AIR CONSTRUCTION PERMIT APPLICATION TO REVISE PERMIT NO. 0530021-009-AC FOR KILN NO. 2 SYSTEM "AS-BUILT" DESIGN

CEMEX, INC.
Kiln No. 2 Project
Brooksville South Cement Plant
Brooksville, Florida

November 20, 2008

Prepared by:
Koogler & Associates, Inc.
Gainesville, Florida

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 • FAX/377-7158

KA 307-08-07
November 20, 2008

Mr. A.A. Linero, PE
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: ***AC Permit Application to Revise AC Permit No. 0530021-009-AC/PSD-FL-351;***
"As-Built" Plant Design
CEMEX, Inc., Brooksville South Cement Plant
Project No.: 0530021-018-AC

Dear Al:

Enclosed please find four (4) air construction permit applications to revise CEMEX, Inc.'s (CEMEX's) Permit No. 0530021-009-AC/PSD-FL-351 (Kiln No. 2 project) for the Brooksville South Cement Plant. The requested changes include the following:

- Changes to the original project from the "as-built" plant design;
- Correct the natural gas rate for Kiln No. 2;
- Revise the CEMS requirement language (SC A.16); and
- Request clarification on the compliance testing requirements for EU 060 and 061.

In addition, CEMEX is submitting the operation and maintenance plan for the Kiln No. 2 System per the requirements of Permit No. 0530021-009-AC, conditions A.8 and C.3.

If you have any questions regarding this letter, please feel free to contact me at (352) 377-5822 or FBergen@kooglerassociates.com, or Mr. George Townsend, Environmental Manager for CEMEX Brooksville South, at (352) 799-7881 or gtownsend@cemexusa.com.

Regards,

KOOGLER AND ASSOCIATES, INC.

Fawn W. Bergen, PE
Senior Engineer

Enclosure: 4 AC Permit Applications

copy to: L. DePrimo, CEMEX (via email)
L. Lucarelli, CEMEX (via email)
G. Townsend, CEMEX

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, Inc. (Florida Crushed Stone Company)**	
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: **Fawn Bergen**
2. Application Contact Mailing Address... Organization/Firm: **Koogler and Associates, Inc.** Street Address: **4014 NW 13th Street** City: **Gainesville** State: **Florida** Zip Code: **32609**
3. Application Contact Telephone Numbers... Telephone: **(352) 377-5822** ext.**15** Fax: **(352) 377-7158**
4. Application Contact E-mail Address: **FBergen@kooglerassociates.com**

Application Processing Information (DEP Use)

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

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

☒ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

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):

115.26 TPY ("as-built" design) – 83.92 TPY (Permit -009-AC) = increase by 31.34 TPY

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

80.68 TPY ("as built" design) – 58.75 TPY (Permit -009-AC) = increase by 21.93 TPY

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

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

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

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

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/Air Heater	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

APPLICATION INFORMATION

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

   11/17/08
   Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☐ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☐ The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

4. Application Responsible Official Telephone Numbers...
   Telephone: ( ) - ext. Fax: ( ) -

5. Application Responsible Official E-mail Address:

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

   Signature Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Fawn Bergen, PE**
   Registration Number: **61614**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Koogler and Associates, Inc.**
   Street Address: **4014 NW 13th Street**
   City: **Gainesville** State: **Florida** Zip Code: **32609**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 377-5822** ext.**15** Fax: **(352) 377-7158**
4. Professional Engineer E-mail Address: **FBergen@kooglerassociates.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.

Signature 11/21/08 Date 11/21/08

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **360.0** North (km) **3162.5**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **28/35/00** Longitude (DD/MM/SS) **82/25/53**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **32**	6. Facility SIC(s): **3241**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Mr. George Townsend, Environmental Manager**
2. Facility Contact Mailing Address... Organization/Firm: **CEMEX, Inc. (Florida Crushed Stone Company)** Street Address: **10311 Cement Plant Road** City: **Brooksville** State: **Florida** Zip Code: **34601**
3. Facility Contact Telephone Numbers: Telephone: **(352) 799-7881** Fax: **(352) 799-6088**
4. Facility Contact E-mail Address: **GTownsend@cemexusa.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official E-mail Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	**A**	**N**
PM_{10}	**A**	**N**
SO_2	**A**	**N**
NOx	**A**	**N**
CO	**A**	**N**
VOC	**A**	**N**
HAPS - Total	**A**	**N**
DIOX	**B**	**N**
H114 (Mercury)	**B**	**N**
SAM	**B**	**N**
FL	**B**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps N/A

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Plot Plan** [ ] Previously Submitted, Date: _____

2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Flow Diagrams** [ ] Previously Submitted, Date: _____

3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date: **9/20/04**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   [ ] Attached, Document ID: _____ [X] Not Applicable (existing permitted facility)

2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   [X] Attached, Document ID: **Plot Plan & Flow Diagrams**

3. Rule Applicability Analysis:
   [ ] Attached, Document ID: **N/A**

4. List of Exempt Emissions Units: **N/A**
   [ ] Attached, Document ID: _____ [ ] Not Applicable (no exempt units at facility)

5. Fugitive Emissions Identification:
   [ ] Attached, Document ID: _____ [X] Not Applicable

6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   [ ] Attached, Document ID: _____ [X] Not Applicable

7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   [ ] Attached, Document ID: _____ [X] Not Applicable

8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   [ ] Attached, Document ID: _____ [X] Not Applicable

9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   [ ] Attached, Document ID: _____ [X] Not Applicable

10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    [ ] Attached, Document ID: _____ [X] Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications N/A

1. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications N/A

1. List of Insignificant Activities: (Required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
   ☐ Attached, Document ID:_____
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
   ☐ Attached, Document ID:_____
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities Onsite but Not Required to be Individually Listed
   ☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:_____ ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED) N/A

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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/Air Heater

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**

Emissions Unit Control Equipment/Method: Control 1 of 3

1. Control Equipment/Method Description: **Baghouse – High Temperature**
2. Control Device or Method Code: **016**

Emissions Unit Control Equipment/Method: Control 2 of 3

1. Control Equipment/Method Description: **Selective Noncatalytic Reduction (SNCR)**
2. Control Device or Method Code: **107**

Emissions Unit Control Equipment/Method: Control 3 of 3

1. Control Equipment/Method Description: **Multi-Staged Combustion (MSC)**
2. Control Device or Method Code: **025**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **206.3 TPH (1-hr); 4,620 TPD; 1,686,300 TPY dry preheater feed & flyash rate**
2. Maximum Production Rate: **125 TPH (1-hr); 2,800 TPD; 1,022,000 tons/consecutive 12-mo. clinker**
3. Maximum Heat Input Rate: **390** million Btu/hr **(pyroprocessing system)**
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: **24** hours/day **7** days/week **52** weeks/year **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Based on Permit No. 0530021-009-AC/PSD-FL-351. No requested changes to the production or process rates as a result of this minor modification.**

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Kiln 2**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Equipment ID 331.BF300**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **320** feet	7. Exit Diameter: **13.6** feet
8. Exit Temperature: **500**°F	9. Actual Volumetric Flow Rate: **329,700** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Common baghouse for kiln, preheater, precalciner, clinker cooler, and air heater. Stack parameters based on as-built design.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Natural Gas; Cement Kiln/Dryer – Kiln and Precalciner**		
2. Source Classification Code (SCC): **3-90-006-02**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.432**	5. Maximum Annual Rate: **3,784.3**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **negligible**	8. Maximum % Ash: **negligible**	9. Million Btu per SCC Unit: **1,050**
10. Segment Comment: **Segment related to this minor modification. Maximum hourly rate based on Permit No. 0530021-009-AC (rate has been corrected). 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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**
SO_2			**EL**
NO_x	**107/025**		**EL**
CO			**EL**
VOC			**EL**
H114 (Mercury)			**EL**

NOTE: No changes to the permitted emission rates as a result of this minor modification.

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **DEP Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC.**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Based on Permit No. 0530021-009-AC. CEMEX is requesting to modify the CEMS requirement language (Condition 16) to reflect 40 CFR 60.13 and 40 CFR 63.8, as follows:** From: "...Each hourly average shall be computed from a minimum of one measurement every minute..." To: "...**Hourly** averages shall be computed **according to 40 CFR 60.13**..."	

Continuous Monitoring System: Continuous Monitor **2** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **SO_2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Based on Permit No. 0530021-009-AC. CEMEX is requesting to modify the CEMS requirement language (Condition 16) to reflect 40 CFR 60.13 and 40 CFR 63.8, as follows:** From: "...Each hourly average shall be computed from a minimum of one measurement every minute..." To: "...**Hourly** averages shall be computed **according to 40 CFR 60.13**..."	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **3** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:

7. Continuous Monitor Comment: **Based on Permit No. 0530021-009-AC. CEMEX is requesting to modify the CEMS requirement language (Condition 16) to reflect 40 CFR 60.13 and 40 CFR 63.8, as follows:**

From: "...Each hourly average shall be computed from a minimum of one measurement every minute..."

To: "...**Hourly** averages shall be computed **according to 40 CFR 60.13**..."

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **4** of **4**

1. Parameter Code: **EM**	2. Pollutant(s): **VOC**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:

7. Continuous Monitor Comment: **Based on Permit No. 0530021-009-AC. CEMEX is requesting to modify the CEMS requirement language (Condition 16) to reflect 40 CFR 60.13 and 40 CFR 63.8, as follows:**

From: "...Each hourly average shall be computed from a minimum of one measurement every minute. Compliance with the 30-day emission limit for VOC shall be based on a 30 day block average that shall be computed from a minimum of one measurement every minute..."

To: "...**Hourly** averages shall be computed **according to 40 CFR 60.13**. Compliance with the 30-day emission limit for VOC shall be based on a 30 day block average that shall be computed from **valid hourly average data in accordance with 40 CFR 63.8(c)**..."

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **12/04**

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known): _____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable

Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Filter Dust**

3. Emissions Unit Identification Number: **045**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Suggest to change EU name to Filter Dust Bin (formerly Filter Dust)**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**
3. **Emissions unit consists of 2 baghouses: Filter Dust Bin (ID No. 331.BF640) and Filter Dust Bin Loadout Spout (ID No. 311.LS609)**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouses (2) – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 **5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Filter Dust Bin, Filter Dust Bin Loadout Spout**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 331.BF640** **Baghouse ID 311.LS609**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **90** feet	7. Exit Diameter: **1** feet
8. Exit Temperature: **392**°F	9. Actual Volumetric Flow Rate: **3,400** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **2,065** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters shown are for Filter Dust Bin baghouse. Stack parameters for Filter Dust Bin Loadout Spout are as follows:** **Discharge Type: V** **Stack height: 25 ft; Stack Diameter: 0.38 ft** **Temp: 375°F** **Flow Rate: 8,000 acfm; 4,958 dscfm** **Moisture content: 2%**		

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); Raw Material Transfer**		
2. Source Classification Code (SCC): **3-05-006-12**	3. SCC Units: **Tons Handled**	
4. Maximum Hourly Rate: **30**	5. Maximum Annual Rate: **262,800**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to the Filter Dust Bin. 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); Raw Material Transfer**		
2. Source Classification Code (SCC): **3-05-006-12**	3. SCC Units: **Tons Handled**	
4. Maximum Hourly Rate: **80**	5. Maximum Annual Rate: **700,800**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to the Filter Dust Bin Loadout Spout. 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.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.6** lb/hour **2.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 2.6 TPY (as-built design) – 6.48 TPY (-009-AC) = decrease by 3.88 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: **0.01 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.6** lb/hour **2.6** 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: **0.4** lb/hour **1.9** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 1.9 TPY (as-built design) – 4.534 TPY (-009-AC) = decrease by 2.6 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: **0.007 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.4** lb/hour **1.9** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Raw Meal Transport**

3. Emissions Unit Identification Number: **046**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Suggest to change EU name to Blend Silo**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**
3. **Emissions unit consists of 1 baghouse: Blend Silo (ID No. 341.BF400)**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – Medium Temperature**
2. Control Device or Method Code: **017**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**5** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Blend Silo**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 341.BF400**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **220** feet	7. Exit Diameter: **1.53** feet
8. Exit Temperature: **188**°F	9. Actual Volumetric Flow Rate: **8,100** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **6,468** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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); Raw Material Transfer**		
2. Source Classification Code (SCC): **3-05-006-12**	3. SCC Units: **Tons Handled**	
4. Maximum Hourly Rate: **300**	5. Maximum Annual Rate: **2,628,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Applies to the Blend Silo (Raw Meal 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 _ 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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**017**		**EL**
PM_{10}	**017**		**EL**

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: **0.55** lb/hour **2.43** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 6,468 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.55 lb/hr
Annual: 0.55 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 2.43 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 2.43 TPY (as-built design) – 1.14 TPY (-009-AC) = increase by 1.29 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **0.55** lb/hour **2.43** 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: **0.39** lb/hour **1.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 6,468 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.39 lb/hr
Annual: 0.39 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1.7 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 1.7 TPY (as-built design) – 0.8 TPY (-009-AC) = increase by 0.9 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **0.39** lb/hour **1.7** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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 Feed Transport**

3. Emissions Unit Identification Number: **047**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Emissions unit consists of three (3) baghouses: Blend Silo Discharge (ID No. 341.BF410), Kiln Feed Bin (ID No. 351.BF410), and Kiln Feed Transport (ID No. 351.BF420)**
2. **Change equipment ID, flow rate, and exit temperature of baghouses**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouses (3) – Medium Temperature**
2. Control Device or Method Code: **017**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Blend Silo Discharge, Kiln Feed Bin, Kiln Feed Transport**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 341.BF410** **Baghouse ID 351.BF410** **Baghouse ID 351.BF420**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **28** feet	7. Exit Diameter: **0.69** feet
8. Exit Temperature: **188°F**	9. Actual Volumetric Flow Rate: **11,700** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **9,343** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters shown are for the Blend Silo Discharge Baghouse. Refer to Tables 1 and 2 for stack parameters for other baghouses.**		

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); Raw Material Transfer**		
2. Source Classification Code (SCC): **3-05-006-12**	3. SCC Units: **Tons Handled**	
4. Maximum Hourly Rate: **241**	5. Maximum Annual Rate: **2,111,160**	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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**017**		**EL**
PM_{10}	**017**		**EL**

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: **2.1** lb/hour **9.14** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 9.14 TPY (as-built design) – 1.14 TPY (-009-AC) = increase by 8 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: **0.01 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **2.1** lb/hour **9.14** 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: **1.5** lb/hour **6.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 6.4 TPY (as-built design) – 0.8 TPY (-009-AC) = increase by 5.6 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: **0.007 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **1.5** lb/hour **6.4** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Clinker Transport**

3. Emissions Unit Identification Number: **048**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Emissions unit consists of 1 baghouse: Clinker Transport (ID No. 471.BF110)**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 **5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Clinker Transport**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 471.BF110**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **15** feet	7. Exit Diameter: **1.29** feet
8. Exit Temperature: **392**°F	9. Actual Volumetric Flow Rate: **4,200** acfm	10. Water Vapor: **2**%
11. Maximum Dry Standard Flow Rate: **2,551** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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: **208**	5. Maximum Annual Rate: **1,822,080**	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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.22** lb/hour **0.96** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 2,551 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.22 lb/hr
Annual: 0.22 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.96 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.96 TPY (as-built design) – 0.83 TPY (-009-AC) = increase by 0.13 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **0.22** lb/hour **0.96** 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: **0.15** lb/hour **0.67** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 2,551 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.15 lb/hr
Annual: 0.15 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.67 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.67 TPY (as-built design) – 0.58 TPY (-009-AC) = increase by 0.09 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **0.15** lb/hour **0.67** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Clinker Storage**

3. Emissions Unit Identification Number: **050**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Emissions unit consists of three (3) baghouses: Clinker Silo Discharge 1 (ID No. 481.BF155), Clinker Silo Discharge 2 (ID No. 481.BF165), and Clinker Storage Silo (ID No. 471.BF120)**
2. **Change equipment ID, flow rate, and exit temperature of baghouses**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouses (3) – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**5** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Clinker Storage**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 481.BF155** **Baghouse ID 481.BF165** **Baghouse ID 471.BF120**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **16** feet	7. Exit Diameter: **1.08** feet
8. Exit Temperature: **375**°F	9. Actual Volumetric Flow Rate: **2,871** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **1,779** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters shown are for the Clinker Silo Discharge 1 stack. All other stack parameters listed in Tables 1 and 2 (Attachment Control Equipment).**		

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: **259**	5. Maximum Annual Rate: **2,268,840**	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: **208**	5. Maximum Annual Rate: **1,822,080**	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.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.99** lb/hour **4.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 4.4 TPY (as-built design) – 1.11 TPY (-009-AC) = increase by 3.3 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: **0.01 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.99** lb/hour **4.4** 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: **0.69** lb/hour **3.0** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 3.0 TPY (as-built design) – 0.776 TPY (-009-AC) = increase by 2.2 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: **0.007 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.69** lb/hour **3.0** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Finish Mill Collecting Bin**

3. Emissions Unit Identification Number: **051**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Emissions unit consist of 1 baghouse: Finish Mill Additives (ID No. 511.BF650)**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – Low Temperature**
2. Control Device or Method Code: **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Finish Mill Additives**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 511.BF650**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **33** feet	7. Exit Diameter: **1.37** feet
8. Exit Temperature: **104**°F	9. Actual Volumetric Flow Rate: **7,300** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **6,697** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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 (Collecting Bin)**		
2. Source Classification Code (SCC): **3-05-006-27**	3. SCC Units: **Tons Material Processed**	
4. Maximum Hourly Rate: **127**	5. Maximum Annual Rate: **1,112,520**	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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**018**		**EL**
PM_{10}	**018**		**EL**

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: **0.57** lb/hour **2.51** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 6,697 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.57 lb/hr
Annual: 0.57 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 2.51 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 2.51 TPY (as-built design) – 3.64 TPY (-009-AC) = decrease by 1.13 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **0.57** lb/hour **2.51** 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: **0.4** lb/hour **1.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 6,697 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.40 lb/hr
Annual: 0.40 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1.8 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 1.8 TPY (as-built design) – 2.55 TPY (-009-AC) = decrease by 0.75 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **0.4** lb/hour **1.8** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Finish Mill**

3. Emissions Unit Identification Number: **052**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **New hot gas generator unit at Finish Mill. The hot gas unit will provide start-up heat (for drying) to the raw mill and will provide additional raw material drying capacity when needed. Detailed diagrams of the hot gas generator unit are included in Attachment 1. Request limit of 2,500 hr/yr for hot gas generator.**
2. **Emissions unit consists of 1 baghouse: Finish Mill (ID No. 531.BF500)**
3. **Change equipment ID, flow rate, and exit temperature of baghouse**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **43.5** million Btu/hr **(hot gas generator unit)**	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**5** days/week
52 weeks/year	**8,760*** hours/year

6. Operating Capacity/Schedule Comment:

Permit No. 0530021-009-AC does not limit the throughput rate of the Finish Mill. The maximum heat input rate represents the maximum rate of the new hot gas generator unit.

***Maximum operation for the hot gas generator unit is 2,500 hour/year.**

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Finish Mill**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 531.BF500**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **207** feet	7. Exit Diameter: **6.58** feet
8. Exit Temperature: **302**°F	9. Actual Volumetric Flow Rate: **263,778** acfm	10. Water Vapor: **2**%
11. Maximum Dry Standard Flow Rate: **179,120** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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: **250**	5. Maximum Annual Rate: **2,190,000**	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 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.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Liquified Petroleum Gas (LPG); General**		
2. Source Classification Code (SCC): **3-90-010-89**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.38**	5. Maximum Annual Rate: **5,946.6**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **0.315**
10. Segment Comment: **Based on 318.0 scf/hr, 7.48 gal/scf, and 2,500 hours/year. Applies to the hot gas generator unit. Propane is used for the pilot light on the unit.**		

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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**
SO_2			**NS**
NO_x			**NS**
VOC			**NS**
CO			**NS**

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: **15.4** lb/hour **67.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 179,120 dscfm x 1 lb/7,000 gr x 60 min/hour = 15.35 lb/hr
Annual: 15.35 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 67.3 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 67.3 TPY (as-built design) – 10.12 TPY (-009-AC) = increase by 57.2 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **15.4** lb/hour **67.3** 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.**	

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: **10.8** lb/hour **47.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 179,120 dscfm x 1 lb/7,000 gr x 60 min/hour = 10.75 lb/hr
Annual: 10.75 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 47.1 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 47.1 TPY (as-built design) – 7.08 TPY (-009-AC) = increase by 40.0 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **10.8** lb/hour **47.1** 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: **SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **21.0** lb/hour **26.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **142 S lb/1,000 gal, S = 0.5%** Reference: **AP-42 Table 1.3-1**	7. Emissions Method Code: **3**
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:
Potential emissions based on the worst-case fuel. Refer to Attachment 1 for the detailed emission calculations.

11. Potential, Fugitive, and Actual Emissions Comment:
Represents emissions from the hot gas generator 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 _ 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):	

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: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **30.9** lb/hour **38.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **13 lb/1,000 gal** Reference: **AP-42 Table 1.5-1**	7. Emissions Method Code: **3**
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:
Potential emissions based on the worst-case fuel. Refer to Attachment 1 for the detailed emission calculations.

11. Potential, Fugitive, and Actual Emissions Comment:
Represents emissions from the hot gas generator 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 _ 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):	

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: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **17.8** lb/hour **22.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **7.5 lb/1,000 gal** Reference: **AP-42 Table 1.5-1**	7. Emissions Method Code: **3**
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:
Potential emissions based on the worst-case fuel. Refer to Attachment 1 for the detailed emission calculations.

11. Potential, Fugitive, and Actual Emissions Comment:
Represents emissions from the hot gas generator 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 _ 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):	

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: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **2.38** lb/hour **2.97** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1.0 lb/1,000 gal** Reference: **AP-42 Table 1.5-1**	7. Emissions Method Code: **3**
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:
Potential emissions based on the worst-case fuel. Refer to Attachment 1 for the detailed emission calculations.

11. Potential, Fugitive, and Actual Emissions Comment:
Represents emissions from the hot gas generator 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 _ 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):	

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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Daily 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(e).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Bucket Elevator**

3. Emissions Unit Identification Number: **054**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Suggest to change EU name to Finish Mill Bucket Elevator**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**
3. **Emissions unit consists of 1 baghouse: Finish Mill Bucket Elevator (ID No. 531.BF020)**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**5** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **FM Bucket Elevator**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 531.BF020**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **88** feet	7. Exit Diameter: **1.75** feet
8. Exit Temperature: **392**°F	9. Actual Volumetric Flow Rate: **11,500** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **6,984** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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: **250**	5. Maximum Annual Rate: **2,190,000**	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 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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.6** lb/hour **2.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 6,984 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.60 lb/hr
Annual: 0.60 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 2.6 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 2.6 TPY (as-built design) – 1.77 TPY (-009-AC) = increase by 0.83 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **0.6** lb/hour **2.6** 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: **0.42** lb/hour **1.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 6,984 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.42 lb/hr
Annual: 0.42 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 1.8 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 1.8 TPY (as-built design) – 1.24 TPY (-009-AC) = increase by 0.56 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **0.42** lb/hour **1.8** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date _

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Cement Transport**

3. Emissions Unit Identification Number: **057**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Emissions unit consists of 2 baghouses: Finish Mill Cement Transport (ID No. 531.BF400) and Finish Mill Rejects Transport (ID No. 531.BF290)**
2. **Change equipment ID, flow rate, and exit temperature of baghouses**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouses (2) – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 **5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **FM Cement Transport**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 531.BF400** **Baghouse ID 531.BF290**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **64** feet	7. Exit Diameter: **1** feet
8. Exit Temperature: **266**°F	9. Actual Volumetric Flow Rate: **2,800** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **1,996** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters shown are for the Finish Mill Cement Transport Baghouse. Other stack parameters are shown in Tables 1 and 2 (Attachment Control Equipment).**		

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: **250**	5. Maximum Annual Rate: **928,560**	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.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.44** lb/hour **1.9** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 1.9 TPY (as-built design) – 4.76 TPY (-009-AC) = decrease by 2.9 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: **0.01 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.44** lb/hour **1.9** 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: **0.3** lb/hour **1.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 1.4 TPY (as-built design) – 3.34 TPY (-009-AC) = decrease by 1.94 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: **0.007 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.3** lb/hour **1.4** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Cement Loadout Bin**

3. Emissions Unit Identification Number: **058**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Suggest to rename EU to Cement Silo 5 Loadout;**
2. **Emissions unit consists of 4 baghouses: Cement Silo 5 (ID No. 612.BF005), Cement Silo 5 Loading Bin (ID No. 612.BF620), Cement Silo 5 Loadout Spout N (ID No. 622.LS140), and Cement Silo 5 Loadout Spout S (ID No. 622.LS160);**
3. **Change equipment ID, flow rate, and exit temperature of baghouses**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouses (4) – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 **5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Cement Silo 5**	2. Emission Point Type Code: **3**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:
Baghouse ID 612.BF005
Baghouse ID 612.BF620
Baghouse ID 622.LS140
Baghouse ID 622.LS160

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code: **V**	6. Stack Height: **210** feet	7. Exit Diameter: **1.53** feet
8. Exit Temperature: **266**°F	9. Actual Volumetric Flow Rate: **8,300** acfm	10. Water Vapor: **2**%

11. Maximum Dry Standard Flow Rate: **5,916** dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)

15. Emission Point Comment:
Stack parameters shown are for Cement Silo 5 baghouse stack. All others shown in Tables 1 and 2 (Attachment Control Equipment).

