

SIP CONSTRUCTION & OPERATING PERMIT AND TITLE V 502(b)10 CHANGE APPLICATION REVIEW

Facility Name: **Lafarge Building Materials, Inc. – Atlanta Plant**

City: Atlanta

County: Fulton

AIRS #: 04-13-121 00401

Application #: 17596

Date SIP Application Received: August 13, 2007

Date Title V Application Received: August 13, 2007

Permit No: 3241-121-0401-V-04-1

Program	Review Engineers	Review Managers
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TOXICS	N/a	N/a

Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and operate and Section 502(b)(10) change to the Part 70 source. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1), 391-3-1-.03(2), and 391-3-1-.03(10). of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the permit and is presented in the same general order as the permit amendment. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

I. Facility Description

A. Existing Permits

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
3241-121-0401-V-04-0	December 9, 2003	X	

Table 2: Comments on Specific Permits

Permit Number	Comments
3241-121-0401-V-04-0	Initial Title V Permit

B. Regulatory Status

1. PSD/NSR/RACT

The facility is major under PSD regulations as its emissions of particulate matter (and PM-10), sulfur dioxide, and nitrogen oxides all exceed the applicable thresholds. The potential emissions of each of these pollutants have been reported to be greater than 250 tons per year in the Title V application.

2. Title V Major Source Status by Pollutant

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓	✓		
PM ₁₀	✓	✓		
SO ₂	✓	✓		
VOC	✓			✓
NO _x	✓	✓		
CO	✓			✓
TRS	✓			✓
H ₂ S	✓			✓
Individual	✓			✓
Total HAPs	✓			✓

II. Proposed Modification

A. Description of Modification

Lafarge has proposed to add a new cement packing line (EU630) to be located in the existing packhouse building that will be controlled by a new baghouse (D92). This permit amendment request also includes previous exempt from permitting activities such as the addition of a new cement unloading project (D85 – D88) modified in May 2004, new pigment silos (D89 & D90) modified in October 2004, and a new Slag unloading system (D91) modified in February 2006.

B. Emissions Change

Table 4: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	Yes	6.83	6.83
PM ₁₀	Yes	6.83	6.83
SO ₂			
VOC			
NO _x			
CO			
TRS			
H ₂ S			
Individual HAP			
Total HAPs			

PM Emissions Increase

Packing Line Production Rate: 56 tons/hr

Hours of Operation: 8,760 year

Assuming Baghouse 99% control efficiency

Using Rule e: $E = 55 P^{0.11} - 40$; for process input weight rate above 30 tons/hour.

Where, E = emission rate in pounds per hour and
P = process input weight rate in tons per hour.

$$E = 55 \times (56)^{(0.11)} - 40$$

$$E = 45.6 \text{ lbs/hour}$$

$$E = (45.6 \text{ lbs/hour}) \times (8,760 \text{ hours/yr}) \times (1 \text{ ton}/2,000 \text{ lbs})$$

$$= 199.9 \text{ tons/yr}$$

$$= (199.9 \text{ tons/yr}) \times (1 - 0.99)$$

$$= 1.999 \text{ tons/yr}$$

Other Previously modified increase

<i>Cement unloading project (D85 – D88) modified in May 2004</i>	2.80 tons/yr
<i>Pigment silos (D89 & D90) modified in October 2004</i>	1.64 tons/yr
<i>Slag unloading system (D91) modified in February 2006.</i>	0.39 tons/yr

Total inclusive modification PM increase **6.83 tons/yr**

C. Title I Modification

- PSD/NSR Applicability

Due to low emission increase, there are no PSD/NSR applicability issues.

- NSPS Modification

This modification is new construction under NSPS.

- NESHAP Modification

There are no applicable NESHAPs as the result of this modification.

III. Facility Wide Requirements

- A. Emission and Operating Caps

Not applicable.

- B. Applicable Rules and Regulations

Not applicable.

- C. Compliance Status

The facility is operating in compliance.

- D. Operational Flexibility

Not applicable.

- E. Permit Conditions

Not applicable.

IV. Regulated Equipment Requirements

A. Brief Process Description

The facility processes Portland cement and has included many associated air pollution control equipment.

B. Equipment List for the New or Modified Process(es)

3.1.1 Additional Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
EU631	Packing Line #2	40 CFR 60 Subpart F, 391-3-1-.02(2)(e)	3.3.1, 3.4.1, 5.2.3	D92	Baghouse
EU625 EU626	Cement Unloading Project	40 CFR 60 Subpart F, 391-3-1-.02(2)(e)	3.3.1, 3.4.1, 3.4.3	D85- D86 D87- D88	Baghouse
EU509 EU616	Regrind Project and Pigment Silos	40 CFR 60 Subpart F, 391-3-1-.02(2)(e)	3.3.1, 3.4.1, 3.4.3	D19 D89- D90	Baghouse
EU318	Slag Unloading System	40 CFR 60 Subpart F, 391-3-1-.02(2)(e)	3.3.1, 3.4.1, 3.4.3	D91	Baghouse

* Generally applicable requirements contained in this permit may also apply to emission units listed above.

C. Equipment & Rule Applicability

- Emission and Operating Caps – None.
- Applicable Rules and Regulations

There are no new or modified facility wide applicable rules or regulations associated with this amendment. All of the new equipment listed are subject to 40 CFR Part 60 Subpart F, “Standards of Performance for Portland Cement Plants”. Pursuant to the requirements of 40 CFR Part 60 Subpart F, visible emissions from subject sources will not equal or exceed 10% opacity. Condition 3.3.1 already exists in the current permit.

All of the new equipment listed are subject to the provisions of Georgia’s Rules for Air Quality Control 391-3-1-.02(2)(e), “Particulate Emissions from Manufacturing Processes”. Condition 3.4.1 already exists in the current permit.

D. Compliance Status

The facility is has indicated compliance with all applicable rules and regulations.

E. Operational Flexibility

Not applicable.

F. Permit Conditions

There are no new or modified permit conditions associated with this amendment.

V. Testing Requirements (with Associated Record Keeping and Reporting)

The current permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

VII. Other Record Keeping and Reporting Requirements

None required.

VIII. Specific Requirements

Discuss any of the following specific requirements as they apply to the modification.

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

Not applicable.

D. Temporary Sources

Not applicable.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

Not applicable.

I. Prevention of Accidental Releases

Not applicable.

J. Stratospheric Ozone Protection Requirements

Not applicable.

K. Pollution Prevention

Not applicable.

L. Specific Conditions

Not applicable.