CEMEX

Mr. A. A. Linero
Program Administrator
Bureau of Air Regulation
2600 Blairstone Road
Tallahassee, FL 32399-2400

20 March 2009

RECEIVED
MAR 24 2009
BUREAU OF AIR REGULATION

Dear Mr. Linero

RE: DEP File No. 0530021-018-AC (PSD –FL-351C)
CEMEX, Inc. South Brooksville Cement Plant - Kiln 2
Revisions to Original Project to reflect "as built" Plant Design Configuration

Dear Mr. Linero:

After further review, CEMEX, Inc. has discovered that a minor change is required to the as-built permit for the South Brooksville Cement Plant. This includes a reduction in air flow for EU 047, Blend Silo Discharge with a subsequent revision in both Air-to-Cloth Ratio (A/C) and emissions. Additionally, there are minor changes to process throughputs for EU 48, 50, 52, 54, 57, 58 and 59.

Additionally, CEMEX requests a PM permit limit emission of 0.009 gr/dscf and a PM_{10} permit emission limit of 0.0063 gr/dscf. Given the very low A/C for the process fabric filters, these limits are easily achievable. This request does not include EU 044, Kiln 2 – the limits for this unit will remain as in the original application. CEMEX believes this request eliminates the need for the company to submit a BACT analysis as the PSD significant emission rates for PM and PM_{10} will not have been exceeded.

Attached you will find:

- A list of page numbers to be replaced
- A spreadsheet showing PM and PM_{10} emission reductions/increases per EU
- Table 1, revised
- Table 2, revised
- All of the pages required to be replaced

There are some minor differences in emission calculations between the documents and this is attributed to rounding. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Lawrence Lucarelli, P.E.
Senior Manager, Environmental
CEMEX, Inc.
840 Gessner, Suite 1400
Houston, TX 77024

LAWRENCE LUCARELLI LICENSE No. 59955 STATE OF FLORIDA PROFESSIONAL ENGINEER

CEMEX BROOKSVILLE SOUTH CEMENT PLANT
REVISIONS TO AS-BUILT PERMIT APPLICATION

PAGE NUMBER	EMISSION UNIT NUMBER	EMISSION UNIT DESCRIPTION (-009-AC designation/New designation)	CHANGE
1	N/A	N/A	Changes: Contact/Engineer of Record
3	N/A	N/A	Recalculates PM/PM_{10} emission increases
3	N/A	N/A	Deleted Air Heater - Replaced with Generator
4	44	Kiln 2/Preheater/Precalciner/Clinker Cooler/Raw Mill	Deleted Air Heater and added Raw Mill
5	N/A	N/A	Authorized Signature
7	N/A	N/A	P.E. Certification/Changes Engineer of Record
16	44	Kiln 2/Preheater/Precalciner/Clinker Cooler/Raw Mill	Deleted Air Heater and added Raw Mill
35	45	Filter Dust/Filter Dust Bin	Recalculates PM @ 0.009 gr/dscf
36	45	Filter Dust/Filter Dust Bin	Recalculates PM @ 0.009 gr/dscf
37	45	Filter Dust/Filter Dust Bin	Recalculates PM_{10} @ 0.0063 gr/dscf
38	45	Filter Dust/Filter Dust Bin	Recalculates PM_{10} @ 0.0063 gr/dscf
50	46	Raw Mill Transport/Blend Silo	Recalculates PM @ 0.009 gr/dscf
51	46	Raw Mill Transport/Blend Silo	Recalculates PM @ 0.009 gr/dscf
52	46	Raw Mill Transport/Blend Silo	Recalculates PM_{10} @ 0.0063 gr/dscf
53	46	Raw Mill Transport/Blend Silo	Recalculates PM_{10} @ 0.0063 gr/dscf
65	47	Kiln Feed Transport/Kiln Feed Transport	Recalculates PM @ 0.009 gr/dscf
66	47	Kiln Feed Transport/Kiln Feed Transport	Recalculates PM @ 0.009 gr/dscf
67	47	Kiln Feed Transport/Kiln Feed Transport	Recalculates PM_{10} @ 0.0063 gr/dscf
68	47	Kiln Feed Transport/Kiln Feed Transport	Recalculates PM_{10} @ 0.0063 gr/dscf
78	48	Clinker Transport/Clinker Transport	Change Hourly and Annual Process Rate
80	48	Clinker Transport/Clinker Transport	Recalculates PM @ 0.009 gr/dscf
81	48	Clinker Transport/Clinker Transport	Recalculates PM @ 0.009 gr/dscf
82	48	Clinker Transport/Clinker Transport	Recalculates PM_{10} @ 0.0063 gr/dscf
83	48	Clinker Transport/Clinker Transport	Recalculates PM_{10} @ 0.0063 gr/dscf
93	50	Clinker Storage/Clinker Storage	Change Hourly and Annual Process Rate
95	50	Clinker Storage/Clinker Storage	Recalculates PM @ 0.009 gr/dscf
96	50	Clinker Storage/Clinker Storage	Recalculates PM @ 0.009 gr/dscf
97	50	Clinker Storage/Clinker Storage	Recalculates PM_{10} @ 0.0063 gr/dscf
98	50	Clinker Storage/Clinker Storage	Recalculates PM_{10} @ 0.0063 gr/dscf
110	51	Finish Mill Collecting Bin/Finish Mill Collecting Bin	Recalculates PM @ 0.009 gr/dscf
111	51	Finish Mill Collecting Bin/Finish Mill Collecting Bin	Recalculates PM @ 0.009 gr/dscf
112	51	Finish Mill Collecting Bin/Finish Mill Collecting Bin	Recalculates PM_{10} @ 0.0063 gr/dscf
113	51	Finish Mill Collecting Bin/Finish Mill Collecting Bin	Recalculates PM_{10} @ 0.0063 gr/dscf