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: **250**	5. Maximum Annual Rate: **2,190,000**	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. 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.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.95** lb/hour **4.2** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 4.2 TPY (as-built design) – 0.91 TPY (-009-AC) = increase by 3.29 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: **0.01 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.95** lb/hour **4.2** 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: **0.67** lb/hour **2.9** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 2.9 TPY (as-built design) – 0.638 TPY (-009-AC) = increase by 2.26 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: **0.007 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.67** lb/hour **2.9** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Cement Loadout Bin**

3. Emissions Unit Identification Number: **059**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Suggest to change EU name to Multi-Cell Cement Loadout**
2. **Emissions unit consists of 4 baghouses: Multi-Cell Cement Silo (ID No. 611.BF005), Multi-Cell Cement Silo Alleviator (ID No. 611.BF045), Multi-Cell Loadout Transport (ID No. 611.BF610), and Multi-Cell Loadout Spout (ID No. 611.LS760)**
3. **Change equipment ID, flow rate, and exit temperature of baghouses**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouses (4) – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Multi-Cell Loadout**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 611.BF005** **Baghouse ID 611.BF045** **Baghouse ID 611.BF610** **Baghouse ID 611.LS760**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **H**	6. Stack Height: **208** feet	7. Exit Diameter: **1.33** feet
8. Exit Temperature: **266**°F	9. Actual Volumetric Flow Rate: **2,200** acfm	10. Water Vapor: **2**%
11. Maximum Dry Standard Flow Rate: **1,568** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters shown are for Multi-Cell Cement Silo baghouse. All other stack parameters shown in Tables 1 and 2 (Attachment Control Equipment).**		

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: **250**	5. Maximum Annual Rate: **2,190,000**	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 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.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.78** lb/hour **3.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 3.4 TPY (as-built design) – 0.91 TPY (-009-AC) = increase by 2.5 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: **0.01 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.78** lb/hour **3.4** 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: **0.55** lb/hour **2.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 2.4 TPY (as-built design) – 0.638 TPY (-009-AC) = increase by 1.76 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: **0.007 gr/dscf (each baghouse)**	4. Equivalent Allowable Emissions: **0.55** lb/hour **2.4** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Coal Mill**

3. Emissions Unit Identification Number: **060**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **Emissions unit consists of 1 baghouse: Coal Mill baghouse (ID No. 461.BF400)**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – Low Temperature**
2. Control Device or Method Code: **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **20.0 tons/hour; 165,000 tons/year coal or pet coke**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**5** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Based on Permit No. 0530021-009-AC and -012-AC.**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Coal Mill**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 461.BF400**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **Coal Mill Baghouse exhaust vents through Main Kiln 2 baghouse and stack**		
5. Discharge Type Code: **V**	6. Stack Height: **320** feet	7. Exit Diameter: **1.29** feet
8. Exit Temperature: **170°F**	9. Actual Volumetric Flow Rate: **27,777** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **22,814** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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); Pulverized Coal Kiln Feed Units (Coal Mill)**		
2. Source Classification Code (SCC): **3-05-006-21**	3. SCC Units: **Tons Processed**	
4. Maximum Hourly Rate: **20**	5. Maximum Annual Rate: **165,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Based on Permit Nos. 0530021-009-AC and -012-AC.**		

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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**018**		**EL**
PM_{10}	**018**		**EL**

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: **1.96** lb/hour **8.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 22,814 dscfm x 1 lb/7,000 gr x 60 min/hour = 1.96 lb/hr
Annual: 1.96 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 8.6 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 8.6 TPY (as-built design) – 7.01 TPY (-009-AC) = increase by 1.6 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **1.96** lb/hour **8.6** 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: **1.37** lb/hour **6.0** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 22,814 dscfm x 1 lb/7,000 gr x 60 min/hour = 1.37 lb/hr
Annual: 1.37 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 6.0 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 6.0 TPY (as-built design) – 4.91 TPY (-009-AC) = increase by 1.09 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **1.37** lb/hour **6.0** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **No compliance demonstration required**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC and Rule 62-297.620(4), F.A.C. Applies to the Coal Mill Baghouse.** **Compliance for this emissions unit is demonstrated by compliance testing at the Main Kiln 2 Baghouse stack, since the Coal Mill baghouse exhausts through the Main Kiln 2 baghouse. The VE limit for the Main Kiln 2 stack applies for compliance purposes.**	

Visible Emissions Limitation: Visible Emissions Limitation _ of _

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **1**

1. Parameter Code: **TEMP**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Based on 40 CFR 60.253 and Permit No. 0530021-009-AC. Monitors the temperature of the gas stream at the exit of the thermal dryer.**	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications N/A

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Fine Coal Bin**

3. Emissions Unit Identification Number: **061**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **New EU name-Fine Coal Bin (formerly Fuel Bin)**
2. **Change equipment ID, flow rate, and exit temperature of baghouse**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **20.0 tons/hr; 165,000 tons/year**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**5** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Based on Permit No. 0530021-009-AC and -012-AC.**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Fine Coal Bin**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 461.BF560**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **59** feet	7. Exit Diameter: **0.5** feet
8. Exit Temperature: **302**°F	9. Actual Volumetric Flow Rate: **544** acfm	10. Water Vapor: **2**%
11. Maximum Dry Standard Flow Rate: **369** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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); Pulverized Coal Kiln Feed Units (Fine Coal Bin)**		
2. Source Classification Code (SCC): **3-05-006-21**	3. SCC Units: **Tons Processed**	
4. Maximum Hourly Rate: **20**	5. Maximum Annual Rate: **165,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Based on the limit for the Coal Mill contained in Permit Nos. 0530021-009-AC and -012-AC, however the permit does not limit throughput for this emissions unit.**		

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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **0.03** lb/hour **0.14** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 369 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.03 lb/hr
Annual: 0.03 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.14 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.14 TPY (as-built design) – 0.64 TPY (-009-AC) = decrease by 0.5 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **0.03** lb/hour **0.14** 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 **0.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 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 = 0.1 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: 0.1 TPY (as-built design) – 0.445 TPY (-009-AC) = decrease by 0.35 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **0.02** lb/hour **0.1** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on Permit No. 0530021-009-AC.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on 40 CFR 60.252(c).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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: **Packing Plant**

3. Emissions Unit Identification Number: **No ID**

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

8. Federal Program Applicability: (Check all that apply)

☐ 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. **New emissions unit—Packing Plant**
2. **Emissions unit consists of 1 baghouse: Packing Plant baghouse (ID No. 641.BF150)**

Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: **Baghouse – High Temperature**
2. Control Device or Method Code: **016**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **200 TPH**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**5** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Packing Plant**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Baghouse ID 641.BF150**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **39** feet	7. Exit Diameter: **2.11** feet
8. Exit Temperature: **266**°F	9. Actual Volumetric Flow Rate: **19,200** acfm	10. Water Vapor: **2%**
11. Maximum Dry Standard Flow Rate: **13,684** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

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); Cement Loadout (Packing Plant)**		
2. Source Classification Code (SCC): **3-05-006-19**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **200**	5. Maximum Annual Rate: **1,752,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Annual rate based on 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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**		**EL**
PM_{10}	**016**		**EL**

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: **1.2** lb/hour **5.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 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: 0.01 gr/dscf x 13,684 dscfm x 1 lb/7,000 gr x 60 min/hour = 1.17 lb/hr
Annual: 1.17 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 5.14 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: increase by 5.14 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: **0.01 gr/dscf**	4. Equivalent Allowable Emissions: **1.2** lb/hour **5.1** 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: **0.82** lb/hour **3.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.007 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: 0.007 gr/dscf x 13,684 dscfm x 1 lb/7,000 gr x 60 min/hour = 0.82 lb/hr
Annual: 0.82 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 3.6 TPY

11. Potential, Fugitive, and Actual Emissions Comment:
Change in emissions: increase by 3.6 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: **0.007 gr/dscf**	4. Equivalent Allowable Emissions: **0.82** lb/hour **3.6** 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):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9 annually**	
5. Visible Emissions Comment: **Based on and Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE00**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **0%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly 1-minute Method 22 testing**	
5. Visible Emissions Comment: **Based on 40 CFR 63.1350(a)(4)(i).**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Flow Diagrams** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **Control Equipment Information** ☐ Previously Submitted, Date __

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
☒ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
☒ Attached, Document ID: **O&M Plan** ☐ Previously Submitted, Date _____
☐ Not Applicable

6. Compliance Demonstration Reports/Records:
☐ Attached, Document ID: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ Previously Submitted, Date: _____
Test Date(s)/Pollutant(s) Tested: _____
☐ To be Submitted, Date (if known):_____
Test Date(s)/Pollutant(s) Tested: _____
☒ Not Applicable
Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

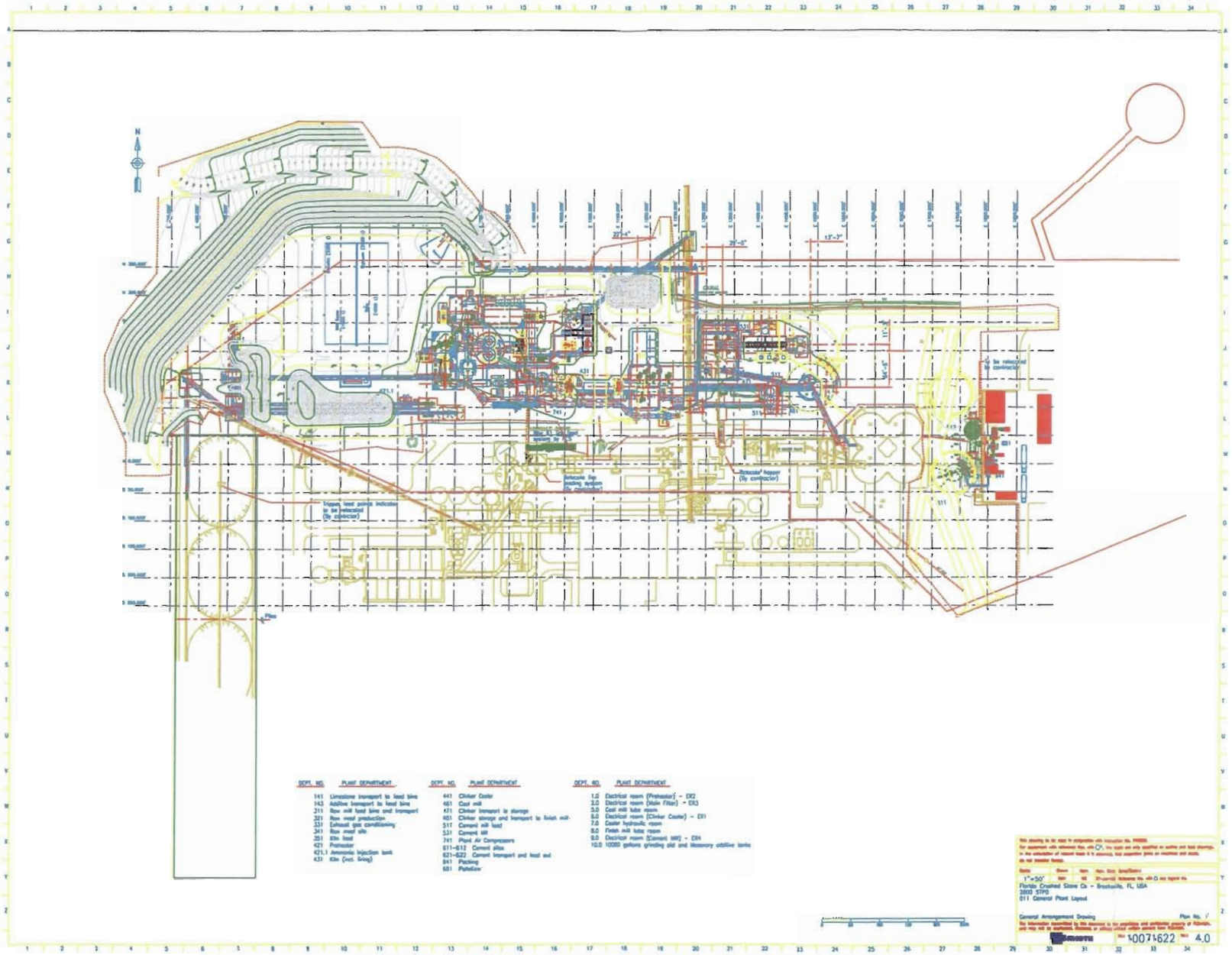
Additional Requirements for Title V Air Operation Permit Applications **N/A**

1. Identification of Applicable Requirements:
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

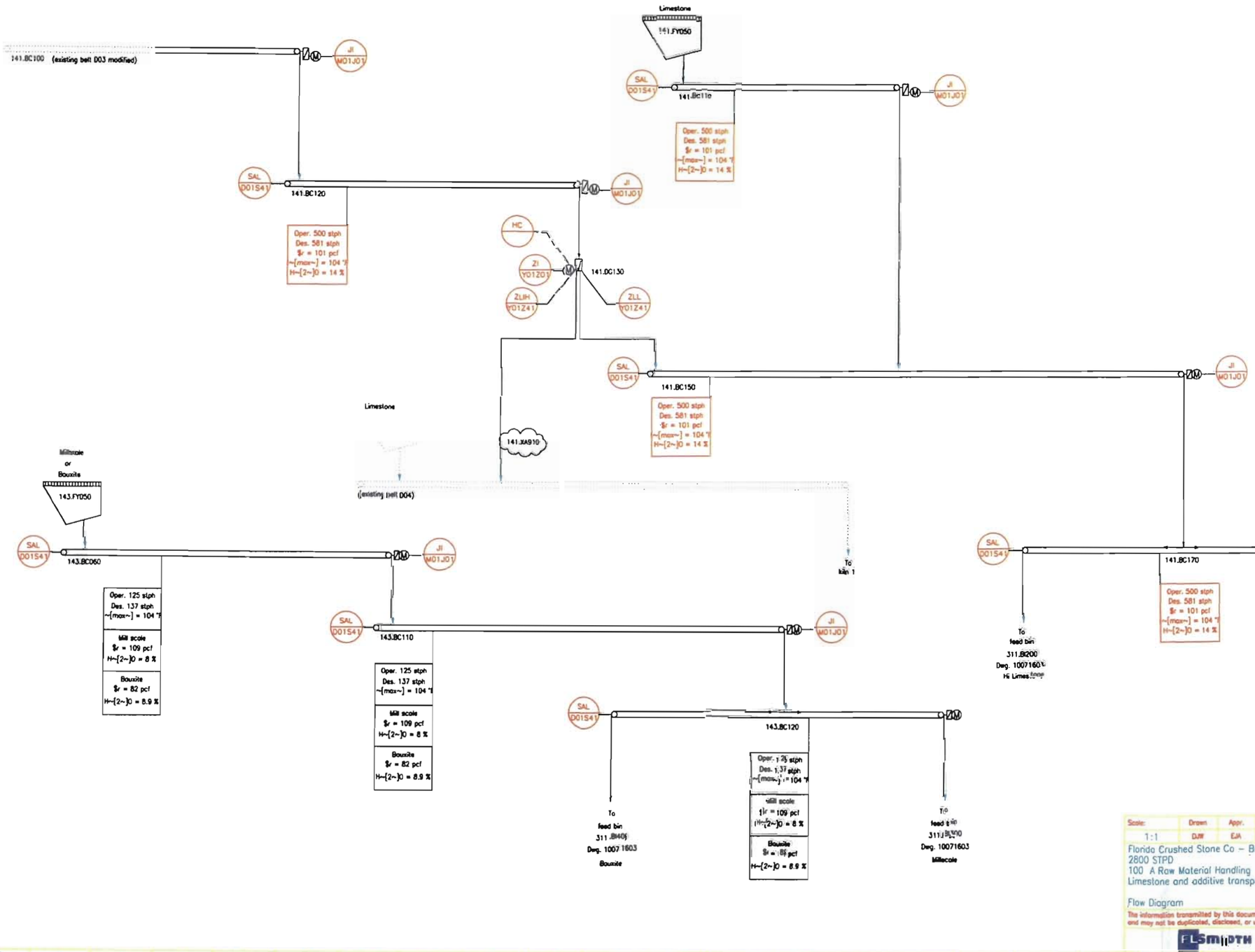
ATTACHMENT PLOT PLAN

KILN 2 SYSTEM PLOT PLAN


N
Limestone transport to feed bins
Additive transport to feed bins
Raw mill feed bins and transport
Raw meal production
Exhaust gas conditioning
Raw meal silo
Kiln feed
Preheater
Ammonia injection tank
Kiln (incl. Grieg)
Clinker Cooler
Coal mill
Clinker transport to storage
Clinker storage and transport to finish mill
Cement mill feed
Cement silo
Plant Air Compressors
Cement silos
Cement transport and feed out
Packing
Palletizer
Electrical room (Preheater) – EK2
Electrical room (Main Filter) – EK3
Coal mill tube room
Electrical room (Clinker Cooler) – EK1
Cooler hydraulic room
Finish mill tube room
Electrical room (Cement Mill) – EK4
10000 gallons grinding aid and Masonary additive tanks
Florida Crushed Stone Co - Brooksville, FL, USA
3800 STPD
011 General Plant Layout
General Arrangement Drawing
1"=50'
4.0

ATTACHMENT FLOW DIAGRAMS

KILN 2 SYSTEM PROCESS FLOW DIAGRAMS

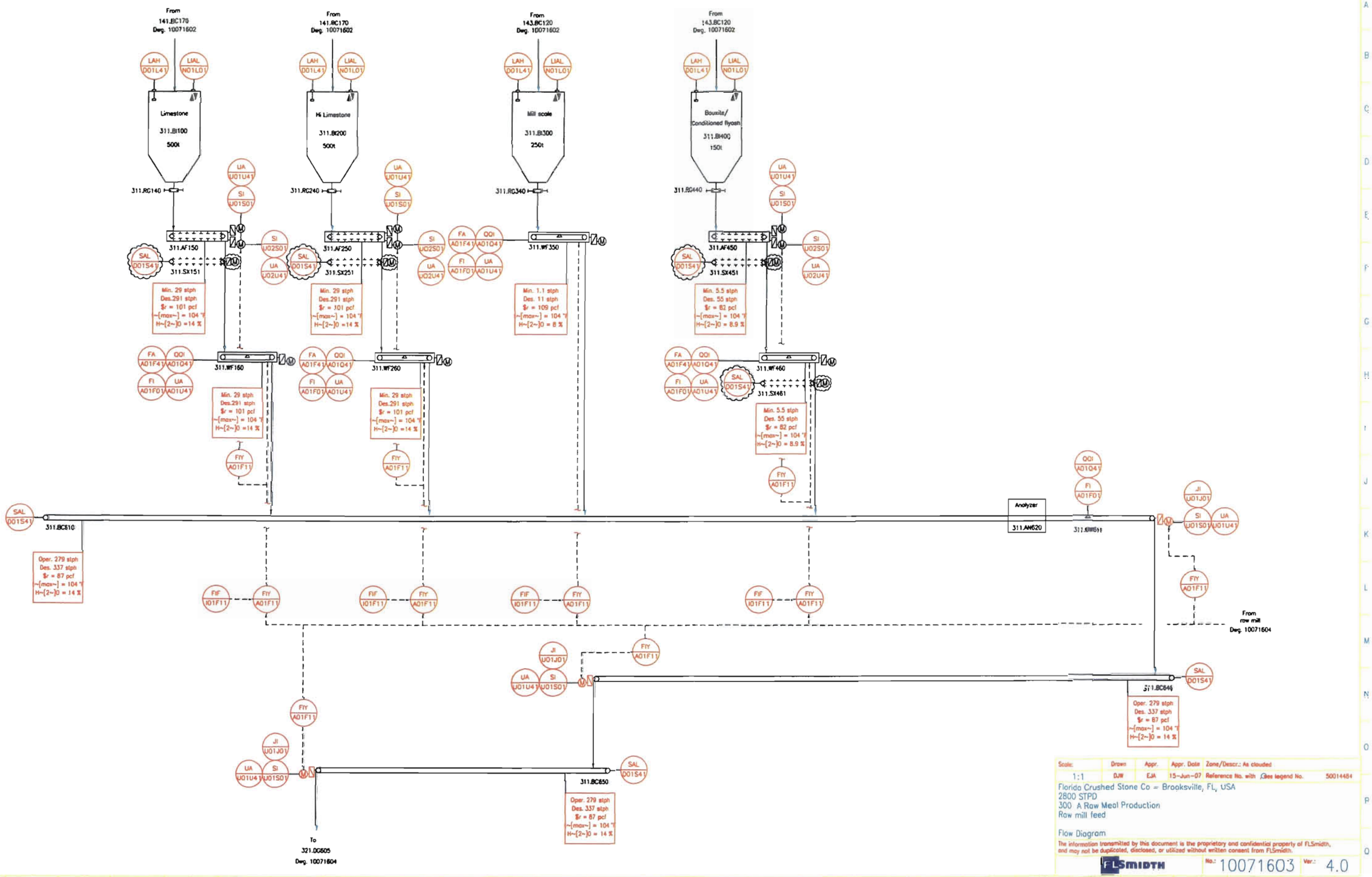


Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	EJA	15-Jun-07	Reference No. with Class legend No. 50014484

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
100 A Raw Material Handling
Limestone and additive transport

