

SIC CODE 1442 SCC CODE 3-05-025-01 EMISSIONS UNIT ID F001

EMISSIONS UNIT DESCRIPTION Sand and Gravel Plant

DATE INSTALLED 11/04

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					15.98
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? **ooo** PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

water spray, compliance with subpart ooo

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 _____ NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 16-02335 Facility ID: 1667000072

FACILITY NAME LaFarge North America Shalersville Plant

FACILITY DESCRIPTION Sand and Gravel Operation, Replaces PTI 16-01948 Issued 9/29/99. CITY/TWP Shalersville

SIC CODE 1442 SCC CODE 3-05-025-04 EMISSIONS UNIT ID F003

EMISSIONS UNIT DESCRIPTION Plant Roadways

DATE INSTALLED 11/04

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					
PM ₁₀					79.96
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? **000** PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

water spray, compliance with 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 containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES _____ NO

IDENTIFY THE AIR CONTAMINANTS: _____