CEMEX BROOKSVILLE SOUTH CEMENT PLANT
REVISIONS TO AS-BUILT PERMIT APPLICATION

123	52	Finish Mill/Finish Mill	Change Hourly and Annual Process Rate
126	52	Finish Mill/Finish Mill	Recalculates PM @ 0.009 gr/dscf
127	52	Finish Mill/Finish Mill	Recalculates PM @ 0.009 gr/dscf
128	52	Finish Mill/Finish Mill	Recalculates PM_{10} @ 0.0063 gr/dscf
129	52	Finish Mill/Finish Mill	Recalculates PM_{10} @ 0.0063 gr/dscf
147	54	Bucket Elevator/Finish Mill Bucket Elevator	Change Hourly and Annual Process Rate
149	54	Bucket Elevator/Finish Mill Bucket Elevator	Recalculates PM @ 0.009 gr/dscf
150	54	Bucket Elevator/Finish Mill Bucket Elevator	Recalculates PM @ 0.009 gr/dscf
151	54	Bucket Elevator/Finish Mill Bucket Elevator	Recalculates PM_{10} @ 0.0063 gr/dscf
152	54	Bucket Elevator/Finish Mill Bucket Elevator	Recalculates PM_{10} @ 0.0063 gr/dscf
162	57	Cement Transport/Cement Transport	Change Hourly and Annual Process Rate
164	57	Cement Transport/Cement Transport	Recalculates PM @ 0.009 gr/dscf
165	57	Cement Transport/Cement Transport	Recalculates PM @ 0.009 gr/dscf
166	57	Cement Transport/Cement Transport	Recalculates PM_{10} @ 0.0063 gr/dscf
167	57	Cement Transport/Cement Transport	Recalculates PM_{10} @ 0.0063 gr/dscf
177	58	Cement Loadout Bin/Cement Silo 5 Loadout	Change Hourly and Annual Process Rate
179	58	Cement Loadout Bin/Cement Silo 5 Loadout	Recalculates PM @ 0.009 gr/dscf
180	58	Cement Loadout Bin/Cement Silo 5 Loadout	Recalculates PM @ 0.009 gr/dscf
181	58	Cement Loadout Bin/Cement Silo 5 Loadout	Recalculates PM_{10} @ 0.0063 gr/dscf
182	58	Cement Loadout Bin/Cement Silo 5 Loadout	Recalculates PM_{10} @ 0.0063 gr/dscf
192	59	Cement Loadout Bin/Multi Cell Loadout	Change Hourly and Annual Process Rate
194	59	Cement Loadout Bin/Multi Cell Loadout	Recalculates PM @ 0.009 gr/dscf
195	59	Cement Loadout Bin/Multi Cell Loadout	Recalculates PM @ 0.009 gr/dscf
196	59	Cement Loadout Bin/Multi Cell Loadout	Recalculates PM_{10} @ 0.0063 gr/dscf
197	59	Cement Loadout Bin/Multi Cell Loadout	Recalculates PM_{10} @ 0.0063 gr/dscf
209	60	Coal Mill/Coal Mill	Recalculates PM @ 0.009 gr/dscf
210	60	Coal Mill/Coal Mill	Recalculates PM @ 0.009 gr/dscf
211	60	Coal Mill/Coal Mill	Recalculates PM_{10} @ 0.0063 gr/dscf
212	60	Coal Mill/Coal Mill	Recalculates PM_{10} @ 0.0063 gr/dscf
224	61	Fuel Bin/Fine Coal Bin	Recalculates PM @ 0.009 gr/dscf
225	61	Fuel Bin/Fine Coal Bin	Recalculates PM @ 0.009 gr/dscf
226	61	Fuel Bin/Fine Coal Bin	Recalculates PM_{10} @ 0.0063 gr/dscf
227	61	Fuel Bin/Fine Coal Bin	Recalculates PM_{10} @ 0.0063 gr/dscf
239	N/A	Packing Plant	Recalculates PM @ 0.009 gr/dscf
240	N/A	Packing Plant	Recalculates PM @ 0.009 gr/dscf
241	N/A	Packing Plant	Recalculates PM_{10} @ 0.0063 gr/dscf
242	N/A	Packing Plant	Recalculates PM_{10} @ 0.0063 gr/dscf

CEMEX BROOKSVILLE SOUTH CEMENT PLANT
REVISIONS TO AS-BUILT PERMIT APPLICATION

Table 1	47	Blend Silo Discharge	Revised Flow Rate, Recalculates A/C
Table 2	47	Blend Silo Discharge	Revised Flow Rate, Recalculates Emissions
Table 1 & 2	48, 50, 52, 54,57, 58, 59	N/A	Revised Process Throughputs
Table 2	ALL	ALL	Recalculates PM/PM_{10} @ 0.009 and 0.0063 gr/dscf

LAL 3/18/09

CEMEX BROOKSVILLE SOUTH CEMENT PLANT
PM AND PM 10 EMISSION CHANGES FOR AS-BUILT EQUIPMENT

EMISSION UNIT	EMISSION UNIT DESCRIPTION	009-AC EMISSIONS				REVISED EMISSIONS			
	(-009-AC/NEW)	PM	PM	PM10	PM10	PM	PM	PM10	PM10
		(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
45	FILTER DUST BIN LOADOUT/FILTER DUST BIN	1.479	6.478	1.035	4.533	0.540	2.365	0.360	1.577
46	RAW MILL TRANSPORT/BLEND SILO	0.260	1.139	0.182	0.797	0.499	2.186	0.349	1.529
47	KILN FEED TRANSPORT/KILN FEED TRANSPORT	0.260	1.139	0.180	0.788	1.210	5.300	0.850	3.723
48	CLINKER TRANSPORT/CLINKER TRANSPORT	0.190	0.832	0.133	0.583	0.197	0.863	0.138	0.604
49	GYPSUM BIN/REMOVED	0.320	1.402	0.224	0.981	0.000	0.000	0.000	0.000
50	CLINKER STORAGE/CLINKER STORAGE	0.253	1.108	0.177	0.775	0.891	3.903	0.621	2.720
51	FINISH MILL COLLECTING BIN/FINISH MILL COLLECTING BIN	0.832	3.644	0.582	2.549	0.517	2.264	0.362	1.586
52	FINISH MILL/FINISH MILL	2.310	10.118	1.620	7.096	13.818	60.523	9.672	42.363
53	AIR SLIDE/REMOVED	0.403	1.765	0.282	1.235	0.000	0.000	0.000	0.000
54	BUCKET ELEVATOR/FINISH MILL BUCKET ELEVATOR	0.403	1.765	0.282	1.235	0.536	2.348	0.377	1.651
55	HIGH EFFICIENCY SEPARATOR/REMOVED	9.199	40.292	6.440	28.207	0.000	0.000	0.000	0.000
56	CEMENT COOLER/REMOVED	0.403	1.765	0.282	1.235	0.000	0.000	0.000	0.000
57	CEMENT TRANSPORT/CEMENT TRANSPORT	1.088	4.765	0.762	3.338	0.396	1.734	0.270	1.183
58	CEMENT LOADOUT BIN/CEMENT SILO 5 LOADOUT	0.208	0.911	0.146	0.639	0.855	3.745	0.603	2.641
59	CEMENT LOADOUT BIN/MULTI CELL LOADOUT SPOUT	0.208	0.911	0.146	0.639	0.702	3.075	0.495	2.168
60	COAL MILL/COAL MILL	1.600	7.010	1.120	4.906	1.760	7.709	1.232	5.396
61	FUEL BIN/FINE COAL BIN	0.145	0.640	0.102	0.447	0.028	0.123	0.200	0.876
	PACKING PLANT	0.000	0.000	0.000	0.000	1.056	4.625	0.739	3.237
	SUM	19.561	85.684	13.695	59.984	23.005	100.762	16.268	71.254
	PM INCREASES (ton/yr)	15.078							
	PM10 INCREASES (ton/yr)	11.270							