Flow Diagram

FLSmidth No.: 10071602 Ver.: 4.0

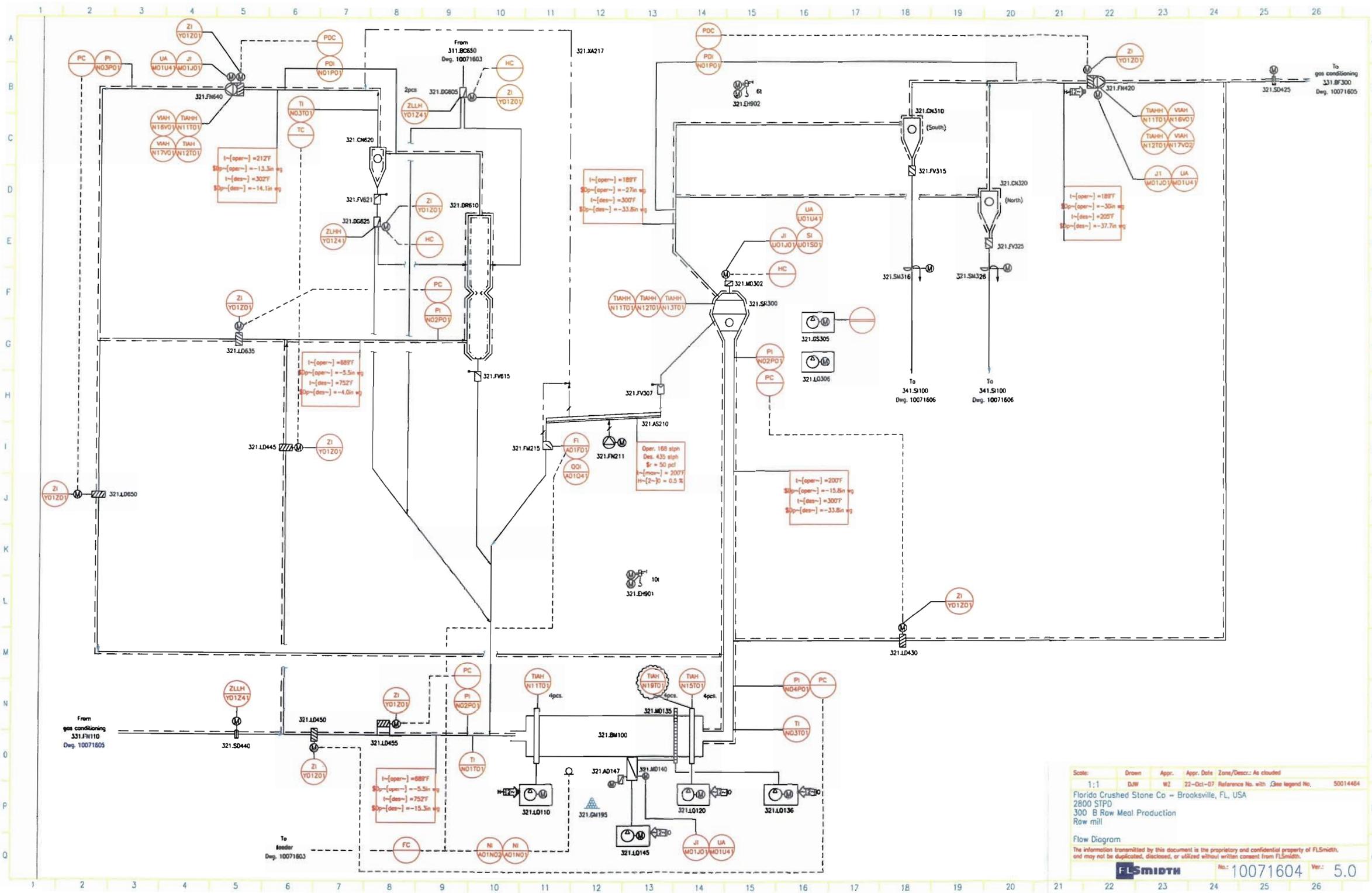


Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	EJA	15-Jun-07	Reference No. with Ø.ies legend No. 50014484

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
300 A Raw Meal Production
Raw mill feed

Flow Diagram

FLSmidth No.: 10071603 Ver.: 4.0


From 311.BC650 Dwg. 10071603
321.XA217
321.FN640
321.DG805
2pcs
ZLLH Y01Z41
321.CN620
321.FV621
321.DG625
321.DR610
321.LD635
321.FV615
321.LD445
321.LD650
321.AS210
321.FM215
321.FN211
Oper. 168 stph
Des. 435 stph
ρ_r = 50 pcf
321.EH902
321.CN310
(South)
321.FV315
321.CN320
(North)
321.FV325
321.SM316
321.SM326
321.FN420
321.SD425
To gas conditioning 331.BF300 Dwg. 10071605
To 341.SI100 Dwg. 10071606
To 341.SI100 Dwg. 10071606
321.MD302
321.SR300
321.GS305
321.LG306
321.FV307
321.EH901
321.LD430
From gas conditioning 331.FN110 Dwg. 10071605
321.SD440
321.LD450
321.LD455
321.BM100
321.MD135
321.MD140
321.AD147
321.GM195
321.LD110
321.LD120
321.LD136
321.LD145
To feeder Dwg. 10071603
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Δp~{oper~} = -13.3in wg
t~{des~} =302°F
Δp~{des~} = -14.1in wg
t~{oper~} =88°F
Δp~{oper~} = -5.5in wg
t~{des~} =752°F
Δp~{des~} = -4.0in wg
t~{oper~} =189°F
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Δp~{des~} = -33.8in wg
t~{oper~} =200°F
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t~{oper~} =189°F
Δp~{oper~} = -30in wg
t~{des~} =205°F
Δp~{des~} = -37.7in wg
t~{oper~} =689°F
Δp~{oper~} = -5.5in wg
t~{des~} =752°F
Δp~{des~} = -15.3in wg
t~{max~} = 200°F
H~{2~}0 = 0.5 %
PC PI N03P01
UA JI M01U41 M01J01
PDC PDI N01P01
TI TC N03T01
VIAH TIAHH N16V01 N11T01
VIAH TIAH N17V01 N12T01
ZI Y01Z01
HC
PC PI N02P01
TI N01T01
TIAHH TIAH TIAH N11T01 N12T01 N13T01
TIAH N11T01 4pcs.
TIAH N19T01 4pcs.
TIAH N15T01 4pcs.
PI PC N04P01
TI N03T01
FI QQI A01F01 A01Q41
NI NI A01N02 A01N01
FC
SI JI U01S01 U01J01
10t
61
Scale: 1:1
Drawn DJW
Appr. WZ
Appr. Date 22-Oct-07
Zone/Descr.: As clouded
Reference No. with See legend No. 50014484
Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
300 B Raw Meal Production
Raw mill
Flow Diagram
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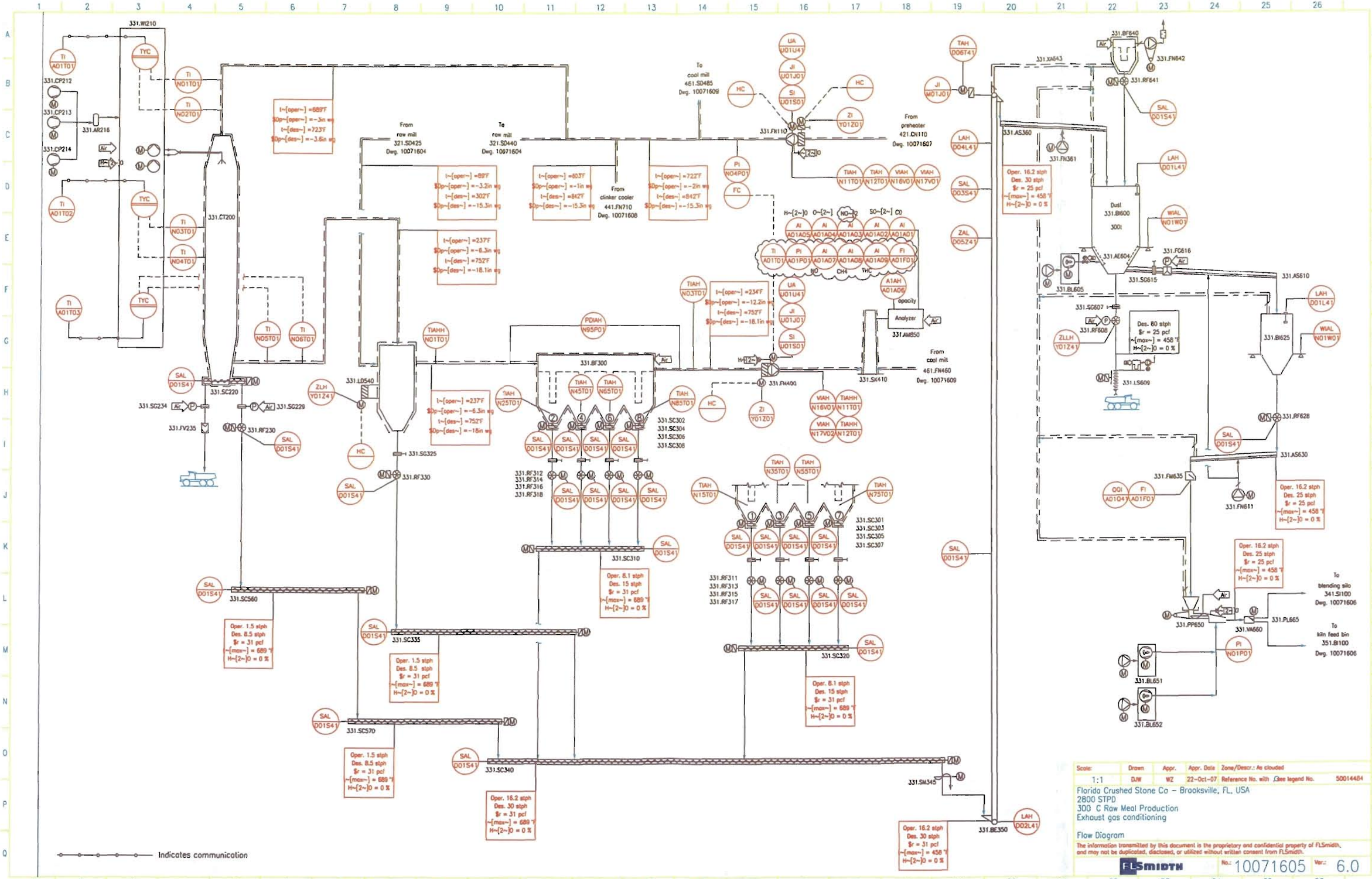
FLSmidth
No.: 10071604
Ver.: 5.0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331.SC306
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331.RF313
331.RF315
331.RF317
331.SC320
331.FN110
331.FN400
331.SK410
331.AM850
331.SM345
331.BE350
331.XA643
331.BF640
331.FN642
331.RF641
331.AS360
331.FN361
331.BI600
331.AE604
331.FG616
331.SC615
331.BL605
331.AS610
331.SC607
331.RF608
331.BI625
331.LS609
331.RF628
331.AS630
331.FM635
331.FN611
331.PP650
331.VA650
331.PL665
331.BL651
331.BL652
From preheater 421.CN110 Dwg. 10071607
From raw mill 321.SD425 Dwg. 10071604
To raw mill 321.SD440 Dwg. 10071604
To cool mill 461.SD485 Dwg. 10071609
From clinker cooler 441.FN710 Dwg. 10071608
From cool mill 461.FN460 Dwg. 10071609
To blending silo 341.SI100 Dwg. 10071606
To kiln feed bin 351.BI100 Dwg. 10071606
Indicates communication
Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
300 C Raw Meal Production
Exhaust gas conditioning
Flow Diagram
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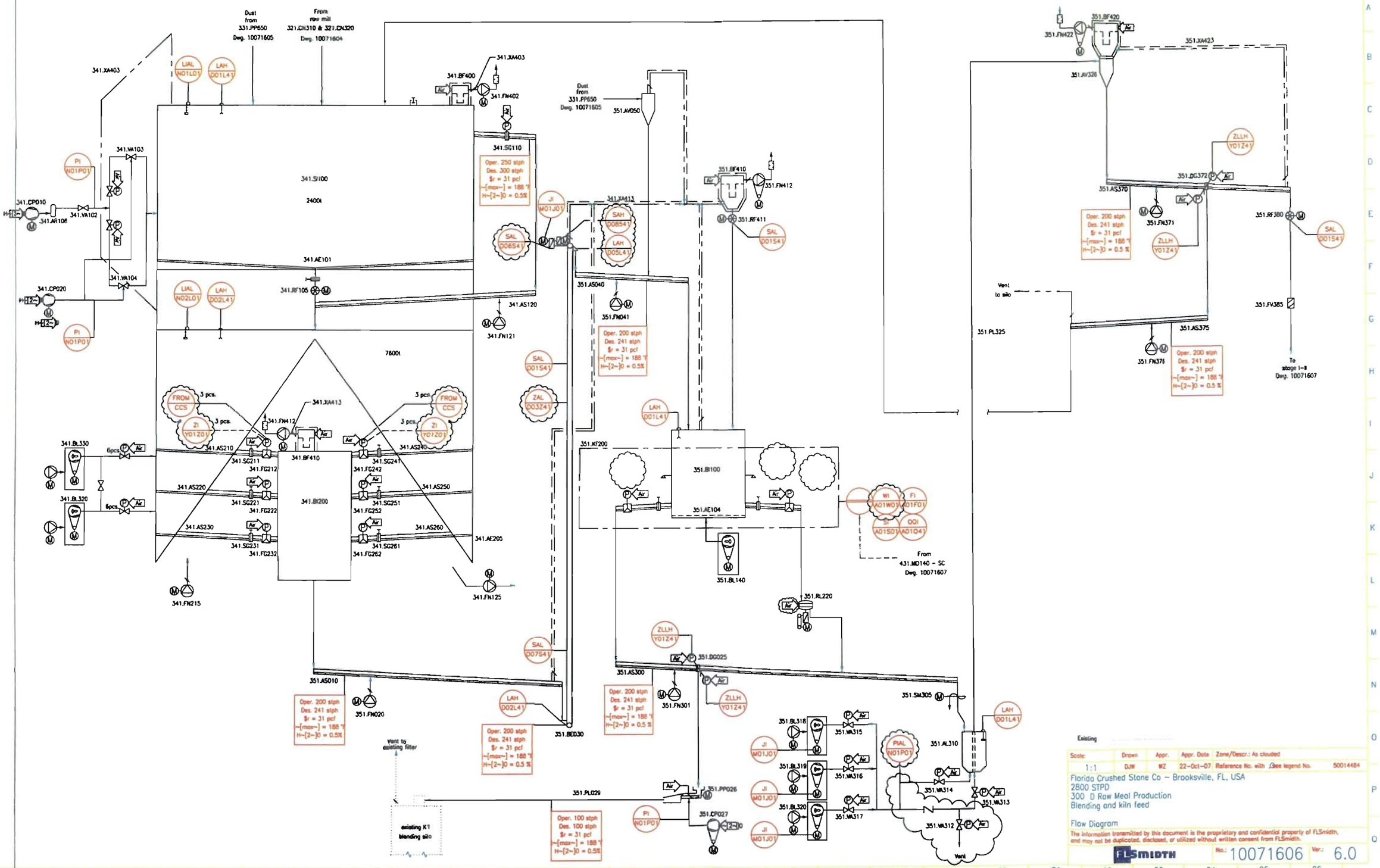
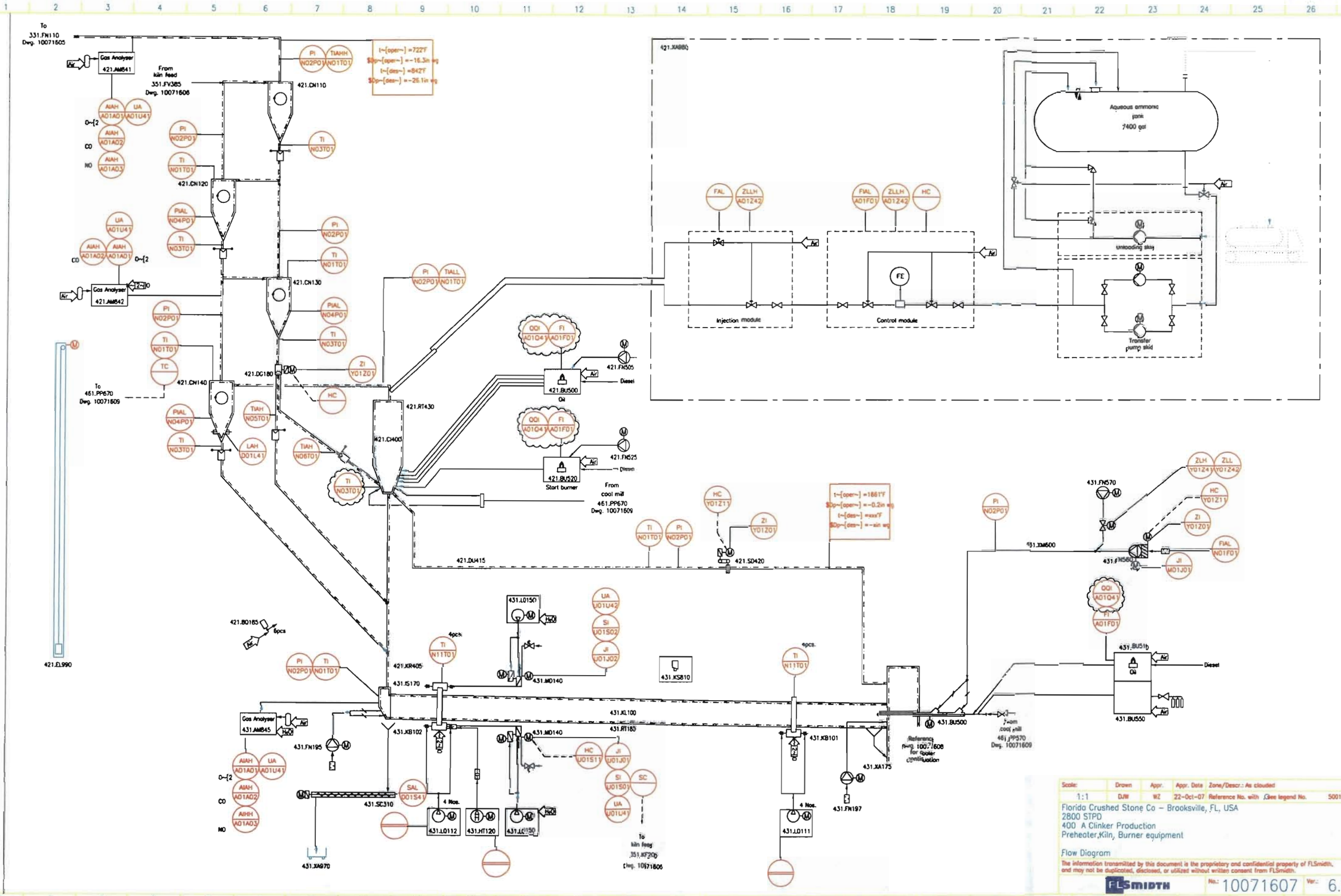
FLSmidth
No.: 10071605
Ver.: 6.0
Scale: 1:1
Drawn: DJW
Appr.: WZ
Appr. Date: 22-Oct-07
Zone/Descr.: As clouded
Reference No. with /See legend No.: 50014484



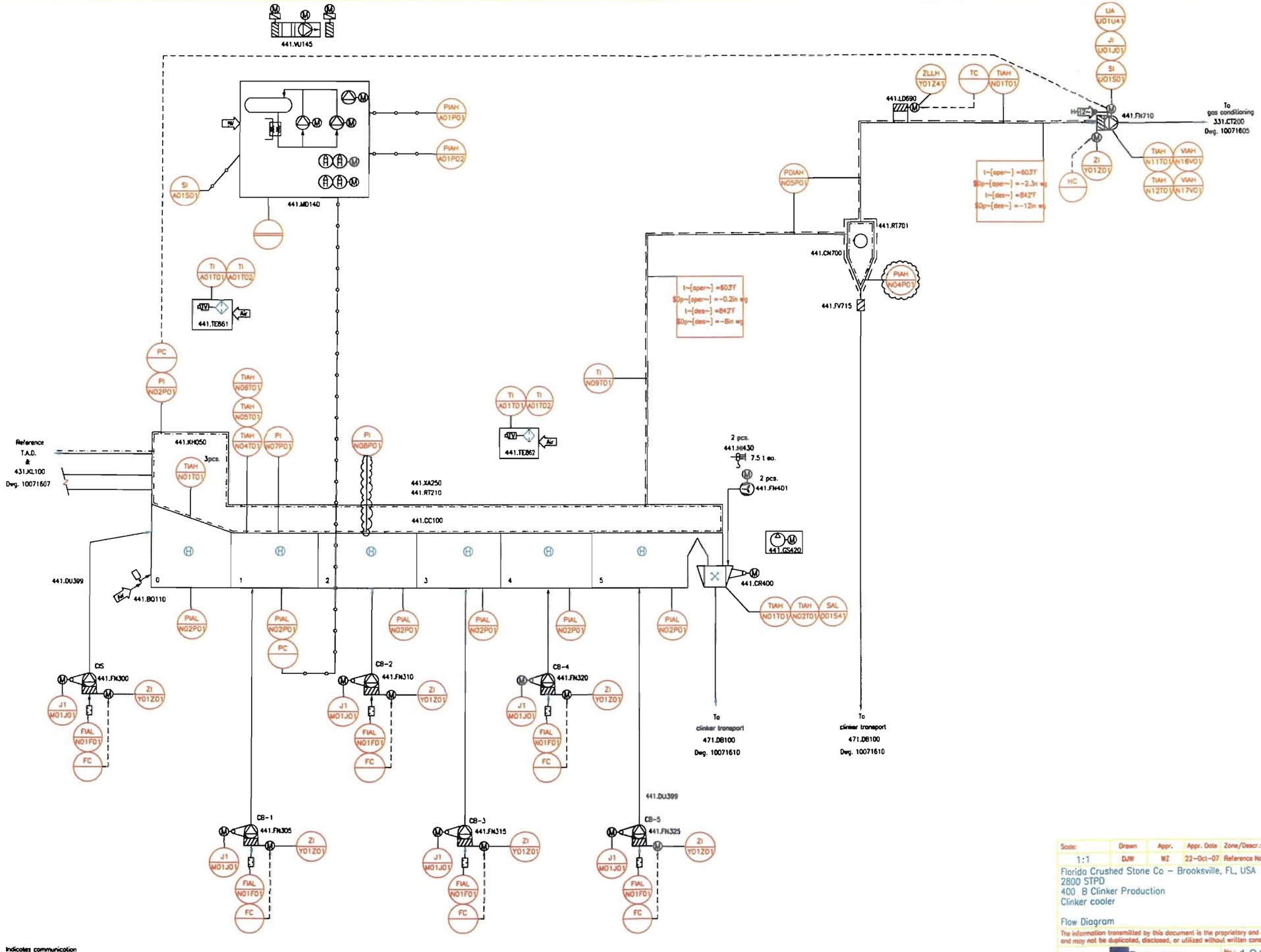


Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded	
1:1	DJW	WZ	22-Oct-07	Reference No. with (See legend No.	50014484

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
400 A Clinker Production
Preheater,Kiln, Burner equipment

