



State of Ohio Environmental Protection Agency

RE: PERMIT TO INSTALL DIRECT FINAL TRUMBULL COUNTY CERTIFIED MAIL

Street Address:

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

Mailing Address:
Lazarus Gov.
Center

Application No: 02-2784

DATE: April 28, 1999

Lafarge - Lordstown Steel Slag Plant
Richard Cole
300 E Joppa Road
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, buy it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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



Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

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

cc: USEPA
DAPC, NEDO
Mahoning-Trumbull APC

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

**Terms and
Conditions**

Issue Date: April 28, 1999
Effective Date: April 28, 1999

DIRECT FINAL PERMIT TO INSTALL 02-2784

Application Number: 02-2784
APS Premise Number: 0278080209
Permit Fee: **\$1200.00**
Name of Facility: Lafarge - Lordstown Steel Slag Plant
Person to Contact: Richard Cole
Address: 300 E Joppa Road
Towson, MD 21286

Location of proposed air contaminant source(s) [emissions unit(s)]:
6205 Newton Falls-Bailey Road SW
Warren, OHIO

Description of proposed emissions unit(s):
**INSTALLATION OF A STEEL SLAG PROCESSING PLANT INCLUDING SLAG SCREENING,
TRANSFER, CONVEYING AND SLAG STORAGE PILES.**

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

Lafarge - Lordstown Steel Slag Plant

PTI Application: **02-2784**

April 28, 1999

Facility ID: **0278080209**

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	15.54
PM ₁₀	7.27

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>
Steel Slag Storage Piles (F002)	OAC rule 3745-31-05 OAC rule 3745-17-07* OAC rule 3745-17-08*	PM: 9.44 TPY PM ₁₀ : 4.47 TPY (See 2.a.i thru 2.a.vi)

* Less stringent than BAT

2. Additional Terms and Conditions

Emission Limitations and Control Requirements

a. Steel Slag Storage Piles (F002)

- i. There shall be no visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.
- ii. Lafarge 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. Lafarge shall treat the load-in and load-out material(s) with water and/or any other suitable dust suppression chemicals, as needed, to ensure compliance. Nothing in this paragraph shall prohibit Lafarge from employing other control measures to ensure compliance.
- iii. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if Lafarge 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.

- iv. Lafarge 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. Lafarge shall treat each storage pile with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit Lafarge from employing other control measures to ensure compliance.
- v. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if Lafarge 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.
- vi. 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. Steel Slag Storage Piles (F002)

- a. Except as otherwise provided in this section, Lafarge 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>
------------------------------------	---

All

Weekly

- b. Except as otherwise provided in this section, Lafarge 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>
------------------------------------	--

All

Weekly

- c. Except as otherwise provided in this section, Lafarge 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>
------------------------------------	--

All

Weekly

- d. 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.
- e. 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.
- f. Lafarge may, upon receipt of written approval from the Ohio EPA Northeast 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.
- g. Lafarge shall maintain records of the following information:
 - i. 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;
 - ii. the date of each inspection where it was determined by Lafarge that it was necessary to implement the control measures;
 - iii. the dates the control measures were implemented; and,
 - iv. 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 C.1.g.iv. shall be kept separately for (a) the load-in operations, (b) the load-out operations, and (c) 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. Lafarge 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. Lafarge shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA Northeast District Office; and,
 - b. quarterly written reports of (i) any deviations (excursions) from the required inspection frequencies and/or control measure implementations that have been detected by the monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA Northeast District Office. If no deviations occurred during a calendar quarter, Lafarge 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.

E. Testing Requirements

1. Compliance with the permit allowable mass emissions shall be determined in accordance with the following method:
 - a. Steel Slag Piles (F002)

Emission Limits

9.44 tons per year particulate matter and 4.47 tons per year PM₁₀ particulate

Applicable Compliance Method

Compliance shall be based on annual throughput and emission factors outlined in AP-42, Sections 13.2.4 (Fifth Edition) and 8.19.1 (Fourth Edition).
2. Compliance with the visible emission limitation in Section A.2.a.i. of these terms and conditions shall be determined in accordance with the following method:
 - a. Steel Slag Storage Piles (F002)

Emission Limitation

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

Lafarge - Lordstown Steel Slag Plant

PTI Application: 02 2784

April :

Facility ID: 0278080209

Emissions Unit ID: F002

Applicable Compliance Method

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.

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

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>
Steel Slag Processing Plant (F003) (Replacement for Existing Portable Steel Slag Plant F001)	OAC rule 3745-31-05 OAC rule 3745-17-07* OAC rule 3745-17-08*	PM: 1.39 pounds/hour and 6.1 TPY PM ₁₀ : 0.64 pounds/hour and 2.8 TPY (See 2.a.i and 2.a.ii)

* Less stringent than BAT

2. Additional Terms and Conditions

Introduction

This is a permit to install for a banked steel slag processing facility including slag storage piles (F002) and a slag processing plant (F003). The slag processing plant includes batch loading and feeding of the slag processing plant, batch and continuous drop operations, conveying, slag screening, iron removal by magnetic separation and product loading into storage.

Emission Limitations and Control Requirements

a. Steel Slag Processing Plant (F003)

- i. A wet suppression system capable of achieving a control efficiency of 90% shall be employed to minimize or eliminate visible particulate emissions of fugitive

dust generated by the steel slag processing plant. The wet suppression system shall be capable of using chemical dust suppressants for fugitive dust control. Spray nozzles shall be installed at the slag feed hopper, slag screens, batch and continuous drop transfer points or conveyors, as needed, to minimize or eliminate visible particulate emissions of fugitive dust generated during slag processing.

- ii. Visible particulate emissions from operations at the steel slag processing plant including slag feeding, screening, drop transfer, magnetic separation and conveying shall not exceed ten (10) percent opacity as a six-minute average.

B. Operational Restrictions

None.

C. Monitoring and/or Recordkeeping Requirements

None.

D. Reporting Requirements

1. Quarterly written reports of (i) any deviations (excursions) from the emissions limitations and/or visible emissions specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA Northeast District Office. If no deviations occurred during a calendar quarter, Lafarge 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. None

E. Testing Requirements

1. Compliance with the permit allowable mass emissions shall be determined in accordance with the following method:
 - a. Steel Slag Processing Plant (F003)

Emission Limits

1.39 pounds per hour particulate matter and 0.64 pounds per hour PM₁₀ particulate

Lafarge - Lordstown Steel Slag Plant

PTI Application: 02-0784

April 1, 2014

Facility ID: 0278080209

Emissions Unit ID: F003

Applicable Compliance Method

outlined To determine the actual hourly emission rate for particulate matter, emission factors in AP-42, Sections 13.2.4 (Fifth Edition) and 11.19.2 (Fourth Edition).

Emission Limits

6.1 tons per year particulate matter and 2.8 tons per year PM₁₀ particulate

Applicable Compliance Method

Compliance shall be based on hours of operation and emission factors outlined in AP-42, Sections 13.2.4 (Fifth Edition) and 11.19.2 (Fourth Edition).

2. Compliance with the visible emission limitation in Section A.2.a.ii. of these terms and conditions shall be determined in accordance with the following method:

a. Steel Slag Processing Plant (F003)

Emission Limitation

Visible particulate emissions from operations at the steel slag processing plant shall not exceed ten (10) percent opacity as a six-minute average.

Applicable Compliance Method

OAC rule 3745-17-03(B)(3) for the opacity of visible particulate emissions.

F. Miscellaneous Requirements

None.