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Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **CEMEX Construction Materials Florida, LLC**	
2. Site Name: **Brooksville South Cement Plant**	
3. Facility Identification Number: **0530021**	
4. Facility Location... Street Address or Other Locator: **10311 Cement Plant Road** City: **Brooksville** County: **Hernando** Zip Code: **34601**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Lawrence Lucarelli**	
2. Application Contact Mailing Address... Organization/Firm: **CEMEX Inc.** Street Address: **840 Gessner, Suite 1400** City: **Houston** State: **Texas** Zip Code: **77024**	
3. Application Contact Telephone Numbers... Telephone: **(713) 973-5069** ext. Fax: **(713) 722-5116**	
4. Application Contact E-mail Address: **lawrencea.lucarelli@cemex.com**	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 11/24/08	3. PSD Number (if applicable): 351 C
2. Project Number(s): 0530021-018-AC	4. Siting Number (if applicable):

Original Project Receipt Date. This is substantial Modification to project in response to RAI.

APPLICATION INFORMATION

Application Comment

This application requests minor modification to Permit No. 0530021-009-AC, PSD-FL-351. The referenced permit is for the construction of the second kiln line at the existing cement plant. The following changes are requested, reflective of as-built configuration:

1. **EU 044: Correct the natural gas rate to reflect 432,000 cf/hr**
2. **EU 044: Revise the CEMS requirement language (Condition 16)**
3. **EU 044: Change equipment ID, flow rate, and exit temperature of baghouse**
4. **EU 045: Add baghouse to this emissions unit: Filter Dust Bin Loadout Spout**
5. **EU 045: Change equipment ID, flow rate, and exit temperature of baghouses**
6. **EU 046: Change equipment ID, flow rate, and exit temperature of baghouse**
7. **EU 047: Add baghouses to this emissions unit: Blend Silo Discharge, Kiln Feed Bin, and Kiln Feed Transport**
8. **EU 047: Change equipment ID, flow rate, and exit temperature of baghouses**
9. **EU 048: Change equipment ID, flow rate, and exit temperature of baghouse**
10. **EU 049: Gypsum Bin eliminated (never constructed)**
11. **EU 050: Add baghouses to this emissions unit: Clinker Silo Discharge 1, Clinker Silo Discharge 2, Clinker Storage Silo**
12. **EU 050: Change equipment ID, flow rate, and exit temperature of baghouses**
13. **EU 051: Change equipment ID, flow rate, and exit temperature of baghouse**
14. **EU 052: Add new hot gas generator unit at Finish Mill**
15. **EU 052: Change equipment ID, flow rate, and exit temperature of baghouse**
16. **EU 053: Air Slide eliminated (individual baghouse never installed—constructed as part of Finish Mill System)**
17. **EU 054: Change equipment ID, flow rate, and exit temperature of baghouse**
18. **EU 055: High Efficiency Separator eliminated (never constructed)**
19. **EU 056: Cement Cooler eliminated (individual baghouse never installed)**
20. **EU 057: Add baghouses to this emissions unit: Finish Mill Cement Transport and Finish Mill Rejects Transport**
21. **EU 057: Change equipment ID, flow rate, and exit temperature of baghouses**
22. **EU 058: Add baghouses to this emissions unit: Cement Silo 5, Cement Silo 5 Loading Bin, Cement Silo 5 Loadout Spout N, Cement Silo 5 Loadout Spout S**
23. **EU 058: Change equipment ID, flow rate, and exit temperature of baghouses**
24. **EU 059: Add baghouses to this emissions unit: Multi-Cell Cement Silo, Multi-Cell Cement Silo Alleviator, Multi-Cell Loadout Transport, Multi-Cell Loadout Spout**
25. **EU 059: Change equipment ID, flow rate, and exit temperature of baghouses**
26. **EU 060: Change equipment ID, flow rate, and exit temperature of baghouse**
27. **EU 061: Change equipment ID, flow rate, and exit temperature of baghouse**
28. **No ID: New emissions unit: Packing Plant**

The change in emissions from the original project (Permit No. 0530021-009-AC) to the "as-built" plant design are as follows:

PM (baghouses only, except kiln):

100.762 TPY ("as-built" design) – 85.684 TPY (Permit -009-AC) = increase by 15.078 TPY

PM_{10} (baghouses only, except kiln):

71.254 TPY ("as built" design) – 59.984 TPY (Permit -009-AC) = increase by 11.270 TPY

SO_2: increase by 26 TPY (EU 052—new hot gas generator)

NOx: increase by 39 TPY (EU 052—new hot gas generator)

VOC: increase by 3 TPY (EU 052—new hot gas generator)

CO: increase by 22 TPY (EU 052—new hot gas generator)

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
044	Kiln No. 2/Preheater/Precalciner/Clinker Cooler/Raw Mill	AC1A	N/A
045	Filter Dust	AC1A	N/A
046	Raw Meal Transport	AC1A	N/A
047	Kiln Feed Transport	AC1A	N/A
048	Clinker Transport	AC1A	N/A
050	Clinker Storage	AC1A	N/A
051	Finish Mill Collecting Bin	AC1A	N/A
052	Finish Mill	AC1A	N/A
054	Bucket Elevator	AC1A	N/A
057	Cement Transport	AC1A	N/A
058	Cement Loadout Bin	AC1A	N/A
059	Cement Loadout Bin	AC1A	N/A
060	Coal Mill	AC1A	N/A
061	Fine Coal Bin	AC1A	N/A
No ID	Packing Plant	AC1A	N/A

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name:
   Mr. James S. Daniel, Plant Manager
2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **CEMEX, Inc. (Florida Crushed Stone Company)**
   Street Address: **10311 Cement Plant Road**
   City: **Brooksville** State: **Florida** Zip Code: **34601**
3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(352) 799-7881** ext. Fax: **(352) 540-4794**
4. Owner/Authorized Representative E-mail Address: **jdaniel@cemexusa.com**
5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.