Flow Diagram

FLSmidth No.: 10071607 Ver.: 6.0

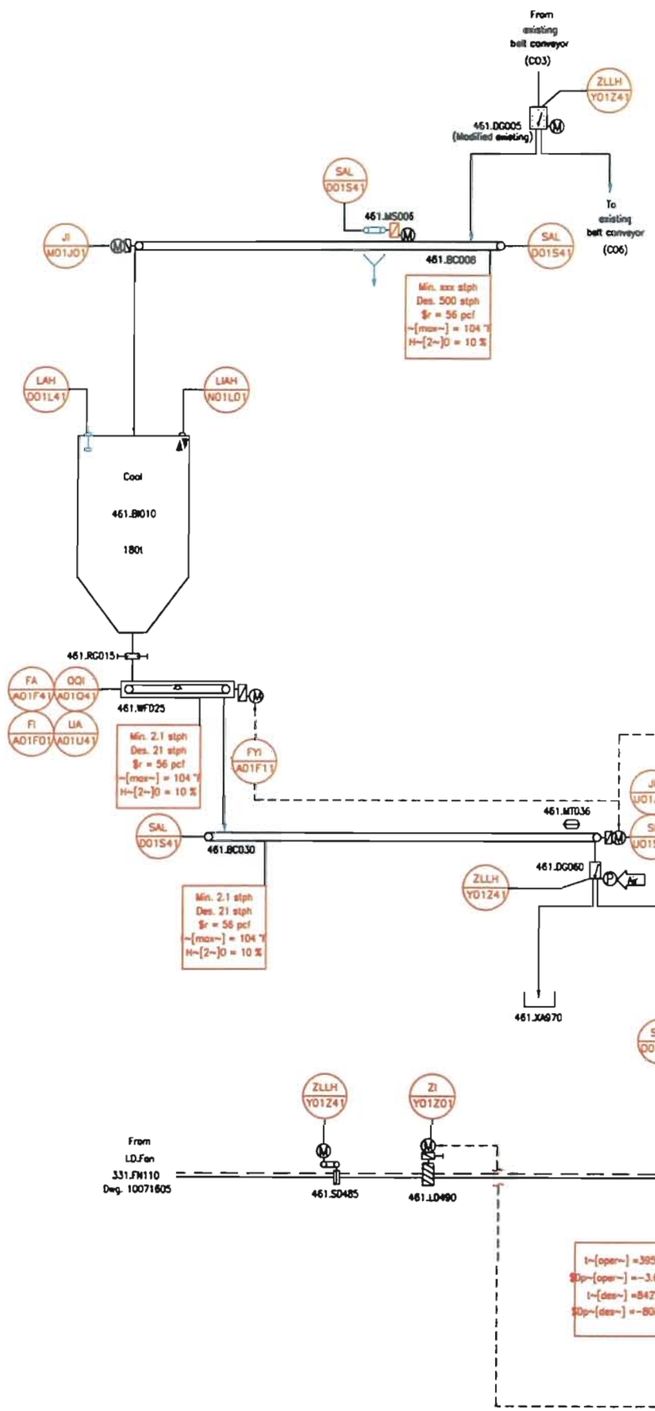


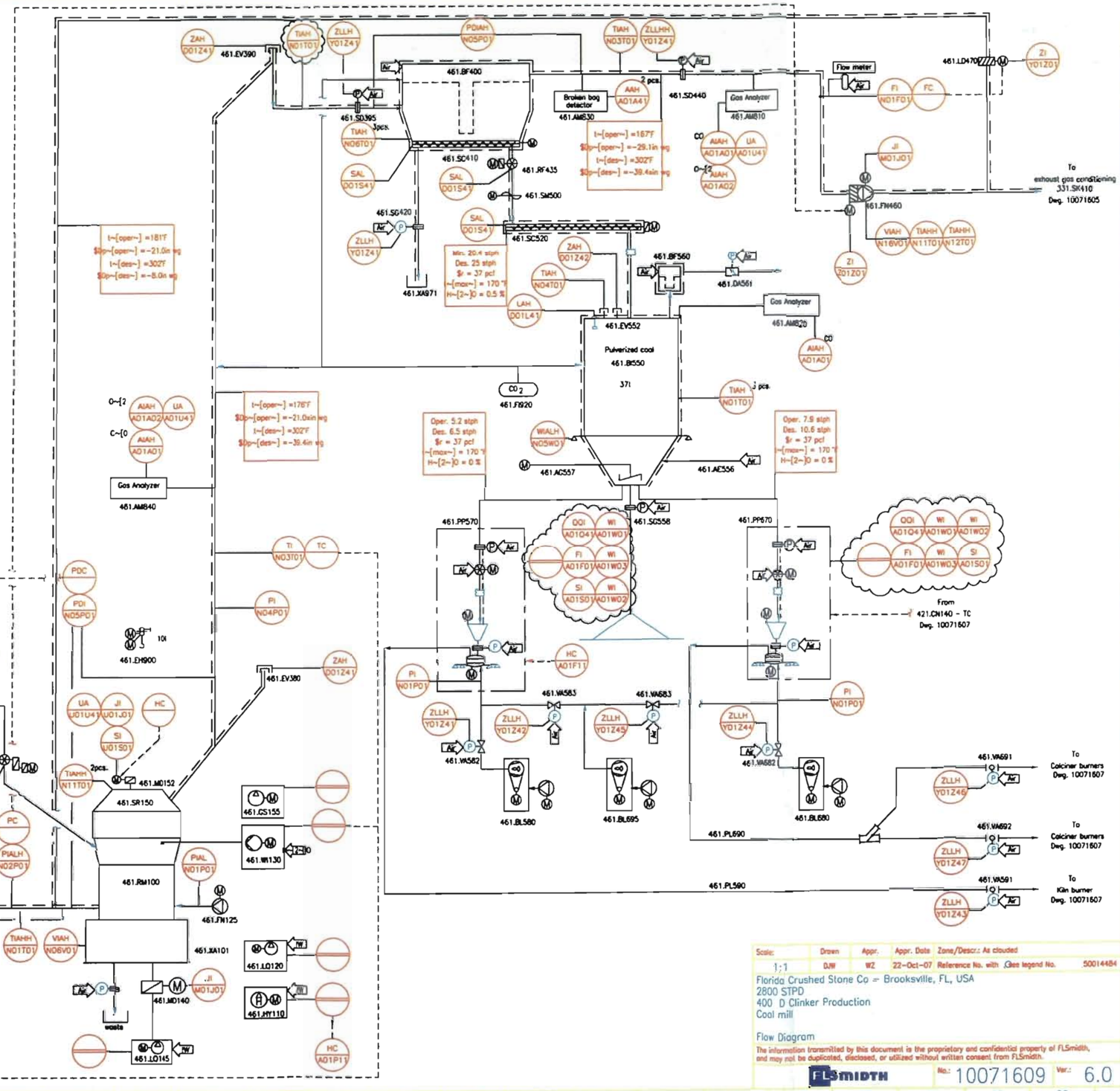
Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	WZ	22-Oct-07	Reference No. with ◊ see legend No. 50014484

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
400 B Clinker Production
Clinker cooler

Flow Diagram

FLSmidth No.: 10071608 Ver.: 5.0



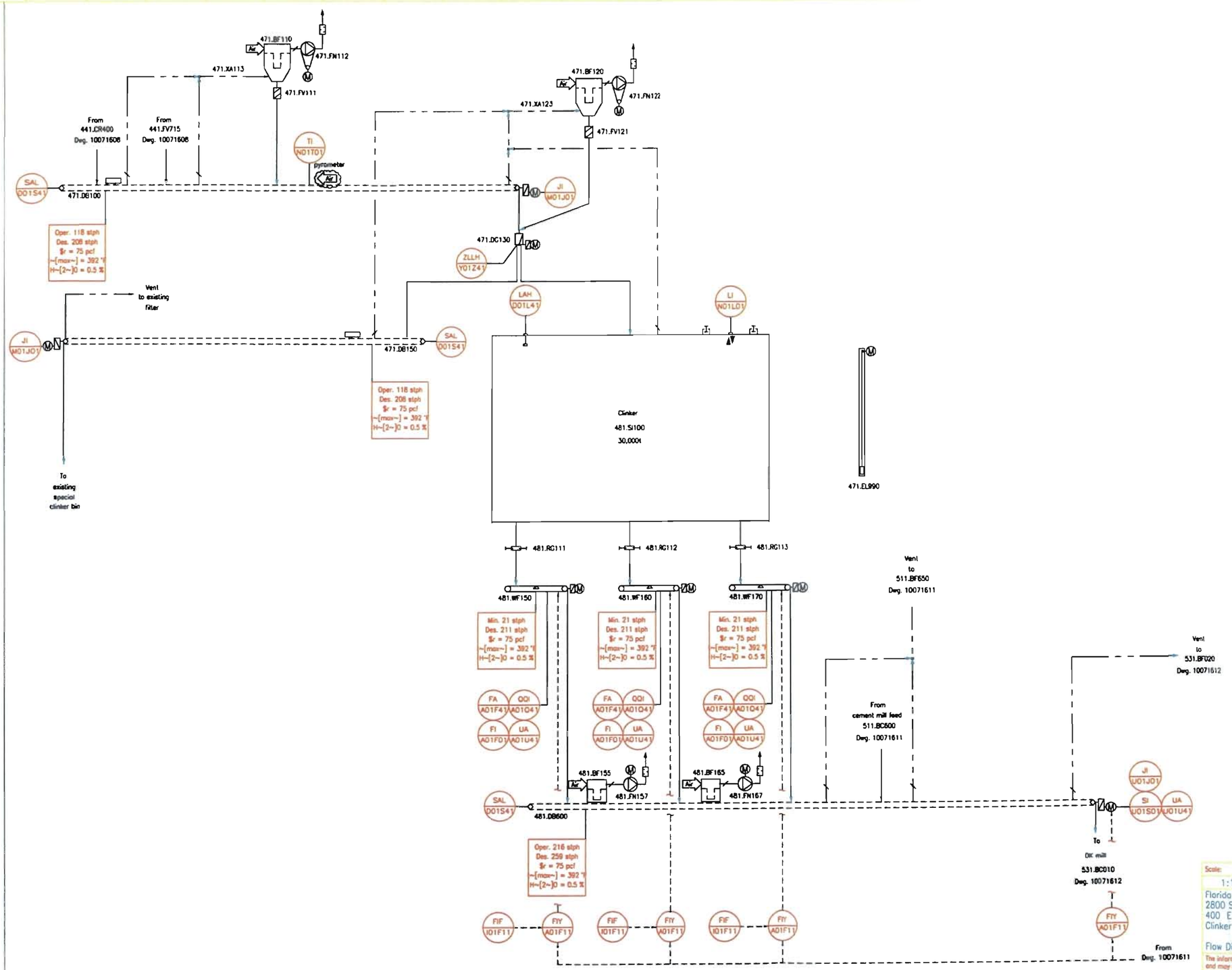


Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	WZ	22-Oct-07	Reference No. with ◇ See legend No. 50014484

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
400 D Clinker Production
Cool mill

Flow Diagram

FLSmidth No.: 10071609 Ver.: 6.0

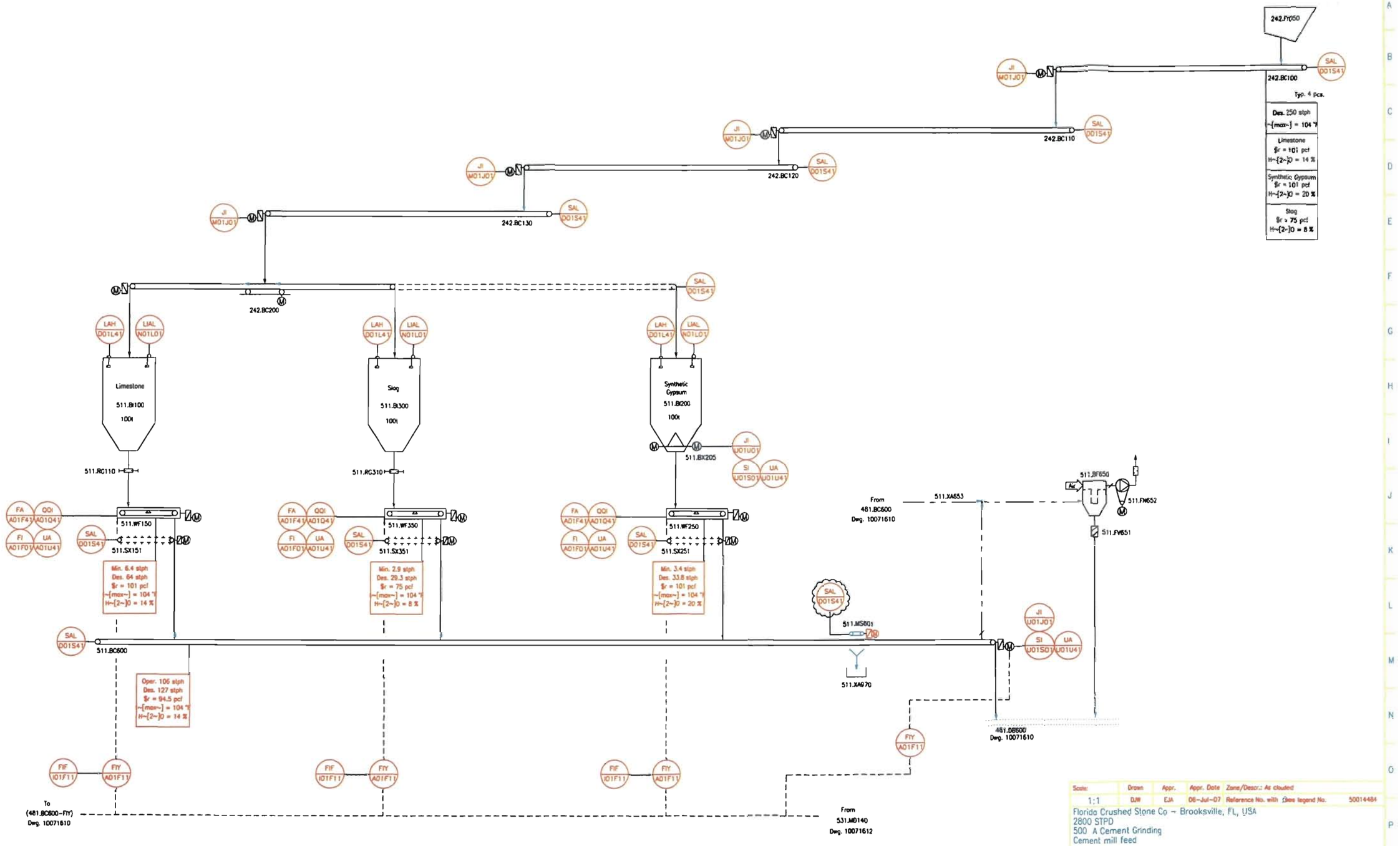


Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	WZ	22-Oct-07	Reference No. with ☁see legend No. 50014484

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
400 E Clinker Production
Clinker storage and transport

Flow Diagram

FLSmidth No.: 10071610 Ver.: 5.0



Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	EJA	06-Jul-07	Reference No. with Desc legend No. 50014484

Florida Crushed Stone Co - Brooksville, FL, USA
2800 STPD
500 A Cement Grinding
Cement mill feed

Flow Diagram

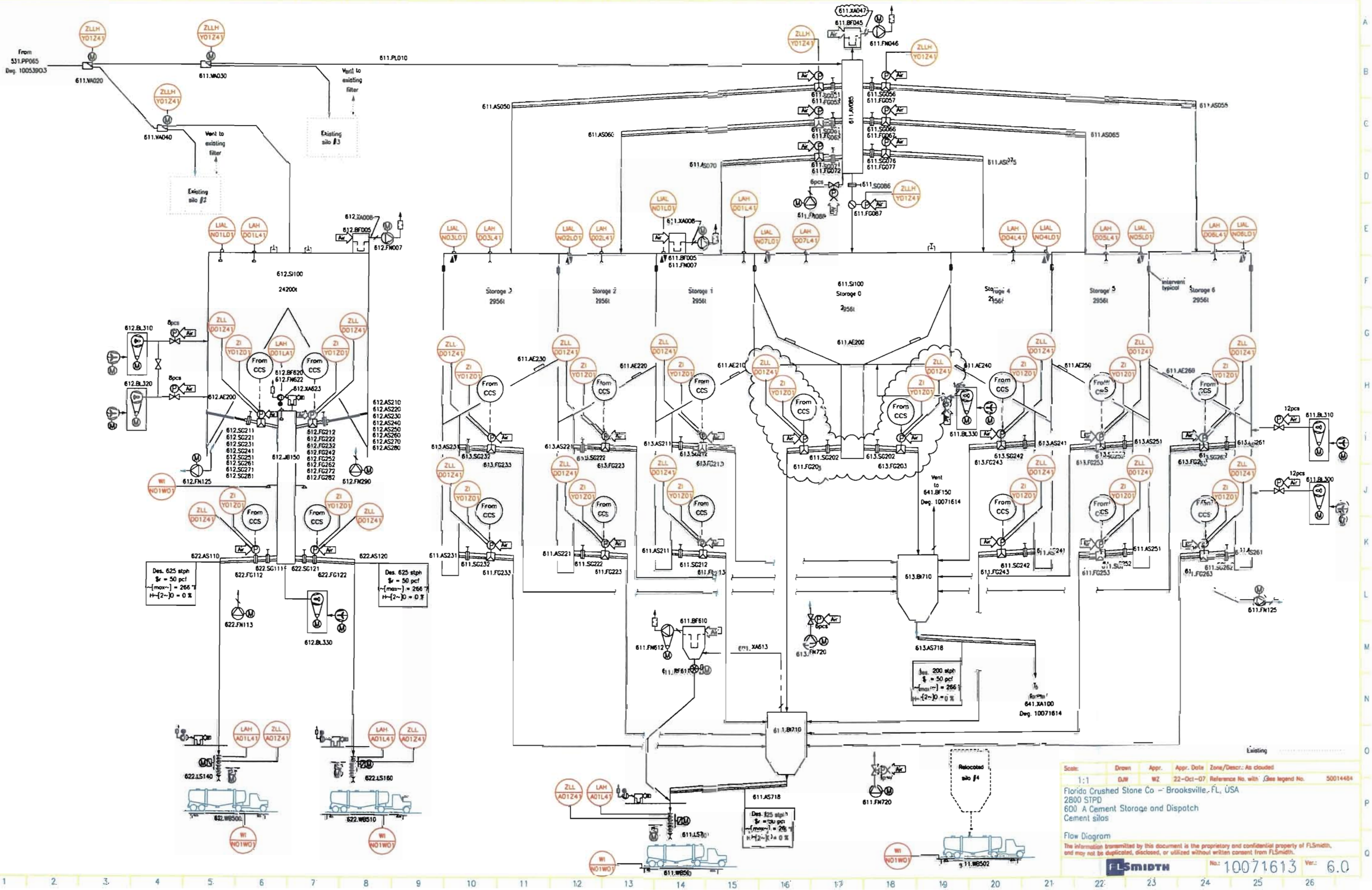
FLSmidth No.: 10071611 Ver.: 5.0

Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
500 B Cement Grinding
OK Mill

Flow Diagram

Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1	DJW	EJA	06-Jul-07	Reference No. with ☐see legend No. 50014484

FLSmidth No.: 10071612 Ver.: 5.0


From 531.PP065 Dwg. 10053903
611.PL010
611.VA020
611.VA030
611.VA040
Vent to existing filter
Existing silo #3
Existing silo #2
611.AS050
611.AS055
611.AS060
611.AS065
611.AS070
611.AS075
611.SI100
24200t
611.AE200
Storage 3 2956t
Storage 2 2956t
Storage 1 2956t
Storage 0 2956t
Storage 4 2956t
Storage 5 2956t
Storage 6 2956t
intervent typical
611.BF045
611.FN046
611.FN007
611.FN088
612.SI100
612.BF005
612.FN007
612.BL310
612.BL320
612.AE200
612.BF620
612.FN622
612.XA623
612.JB150
612.FN125
612.FN290
612.BL330
612.AS210
612.AS220
612.AS230
612.AS240
612.AS250
612.AS260
612.AS270
612.AS280
611.AE210
611.AE220
611.AE230
611.AE240
611.AE250
611.AE260
611.SC202
611.FG203
611.FG209
611.BL330
611.BL300
611.FN125
613.BI710
613.AS718
613.FN720
611.BF610
611.FN612
611.XA613
611.BI710
611.AS718
611.FN720
611.WB502
611.WB550
622.AS110
622.AS120
622.FG112
622.FG122
622.FN113
622.LS140
622.LS160
622.WB500
622.WB510
Des. 625 stph $r = 50 pcf ~{max~} = 266 ° H~{2~}0 = 0 %
641.XA100 Dwg. 10071614
Vent to 641.BF150 Dwg. 10071614
Relocated silo #4
Existing
Scale: 1:1 | Drawn: DJW | Appr.: WZ | Appr. Date: 22-Oct-07 | Zone/Descr.: As clouded | Reference No. with Geo legend No.: 50014484
Florida Crushed Stone Co – Brooksville, FL, USA
2800 STPD
600 A Cement Storage and Dispatch
Cement silos
Flow Diagram
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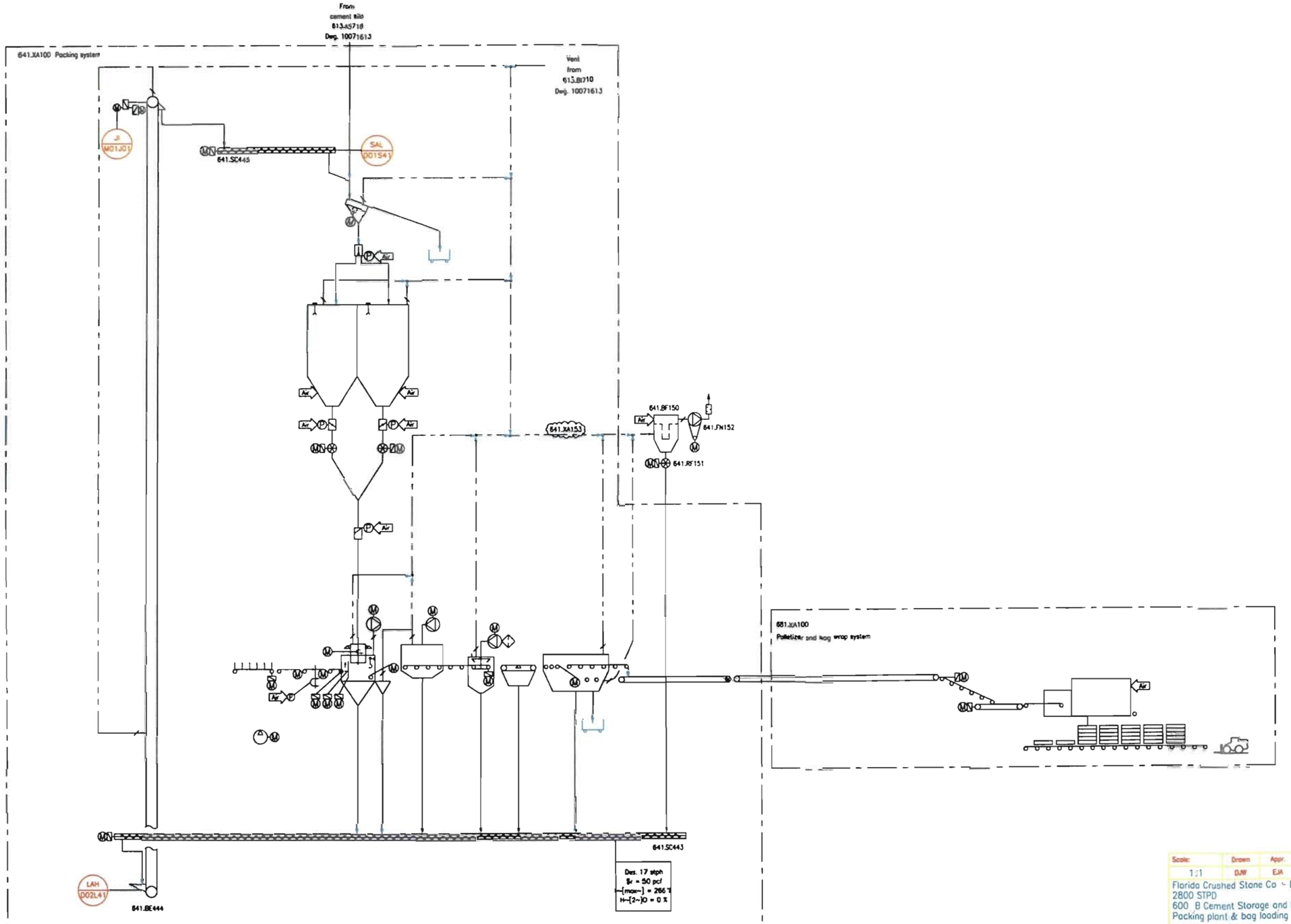
FLSmidth
No.: 10071613
Ver.: 6.0



Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded	
1:1	DJW	EJA	06-Jul-07	Reference No. with Glee legend No.	50014484

Florida Crushed Stone Co - Brooksville, FL, USA
2800 STPD
600 B Cement Storage and Dispatch
Packing plant & bag loading

Flow Diagram

FLSmidth No.: 10071614 Ver.: 5.0

ATTACHMENT 1

FINISH MILL HOT GAS GENERATOR

EMISSION CALCULATIONS
AND PROCESS FLOW DIAGRAMS

Attachment 1. Hot Gas Generator Unit--Finish Mill, Emission Calculations
Kiln 2 System, Brooksville South, CEMEX, Inc.