   Signature

   Date: 3/29/09

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Lawrence Lucarelli, PE**
   Registration Number: **58956**
2. Professional Engineer Mailing Address...
   Organization/Firm: **CEMEX, Inc.**
   Street Address: **840 Gessner, Suite 1400**
   City: **Houston** State: **Texas** Zip Code: **77024**
3. Professional Engineer Telephone Numbers...
   Telephone: **(713) 973-5069** ext. Fax: **(713) 722-5116**
4. Professional Engineer E-mail Address: **lawrencea.lucarelli@cemex.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Lawrence Lucarelli
Signature

20 MARCH 2009
Date

(seal)

LAWRENCE LUCARELLI LICENSE STATE OF FLORIDA PROFESSIONAL ENGINEER

* Attach any exception to certification statement.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Kiln No. 2/Preheater/Precalciner/Clinker Cooler/Raw Mill

3. Emissions Unit Identification Number: **044**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C			**32**

8. Federal Program Applicability: (Check all that apply) **N/A**

☐ Acid Rain Unit

☐ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment: **This minor modification describes changes to this emissions unit:**

1. **Correct the natural gas rate to reflect 432,000 cf/hr**
2. **Revise the CEMS requirement language (Condition 16)**
3. **Change equipment ID, flow rate, and exit temperature of baghouse**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.54** lb/hour **2.365** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Refer to Table 2 (Attachment Control Equipment).**	
11. Potential, Fugitive, and Actual Emissions Comment: **Represents both baghouses combined.** **Change in emissions: 2.365 TPY (as-built design) – 6.478 TPY (-009-AC) = decrease by 4.113 TPY PM.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.54** lb/hour **2.365** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent both baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.36** lb/hour **1.577** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Potential emissions represent both baghouses combined.

Change in emissions: 1.577 TPY (as-built design) – 4.533 TPY (-009-AC) = decrease by 2.956 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.36** lb/hour **1.577** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.499** lb/hour **2.186** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.009 gr/dscf x 6,468 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.499 lb/hr
Annual: 0.499 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 2.186 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 2.186 TPY (as-built design) – 1.139 TPY (-009-AC) = increase by 1.047 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **0.499** lb/hour **2.186** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.349** lb/hour **1.53** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 6,468 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.349 lb/hr
Annual: 0.349 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1.53 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 1.53 TPY (as-built design) – 0.797 TPY (-009-AC) = increase by 0.733 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **0.349** lb/hour **1.53** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.21** lb/hour **5.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Emissions represent all 3 baghouses combined.
Change in emissions: 5.3 TPY (as-built design) – 1.139 TPY (-009-AC) = increase by 4.161 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **1.21** lb/hour **5.3** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent all three baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.85** lb/hour **3.723** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Emissions represent all 3 baghouses combined.
Change in emissions: 3.723 TPY (as-built design) – 0.788 TPY (-009-AC) = increase by 2.935 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.85** lb/hour **3.723** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent all 3 baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Clinker Transfer**		
2. Source Classification Code (SCC): **3-05-006-16**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **125**	5. Maximum Annual Rate: **1,022,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the daily rate and 365 days/yr.**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.197** lb/hour **0.862** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Hourly: 0.009 gr/dscf x 2,551 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.197 lb/hr** **Annual: 0.197 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.862 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment: **Change in emissions: 0.862 TPY (as-built design) – 0.832 TPY (-009-AC) = increase by 0.03 TPY.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **0.197** lb/hour **0.862** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.138** lb/hour **0.603** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 2,551 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.138 lb/hr
Annual: 0.138 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.603 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.603TPY (as-built design) – 0.583 TPY (-009-AC) = increase by 0.02 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **0.138** lb/hour **0.603** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Clinker Piles (Storage Silos)**		
2. Source Classification Code (SCC): **3-05-006-15**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **216**	5. Maximum Annual Rate: **1,892,160**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1**
10. Segment Comment: **Applies to Clinker Silo Discharge 1 and 2 (each). Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Clinker Piles (Storage Silos)**		
2. Source Classification Code (SCC): **3-05-006-15**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **216**	5. Maximum Annual Rate: **1,892,160**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Clinker Storage Silo. Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.891** lb/hour **3.903** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Represents total emissions for all 3 baghouses combined.
Change in emissions: 3.903 TPY (as-built design) – 1.108 TPY (-009-AC) = increase by 2.795 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.891** lb/hour **3.903** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent all 3 baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.621** lb/hour **2.72** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Refer to Table 2 (Attachment Control Equipment).**	
11. Potential, Fugitive, and Actual Emissions Comment: **Represents total emissions for all 3 baghouses combined. Change in emissions: 2.72 TPY (as-built design) – 0.775 TPY (-009-AC) = increase by 1.945 TPY.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.621** lb/hour **2.72** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Represents all 3 baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.517** lb/hour **2.263** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.009 gr/dscf x 6,697 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.517 lb/hr
Annual: 0.517 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 2.263 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 2.263 TPY (as-built design) – 3.644 TPY (-009-AC) = decrease by 1.381 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **0.517** lb/hour **2.263** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.362** lb/hour **1.584** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 6,697 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.362 lb/hr
Annual: 0.362 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1.584 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 1.584 TPY (as-built design) – 2.549 TPY (-009-AC) = decrease by 0.965 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **0.362** lb/hour **1.584** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **3**

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Finish Grinding Mill**		
2. Source Classification Code (SCC): **3-05-006-29**	3. SCC Units: **Tons Material Processed**	
4. Maximum Hourly Rate: **240**	5. Maximum Annual Rate: **2,102,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment **2** of **3**