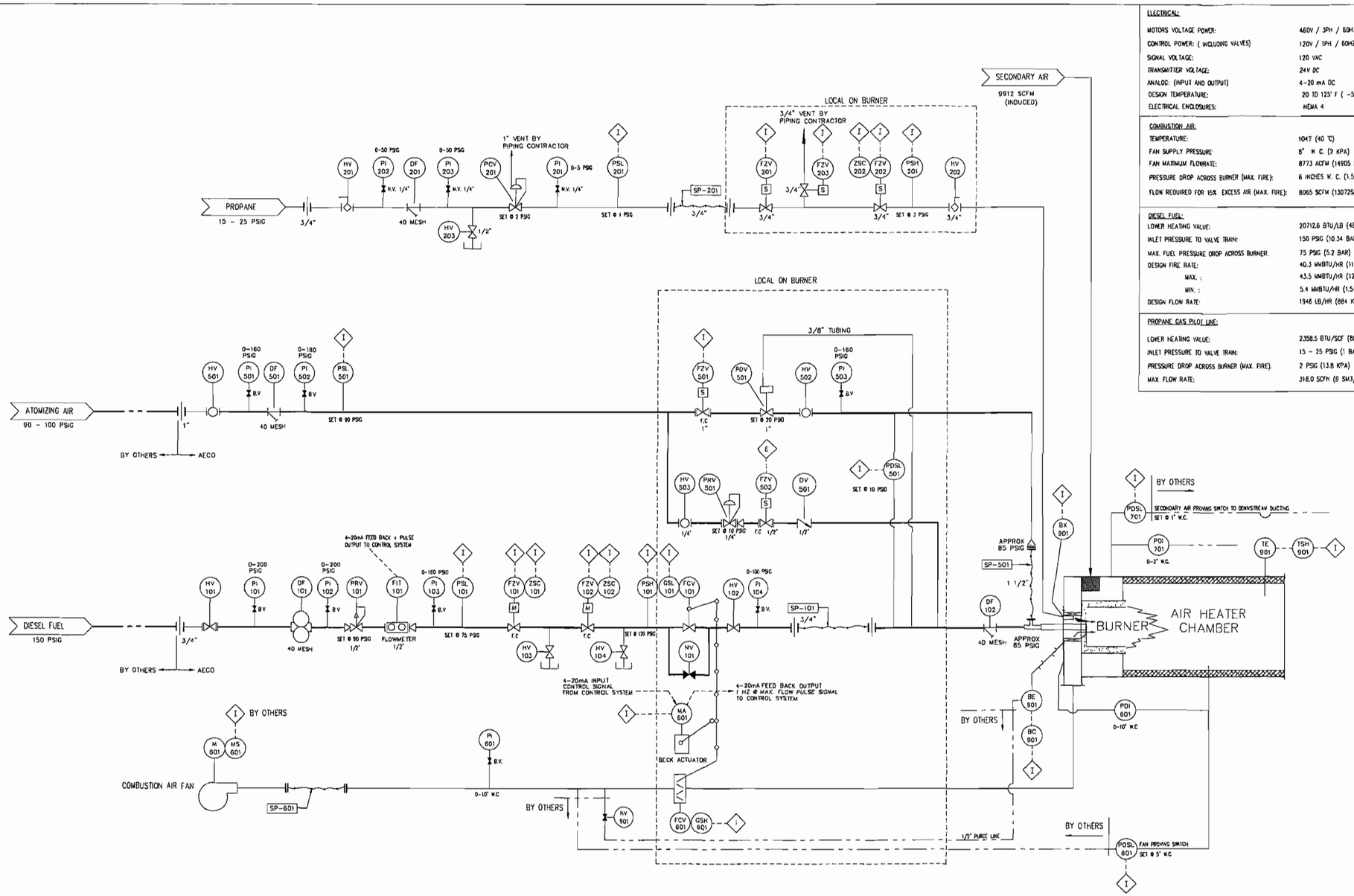
Maximum Heat Input Rate:	**43.5 MMBtu/hr**	
Annual Operating Hours:	**2,500 hr/yr**	
Heating Value:		
Diesel	**20,713 Btu/lb**	
Propane (Pilot)	**2,359 Btu/scf**	
Sulfur Content:		
Diesel	**0.5 %**	
Propane (Pilot)	**2 gr/1000 scf**	
Fuel Consumption:		
Diesel	**295.8 gal/hr**	**(based on maximum heat input rate)**
	739,497 gal/yr	
Propane (Pilot)	**318.0 scf/hr**	**(maximum rate)**
	795,000 scf/yr	

Emission Calculations

Pollutant	Emission Factor	(Ref)	Diesel		Propane		Maximum of any Fuel Type	
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
SO_2	142 S lb/1000 gal	(1)	21.0	26.25	--	--	21.00	26.25
	0.1 S lb/1000 gal	(3)	--	--	0.48	0.6	--	--
NO_x	20 lb/1000 gal	(1)	5.92	7.39	--	--	30.92	38.65
	13 lb/1000 gal	(3)	--	--	30.92	38.7	--	--
CO	5 lb/1000 gal	(1)	1.48	1.85	--	--	17.84	22.30
	7.5 lb/1000 gal	(3)	--	--	17.84	22.3	--	--
VOC	0.556 lb/1000 gal	(2)	0.164	0.21	--	--	2.38	2.97
	1.0 lb/1000 gal	(3)	--	--	2.38	3.0	--	--

References:
(1) AP-42 Table 1.3-1.
(2) AP-42 Table 1.3-2 (as total organic compounds)
(3) AP-42 Table 1.5-1.
(4) Based on a maximum sulfur content of 2 gr/100 scf.

Notes:
Density of diesel fuel = 7.1 lb/gal
Density of propane (liquified) = 4.24 lb/gal
1 scf = 7.48 gal
PM/PM_{10} emissions accounted for in the Finish Mill emissions from the baghouse stack.



ELECTRICAL:	
MOTORS VOLTAGE POWER:	460V / 3PH / 60HZ
CONTROL POWER: (INCLUDING VALVES)	120V / 1PH / 60HZ
SIGNAL VOLTAGE:	120 VAC
TRANSMITTER VOLTAGE:	24V DC
ANALOG: (INPUT AND OUTPUT)	4-20 mA DC
DESIGN TEMPERATURE:	20 TO 125° F (-5~51.5 °C)
ELECTRICAL ENCLOSURES:	NEMA 4

COMBUSTION AIR:	
TEMPERATURE:	104T (40 °C)
FAN SUPPLY PRESSURE:	8" W.C. (2 KPA)
FAN MAXIMUM FLOWRATE:	8773 ACFM (14905 MJ/HR)
PRESSURE DROP ACROSS BURNER (MAX. FIRE):	6 INCHES W. C. (1.5KPA)
FLOW REQUIRED FOR 15% EXCESS AIR (MAX. FIRE):	8065 SCFM (13072SMJ/HR)

DIESEL FUEL:	
LOWER HEATING VALUE:	20712.6 BTU/LB (48074 KJ/KG)
INLET PRESSURE TO VALVE TRAIN:	150 PSIG (10.34 BAR)
MAX. FUEL PRESSURE DROP ACROSS BURNER.	75 PSIG (5.2 BAR)
DESIGN FIRE RATE:	40.3 MMBTU/HR (11.78 MW)
MAX. :	43.5 MMBTU/HR (12.74 MW)
MIN. :	5.4 MMBTU/HR (1.54 MW)
DESIGN FLOW RATE:	1946 LB/HR (884 KG/HR)

PROPANE GAS PILOT LINE:	
LOWER HEATING VALUE:	2358.5 BTU/SCF (88939 KJ/SM3)
INLET PRESSURE TO VALVE TRAIN:	15 - 25 PSIG (1 BAR - 1.7 BAR)
PRESSURE DROP ACROSS BURNER (MAX. FIRE).	2 PSIG (13.8 KPA)
MAX FLOW RATE:	318.0 SCFH (8 SM3/HR)

AMBIENT CONDITIONS:	
LOCATION:	OUTDOORS
ALTITUDE:	100 FASL (30M)
AMBIENT TEMPERATURE:	104° F MAXIMUM (40 °C MAX.)
LOCAL PRESSURE:	1 ATM

ATOMIZING AIR:	
INLET PRESSURE TO VALVE TRAIN:	90 - 100 PSIG (6.2~6.9 BAR)
MAX. FUEL PRESSURE DROP ACROSS BURNER:	90 PSIG (6.2 BAR)
DESIGN FLOW RATE @ VALVE-TRAIN.	128 SCFM (217 SM3/HR)
ATOMIZING AIR QUANTITY REQUIRED:	0.3 LB (AIR) / LB (#2 FUEL OIL)

SECONDARY AIR	
TEMPERATURE:	104T (40°C)
INLET PRESSURE:	1.5 TO 2" W. C. (0.37~0.5 KPA)
FLOWRATE DESIGN:	9912 SCFM (16840 SM3/HR)
MAXIMUM FLOWRATE FOR STARTUP:	10782 ACFM (18318 M3/HR)

HOT GAS OUTLET FLOW:	
CHAMBER PRESSURE:	0 TO -1" W. C (0~0.25 KPA)
HOT GAS TEMPERATURE:	1832° F (MAXIMUM) (1000 °C)
HOT GAS FLOWRATE (MAX.):	18715 SCFM (31797 SM3/HR)

AS BUILT

No	REVISION	BY	DATE
3	DIESEL FUEL LINE WAS #2 FUEL OIL/AS BUILT	DAT	2007 01/02
2	CERTIFIED	DAT	2006 11/02
1	ADDED PROJECT BLOCK & CHANGED PSIG SETTINGS	DAT	2006 09/11
D	ISSUED FOR CUSTOMER APPROVAL	DAT	2006 08/22

AECOMETRIC CORPORATION
THE CONAMARA GROUP
ONTARIO, CANADA

NOTES:
1. BURNER SYSTEM VALVE TRAIN DESIGNED TO FM AND NFPA 86.
2. ALL ELECTRICAL EQUIPMENT TO BE NEMA 4X OUTDOORS.
3. VENT PROPANE PILOT LINE TO ATMOSPHERE IN A SAFE LOCATION.

LINE AND PIPING SYMBOL IDENTIFICATION
1. DENOTES MECHANICAL LINKAGE
2. DENOTES FLEXIBLE CONNECTIONS
3. DENOTES ELECTRICAL SIGNAL
4. DENOTES INSTRUMENT LINE
5. DENOTES BY OTHERS
6. DENOTES PROCESS LINE

REFERENCE DOCUMENTS:

(I) - SAFETY INTERLOCK
(E) - ELECTRICAL CONNECTION NOT PART OF SAFETY SYESTEM

DRAWINGS REFERENCE LIST:	AECO DWG. NO.	FLS DWG. NO.
GENERAL ARRANGEMENT	C0955 [illegible]	60027873
VALVE TRAIN LAYOUT	C0955-A-C-VT-01	60027[illegible]
ELECTRICAL CONTROL SCHEMATIC	C0955-A-D-EL-01	60027882/60027885
ELECTRICAL CONTROL PANEL LAYOUT	C0955-A-D-PL-01	60027878
TERMINAL BLOCK WIRING CONNECTIONS	C0955-A-C-FW-01	60027888
ELECTRICAL INTERCONNECTION DIAGRAM	C0955-A-C-ID-01	60027887

PROJECT NAME: FLORIDA CRUSHED STONE
PURCHASE ORDER No.: 4-0520043-88369
Contract No.: 05-20043
FLS Equipment No.: 531.HG700 & 531FN701
FLS Drawing No.: 60027874

DESCRIPTION: P & ID
FOR: FL SMIDTH
FLORIDA CRUSHED STONE

DRAWN BY:	DATE:	SCALE:	DRAWING No.:
DAT	06/13/2006	N.T.S.	C0955-A-D-PD-01
CHECKED BY:	DATE:	CONTRACT No.: C0955	
APPROVED BY:	DATE:	CUST. O/No.:	SHEET No.: 1 OF 1 / REVISION No.: 3

Florida Crushed Stone Co - Brooksville, FL, USA
2800 STPD
500 B Cement Grinding
OK Mill

Flow Diagram

No. 10071612 Rev. 5.0

ATTACHMENT CONTROL EQUIPMENT

KILN 2 SYSTEM
DESCRIPTION OF CONTROL EQUIPMENT

Table 1. Summary of Kiln 2 System Control Equipment Information

EU No.	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 (-)					
044	2K-06	2E-19	Kiln 2 Baghouse	331.BF300	320	13.6	V	329,698	--	2	500	526	PJ	FLS AirTech		12.2	8	25.78	96,519	3.42	2008
045	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
045	--	--	Filter Dust Bin Loadout Spout	311.LS609	25	0.38	V	8,000	4,958	2	375	80	PJ	Midwest Itnl.							2008
046	2E-22	2G-09	Blend Silo	341.BF400	220	1.53	V	8,100	6,468	2	188	300	PJ	FLS AirTech	169C10	20.0	1	13.09	2,216	3.66	2008
047	2E-22	2G-09	Blend Silo Discharge	341.BF410	28	0.69	V	11,700	9,343	2	188	241	PJ	FLS AirTech	16TA10	20.0	1	13.09	209	55.86	2008
047	2E-22	2G-09	Kiln Feed Bin	351.BF410	91	1.37	V	7,100	5,669	2	188	241	PJ	FLS AirTech	144C10	20.0	1	13.09	1,885	3.77	2008
047	2H-05	2H-08	Kiln Feed Transport	351.BF420	280	1.7	V	11,700	9,343	2	188	241	PJ	FLS AirTech	256C10FM	20.0	1	13.09	3,351	3.49	2008
048	2L-01	2L-03	Clinker Transport	471.BF110	15	1.29	V	4,200	2,551	2	392	208	PJ	FLS AirTech	81C10	20.0	1	13.09	1,060	3.96	2008
050	2L-01	2L-03	Clinker Silo Discharge 1	481.BF155	16	1.08	V	2,871	1,779	2	375	259	PJ	GE Energy		15.0	1		946	3.03	2008
050	2L-01	2L-03	Clinker Silo Discharge 2	481.BF165	16	1.08	V	2,871	1,779	2	375	259	PJ	GE Energy		15.0	1		946	3.03	2008
050	2L-05	2L-06	Clinker Storage Silo	471.BF120	105	1.7	V	13,200	8,017	2	392	208	PJ	FLS AirTech	256C10	20.0	1	13.09	3,351	3.94	2008
051	2M-04	2M-09	Finish Mill Additives	511.BF650	33	1.37	V	7,300	6,697	2	104	127	PJ	FLS AirTech	144C10	20.0	1	13.09	1,885	3.87	2008
052	2N-01	2N-12	Finish Mill	531.BF500	207	6.58	V	263,778	179,120	2	302	250	PJ	FLS AirTech	2M1650S14(6)	40.0	1	21.99	72,571	3.63	2008
[redacted]	2N-04	2N-91	Finish Mill Bucket Elevator	531.BF020	88	1.75	V	11,500	6,984	2	392	106	PJ	FLS AirTech	225C10	20.0	1	13.09	2,945	3.90	2008
057	2N-03	2N-12	Finish Mill Cement Transport	531.BF400	64	1	H	2,800	1,996	2	266	250	PJ	FLS AirTech	64C10	20.0	1	13.09	838	3.34	2008
057	2N-06	2N-12	Finish Mill Rejects Transport	531.BF290	74	1.2	V	5,150	3,128	2	392	109	PJ	FLS AirTech	100C10	20.0	1	13.09	1,309	3.93	2008
058	--	Q-01	Cement Silo 5	612.BF005	210	1.53	V	8,300	5,916	2	266	250	PJ	FLS AirTech	169C10	20.0	1	13.09	2,212	3.75	2008
058	2P-01	2Q-13	Cement Silo 5 Loading Bin	612.BF620	28	1.29	V	4,300	3,065	2	266	625	PJ	FLS AirTech	81C10	20.0	1	13.09	1,060	4.06	2008
058	2Q-28	2Q-15	Cement Silo 5 Loadout Spout N	622.LS140	28	0.38	V	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	21.60	540	2.78	2008
058	2Q-29	2Q-16	Cement Silo 5 Loadout Spout S	622.LS160	28	0.38	V	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	21.60	540	2.78	2008
059	--	Q-13	Multi Cell Cement Silo	611.BF005	208	1.33	H	2,200	1,568	2	266	250	PJ	FLS AirTech	48C10	20.0	1	13.09	630	3.49	2008
059	--		Multi Cell Cement Silo Alleviator	611.BF045	210	1.37	V	7,500	5,345	2	266	250	PJ	FLS AirTech	196C10	20.0	1	13.09	2,566	2.92	2008
059	--		Multi Cell Loadout Transport	611.BF610	38	1.42	V	1,600	1,140	2	266	625	PJ	FLS AirTech	36C10	20.0	1	13.09	471	3.40	2008
059	--		Multi Cell Loadout Spout	611.LS760	29	0.38	V	1,500	1,069	2	266	625	PJ	Midwest Itnl.			1	4.32	108	13.89	2008
060	2S-15	2S-16 1&2	Coal Mill	461.BF400	320	1.29	V	27,777	22,814	2	170	25	PJ	FLS AirTech	450SX129(6)	40.0	1	18.85	8,482	3.27	2008
061	2S-20	2S-21	Fine Coal Bin	461.BF560	59	0.5	V	544	369	2	302	25	PJ	FLS AirTech		40.0	1				2008
No ID	--		Packing Plant	641.BF150	39	2.11	V	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

[redacted]ated bags

Table 2. CEMEX, Inc. (Florida Crushed Stone Co.); Brooksville South Cement Plant - Kiln 2 System PM/PM_{10} Emission Rates

EU No.	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	2K-06	Kiln 2 Baghouse	331.BF300	2E-19	329,698	--	2	500	526	--	--	--	--	--	--
045	2E-22	Filter Dust Bin	331.BF640	2G-08	3,400	2,065	2	392	30	0.01	0.18	0.78	0.007	0.12	0.54
045		Filter Dust Bin Loadout Spout	311.LS609		8,000	4,958	2	375	80	0.01	0.42	1.86	0.007	0.30	1.30
									Total EU 045 =		**0.60**	**2.64**		**0.42**	**1.85**
046	2E-22	Blend Silo	341.BF400	2G-09	8,100	6,468	2	188	300	0.01	0.55	2.43	0.007	0.39	1.70
047	2E-22	Blend Silo Discharge	341.BF410	2G-09	11,700	9,343	2	188	241	0.01	0.80	3.51	0.007	0.56	2.46
047	2E-22	Kiln Feed Bin	351.BF410	2G-09	7,100	5,669	2	188	241	0.01	0.49	2.13	0.007	0.34	1.49
047	2H-05	Kiln Feed Transport	351.BF420	2H-08	11,700	9,343	2	188	241	0.01	0.80	3.51	0.007	0.56	2.46
									Total EU 047 =		**2.09**	**9.14**		**1.46**	**6.40**
048	2L-01	Clinker Transport	471.BF110	2L-03	4,200	2,551	2	392	208	0.01	0.22	0.96	0.007	0.15	0.67
050	2L-01	Clinker Silo Discharge 1	481.BF155	2L-03	2,871	1,779	2	375	259	0.01	0.15	0.67	0.007	0.11	0.47
050	2L-01	Clinker Silo Discharge 2	481.BF165	2L-03	2,871	1,779	2	375	259	0.01	0.15	0.67	0.007	0.11	0.47
050	2L-05	Clinker Storage Silo	471.BF120	2L-06	13,200	8,017	2	392	208	0.01	0.69	3.01	0.007	0.48	2.11
									Total EU 050 =		**0.99**	**4.35**		**0.69**	**3.04**
051	2M-04	Finish Mill Additives	511.BF650	2M-09	7,300	6,697	2	104	127	0.01	0.57	2.51	0.007	0.40	1.76
052	2N-01	Finish Mill	531.BF500	2N-12	263,778	179,120	2	302	250	0.01	15.35	67.25	0.007	10.75	47.07
054	2N-04	Finish Mill Bucket Elevator	531.BF020	2N-91	11,500	6,984	2	392	106	0.01	0.60	2.62	0.007	0.42	1.84
057	2N-03	Finish Mill Cement Transport	531.BF400	2N-12	2,800	1,996	2	266	250	0.01	0.17	0.75	0.007	0.12	0.52
057	2N-06	Finish Mill Rejects Transport	531.BF290	2N-12	5,150	3,128	2	392	109	0.01	0.27	1.17	0.007	0.19	0.82
									Total EU 057 =		**0.44**	**1.92**		**0.31**	**1.35**
058		Cement Silo 5	612.BF005	Q-01	8,300	5,916	2	266	250	0.01	0.51	2.22	0.007	0.35	1.55
058	2P-01	Cement Silo 5 Loading Bin	612.BF620	2Q-13	4,300	3,065	2	266	625	0.01	0.26	1.15	0.007	0.18	0.81
058	2Q-28	Cement Silo 5 Loadout Spout N	622.LS140	2Q-15	1,500	1,069	2	266	625	0.01	0.09	0.40	0.007	0.06	0.28
058	2Q-29	Cement Silo 5 Loadout Spout S	622.LS160	2Q-16	1,500	1,069	2	266	625	0.01	0.09	0.40	0.007	0.06	0.28
									Total EU 058 =		**0.95**	**4.17**		**0.67**	**2.92**
059		Multi Cell Cement Silo	611.BF005	Q-13	2,200	1,568	2	266	625	0.01	0.13	0.59	0.007	0.09	0.41
059		Multi Cell Cement Silo Alleviator	611.BF045	Q-13	7,500	5,345	2	266	250	0.01	0.46	2.01	0.007	0.32	1.40
059		Multi Cell Loadout Transport	611.BF610		1,600	1,140	2	266	625	0.01	0.10	0.43	0.007	0.07	0.30
059		Multi Cell Loadout Spout	611.LS760		1,500	1,069	2	266	625	0.01	0.09	0.40	0.007	0.06	0.28
									Total EU 059 =		**0.78**	**3.43**		**0.55**	**2.40**
060	2S-15	Coal Mill	461.BF400	2S-16 1&2	27,777	22,814	2	170	25	0.01	1.96	8.57	0.007	1.37	6.00
061	2S-20	Fine Coal Bin	461.BF560	2S-21	544	369	2	302	25	0.01	0.03	0.14	0.007	0.02	0.10
No ID		Packing Plant	641.BF150		19,200	13,684	2	266	200	0.01	1.17	5.14	0.007	0.82	3.60

ATTACHMENT O&M PLAN

KILN 2 SYSTEM
OPERATION AND MAINTENANCE PLAN

CEMEX, Inc.
BROOKSVILLE SOUTH CEMENT PLANT
KILN NO. 2 SYSTEM

OPERATION & MAINTENANCE PLAN
STARTUP, SHUTDOWN & MALFUNCTION PLAN

INITIAL PLAN PREPARATION DATE: November 18, 2008
PLAN REVISION NUMBER & DATE: REV. 0, November 18, 2008

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION

1.1 SCOPE OF PLAN

This document acts as an Operation and Maintenance (O&M) Plan that has been prepared to fulfill requirements of 40 CFR 63.1350(a) and Permit No. 0530021-009-AC for the CEMEX, Inc., (formerly Florida Crushed Stone Company) South Cement Plant located in Brooksville, Florida. Facilities that are subject to 40 CFR 63 Subpart LLL are required to prepare a written O&M plan for affected sources and submit to the Administrator for review and approval as part of the Title V permit application. The facility's Title V Air Operation Permit is No. 0530021-011-AV and the construction of the Cement Kiln No. 2 operation is authorized in Permit No. 0530021-009-AC and -012-AC. An O&M plan is required for the new kiln system sources under Permit No. 0533021-009-AC.

This document also acts as a Startup, Shutdown, and Malfunction (SSM) Plan for affected sources, as required by 40 CFR 63.6.

A brief description of the affected sources can be seen in the *Summary of Emission Units* (**Table 1.1**).

1.2 DESCRIPTION OF PLANT

This Plant is owned and operated by CEMEX, Inc. The construction a second kiln system (Kiln No. 2) was authorized in 2005 under Permit Nos. 0530021-009-AC and -012-AC. The existing Plant is an integrated facility that includes a Portland cement manufacturing plant, a power plant (owned and operated by Delta Power Services), and a coal yard. The Power Plant Boiler is a coal-fired unit that is allowed to generate a net delivered 150 MW. The Cement Kiln I, In-line kiln/Raw mill and Clinker Cooler I share a common baghouse fabric filter system (for particulate matter emissions control) and stack with the power plant; and, dry limestone injection is used to control sulfur dioxide (SO_2) emissions from the Power Plant Boiler, which is then collected in the common baghouse fabric filter system. Waste heat from the kiln is used to provide heat to the raw mill and the kiln preheater, which is used to drive off moisture from the materials used for making clinker. All of the materials handling activities, that require air pollution control devices, are controlled by fabric filter baghouse control systems, except for the Clinker Receiving/Handling System and the coal yard activities. For the Clinker Receiving/Handling System, the fugitive particulate matter (PM) emissions generated from the transfer of clinker from the receiving hopper to the belt conveyor are controlled using a dust suppression system (Johnston-Marsh or equivalent). Water sprays or chemical wetting agents and stabilizers are used at the coal receiving area, the coal storage area, and the coal transfer system to control fugitive particulate matter emissions and minimize visible emissions. All (power plant) fly ash handling systems (including transfer and silo storage) are totally enclosed and vented (including pneumatic system exhaust) through fabric filters.

CEMEX is nearing completion of construction of a new cement manufacturing line (Kiln No. 2) consisting of a raw mill system, a dry process preheater/precalciner kiln system, clinker handling system, finish grinding operations, two cement loadout silos, and coal handling and grinding operations. Table 1.1 below lists all of the new Kiln No. 2 system sources and associated emission unit ID and facility ID numbers. This O&M plan addresses these new emission units.