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Distillate Oil; General**		
2. Source Classification Code (SCC): **3-90-005-89**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **0.296**	5. Maximum Annual Rate: **739.5**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **147.1**
10. Segment Comment: **Based on 43.5 MMBtu/hr and 2,500 hours/year. Applies to the hot gas generator unit.**		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **13.818** lb/hour **60.522** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.009 gr/dscf x 179,120 dscfm x 1 lb/7,000 gr x 60 min/hour = 13.818 lb/hr
Annual: 13.818 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 60.522 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 60.522 TPY (as-built design) – 10.118 TPY (-009-AC) = increase by 50.404 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **13.818** lb/hour **60.522** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **9.672** lb/hour **42.365** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 179,120 dscfm x 1 lb/7,000 gr x 60 min/hour = 9.672 lb/hr
Annual: 9.672lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 42.365 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 42.365 TPY (as-built design) – 7.096 TPY (-009-AC) = increase by 35.269 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **9.672** lb/hour **42.365** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Finish Grinding Mill (Bucket Elevator)**		
2. Source Classification Code (SCC): **3-05-006-29**	3. SCC Units: **Tons Material Processed**	
4. Maximum Hourly Rate: **240**	5. Maximum Annual Rate: **2,102,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.536** lb/hour **2.35** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.009 gr/dscf x 6,984 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.536 lb/hr
Annual: 0.536 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 2.35 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 2.35 TPY (as-built design) – 1.765 TPY (-009-AC) = increase by 0.585 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **0.536** lb/hour **2.35** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0..377** lb/hour **1.651** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 6,984 dscfm x 1 lb/7,000 gr x 60 min/hour = 0..377 lb/hr
Annual: 0.377 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1.651 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 1.651 TPY (as-built design) – 1.235 TPY (-009-AC) = increase by 0.416 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **0.377** lb/hour **1.651** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Other Not Classified (Cement Transfer)**		
2. Source Classification Code (SCC): **3-05-006-99**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **240**	5. Maximum Annual Rate: **2,102,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Finish Mill Cement Transport. Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Other Not Classified (Cement Transfer)**		
2. Source Classification Code (SCC): **3-05-006-99**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **109**	5. Maximum Annual Rate: **954,840**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Finish Mill Rejects Transport. Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.396** lb/hour **1.734** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Represents both baghouses combined.
Change in emissions: 1.734 TPY (as-built design) – 4.765 TPY (-009-AC) = decrease by 3.031 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.396** lb/hour **1.734** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent both baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.27** lb/hour **1.183** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Refer to Table 2 (Attachment Control Equipment).**	
11. Potential, Fugitive, and Actual Emissions Comment: **Represents both baghouses combined. Change in emissions: 1.183 TPY (as-built design) – 3.338 TPY (-009-AC) = decrease by 2.155 TPY.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.27** lb/hour **1.183** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent both baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Cement Silos**		
2. Source Classification Code (SCC): **3-05-006-18**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **240**	5. Maximum Annual Rate: **2,102,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Cement Silo 5. Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Cement Silos**		
2. Source Classification Code (SCC): **3-05-006-18**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **625**	5. Maximum Annual Rate: **5,475,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Cement Silo 5 Loading Bin, Loadout Spout N, and Loadout Spout S (each). Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.855** lb/hour **3.745** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Represents combined emissions for all 4 baghouses.
Change in emissions: 3.745 TPY (as-built design) – 0.911 TPY (-009-AC) = increase by 2.834 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.855** lb/hour **3.745** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Represents combined emissions from all baghouses.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.603** lb/hour **2.641** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0067 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Potential emissions represent emissions from all 4 baghouses combined.
Change in emissions: 2.641 TPY (as-built design) – 0.639 TPY (-009-AC) = increase by 2.002 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0067 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.603** lb/hour **2.641** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent all 4 baghouses combined.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Cement Silos**		
2. Source Classification Code (SCC): **3-05-006-18**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **240**	5. Maximum Annual Rate: **2,102,400**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Multi-Cell Cement Silo Alleviator. Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Cement Silos**		
2. Source Classification Code (SCC): **3-05-006-18**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **625**	5. Maximum Annual Rate: **5,475,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to Multi-Cell Cement Silo, Loadout Transport, and Loadout Spout (each). Permit No. 0530021-009-AC does not limit the throughput for this emissions unit. The annual rate is based on the hourly rate and 8,760 hr/yr.**		

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.702** lb/hour **3.075** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Refer to Table 2 (Attachment Control Equipment).**	
11. Potential, Fugitive, and Actual Emissions Comment: **Represents combined emissions from all 4 baghouses.** **Change in emissions: 3.075 TPY (as-built design) – 0.911 TPY (-009-AC) = increase by 2.164 TPY.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.702** lb/hour **3.075** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Emissions represent all 4 baghouses combined.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.495** lb/hour **2.168** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf (each baghouse)** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Refer to Table 2 (Attachment Control Equipment).

11. Potential, Fugitive, and Actual Emissions Comment:
Represents all 4 baghouses combined.
Change in emissions: 2.168 TPY (as-built design) – 0.639 TPY (-009-AC) = increase by 1.529 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.495** lb/hour **2.168** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Represents all 4 baghouses combined.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.76** lb/hour **7.709** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.009 gr/dscf x 22,814 dscfm x 1 lb/7,000 gr x 60 min/hour = 1.76 lb/hr
Annual: 1.76 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 7.709 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 7.709 TPY (as-built design) – 7.01 TPY (-009-AC) = increase by 0.699 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **1.76** lb/hour **7.709** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 9 on main (Kiln 2) stack.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.232** lb/hour **5.396** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 22,814 dscfm x 1 lb/7,000 gr x 60 min/hour = 1.232 lb/hr
Annual: 1.232 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 5.396 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 5.396 TPY (as-built design) – 4.906 TPY (-009-AC) = increase by 0.49 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **1.232** lb/hour **5.396** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 9 on main (Kiln 2) stack.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.028** lb/hour **0.125** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.009 gr/dscf x 369 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.028 lb/hr
Annual: 0.028 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.125 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.125 TPY (as-built design) – 0.64 TPY (-009-AC) = decrease by 0.515 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **0.028** lb/hour **0.125** tons/year
5. Method of Compliance: **Compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC. Request clarification: SC.4 waives initial and annual testing, but SC.5 requires Method 5 for 061 (should be 060).**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.02** lb/hour **0.087** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Permit No. 0530021-009-AC**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 369 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.02 lb/hr
Annual: 0.02 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.087 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.087 TPY (as-built design) – 0.447 TPY (-009-AC) = decrease by 0.36 TPY.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **0.02** lb/hour **0.087** tons/year
5. Method of Compliance: **No compliance demonstration required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530021-009-AC.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.056** lb/hour **4.624** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.009 gr/dscf** Reference: **Proposed Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Hourly: 0.009 gr/dscf x 13,684 dscfm x 1 lb/7,000 gr x 60 min/hour = 1.056 lb/hr** **Annual: 1.056 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 4.624 TPY**	
11. Potential, Fugitive, and Actual Emissions Comment: **Change in emissions: increase by 4.624 TPY (new unit).**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.009 gr/dscf**	4. Equivalent Allowable Emissions: **1.056** lb/hour **4.624** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on proposed permit limit.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.739** lb/hour **3.237** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0063 gr/dscf** Reference: **Proposed permit limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
Hourly: 0.0063 gr/dscf x 13,684 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.739 lb/hr
Annual: 0.739 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 3.237 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: increase by 3.237 TPY (new unit).

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0063 gr/dscf**	4. Equivalent Allowable Emissions: **0.739** lb/hour **3.237** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 9 in lieu of Method 5.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on proposed permit limit.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Table 1. Summary of Kiln 2 System Control Equipment Information, CEMEX Construction Materials of Florida, LLC; Brooksville South Cement Plant

	EU No.	Emissions Unit Name	Old ID No.	Old BH No.	Dust Collector Name	New BH Equip. No.	Stack Parameters							Process Rate (TPH)	Baghouse Design Information				No. of Compart-ments	Baghouse Area (ft^2)	Cloth Area	A/C Ratio	Date Installed
							Height (ft)	Diameter (ft)	Exhaust Direction	Flow Rate (acfm)	Flow Rate (dscfm)	Moisture Content (%)	Exit Temp. (°F)		Type	Manufacturer	Model No.	"H_2O (-)					
1	**044**	**Kiln No. 2**	2K-06	2E-19	Kiln 2 Baghouse	331.BF300	320	13.6	V	329,698	--	2	500	206.3	PJ	FLS AirTech		12.2	8	25.78	96,519	3.42	2008
2	**045**	**Filter Dust (Bin)**	2E-22	2G-08	Filter Dust Bin	331.BF640	90	1	H	3,400	2,065	2	392	30	PJ	FLS AirTech	64C10	20.0	1	13.09	840	4.05	2008
3	**045**		--	--	Filter Dust Bin Loadout Spout	311.LS609	25	0.38	H	8,000	4,958	2	375	80	PJ	Midwest Itnl.							2008
4	**046**	**Raw Meal Transport**	2E-22	2G-09	Blend Silo	341.BF400	220	1.53	H	8,100	6,468	2	188	300	PJ	FLS AirTech	169C10	20.0	1	13.09	2,216	3.66	2008
5	**047**	**Kiln Feed Transport**	2E-22	2G-09	Blend Silo Discharge	341.BF410	28	0.69	H	900	719	2	188	241	PJ	FLS AirTech	16TA10	20.0	1	13.09	209	4.30	2008
6	**047**		2E-22	2G-09	Kiln Feed Bin	351.BF410	91	1.37	H	7,100	5,669	2	188	241	PJ	FLS AirTech	144C10	20.0	1	13.09	1,885	3.77	2008
7	**047**		2H-05	2H-08	Kiln Feed Transport	351.BF420	280	1.7	H	11,700	9,343	2	188	241	PJ	FLS AirTech	256C10FM	20.0	1	13.09	3,351	3.49	2008
8	**048**	**Clinker Transport**	2L-01	2L-03	Clinker Transport	471.BF110	15	1.29	H	4,200	2,551	2	392	125	PJ	FLS AirTech	81C10	20.0	1	13.09	1,060	3.96	2008
9	**050**	**Clinker Storage**	2L-01	2L-03	Clinker Silo Discharge 1	481.BF155	16	1.08	H	2,871	1,779	2	375	216	PJ	GE Energy		15.0	1		946	3.03	2008
10	**050**		2L-01	2L-03	Clinker Silo Discharge 2	481.BF165	16	1.08	H	2,871	1,779	2	375	216	PJ	GE Energy		15.0	1		946	3.03	2008
11	**050**		2L-05	2L-06	Clinker Storage Silo	471.BF120	105	1.7	H	13,200	8,017	2	392	125	PJ	FLS AirTech	256C10	20.0	1	13.09	3,351	3.94	2008
12	**051**	**Finish Mill Collecting Bin**	2M-04	2M-09	Finish Mill Additives	511.BF650	33	1.37	H	7,300	6,697	2	104	127	PJ	FLS AirTech	144C10	20.0	1	13.09	1,885	3.87	2008
13	**052**	**Finish Mill**	2N-01	2N-12	Finish Mill	531.BF500	207	6.58	V	263,778	179,120	2	302	240	PJ	FLS AirTech	2M1650S14(6)	40.0	1	21.99	72,571	3.63	2008
15	**054**	**Bucket Elevator**	2N-04	2N-91	Finish Mill Bucket Elevator	531.BF020	88	1.75	H	11,500	6,984	2	392	106	PJ	FLS AirTech	225C10	20.0	1	13.09	2,945	3.90	2008
14	**057**	**Cement Transport**	2N-03	2N-12	Finish Mill Cement Transport	531.BF400	64	1	H	2,800	1,996	2	266	240	PJ	FLS AirTech	64C10	20.0	1	13.09	838	3.34	2008
16	**057**		2N-06	2N-12	Finish Mill Rejects Transport	531.BF290	74	1.2	H	5,150	3,128	2	392	109	PJ	FLS AirTech	100C10	20.0	1	13.09	1,309	3.93	2008
17	**058**	**Cement Loadout Bin (Cement Silo 5 Loadout)**	--	Q-01	Cement Silo 5	612.BF005	210	1.53	H	8,300	5,916	2	266	240	PJ	FLS AirTech	169C10	20.0	1	13.09	2,212	3.75	2008
18	**058**		2P-01	2Q-13	Cement Silo 5 Loading Bin	612.BF620	28	1.29	H	4,300	3,065	2	266	625	PJ	FLS AirTech	81C10	20.0	1	13.09	1,060	4.06	2008
19	**058**		2Q-28	2Q-15	Cement Silo 5 Loadout Spout N	622.LS140	28	0.38	H	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	21.60	540	2.78	2008
20	**058**		2Q-29	2Q-16	Cement Silo 5 Loadout Spout S	622.LS160	28	0.38	H	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	21.60	540	2.78	2008
23	**059**	**Cement Loadout Bin (Multi-Cell Cement Loadout)**	--	Q-13	Multi Cell Cement Silo	611.BF005	208	1.33	H	2,200	1,568	2	266	240	PJ	FLS AirTech	48C10	20.0	1	13.09	630	3.49	2008
24	**059**		--		Multi Cell Cement Silo Alleviator	611.BF045	210	1.37	H	7,500	5,345	2	266	240	PJ	FLS AirTech	196C10	20.0	1	13.09	2,566	2.92	2008
25	**059**		--		Multi Cell Loadout Transport	611.BF610	38	1.42	H	1,600	1,140	2	266	625	PJ	FLS AirTech	36C10	20.0	1	13.09	471	3.40	2008
26	**059**		--		Multi Cell Loadout Spout	611.LS760	29	0.38	H	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	4.32	108	13.89	2008
22	**060**	**Coal Mill**	2S-15	2S-16 1&2	Coal Mill	461.BF400	320	1.29	V	27,777	22,814	2	170	20	PJ	FLS AirTech	450SX129(6)	40.0	1	18.85	8,482	3.27	2008
21	**061**	**Fine Coal Bin**	2S-20	2S-21	Fine Coal Bin	461.BF560	59	0.5	H	544	369	2	302	20	PJ	FLS AirTech		40.0	1				2008
27	**No ID**	**Packing Plant**	--		Packing Plant	641.BF150	39	2.11	H	19,200	13,684	2	266	200	PJ	FLS AirTech	304C10	20.0	1	13.09	3,979	4.82	2008