Table 1.1: Summary of Emission Units

Brooksville South Cement Plant - Kiln No. 2 Line	
EU ID No.	**EU Description**
044	Kiln No. 2, Preheater, Precalciner, Clinker Cooler, Air Heater
045	Filter Dust
046	Raw Meal Transport
047	Kiln Feed Transport
048	Clinker Transport
050	Clinker Storage
051	Finish Mill Collecting Bin
052	Finish Mill
054	Bucket Elevator
057	Cement Transport
058	Cement Loadout Bin (Silo 5)
059	Cement Loadout Bin (Multi-Cell)
060	Coal Mill
061	Fine Coal Bin
No ID	Packing Plant

SECTION 2 - OPERATION AND MAINTENANCE PROCEDURES

Safety is a critical component of plant operation and maintenance, and is not specifically addressed in this plan. Existing site-specific safety procedures supersede any general guidance within this plan.

2.1 OPERATION PROCEDURE

At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

Appropriate parameters of processing or materials handling systems provide a measure of the rate of operations.

The equipment included in this plan will not be operated unless it is vented to air pollution control equipment that is functioning. Air pollution control equipment will be operated and maintained according to manufacturer's recommendations. In addition, air pollution control devices will be put into operation prior to the start of source operation and remain in operation while the source is in operation. Operators are familiar with startup and shutdown procedures of dust control systems. Certain units are equipped with an alarm to sound when the air pollution control device stops operating.

Air pollution control device parameters can be seen in Table 2.1.

The Kiln 2 baghouse inlet temperature will be monitored according to 40 CFR 63.1344. The continuous temperature monitor shall meet the requirements of 40 CFR 63.1350(f)(1) through (f)(6). See **Appendix 1** for text of regulation.

The Kiln 2 baghouse exhaust and cooler baghouse exhaust shall each be monitored through the use of a continuous opacity monitor (COM) on a common stack.

2.2 PREVENTIVE MAINTENANCE PROCEDURE

The Preventive Maintenance Procedure is the established equipment inspection implemented as a result of the Title V Operating Permit requirements. Routine preventive maintenance inspections on a quarterly basis will be conducted as scheduled via the maintenance work order planning system.

If any piece of equipment is found with abnormalities and needs to be corrected, then a work order will be made out for the dust collector specifying a description of the problem with any recommendations for improvement (one work order per piece of abnormal equipment). All records of inspections and repairs will be held for 5 years.

An *Annual Combustion System Inspection Procedure* (**Appendix 2**) has been developed that assesses the combustion operation at the main burner, while in the operating mode. The results of the inspection will indicate any repairs needed to maintain efficient burner operation.

An *Inspection and Preventive Maintenance Schedule* has been prepared for all affected sources. This schedule is included in **Appendix 3**.

The plant maintains a supply of replacement and spare parts as current inventory. The purchasing computer system alerts the buyer when the inventory for an item falls below a specified minimum number. In the event that parts are unavailable, there is a high possibility that nearby CEMEX cement plants in Florida, Alabama, and Georgia would have the necessary replacement parts. CEMEX has also frequently exchanged parts with the other CEMEX plant located in the Brooksville area as the equipment is very similar.

The Kiln No. 2 COM has been installed and is operated and maintained in accordance with 40 CFR 63 Subpart A and 40 CFR 60 PS-1 of Appendix B.

2.2.1 Maintenance of Storage Bins

Bins are prone to internal buildup of material, particularly if material is wet or if aeration is inadequate. Periodic inspection and maintenance are necessary.

In order to use a bin for material storage, it must be structurally sound, with no evidence of major deterioration or over-stressing. Bins with supports and/or walls that show any signs of having been over-stressed during previous use, or that have been badly deteriorated by corrosion, should be repaired before further use. Deteriorated doors and door frames shall be repaired to prevent possible air leakage during aeration. Regular maintenance will help extend the bin's life. At least annually, a thorough inspection of the entire structure is performed, and repairs are made where necessary.

2.2.2 Maintenance of Conveyors / Conveyor Transfer Points

The following items should be inspected periodically, as applicable:

1. Inspect and repair air gravity conveyor housings to prevent leakage.

2. Inspect and repair vent ducts to dust collector to prevent leakage.

3. Inspect and repair belt covers and enclosures as required to prevent leakage.

4. Replace torn or defective conveyor belts and parts to prevent leakage.

5. Inspect belt scrapers on belt conveyors and adjust, replace worn-out components.

6. Inspect drag chain housing and deep bucket conveyor covers and repair as required to prevent leakage.

7. Inspect material transfer chutes for holes and repair as required to prevent leakage.

8. Inspect deep bucket conveyor buckets for holes and repair as required.

9. Inspect control valves for holes and seal deterioration and repair as required to prevent leakage.

10. Inspect all pneumatic lines and pumps for cracks.

11. Inspect dust collector vent ducts for holes.

12. Inspect and adjust all conveyors and their skirting rubber and dust seals.

13. Check the speed of conveyors and slow them down, if possible, to reduce dust circulation and spillage.

14. Inspect conveyor idlers and nonmoving idlers.

15. Remove and replace missing or broken idlers.

16. Inspect all conveyor training idlers; adjust as necessary so the conveyor does not travel laterally.

17. Inspect rubber boots for cracks and tears.

2.2.3 Maintenance of Silos

Silos are prone to internal buildup of material, particularly if material is wet or if aeration is inadequate. Periodic inspection (every 1-2 years) and maintenance are necessary.

In order to use a silo for material storage, it must be structurally sound, with no evidence of major deterioration or over-stressing. Deteriorated doors and door frames should be repaired to prevent possible air leakage during aeration. Regular maintenance will help extend the silo's life. Silos need periodic inspection and maintenance, such as cleaning. At least annually, a thorough inspection of the entire structure should be performed, and repairs will be made where necessary.

Storage silos allow cement plants to stockpile inventory until needed. Buildup on the vessel walls, however, can rob plants of the storage capacity in which they have invested. Buildups slow material flow and decrease the "live" capacity of the vessel. Overcoming these flow problems and recovering storage capacity may require silo cleaning.

Several types of equipment can be used for silo cleaning. One of these operates like an industrial-strength "weed whip," rotating a set of "flails" against the material in the vessel. The cleaning head is typically inserted through the access port down into the vessel on a pivoting arm.

Any clean-out activity must be carefully controlled to avoid damage to the inner wall, which can reduce flow and cause continuing problems. Steel chain is commonly used for Portland cement or any compacted material where there is no risk of explosion. Non-sparking brass chain is effective for compacted materials where the risk of fire or explosion is present.

Before the cleaning process is initiated, a path for loosened material to leave the vessel must be secured, and the discharge opening must be clear. A transport mechanism at the bottom — a conveyor, a truck, or a loader — is required to avoid buildup below the discharge and blockage of the opening as large quantities of material are removed. In cleaning a plugged silo, the operator starts at the bottom and progresses upward. Wall accumulations are undercut until they fall by their own weight.

Inspect loading spouts for holes and repair as required.

2.2.4 Maintenance of the Finish Mill

Preventive maintenance provides for more productivity through increased uptime. The mill maintenance program reflects the fact that long lead times are required to procure and deliver materials to the site. A target is to maintain a three-month inventory of wear parts and common failure components on-site, to carry a large inventory of spare parts, and to stock two years of certain mechanical, electrical and instrumentation spares.

The inspection and maintenance program includes periodic assessments of the condition of ducting, hoods, conveyors, elevator housings, and other equipment.

2.2.5 Maintenance of Kiln No. 2, Preheater, Precalciner, Clinker Cooler, and Air Heater

The kiln is the main operation in the cement manufacturing process. Kiln repair and maintenance are critical components in assuring the efficiency of the cement manufacturing plant. If not maintained properly, kiln run-time will be reduced, causing substantial economic losses. Maintenance procedures performed according to prescribed instructions will significantly improve the performance of the kiln and increase plant efficiency.

Proper kiln maintenance techniques ensure desirable operating efficiency. Alignment and ovality measurements can help prevent breakdowns. Inspection and maintenance of the clinker cooler are also important.

Plant availability is critical in a continuous process such as cement production, and an important part is implementing maintenance based on predictive maintenance information. High kiln availability can impact the stability of auxiliary equipment – shutdowns can have a "domino effect" on auxiliary equipment.

Vibration analysis and monitoring is a part of the preventive maintenance program. Unplanned maintenance on a continuous process line can result in higher costs per ton of clinker. The use of predictive maintenance techniques allows one planned shutdown per year, with four or five minor stops and starts. Vibration analysis identifies potential problems and corrective actions can be initiated to eliminate the influence on the component from other sources, such as imbalance or misalignment.

Mechanical personnel are aware of the importance of setting up a machine within certain criteria to enable a long, trouble-free mechanical life. When setting up a machine after repairs or installation, ensure that imbalance or pulley wobbles are eliminated. By evaluating clinker cooler fans, simple, inexpensive adjustments can lower the overall vibration levels.

Predictive maintenance can reduce the systematic replacement of components, regardless of their condition. Individual job requests are initiated when there is evidence that a component is deteriorating. This information is used to determine a plan of action to carry out repairs at the most convenient time, allowing lead time for planning and ordering of parts, and for labor resources.

An effective predictive maintenance program looks at the rate of change over a period of time with a set of machinery components, using specific criteria to assess the various individual components that make up a particular machine. Another benefit of predictive maintenance is inventory stock control of mechanical components. The predictive maintenance plan is as follows:

1. Inspect preheater system.

2. Inspect kiln shell.

3. Inspect kiln supports.

4. Inspect kiln drive.

5. Evaluate alignment and mechanical balance of kiln.

6. Inspect clinker cooler.

7. Inspect kiln lining at regular intervals.

8. Check the kiln shell temperature. Special attention must be focused on the covered areas in the burning zone where high surface temperatures may occur.

9. The clearance between the kiln shell and kiln riding-rings must be checked at regular intervals.

Table 2.1: Operational Parameters for Baghouses

ID	Description	Stack Height (ft)	Exit Diameter (ft)	Design Volumetric Flow Rate (acfm)	Max. Dry Standard Flow Rate (dscfm)	Gas Temp. (°F)
044/ 331.BF300	Baghouse for Kiln No. 2, Preheater, Precalciner, Clinker Cooler, Air Heater	320	13.6	329,698	--	500
045/ 331.BF640	Baghouse for Filter Dust Bin	90	1	3,400	2,065	392
045/ 311.LS609	Baghouse for Filter Dust Bin Loadout Spout	25	0.38	8,000	4,958	375
046/ 341.BF400	Baghouse for Blend Silo	220	1.53	8,100	6,468	188
047/ 341.BF410	Baghouse for Blend Silo Discharge	28	0.69	11,700	9,343	188
047/ 351.BF410	Baghouse for Kiln Feed Bin	91	1.37	7,100	5,669	188
047/ 351.BF420	Baghouse for Kiln Feed Transport	280	1.7	11,700	9,343	188
048/ 471.BF110	Baghouse for Clinker Transport	15	1.29	4,200	2,551	392
050/ 481.BF155	Baghouse for Clinker Silo Discharge 1	16	1.08	2,871	1,779	375
050/ 481.BF165	Baghouse for Clinker Silo Discharge 2	16	1.08	2,871	1,779	375
050/ 471.BF120	Baghouse for Cement Storage Silo	105	1.7	13,200	8,017	392
051/ 511.BF650	Baghouse for Finish Mill Additives	33	1.37	7,300	6,697	104

Table 2.1 (continued)						
052/ 531.BF500	Baghouse for Finish Mill	207	6.58	263,778	179,120	302
054/ 531.BF020	Baghouse for Finish Mill Bucket Elevator	88	1.75	11,500	6,984	392
057/ 531.BF400	Baghouse for Finish Mill Cement Transport	64	1	2,800	1,996	266
057/ 531.BF290	Baghouse for Finish Mill Rejects Transport	74	1.2	5,150	3,128	392
058/ 612.BF005	Baghouse for Cement Silo 5	210	1.53	8,300	5,916	266
058/ 612.BF620	Baghouse for Cement Silo 5 Loading Bin	28	1.29	4,300	3,065	266
058/ 622.LS140	Baghouse for Cement Silo Loadout Spout N	28	0.38	1,500	1,069	266
058/ 622.LS160	Baghouse for Cement Silo Loadout Spout S	28	0.38	1,500	1,069	266
059/ 611.BF005	Baghouse for Multi-cell Cement Silo	208	1.33	2,200	1,568	266
059/ 611.BF045	Baghouse for Multi-cell Cement Silo Alleviator	210	1.37	7,500	5,345	266
059/ 611.BF610	Baghouse for Multi-cell Loadout Transport	38	1.42	1,600	1,140	266
059/ 611.LS760	Baghouse for Multi-cell Loadout Spout	29	0.38	1,500	1,069	266
060/ 461.BF400	Baghouse for Coal Mill	320	1.29	27,777	22,814	170
061/ 461.BF560	Baghouse for Fine Coal Bin	59	0.5	544	369	302
No ID/ 641.BF150	Baghouse for Packing Plant	39	2.11	19,200	13,684	266

SECTION 3 - OPACITY MONITORING PROCEDURES

3.1 MONTHLY OPACITY MONITORING PROCEDURES

Applicable Sources:

Brooksville South Cement Plant - Kiln No. 2 Line	
EU ID No.	**EU Description**
044	Kiln No. 2, Preheater, Precalciner, Clinker Cooler, Air Heater
045	Filter Dust
046	Raw Meal Transport
047	Kiln Feed Transport
048	Clinker Transport
050	Clinker Storage
051	Finish Mill Collecting Bin
052	Finish Mill
054	Bucket Elevator
057	Cement Transport
058	Cement Loadout Bin (Silo 5)
059	Cement Loadout Bin (Multi-Cell)
060	Coal Mill
061	Fine Coal Bin
No ID	Packing Plant

Once per calendar month, one-minute visible emissions (VE) tests will be conducted on the emission points indicated on the Summary of Emission Units Sheets (**Table 1-1)** using Method 22.

Testing will be scheduled during daylight hours.

The *Procedure for Monthly VE Monitoring* is to be followed. A flow chart of the Procedure can be seen in Figure 3-1. The results of each month's test are recorded on a *Monthly Visible Emissions Inspection Report* (**MVEIR**) *Form*, **Appendix 4**.

At least one person at the facility will be certified to perform a Method 9 test.

3.1.1 Procedure for Monthly VE Monitoring

Determine that all the sources to be monitored are operating normally. Conduct a one – minute Method 22 test. Record the time and operating capacity at which each Method 22 was made. If no VE are observed, the observer may record a negative observation. At the end of the test, the observer will verify that all sources being tested continuously operated throughout the test period. If any of the sources stopped operation during the test period, another one-minute, Method 22 test will be performed for those sources during the calendar month.

If VE are observed, the observer will record the time of the observation and the identity of the equipment from which emissions were observed. The observer should then contact the person qualified to conduct a Method 9 test as soon as practical and initiate a *Corrective Action Report Monthly* **(CARM)** *Form*, **Appendix 5**.

A six – minute Method 9 must be started no later than one hour from the time visible emissions were observed and all the required information recorded. When testing is complete, the observer will again verify that the equipment was running during the test. If the equipment stopped operation during the test, the test must be repeated when the equipment is restarted.

If the Method 9 test indicates that the source is in compliance with the opacity limit, a negative observation will be recorded and the observer will return to the normally scheduled VE monitoring schedule (monthly).

If the Method 9 indicates that the source is exceeding the opacity limit, a positive observation shall be recorded on the semi-annual report. Corrective action will be initiated. Daily six – minute Method 9 tests will be conducted until the problem is corrected. Daily VE observations will be recorded on a *Daily Visible Emissions Inspection Report* **(DVEIR)** *Form*, **Appendix 6**.

When the Method 9 test verifies compliance, return to the normal VE monitoring schedule.

A sample of the *Visible Emission Observation Form* to be used when performing a six – minute Method 9 test is included in **Appendix 7**.

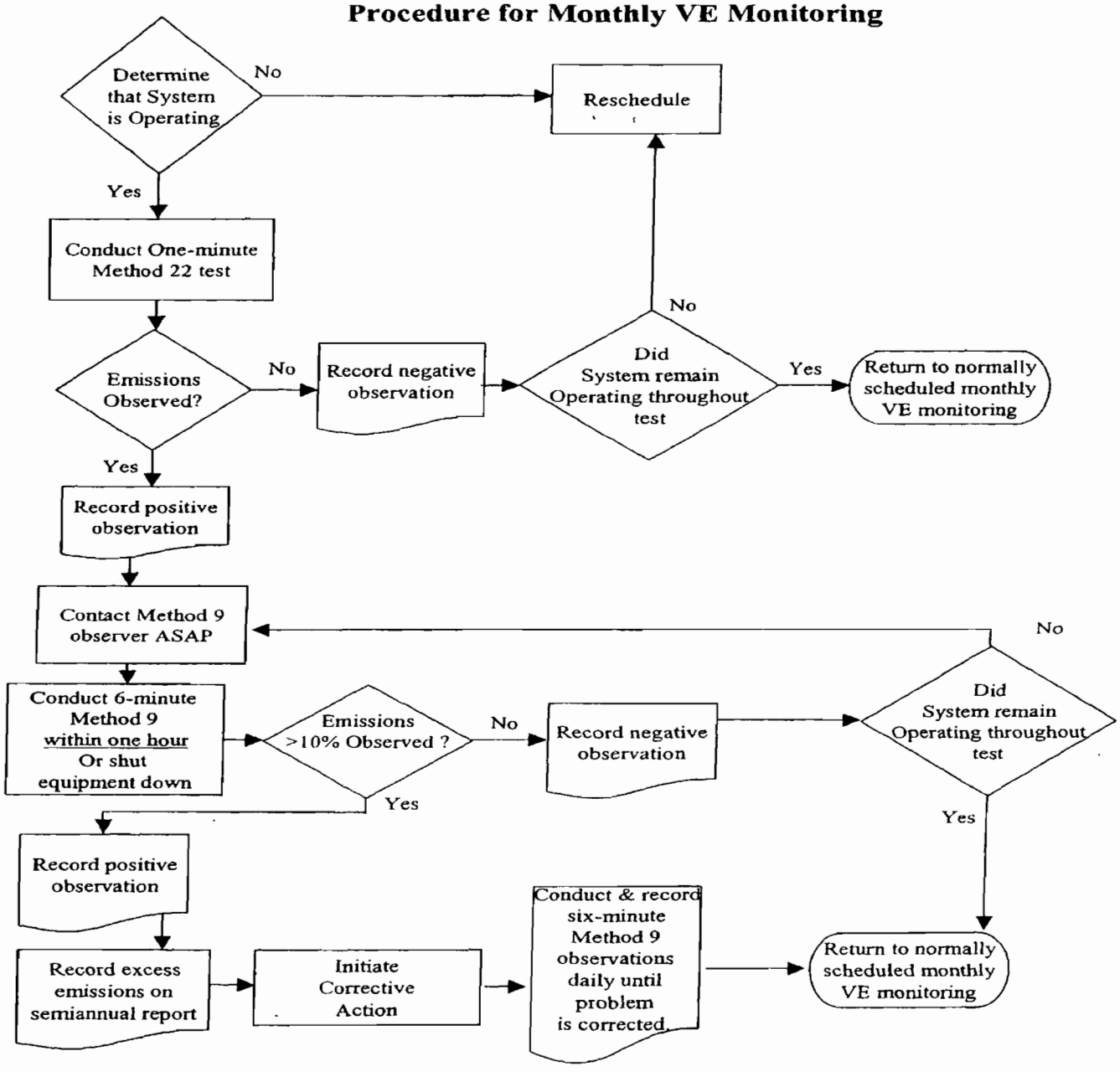
Figure 3-1: Method 22 Visible Emissions Observation Flow Chart – Other Sources

Applicable Sources:

Brooksville South Cement Plant - Kiln No. 2 Line	
EU ID No.	**EU Description**
044	Kiln No. 2, Preheater, Precalciner, Clinker Cooler, Air Heater
045	Filter Dust
046	Raw Meal Transport
047	Kiln Feed Transport
048	Clinker Transport
050	Clinker Storage
051	Finish Mill Collecting Bin
054	Bucket Elevator
057	Cement Transport
058	Cement Loadout Bin (Silo 5)
059	Cement Loadout Bin (Multi-Cell)
060	Coal Mill
061	Fine Coal Bin
No ID	Packing Plant

Figure 3.1

Procedure for Monthly VE Monitoring



3.2 DAILY OPACITY MONITORING PROCEDURES (FINISH MILL)

Applicable Source:

052	Finish Mill

Once per operating day, a six – minute Method 22 VE test will be conducted covering the Finish Mill PM control devices that filter air from the mill sweeps and air separators.

Testing will be scheduled during daylight hours.

The *Procedure for Daily VE Monitoring* is to be followed. A flow chart of the Procedure can be seen in Figure 3-2. The results of each test are recorded on the **DVEIR Form**, **Appendix 6**.

At least one person at the facility will be certified to perform a Method 9 test.

3.2.1 Procedure for Daily VE Monitoring

Determine that all the sources to be monitored are operating normally. Conduct a six – minute Method 22 test. Record the time and operating capacity for which the Method 22 determination was made. If no VE are observed, the observer may record a negative observation. At the end of the test, the observer will verify that all sources being tested operated continuously throughout the test period. If any of the sources stopped operation during the test period, a Method 22 test will be rescheduled.

If VE are observed, the observer must complete a *Corrective Action Report Daily* **(CARD)** *Form* (Appendix 8) and take corrective action within one hour. Within 24 hours, the observer will subsequently conduct a second Method 22 test.

If VE are observed during the second Method 22 test, the observer must notify a Method 9 observer within one hour of that test. A qualified observer will conduct a 30-minute Method 9 test within 24 hours.

If the Method 9 test indicates that the opacity is greater than 10%, then a Method 9 test will be conducted daily until the problem is corrected.

If any of the Method 9 tests indicate that opacity exceeds than 10% limit, further corrective action will begin as soon as possible. Corrective action when the opacity exceeds 10% is to initiate maintenance repairs to correct the problem or shut the mill down if entry into the baghouse is needed to make the repairs.

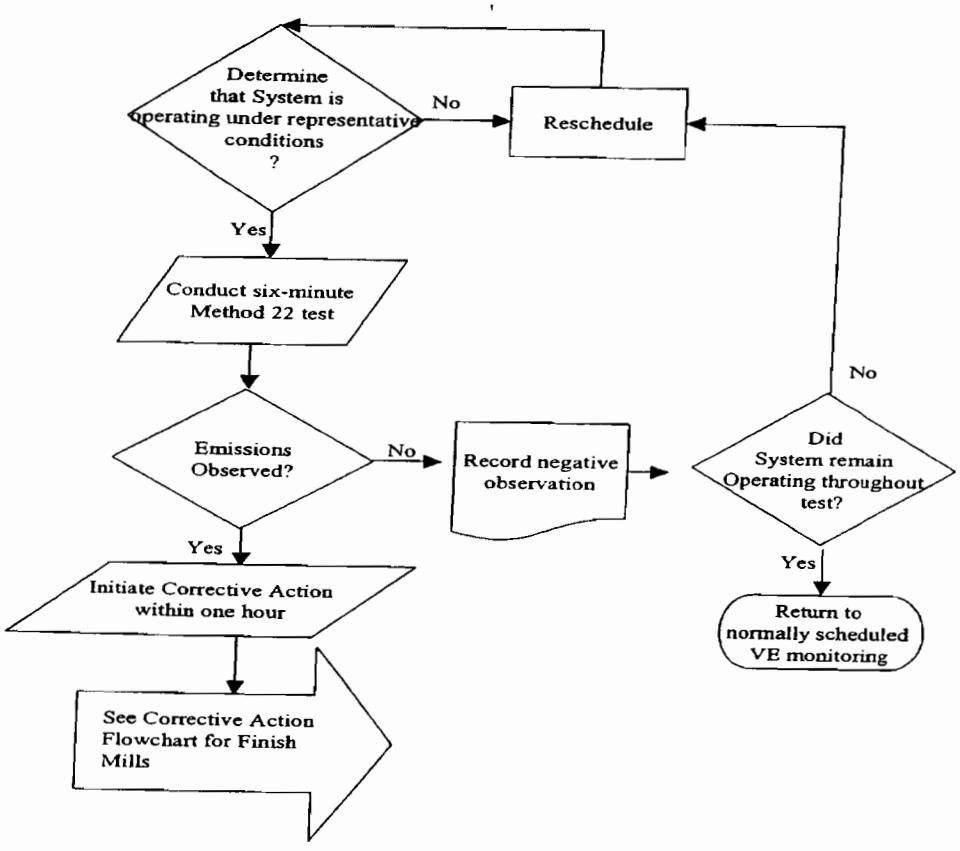
If any problems occur, all information will be recorded on the **CARD Form**. A positive observation shall be recorded on the semi-annual report that will be filed with the Florida Department of Environmental Protection. Once the problem is corrected, normal Method 22 observations will resume.