Notes: V = vertical; H = Horizontal

PJ - Pulse Jet

***Pleated bags**

Table 2. CEMEX Construction Materials of Florida, LLC (f/k/a Florida Crushed Stone Co.); Brooksville South Cement Plant - Kiln 2 System PM/PM_{10} Emission Rates

EU No.	Emissions Unit Name	Old ID No.	Dust Collector Name	New BH Equip. No.	Old BH No.	Flow Rate acfm	Flow Rate dscfm	Moisture Content (%)	Stack Temp °F	Throughput TPH	Emission Rates PM gr/dscf	PM lb/hr	PM TPY	PM_{10} gr/dscf	PM_{10} lb/hr	PM_{10} TPY
044	**Kiln No. 2**	2K-06	Kiln 2 Baghouse	331.BF300	2E-19	329,698	177,707	2	500	206.3	--	28.80	126.1	--	25.00	109.5
045	**Filter Dust (Bin)**	2E-22	Filter Dust Bin	331.BF640	2G-08	3,400	2,065	2	392	30	0.009	0.16	0.70	0.0063	0.11	0.49
045		--	Filter Dust Bin Loadout Spout	311.LS609	--	8,000	4,958	2	375	80	0.009	0.38	1.68	0.0063	0.27	1.17
										Total EU 045 =		**0.54**	**2.37**		**0.38**	**1.66**
046	**Raw Meal Transport (Blend Silo)**	2E-22	Blend Silo	341.BF400	2G-09	8,100	6,468	2	188	300	0.009	0.50	2.19	0.0063	0.35	1.53
047		2E-22	Blend Silo Discharge	341.BF410	2G-09	900	719	2	188	241	0.009	0.06	0.24	0.0063	0.04	0.17
047	**Kiln Feed Transport**	2E-22	Kiln Feed Bin	351.BF410	2G-09	7,100	5,669	2	188	241	0.009	0.44	1.92	0.0063	0.31	1.34
047		2H-05	Kiln Feed Transport	351.BF420	2H-08	11,700	9,343	2	188	241	0.009	0.72	3.16	0.0063	0.50	2.21
										Total EU 047 =		**1.21**	**5.32**		**0.85**	**3.72**
048	**Clinker Transport**	2L-01	Clinker Transport	471.BF110	2L-03	4,200	2,551	2	392	125	0.009	0.20	0.86	0.0063	0.14	0.60
050		2L-01	Clinker Silo Discharge 1	481.BF155	2L-03	2,871	1,779	2	375	216	0.009	0.14	0.60	0.0063	0.10	0.42
050	**Clinker Storage**	2L-01	Clinker Silo Discharge 2	481.BF165	2L-03	2,871	1,779	2	375	216	0.009	0.14	0.60	0.0063	0.10	0.42
050		2L-05	Clinker Storage Silo	471.BF120	2L-06	13,200	8,017	2	392	125	0.009	0.62	2.71	0.0063	0.43	1.90
										Total EU 050 =		**0.89**	**3.91**		**0.63**	**2.74**
051	**Finish Mill Collecting Bin**	2M-04	Finish Mill Additives	511.BF650	2M-09	7,300	6,697	2	104	127	0.009	0.52	2.26	0.0063	0.36	1.58
052	**Finish Mill**	2N-01	Finish Mill	531.BF500	2N-12	263,778	179,120	2	302	240	0.009	13.82	60.52	0.0063	9.67	42.37
054	**Finish Mill Bucket Elevator**	2N-04	Finish Mill Bucket Elevator	531.BF020	2N-91	11,500	6,984	2	392	106	0.009	0.54	2.36	0.0063	0.38	1.65
057	**Cement Transport**	2N-03	Finish Mill Cement Transport	531.BF400	2N-12	2,800	1,996	2	266	240	0.009	0.15	0.67	0.0063	0.11	0.47
057		2N-06	Finish Mill Rejects Transport	531.BF290	2N-12	5,150	3,128	2	392	109	0.009	0.24	1.06	0.0063	0.17	0.74
										Total EU 057 =		**0.40**	**1.73**		**0.28**	**1.21**
058			Cement Silo 5	612.BF005	Q-01	8,300	5,916	2	266	240	0.009	0.46	2.00	0.0063	0.32	1.40
058	**Cement Loadout Bin (Cement Silo**	2P-01	Cement Silo 5 Loading Bin	612.BF620	2Q-13	4,300	3,065	2	266	625	0.009	0.24	1.04	0.0063	0.17	0.72
058	**5 Loadout)**	2Q-28	Cement Silo 5 Loadout Spout N	622.LS140	2Q-15	1,500	1,069	2	266	625	0.009	0.08	0.36	0.0063	0.06	0.25
058		2Q-29	Cement Silo 5 Loadout Spout S	622.LS160	2Q-16	1,500	1,069	2	266	625	0.009	0.08	0.36	0.0063	0.06	0.25
										Total EU 058 =		**0.86**	**3.76**		**0.60**	**2.63**
059			Multi Cell Cement Silo	611.BF005	Q-13	2,200	1,568	2	266	240	0.009	0.12	0.53	0.0063	0.08	0.37
059	**Cement Loadout Bin (Multi-Cell**		Multi Cell Cement Silo Alleviato	611.BF045	Q-13	7,500	5,345	2	266	240	0.009	0.41	1.81	0.0063	0.29	1.26
059	**Cement Loadout)**		Multi Cell Loadout Transport	611.BF610		1,600	1,140	2	266	625	0.009	0.09	0.39	0.0063	0.06	0.27
059			Multi Cell Loadout Spout	611.LS760		1,500	1,069	2	266	625	0.009	0.08	0.36	0.0063	0.06	0.25
										Total EU 059 =		**0.70**	**3.08**		**0.49**	**2.16**
060	**Coal Mill**	2S-15	Coal Mill	461.BF400	2S-16 1&2	27,777	22,814	2	170	20	0.009	1.76	7.71	0.0063	1.23	5.40
061	**Fine Coal Bin**	2S-20	Fine Coal Bin	461.BF560	2S-21	544	369	2	302	20	0.009	0.03	0.12	0.0063	0.02	0.09
No ID	**Packing Plant**		Packing Plant	641.BF150		19,200	13,684	2	266	200	0.009	1.06	4.62	0.0063	0.74	3.24
										Total (all baghouses, except Kiln 2) =		**23.02**	**100.82**		**16.11**	**70.57**

Table 1. Summary of Kiln 2 System Control Equipment Information, CEMEX Construction Materials of Florida, LLC; Brooksville South Cement Plant