Figure 3-2: Method 22 Visible Emissions Observation Flow Chart – Finish Mills

Applies to:

052	Finish Mill

Figure 3.2
Procedure for Daily VE Monitoring of Finish Mills



SECTION 4 - CORRECTIVE ACTION PROCEDURES

4.1 CORRECTIVE ACTION PROCEDURES

Testing will be scheduled during daylight hours. If visible emissions are observed during a regularly scheduled inspection, the 'YES' column of each **DVEIR** and **MVEIR Form** shows the Corrective Action Method to follow. In addition, each *Daily* and *Monthly Inspection Form Logbook* gives a detailed explanation of each Corrective Action Method. **CARD** or **CARM Forms** are located in each of the inspection logbooks and should be completed in the event of any visible emissions.

4.2 CORRECTIVE ACTION PROCEDURES FOR FINISH MILLS

[Per 40 CFR 63.1350(e) (copy attached in ***Appendix 1***)]

The *Corrective Action for Finish Mills* is to be followed. A flow chart of the Corrective Actions can be seen in Figure 4.1. The results of each corrective action implemented are recorded on the **CARD Form.**

4.2.1 Corrective Action for Finish Mills

The person making the daily VE observation is responsible for initiating corrective action. The observer will record the time that corrective action began. Corrective action must be initiated within one hour of the time of the observation of VE. The following procedure will be followed:

1. The person responsible for corrective action will attempt to identify the source and/or cause of the visible emissions. If possible, attempt to correct the problem as quickly as practical without shutting down the mill.

2. After the problem is corrected, a Method 22 VE test will be conducted. If no VE are observed, return to the normally scheduled VE testing.

3. If VE are observed on two consecutive days, and the problem cannot be corrected without shutting the mill down, within 24 hours, a Method 9 test must be conducted for 30 minutes. If the Method 9 test indicates that the source is in compliance with the 10% opacity limit, return to normal daily monitoring procedure.

4. If the Method 9 test indicates that the opacity exceeds the 10% limit, further corrective actions will be implemented and the observer will return to the normal VE monitoring schedule. The excursion will be recorded as excess emissions for the day and included on the semi-annual report.

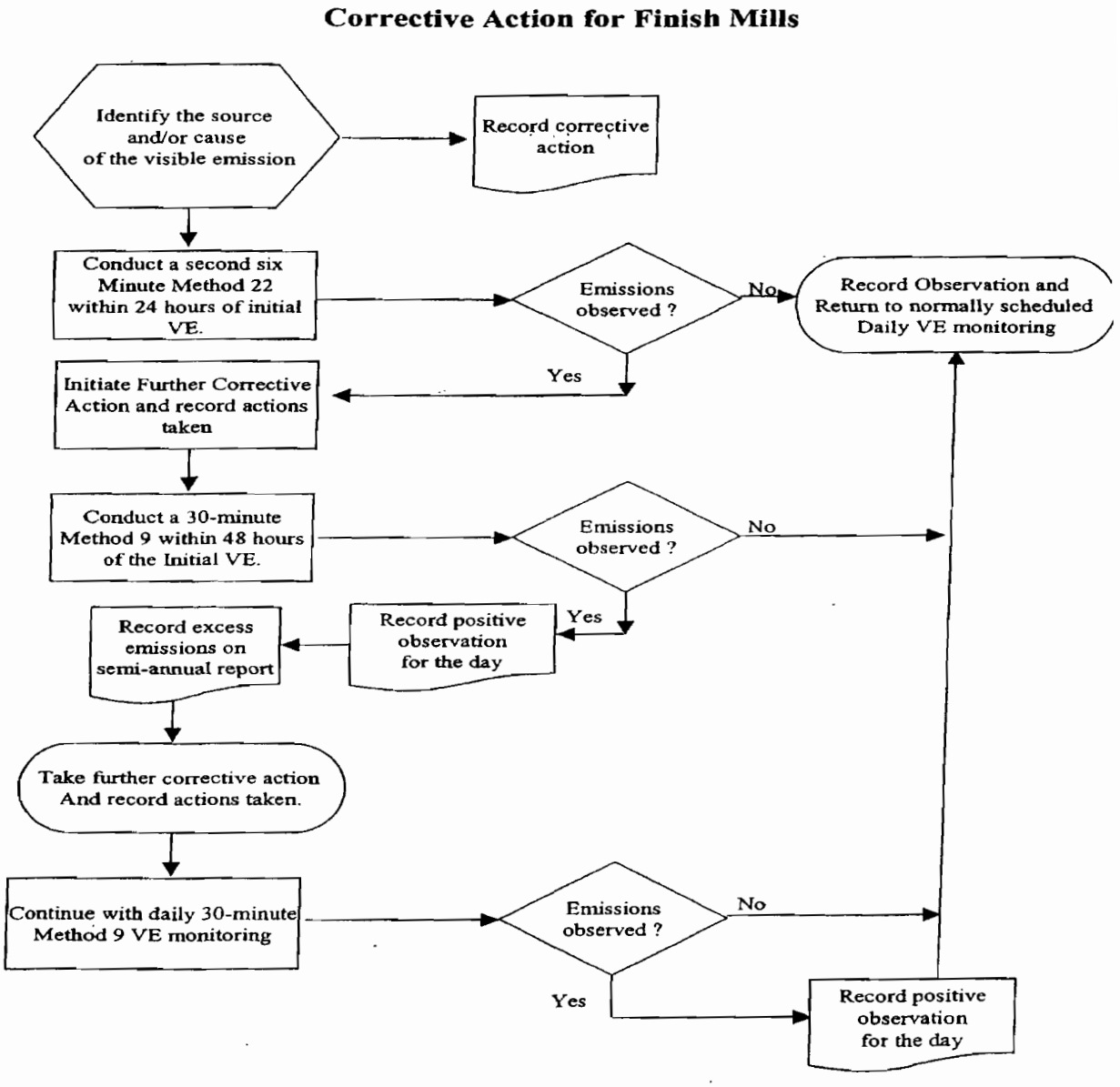
If the mill ***must*** go offline:

1. Notify control room that Finish Mill will be going off-line.
2. Determine availability of clinker storage volume.
3. Temporarily store clinker if necessary.
4. Gradually reduce milling rate and cease milling operation.
5. Perform complete baghouse and ductwork inspection.
6. Perform necessary repairs.
7. Put baghouse in operation.
8. Resume milling.

If any new bags have been installed, allow bags to form a filter cake before conducting the Method 9 test specified above.

A sample of the six-minute and thirty-minute *Visible Emission Observation Form* to be used upon performing a Method 9 test is included in **Appendix 7.**

Figure 4.1: Corrective Action for Finish Mills



SECTION 5 - TRAINING FOR VISIBLE EMISSIONS TESTING

5.1 METHOD 9

Persons conducting Method 9 testing will be certified observers. At least one person in the plant will have a current Method 9 Certification.

5.2 METHOD 22

Anyone who has received training to perform Method 22 observations can do so and they do not need to be certified. Plant personnel may be trained to perform Method 22 testing. The person conducting the Method 22 training will have received Method 9 training and will include the following information in the training:

1. Appropriate location from which observations are to be made
2. Duration and frequency of testing required
3. Procedures outlined in Sections III and IV of this manual
4. Recording of data
5. Ambient lighting
6. Observer's position relative to lighting
7. Effects of background contrast
8. Wind
9. Presence of condensed water
10. Procedures to follow if a positive reading occurs.

The information presented in training may be taken from:

- This manual
- 40 CFR 60, Appendix A, Method 22
- 40 CFR 60, Appendix A, Method 9
- The lecture portion of the Method 9 certification course.

SECTION 6 - IMPLEMENTATION AND REVISION OF PLAN

6.1 PROCEDURES

The plan will be submitted to the Administrator for approval. Prior to submitting the plan to the Administrator, the plan may be revised without the Administrator's review.

If any parts of this plan are found to be ineffective, inadequate or unnecessary, after the Administrator has approved the plan, CEMEX may submit a revised plan to the Administrator for approval. If the Administrator approves the revised plan or takes no action within 90 days, CEMEX may implement the revised plan without reopening the Title V permit.

Table 6-1: CEMEX Brooksville South - Operations and Maintenance Plan Revision Log

Revision Date	Section(s) Revised	Revised by Name / Title	Comments

SECTION 7 - RECORD KEEPING REQUIREMENTS

7.1 RECORDS

Records of inspections, maintenance and performance data of control devices and auxiliary equipment shall be retained by the emissions unit for a minimum of five years and shall be made available to the Department upon request.

The O&M Plan includes procedures for an annual inspection of the combustion system. Results of this inspection are to be included with annual reporting.

SECTION 8 - STARTUP, SHUTDOWN, AND MALFUNCTION PLAN

Applicable Sources:

Brooksville South Cement Plant - Kiln No. 2 Line	
EU ID No.	**EU Description**
044	Kiln No. 2, Preheater, Precalciner, Clinker Cooler, Air Heater
045	Filter Dust
046	Raw Meal Transport
047	Kiln Feed Transport
048	Clinker Transport
050	Clinker Storage
051	Finish Mill Collecting Bin
052	Finish Mill
054	Bucket Elevator
057	Cement Transport
058	Cement Loadout Bin (Silo 5)
059	Cement Loadout Bin (Multi-Cell)
No ID	Packing Plant

8.1 PURPOSE

The purpose of the startup, shutdown, and malfunction (SSM) plan is to—

(A) Ensure that, at all times, owners or operators operate and maintain affected sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

8.2 PROCEDURES FOR MALFUNCTIONS

Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan of this section.

The equipment subject to the maximum achievable control technology (MACT) standards includes equipment such as process equipment (e.g., kiln, raw and finish mills), storage silos, control devices (e.g., baghouses), and continuous monitoring systems

(CMS; i.e., monitoring systems used to demonstrate compliance with the MACT standards during normal operation).

Potential malfunctions of the applicable equipment were evaluated to determine whether a particular malfunction could result in excess hazardous air pollutant (HAP) emissions. Potential malfunctions that may result in excess HAP emissions include:

- broken bags in baghouses
- excess or inadequate combustion air
- high level in a storage vessel
- excessive temperature at inlet of control device

Corrective actions are identified for all malfunctions that have the potential for excess HAP emissions. The standards do not necessarily require facilities to control HAP emissions resulting from malfunctions to the level established in the standard, but to do their best to minimize emissions. The corrective actions are documented in the SSM plan. Operations personnel have reviewed the proposed corrective actions to validate that each will effectively mitigate the malfunction and the resulting excess HAP emissions, while also providing sufficient operational flexibility.

The malfunction scenarios have been identified in the SSM plan and corrective actions have been specified:

broken bags in baghouses	Repair bags as necessary
excess or inadequate combustion air	Adjust combustion O_2
high level in a storage vessel	Cease filling, reduce level
excessive temperature at inlet of control device	Repair gas conditioning equipment

The corrective actions allow operators to react to the malfunction and minimize excess emissions, achieve compliance with the standard, and maintain operational stability.

Where two (or more) corrective actions are available, both are included in the SSM plan. This prevents the facility from deviating from the plan (and having to report the deviation to the regulatory agency) if one of the alternatives is not available or is not feasible when a malfunction occurs.

Part of an effective SSM plan implementation is to record the time and duration of each malfunction event identified. Compliance management tools, such as monitoring and recordkeeping systems, are essential in order to demonstrate continued compliance with the SSM requirements. Included in the SSM plan are the monitoring instruments (e.g., oxygen sensors, vessel high level alarms) that will be used to record SSM events for each piece of equipment subject to the standard. Where no instrumentation is available, visual inspections of certain equipment will be performed and documented at regular intervals to demonstrate that SSM events are not occurring.

This SSM plan includes startup and shutdown procedures for the equipment subject to the MACT standards. These procedures were discussed with operations personnel to determine whether a particular routine startup or shutdown activity potentially results in excess HAP emissions. Any that do are documented in the SSM plan.

Specific maintenance procedures for the air pollution control devices and the continuous monitoring systems were developed and documented in the O&M plan or the SSM plan, including the frequency of implementation. The plan identifies routine or otherwise predictable continuous monitoring systems malfunctions. Routine calibration of the continuous monitoring systems is required. An onsite inventory of critical spare parts is maintained. Routine maintenance of all monitoring equipment is documented.

8.3 PROCEDURES FOR STARTUP AND SHUTDOWN

Specific procedures for S*tartup* and S*hutdown* are included in **APPENDIX 8** and **APPENDIX 9**.

8.4 REPORTING

When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's SSM plan, the owner or operator shall keep records for that event that demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping, that confirms conformance with the SSM plan for that event.

In addition, the owner or operator shall keep records of these events as specified in 40 CFR 63.10(b) (and elsewhere in this part), including records of the occurrence and duration of each SSM of operation and each malfunction of the air pollution control equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of SSM were consistent with the affected source's SSM plan in the semiannual (or more frequent) SSM report required in 40 CFR 63.10(d)(5).

If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's SSM plan, the owner or operator shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

Two kinds of reports are required: the immediate SSM deviation report, and the semi-annual SSM report. A deviation report is sent to the regulatory agency each time an SSM event occurs and the facility deviates from its SSM plan. This notification must be made within two days by phone or facsimile, followed by a written letter within seven days.

The semi-annual report summarizes all of the deviations in the six-month reporting period.

The owner or operator shall keep the written SSM plan on record after it is developed to be made available for inspection, upon request, by the Administrator for the life of the affected source or until the affected source is no longer subject to the provisions of this part. In addition, if the SSM is revised, the owner or operator shall keep previous (i.e., superseded) versions of the SSM plan on record, to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

SECTION 9 - REFERENCES

The Cement Plant Operations Handbook, 3rd Edition. International Cement Review. November 2001.

A Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant). Environmental Protection Department. Air Management Group. November 1993.

AP-42 Section 11.6: Portland Cement Manufacturing. United States Environmental Protection Agency. January 1995.

AP-42 Section 11.12: Concrete Batching. United States Environmental Protection Agency. October 2001.

Rule 62-296.700, F.A.C. Reasonably Available Control Technology (RACT) Particulate Matter. Florida Department of Environmental Protection. March 1999.

Maintenance Checklist for a Better Baghouse. Cement Americas. May 1999.

Operating and Preventive Maintenance Procedures, OSHA Silica Advisor. http://www.osha-slc.gov/SLTC/silica_advisor/protect_against/protect_against.html

Removing Material Buildup from Cement Storage Silos. Jim Stuckey. Cement Americas. July 2002.

Emissions Activity Category Form Cement Manufacturing and Blending Plants: Fugitive Dust Emissions. Ohio EPA. 199. http://www.epa.state.oh.us/dapc/fops/eac/Cement.pdf.

Failure of Dust Suppression Systems at Coal Handling Plants of Thermal Power Stations. Makarand Joshi.
http://www.plant-maintenance.com/articles/dust_suppression.pdf

European Commission Directorate-General Joint Research Centre. Integrated Pollution Prevention and Control (IPPC). Reference Document on Best Available Techniques in the Cement and Lime Manufacturing Industries. March 2000.

Martin Sprocket & Gear, Inc. Comprehensive brochure.
Kiln Maintenance. FL Smidth Institute.
http://www.flsmidth.com/services/Seminars/kiln_maintenance.pdf

Entek International Corporation. Adelaide Brighton Cement Ltd. -- Business Success Profile.
http://www.entekird.com/news/profiles/Adelaide%20Brighton%20Cement%20Ltd.pdf

40 CFR Part 60. 40 CFR 60.36e Inspection guidelines.

Develop an Effective Startup, Shutdown and Malfunction Plan. Chad Scott, P.E., and Shishir Mohan, Trinity Consultants. CEP August 2002. www.cepmagazine.org.

http://www.martinsprocket.com/innovation.htm
http://www.state.ia.us/epd/air/prof/oper/tech/baghouse.pdf
http://www.state.ia.us/epd/air/prof/oper/tech/esp.pdf
http://www.cdphe.state.co.us/ap/down/FSstart.PDF
http://cementtour.cementamericas.com/ar/cement_maintenance_checklist_better/
http://www.goodyearindustrialproducts.com/conveyorbelts/troubleshoot.html

APPENDIX 1

40 CFR 63, SUBPART LLL
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM THE PORTLAND CEMENT MANUFACTURING INDUSTRY

§ 63.1340 Applicability and designation of affected sources.

(a) Except as specified in paragraphs (b) and (c) of this section, the provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.

(b) The affected sources subject to this subpart are:

(1) Each kiln and each in-line kiln/raw mill at any major or area source, including alkali bypasses, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to and regulated under subpart EEE of this part;

(2) Each clinker cooler at any portland cement plant which is a major source;

(3) Each raw mill at any portland cement plant which is a major source;

(4) Each finish mill at any portland cement plant which is a major source;

(5) Each raw material dryer at any portland cement plant which is a major source and each greenfield raw material dryer at any portland cement plant which is a major or area source;

(6) Each raw material, clinker, or finished product storage bin at any portland cement plant which is a major source;

(7) Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant which is a major source; and

(8) Each bagging and bulk loading and unloading system at any portland cement plant which is a major source.

(c) For portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to this subpart. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.

(d) The owner or operator of any affected source subject to the provisions of this subpart is subject to title V permitting requirements.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 67 FR 72584, Dec. 6, 2002]

§ 63.1341 Definitions.

All terms used in this subpart that are not defined in this section have the meaning given to them in the CAA and in subpart A of this part.

Alkali bypass means a duct between the feed end of the kiln and the preheater tower through which a portion of the kiln exit gas stream is withdrawn and quickly cooled by air or water to avoid excessive buildup of alkali, chloride and/or sulfur on the raw feed. This may also be referred to as the "kiln exhaust gas bypass".

Bagging system means the equipment which fills bags with portland cement.

Bin means a manmade enclosure for storage of raw materials, clinker, or finished product prior to further processing at a portland cement plant.

Clinker cooler means equipment into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system.

Continuous monitor means a device which continuously samples the regulated parameter specified in §63.1350 of this subpart without interruption, evaluates the detector response at least once every 15 seconds, and computes and records the average value at least every 60 seconds, except during allowable periods of calibration and except as defined otherwise by the continuous emission monitoring system performance specifications in appendix B to part 60 of this chapter.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a facility. Conveying systems include but are not limited to the following: feeders, belt conveyors, bucket elevators and pneumatic systems.

Conveying system transfer point means a point where any material including but not limited to feed material, fuel, clinker or product, is transferred to or from a conveying system, or between separate parts of a conveying system.

Dioxins and furans (D/F) means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Feed means the prepared and mixed materials, which include but are not limited to materials such as limestone, clay, shale, sand, iron ore, mill scale, cement kiln dust and flyash, that are fed to the kiln. Feed does not include the fuels used in the kiln to produce heat to form the clinker product.

Finish mill means a roll crusher, ball and tube mill or other size reduction equipment used to grind clinker to a fine powder. Gypsum and other materials may be added to and blended with clinker in a finish mill. The finish mill also includes the air separator associated with the finish mill.

Greenfield kiln, in-line kiln/raw mill, or raw material dryer means a kiln, in-line kiln/raw mill, or raw material dryer for which construction is commenced at a plant site (where no kilns and no in-line kiln/raw mills were in operation at any time prior to March 24, 1998) after March 24, 1998.

Hazardous waste is defined in §261.3 of this chapter.

In-line kiln/raw mill means a system in a portland cement production process where a dry kiln system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to perform the drying operation of the raw mill, with no auxiliary heat source used. In this system the kiln is capable of operating without the raw mill operating, but the raw mill cannot operate without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas stream.

Kiln means a device, including any associated preheater or precalciner devices, that produces clinker by heating limestone and other materials for subsequent production of portland cement.

Kiln exhaust gas bypass means alkali bypass.

Monovent means an exhaust configuration of a building or emission control device (e. g. positive pressure fabric filter) that extends the length of the structure and has a width very small in relation to its length (i. e., length to width ratio is typically greater than 5:1). The exhaust may be an open vent with or without a roof, louvered vents, or a combination of such features.

New brownfield kiln, in-line kiln raw mill, or raw material dryer means a kiln, in-line kiln/raw mill or raw material dryer for which construction is commenced at a plant site (where kilns and/or in-line kiln/raw mills were in operation prior to March 24, 1998) after March 24, 1998.

One-minute average means the average of thermocouple or other sensor responses calculated at least every 60 seconds from responses obtained at least once during each consecutive 15 second period.

Portland cement plant means any facility manufacturing portland cement.

Raw material dryer means an impact dryer, drum dryer, paddle-equipped rapid dryer, air separator, or other equipment used to reduce the moisture content of feed materials.

Raw mill means a ball and tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Rolling average means the average of all one-minute averages over the averaging period.

Run average means the average of the one-minute parameter values for a run.

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002]

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

Table 1 to this subpart provides cross references to the 40 CFR part 63, subpart A, general provisions, indicating the applicability of the general provisions requirements to subpart LLL.

[71 FR 76549, Dec. 20, 2006]

§ 63.1343 Standards for kilns and in-line kiln/raw mills.

(a) *General.* The provisions in this section apply to each kiln, each in-line kiln/raw mill, and any alkali bypass associated with that kiln or in-line kiln/raw mill. All gaseous, mercury and D/F emission limits are on a dry basis, corrected to 7 percent oxygen. All total hydrocarbon (THC) emission limits are measured as propane. The block averaging periods to demonstrate compliance are hourly for 20 ppmv total hydrocarbon (THC) limits and monthly for the 50 ppmv THC limit.

(b) *Existing kilns located at major sources.* No owner or operator of an existing kiln or an existing kiln/raw mill located at a facility that is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources, any gases which:

(1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the alkali bypass are subject to this emission limit.

(2) Exhibit opacity greater than 20 percent.

(3) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11}gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10}gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(c) *Reconstructed or new kilns located at major sources.* No owner or operator of a reconstructed or new kiln or reconstructed or new inline kiln/raw mill located at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the bypass stack are subject to this emission limit.

(2) Exhibit opacity greater than 20 percent.

(3) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11}gr per dscf) (TEQ); or

(ii) 0.40 ng per dscm (1.7×10^{-10}gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(4) Contain total hydrocarbons (THC), from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, in excess of 20 ppmv if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 20 ppmv standard you may demonstrate a 98 percent reduction of THC emissions from the exit of the kiln to discharge to the atmosphere. If the source is a greenfield kiln that commenced construction on or prior to December 2, 2005, then the THC limit is 50 ppmv.

(5) Contain mercury from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, or the alkali bypass in excess of 41μg/dscm if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 41 μg/dscm standard you may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas (l/g) ratio of 30 gallons per 1000 actual cubic feet per minute (acfm) or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber.

(d) *Existing kilns located at area sources.* No owner or operator of an existing kiln or an existing in-line kiln/raw mill located at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain D/F in excess of 0.20 ng per dscm (8.7×10^{-11}gr per dscf) (TEQ); or

(2) Contain D/F in excess of 0.40 ng per dscm (1.7×10^{-10}gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(e) *New or reconstructed kilns located at area sources.* No owner or operator of a new or reconstructed kiln or new or reconstructed in-line kiln/raw mill located at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

(1) Contain D/F in excess of:

(i) 0.20 ng per dscm (8.7×10^{-11}gr per dscf) (TEQ; or

(ii) 0.40 ng per dscm (1.7×10^{-10}gr per dscf) (TEQ) when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

(2) Contain total hydrocarbons (THC), from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, in excess of 20 ppmv if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 20 ppmv standard you may demonstrate a 98 percent reduction of THC emissions from the exit of the kiln to discharge to the atmosphere. If the source is a greenfield kiln that commenced construction on or prior to December 2, 2005, then the THC limit is 50 ppmv.