	EU No.	Emissions Unit Name	Old ID No	Old BH No.	Dust Collector Name	New BH Equip. No	Stack Parameters							Process Rate (TPH)	Baghouse Design Information				No of Compart-ments	Baghouse Area (ft^2)	Cloth Area	A/C Ratio	Date Installed
							Height (ft)	Diameter (ft)	Exhaust Direction	Flow Rate (acfm)	Flow Rate (dscfm)	Moisture Content (%)	Exit Temp. (°F)		Type	Manufacturer	Model No.	"H_2O (-)					
1	044	Kiln No. 2	2K-06	2E-19	Kiln 2 Baghouse	331.BF300	320	13.6	V	329,698	--	2	500	206.3	PJ	FLS AirTech		12.2	8	25.78	96,519	3.42	2008
2	045	Filter Dust (Bin)	2E-22	2G-08	Filter Dust Bin	331.BF640	90	1	H	3,400	2,065	2	392	30	PJ	FLS AirTech	64C10	20.0	1	13.09	840	4.05	2008
3	045		--	--	Filter Dust Bin Loadout Spout	311.LS609	25	0.38	H	8,000	4,958	2	375	80	PJ	Midwest Itnl.							2008
4	046	Raw Meal Transport	2E-22	2G-09	Blend Silo	341.BF400	220	1.53	H	8,100	6,468	2	188	300	PJ	FLS AirTech	169C10	20.0	1	13.09	2,216	3.66	2008
5	047	Kiln Feed Transport	2E-22	2G-09	Blend Silo Discharge	341.BF410	28	0.69	H	900	719	2	188	241	PJ	FLS AirTech	16TA10	20.0	1	13.09	209	4.30	2008
6	047		2E-22	2G-09	Kiln Feed Bin	351.BF410	91	1.37	H	7,100	5,669	2	188	241	PJ	FLS AirTech	144C10	20.0	1	13.09	1,885	3.77	2008
7	047		2H-05	2H-08	Kiln Feed Transport	351.BF420	280	1.7	H	11,700	9,343	2	188	241	PJ	FLS AirTech	256C10FM	20.0	1	13.09	3,351	3.49	2008
8	048	Clinker Transport	2L-01	2L-03	Clinker Transport	471.BF110	15	1.29	H	4,200	2,551	2	392	125	PJ	FLS AirTech	81C10	20.0	1	13.09	1,060	3.96	2008
9	050	Clinker Storage	2L-01	2L-03	Clinker Silo Discharge 1	481.BF155	16	1.08	H	2,871	1,779	2	375	216	PJ	GE Energy		15.0	1		946	3.03	2008
10	050		2L-01	2L-03	Clinker Silo Discharge 2	481.BF165	16	1.08	H	2,871	1,779	2	375	216	PJ	GE Energy		15.0	1		946	3.03	2008
11	050		2L-05	2L-06	Clinker Storage Silo	471.BF120	105	1.7	H	13,200	8,017	2	392	125	PJ	FLS AirTech	256C10	20.0	1	13.09	3,351	3.94	2008
12	051	Finish Mill Collecting Bin	2M-04	2M-09	Finish Mill Additives	511.BF650	33	1.37	H	7,300	6,697	2	104	127	PJ	FLS AirTech	144C10	20.0	1	13.09	1,885	3.87	2008
13	052	Finish Mill	2N-01	2N-12	Finish Mill	531.BF500	207	6.58	V	263,778	179,120	2	302	240	PJ	FLS AirTech	2M1650S14(6)	40.0	1	21.99	72,571	3.63	2008
15	054	Bucket Elevator	2N-04	2N-91	Finish Mill Bucket Elevator	531.BF020	88	1.75	H	11,500	6,984	2	392	106	PJ	FLS AirTech	225C10	20.0	1	13.09	2,945	3.90	2008
14	057	Cement Transport	2N-03	2N-12	Finish Mill Cement Transport	531.BF400	64	1	H	2,800	1,996	2	266	240	PJ	FLS AirTech	64C10	20.0	1	13.09	838	3.34	2008
16	057		2N-06	2N-12	Finish Mill Rejects Transport	531.BF290	74	1.2	H	5,150	3,128	2	392	109	PJ	FLS AirTech	100C10	20.0	1	13.09	1,309	3.93	2008
17	058	Cement Loadout Bin (Cement Silo 5 Loadout)	--	Q-01	Cement Silo 5	612.BF005	210	1.53	H	8,300	5,916	2	266	240	PJ	FLS AirTech	169C10	20.0	1	13.09	2,212	3.75	2008
18	058		2P-01	2Q-13	Cement Silo 5 Loading Bin	612.BF620	28	1.29	H	4,300	3,065	2	266	625	PJ	FLS AirTech	81C10	20.0	1	13.09	1,060	4.06	2008
19	058		2Q-28	2Q-15	Cement Silo 5 Loadout Spout N	622.LS140	28	0.38	H	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	21.60	540	2.78	2008
20	058		2Q-29	2Q-16	Cement Silo 5 Loadout Spout S	622.LS160	28	0.38	H	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	21.60	540	2.78	2008
23	059	Cement Loadout Bin (Multi-Cell Cement Loadout)	--	Q-13	Multi Cell Cement Silo	611.BF005	208	1.33	H	2,200	1,568	2	266	240	PJ	FLS AirTech	48C10	20.0	1	13.09	630	3.49	2008
24	059		--		Multi Cell Cement Silo Alleviator	611.BF045	210	1.37	H	7,500	5,345	2	266	240	PJ	FLS AirTech	196C10	20.0	1	13.09	2,566	2.92	2008
25	059		--		Multi Cell Loadout Transport	611.BF610	38	1.42	H	1,600	1,140	2	266	625	PJ	FLS AirTech	36C10	20.0	1	13.09	471	3.40	2008
26	059		--		Multi Cell Loadout Spout	611.LS760	29	0.38	H	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	4.32	108	13.89	2008
22	060	Coal Mill	2S-15	2S-16 1&2	Coal Mill	461.BF400	320	1.29	V	27,777	22,814	2	170	20	PJ	FLS AirTech	450SX129(6)	40.0	1	18.85	8,482	3.27	2008
21	061	Fine Coal Bin	2S-20	2S-21	Fine Coal Bin	461.BF560	59	0.5	H	544	369	2	302	20	PJ	FLS AirTech		40.0	1				2008
27	No ID	Packing Plant	--		Packing Plant	641.BF150	39	2.11	H	19,200	13,684	2	266	200	PJ	FLS AirTech	304C10	20.0	1	13.09	3,979	4.82	2008

Notes: V = vertical; H = Horizontal

PJ - Pulse Jet

***Pleated bags**