(3) Contain mercury from the main exhaust of the kiln, or main exhaust of the in-line kiln/raw mill, or the alkali bypass in excess of 41 μg/dscm if the source is a new or reconstructed source that commenced construction after December 2, 2005. As an alternative to meeting the 41 μg/dscm standard you may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas (l/g) ratio of 30 gallons per 1000 actual cubic feet per minute (acfm) or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber.

[71 FR 76549, Dec. 20, 2006]

§ 63.1344 Operating limits for kilns and in-line kiln/raw mills.

(a) The owner or operator of a kiln subject to a D/F emission limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:

(1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was operating is not exceeded.

(2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was not operating, is not exceeded.

(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded.

(b) The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.1349(b)(3)(iv).

(c) The owner or operator of an affected source subject to a mercury, THC or D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.

(1) The three-hour rolling average activated carbon injection rate shall be equal to or greater than the activated carbon injection rate determined in accordance with §63.1349(b)(3)(vi).

(2) The owner or operator shall either:

(i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c), or

(ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).

(d) Except as provided in paragraph (e) of this section, the owner or operator of an affected source subject to a mercury, THC or D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must specify and use the brand and type of activated carbon used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.

(e) The owner or operator of an affected source subject to a D/F, THC, or mercury emission limitation under §63.1343 that employs carbon injection as an emission control technique may substitute, at any time, a different brand or type of activated carbon provided that the replacement has equivalent or improved properties compared to the activated carbon specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute activated carbon will provide the same or better level of control as the original activated carbon.

(f) Existing kilns and in-line kilns/raw mills must implement good combustion practices (GCP) designed to minimize THC from fuel combustion. GCP include training all operators and supervisors to operate and maintain the kiln and calciner, and the pollution control systems in accordance with good engineering practices. The training shall include methods for minimizing excess emissions.

(g) No kiln and in-line kiln/raw mill may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent unless

the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (i.e. emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline.

(h) All kilns and in-line kilns/raw mills must remove (i.e. not recycle to the kiln) from the kiln system sufficient cement kiln dust to maintain the desired product quality.

(i) New and reconstructed kilns and in-line kilns/raw mills must not exceed the average hourly CKD recycle rate measured during mercury performance testing. Any exceedance of this average hourly rate is considered a violation of the standard.

[64 FR 31925, June 14, 1999, as amended at 67 FR 72585, Dec. 6, 2002; 71 FR 76550, Dec. 20, 2006]

§ 63.1345 Standards for clinker coolers.

(a) No owner or operator of a new or existing clinker cooler at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the clinker cooler any gases which:

(1) Contain particulate matter in excess of 0.050 kg per Mg (0.10 lb per ton) of feed (dry basis) to the kiln.

(2) Exhibit opacity greater than ten percent.

(b) [Reserved]

§ 63.1346 Standards for new or reconstructed raw material dryers.

(a) New or reconstructed raw material dryers located at facilities that are major sources can not discharge to the atmosphere any gases which:

(1) Exhibit opacity greater than ten percent, or

(2) Contain THC in excess of 20 ppmv, on a dry basis as propane corrected to 7 percent oxygen if the source commenced construction after December 2, 2005. As an alternative to the 20 ppmv standard, you may demonstrate a 98 percent reduction in THC emissions from the exit of the raw materials dryer to discharge to the atmosphere. If the source is a greenfield dryer constructed on or prior to December 2, 2005, then the THC limit is 50 ppmv, on a dry basis corrected to 7 percent oxygen.

(b) New or reconstructed raw materials dryers located at a facility that is an area source cannot discharge to the atmosphere any gases which contain THC in excess of 20 ppmv, on a dry basis as propane corrected to 7 percent oxygen if the source commenced construction after December 2, 2005. As an alternative to the 20 ppmv standard, you may demonstrate a 98 percent reduction in THC emissions from the exit of the raw materials dryer to discharge to the atmosphere. If the source is a greenfield dryer constructed on or prior to December 2, 2005, then the THC limit is 50 ppmv, on a dry basis corrected to 7 percent oxygen.

[71 FR 76551, Dec. 20, 2006]

§ 63.1347 Standards for raw and finish mills.

The owner or operator of each new or existing raw mill or finish mill at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged from the mill sweep or air

separator air pollution control devices of these affected sources any gases which exhibit opacity in excess of ten percent.

§ 63.1348 Standards for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills.

The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

(a) The owner or operator of an affected source subject to this subpart shall demonstrate initial compliance with the emission limits of §63.1343 and §§63.1345 through 63.1348 using the test methods and procedures in paragraph (b) of this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.

(1) A brief description of the process and the air pollution control system;

(2) Sampling location description(s);

(3) A description of sampling and analytical procedures and any modifications to standard procedures;

(4) Test results;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analyses;

(8) Documentation of calculations;

(9) All data recorded and used to establish parameters for compliance monitoring; and

(10) Any other information required by the test method.

(b) Performance tests to demonstrate initial compliance with this subpart shall be conducted as specified in paragraphs (b)(1) through (b)(4) of this section.

(1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section. The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting separate performance tests as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner

or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section. The opacity exhibited during the period of the Method 5 of Appendix A to part 60 of this chapter performance tests required by paragraph (b)(1)(i) of this section shall be determined as required in paragraphs (b)(1)(v) through (vi) of this section.

(i) Method 5 of appendix A to part 60 of this chapter shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run shall be conducted for at least 1 hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the PM collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of this subpart. However, this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln or inline kiln/raw mill feed rate, except for fuels, for each run.

(iii) The emission rate, E, of PM shall be computed for each run using equation 1:

$$E = (C_s Q_{sd}) / P \qquad (Eq. 1)$$

Where:

E = emission rate of particulate matter, kg/Mg of kiln feed.

c_s= concentration of PM, kg/dscm.

Q_{sd}= volumetric flow rate of effluent gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(iv) When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the main exhaust and alkali bypass of the kiln or in-line kiln/raw mill shall be tested simultaneously and the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and alkali bypass shall be computed for each run using equation 2,

$$E_c = (C_{sk} Q_{sdk} + C_{sb} Q_{sdb}) / P \qquad (Eq. 2)$$

Where:

E_c= the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, kg/Mg of kiln feed.

c_{sk}= concentration of particulate matter in the kiln or in-line kiln/raw mill effluent, kg/dscm.

Q_{sdk}= volumetric flow rate of kiln or in-line kiln/raw mill effluent, dscm/hr.

c_{sb}= concentration of particulate matter in the alkali bypass gas, kg/dscm.

Q_{sdb}= volumetric flow rate of alkali bypass gas, dscm/hr.

P=total kiln feed (dry basis), Mg/hr.

(v) Except as provided in paragraph (b)(1)(vi) of this section the opacity exhibited during the period of the Method 5 performance tests required by paragraph (b)(1)(i) of this section shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(vi) Each owner or operator of a kiln, in-line kiln/raw mill, or clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (b)(1)(v) of this section, conduct an opacity test in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of Performance Specification 1 (PS–1) of appendix B to part 60 of this chapter is not feasible, a test shall be conducted in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. The maximum six-minute average opacity shall be determined during the three Method 5 test runs, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (ii) of this section apply:

(i) There are no individual readings greater than 10 percent opacity;

(ii) There are no more than three readings of 10 percent for the first 1-hour period.

(3) The owner or operator of an affected source subject to limitations on D/F emissions under this subpart shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of appendix A to part 60 of this chapter. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The duration of each run shall be at least 3 hours, and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run, and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).

(v) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. Activated carbon injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(vi) The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

(4)(i) The owner or operator of an affected source subject to limitations on emissions of THC shall demonstrate initial compliance with the THC limit by operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 of this chapter. The duration of the performance test shall be three hours, and the average THC concentration (as calculated from the one-minute averages) during the three-hour performance test shall be calculated. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating.

(ii) The owner or operator of an affected source subject to limitations on emissions of THC who elects to demonstrate compliance with the alternative THC emission limit of 98 percent weight reduction must demonstrate compliance by also operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 at the inlet to the THC control device of the kiln, inline kiln raw mill, or raw materials dryer in the same manner as prescribed in paragraph (i) above. Alternately, you may elect to demonstrate a 98 weight percent reduction in THC across the control device using the performance test requirements in 40 CFR part 63, subpart SS.

(5) The owner or operator of a kiln or in-line kiln/raw mill subject to the 41 μg/dscm mercury standard shall demonstrate compliance using EPA Method 29 of 40 CFR part 60. ASTM D6784–02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), is an acceptable alternative to EPA Method 29 (portion for mercury only). If the kiln has an in-line raw mill, you must demonstrate compliance with both raw mill off and raw mill on. You must record the hourly recycle rate of CKD during both test conditions and calculate an average hourly rate for the three test runs for each test condition.

(c) Except as provided in paragraph (e) of this section, performance tests required under paragraphs (b)(1) and (b)(2) of this section shall be repeated every five years, except that the owner or operator of a kiln, in-line kiln/raw mill or clinker cooler is not required to repeat the initial performance test of opacity for the kiln, in-line kiln/raw mill or clinker cooler.

(d) Performance tests required under paragraph (b)(3) of this section shall be repeated every 30 months.

(e)(1) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable D/F standard under this subpart, the source must conduct a performance test and establish new temperature limit(s) as specified in paragraph (b)(3) of this section.

(2) If a source plans to undertake a change in operations that may adversely affect compliance with an applicable PM standard under §63.1343, the source must conduct a performance test as specified in paragraph (b)(1) of this section.

(3) In preparation for and while conducting a performance test required in paragraph (e)(1) of this section, a source may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in paragraphs (e)(3)(i) through (iv) of this section are met. The source shall submit temperature and other monitoring data that are recorded during the pretest operations.

(i) The source must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph shall include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (e)(1) of this section, including when the planned operational change period would begin.

(ii) The performance test results must be documented in a test report according to paragraph (a) of this section.

(iii) A test plan must be made available to the Administrator prior to testing, if requested.

(iv) The performance test must be conducted, and it must be completed within 360 hours after the planned operational change period begins.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16619, Apr. 5, 2002; 67 FR 72585, Dec. 6, 2002; 71 FR 76551, Dec. 20, 2006]

§ 63.1350 Monitoring requirements.

(a) The owner or operator of each portland cement plant shall prepare for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a part 70 permit and shall include the following information:

(1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of §§63.1343 through 63.1348;

(2) Corrective actions to be taken when required by paragraph (e) of this section;

(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year; and

(4) Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of

that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter. The Method 9 test must begin within one hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

(b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph (a) of this section shall be a violation of the standard.

(c) The owner or operator of a kiln or in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources including alkali bypasses in accordance with paragraphs (c)(1) through (c)(3) of this section.

(1) Except as provided in paragraph (c)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS–1 of appendix B to part 60 of this chapter.

(2) The owner or operator of a kiln or in-line kiln/raw mill subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (c)(1) of this section, monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS–1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section.

(i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is

operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.

(ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.

(3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.

(d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs (d)(1) through (d)(3) of this section.

(1) Except as provided in paragraph (d)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS–1 of appendix B to part 60 of this chapter.

(2) The owner or operator of a clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (d)(1) of this section, monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS–1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section.

(i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A to part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 9 test shall be at least 30 minutes each day.

(ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.

(3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.

(e) The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCD of these affected sources in accordance with the procedures of Method 22 of appendix A to part 60 of this chapter. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 22 test shall be 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

(1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with paragraphs (a)(1) and (a)(2) of this section; and

(2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of

each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of appendix A to part 60 of this chapter. The duration of the Method 9 test shall be 30 minutes.

(f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs (f)(1) through (f)(6) of this section.

(1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PM control devices.

(i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in §63.1349(b)(3)(iv).

(ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.

(3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

(6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

(g) The owner or operator of an affected source subject to an emissions limitation on D/F, THC or mercury emissions that employs carbon injection as an emission control technique shall comply with the monitoring requirements of paragraphs (f)(1) through (f)(6) and (g)(1) through (g)(6) of this section to demonstrate continuous compliance with the D/F, THC or mercury emissions standard.

(1) Install, operate, calibrate and maintain a continuous monitor to record the rate of activated carbon injection. The accuracy of the rate measurement device must be ±1 percent of the rate being measured.

(2) Verify the calibration of the device at least once every three months.

(3) The three-hour rolling average activated carbon injection rate shall be calculated as the average of 180 successive one-minute average activated carbon injection rates.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off, the calculation of the three-hour rolling average activated carbon injection rate must begin anew, without considering previous recordings.

(6) The owner or operator must install, operate, calibrate and maintain a continuous monitor to record the activated carbon injection system carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) established during the mercury, THC or D/F performance test in accordance with paragraphs (g)(6)(i) through (g)(6)(iii) of this section.

(i) The owner or operator shall install, calibrate, operate and maintain a device to continuously monitor and record the parameter value.

(ii) The owner or operator must calculate and record three-hour rolling averages of the parameter value.

(iii) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average shall be added to the previous 179 values to calculate the three-hour rolling average.

(h) The owner or operator of an affected source subject to a limitation on THC emissions under this subpart shall comply with the monitoring requirements of paragraphs (h)(1) through (h)(3) of this section to demonstrate continuous compliance with the THC emission standard:

(1) The owner or operator shall install, operate and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8A, of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.

(2) The owner or operator is not required to calculate hourly rolling averages in accordance with section 4.9 of Performance Specification 8A if they are only complying with the 50 ppmv THC emissions limit.

(3) For facilities complying with the 50 ppmv THC emissions limit, any thirty-day block average THC concentration in any gas discharged from a greenfield raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a greenfield in-line kiln/raw mill, exceeding 50 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(4) For new facilities complying with the 20 ppmv THC emissions limit, any hourly average THC concentration in any gas discharged from a raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a kiln or in-line kiln/raw mill, exceeding 20 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(i) The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln raw mill at least once per year.

(j) The owner or operator of an affected source subject to a limitation on opacity under §63.1346 or §63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph (a) of this section.

(k) The owner or operator of an affected source subject to a particulate matter standard under §63.1343 shall install, calibrate, maintain, and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. All requirements relating to installation, calibration, maintenance, operation or performance of the PM CEMS and implementation of the PM CEMS requirement are deferred pending further rulemaking.

(l) An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (l)(1) through (l)(6) of this section.

(1) The Administrator will not approve averaging periods other than those specified in this section, unless the owner or operator documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

(2) If the application to use an alternate monitoring requirement is approved, the owner or operator must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.

(3) The owner or operator shall submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (l)(3)(i) through (l)(3)(iii) of this section:

(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and

(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

(4) The Administrator will notify the owner or operator of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:

(i) Notice of the information and findings upon which the intended disapproval is based; and

(ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.

(5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provision of this subpart.

(6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

(m) The requirements under paragraph (e) of this section to conduct daily Method 22 testing shall not apply to any specific raw mill or finish mill equipped with a continuous opacity monitor COM or bag leak detection system (BLDS). If the owner or operator chooses to install a COM in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, then the COM must be installed at the outlet of the PM control device of the raw mill or finish mill, and the COM must be installed, maintained,

calibrated, and operated as required by the general provisions in subpart A of this part and according to PS–1 of appendix B to part 60 of this chapter. To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard. If the owner or operator chooses to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (e) of this section, the requirements in paragraphs (m)(1) through (9) of this section apply to each BLDS:

(1) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. "Certify" shall mean that the instrument manufacturer has tested the instrument on gas streams having a range of particle size distributions and confirmed by means of valid filterable PM tests that the minimum detectable concentration limit is at or below 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The sensor on the BLDS must provide output of relative PM emissions.

(3) The BLDS must have an alarm that will activate automatically when it detects a significant increase in relative PM emissions greater than a preset level.

(4) The presence of an alarm condition should be clearly apparent to facility operating personnel.

(5) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm.

(6) All BLDS must be installed, operated, adjusted, and maintained so that they are based on the manufacturer's written specifications and recommendations. The EPA recommends that where appropriate, the standard operating procedures manual for each bag leak detection system include concepts from EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA–454/R–98–015, September 1997).

(7) The baseline output of the system must be established as follows:

(i) Adjust the range and the averaging period of the device; and

(ii) Establish the alarm set points and the alarm delay time.

(8) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations and maintenance plan required by paragraph (a) of this section. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 1 calendar year period unless a responsible official as defined in §63.2 certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition.

(9) The owner or operator must maintain and operate the fabric filter such that the bag leak detector alarm is not activated and alarm condition does not exist for more than 5 percent of the total operating time in a 6-month block period. Each time the alarm activates, alarm time will be counted as the actual amount of time taken by the owner or operator to initiate corrective actions. If inspection of the fabric filter demonstrates that no corrective actions are necessary, no alarm time will be counted. The owner or operator must continuously record the output from the BLDS during periods of normal operation. Normal operation does not include periods when the BLDS is being maintained or during startup, shutdown or malfunction.

(n) Any kiln or kiln/in-line raw mill using a control device (other then ACI) to comply with a mercury emissions limit or equipment standard will monitor the control device parameters as specified in 40 CFR part 63 subpart SS.

(o) For kilns and in-line kilns/raw mills complying with the requirements in Section 63.1344(g), each owner or operator must obtain a certification from the supplier for each shipment of fly ash received to demonstrate that the fly ash was not derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control. The certification shall include the name of the supplier and a signed statement from the supplier confirming that the fly ash was not derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of emission control.

(p) If the facility opts to use a fly ash derived from a source in which the use of activated carbon, or any other sorbent, is used as a method of mercury emissions control and demonstrate that the use of this fly ash does not increase mercury emissions, they must obtain daily fly ash samples, composites monthly, and analyze the samples for mercury.

[64 FR 31925, June 14, 1999, as amended at 64 FR 53070, Sept. 30, 1999; 67 FR 16620, Apr. 5, 2002; 67 FR 44769, July 5, 2002; 67 FR 72585, Dec. 6, 2002; 71 FR 76551, Dec. 20, 2006]

§ 63.1351 Compliance dates.

(a) Except as noted in paragraph (c) below, the compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is June 14, 2002.

(b) Except as noted in paragraph (d) below, the compliance date for an owner or operator of an affected source subject to the provisions of this subpart that commences new construction or reconstruction after March 24, 1998, is June 14, 1999, or upon startup of operations, whichever is later.

(c) The compliance date for an existing source to meet the requirements of GCP for THC is December 20, 2007.

(d) The compliance date for a new source which commenced construction after December 2, 2005, and before December 20, 2006 to meet the THC emission limit of 20 ppmv/98 percent reduction or the mercury standard of 41 µg/dscm or a site-specific standard based on application of a wet scrubber will be December 21, 2009.

[71 FR 76552, Dec. 20, 2006]

§ 63.1352 Additional test methods.

(a) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 are permitted to use Method 320 or Method 321 of appendix A of this part.

(b) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 are permitted to use Methods 26 or 26A of appendix A to part 60 of this chapter, except that the results of these tests shall not be used to establish status as an area source.

(c) Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at portland cement manufacturing facilities, for use in

applicability determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter.

Notification, Reporting and Recordkeeping

§ 63.1353 Notification requirements.

(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:

(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

(2) Notification of performance tests, as required by §§63.7 and 63.9(e).

(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).

(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.

(5) Notification of compliance status, as required by §63.9(h).

§ 63.1354 Reporting requirements.

(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.

(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).

(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:

(i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);

(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and

(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).

(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).

(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).

(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

§ 63.1355 Recordkeeping requirements.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) You must keep records of the amount of CKD recycled on an hourly basis.

(f) You must keep records of all fly ash supplier certifications as required by §63.1350(o).

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006]

Other

§ 63.1356 Exemption from new source performance standards.

(a) Except as provided in paragraphs (a)(1) and (2) of this section, any affected source subject to the provisions of this subpart is exempt from any otherwise applicable new source performance standard contained in subpart F or subpart OOO of part 60 of this chapter.

(1) Kilns and in-line kiln/raw mills, as applicable, under 40 CFR 60.60(b), located at area sources are subject to PM and opacity limits and associated reporting and recordkeeping, under 40 CFR part 60, subpart F.

(2) Greenfield raw material dryers, as applicable under 40 CFR 60.60(b), located at area sources, are subject to opacity limits and associated reporting and recordkeeping under 40 CFR part 60, subpart F.

(b) The requirements of subpart Y of part 60 of this chapter, "Standards of Performance for Coal Preparation Plants," do not apply to conveying system transfer points used to convey coal from the mill to the kiln that are associated with coal preparation at a portland cement plant that is a major source under this subpart.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002; 71 FR 76552, Dec. 20, 2006]

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

(a) Subject to the limitations of paragraphs (b) through (f) of this section, an owner or operator conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:

(1) Any particulate matter and opacity standards of part 60 or part 63 of this chapter that are applicable to cement kilns and in-line kiln/raw mills.

(2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and in-line kiln raw mills to ensure compliance with any particulate matter and opacity standards of this part or part 60 of this chapter.

(b) The owner or operator must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:

(1) The number of test conditions and the number of runs for each test condition;

(2) The target particulate matter emission level for each test condition;

(3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and

(4) The anticipated normal particulate matter emission level.

(c) The Administrator will review and approve or disapprove the correlation test plan in accordance with §63.7(c)(3)(i) and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified in §63.7(c)(3)(iii), the plan shall be considered approved, unless the Administrator has requested additional information.

(d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.

(e) The PM and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for the purposes of conducting tests to correlate PM CEMS with manual method test results, including all runs and conditions, except as described in this paragraph. Where additional time is required to correlate a PM CEMS device, a source may petition the Administrator for an extension of the 96-hour aggregate waiver of compliance with the PM and opacity standards. An extension of the 96-hour aggregate waiver is renewable at the discretion of the Administrator.

(f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

[64 FR 31925, June 14, 1999, as amended at 67 FR 16622, Apr. 5, 2002]

§ 63.1358 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

Table 1 to Subpart LLL of Part 63—Applicability of General Provisions

Citation	Requirement	Applies to Subpart LLL	Explaination
63.1(a)(1)–(4)	Applicability	Yes	
63.1(a)(5)		No	[Reserved]
63.1(a)(6)–(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved]
63.1(a)(10)–(14)	Applicability	Yes	
63.1(b)(1)	Initial Applicability Determination	No	§63.1340 specifies applicability.
63.1(b)(2)–(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved]
63.1(c)(4)–(5)	Extensions, Notifications	Yes	
63.1(d)		No	[Reserved]
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in §63.1341.
63.3(a)–(c)	Units and Abbreviations	Yes	
63.4(a)(1)–(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved]
63.4(a)(5)	Compliance date	Yes	
63.4(b)–(c)	Circumvention, Severability	Yes	
63.5(a)(1)–(2)	Construction/Reconstruction	Yes	
63.5(b)(1)	Compliance Dates	Yes	
63.5(b)(2)		No	[Reserved]

63.5(b)(3)–(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved]
63.5(d)(1)–(4)	Approval of Construction/Reconstruction	Yes	
63.5(e)	Approval of Construction/Reconstruction	Yes	
63.5(f)(1)–(2)	Approval of Construction/Reconstruction	Yes	
63.6(a)	Compliance for Standards and Maintenance	Yes	
63.6(b)(1)–(5)	Compliance Dates	Yes	
63.6(b)(6)		No	[Reserved]
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)–(2)	Compliance Dates	Yes	
63.6(c)(3)–(4)		No	[Reserved]
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved]
63.6(e)(1)–(2)	Operation & Maintenance	Yes	
63.6(e)(3)	Startup, Shutdown Malfunction Plan	Yes	
63.6(f)(1)–(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)–(3)	Alternative Standard	Yes	
63.6(h)(1)–(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved]
63.6(h)(4)–(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)–(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)–	Extension of Compliance	Yes	

(14)			
63.6(i)(15)		No	[Reserved]
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)–(3)	Performance Testing Requirements	Yes	§63.1349 has specific requirements.
63.7(b)	Notification	Yes	
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	
63.7(e)(1)–(4)	Conduct of Tests	Yes	
63.7(f)	Alternative Test Method	Yes	
63.7(g)	Data Analysis	Yes	
63.7(h)	Waiver of Tests	Yes	
63.8(a)(1)	Monitoring Requirements	Yes	
63.8(a)(2)	Monitoring	No	§63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved]
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)–(3)	Conduct of Monitoring	Yes	
63.8(c)(1)–(8)	CMS Operation/Maintenance	Yes	Performance specification supersedes requirements for THC CEMS Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes	
63.8(e)	Performance Evaluation for CMS	Yes	Performance specification supersedes requirements for THC CEMS.
63.8(f)(1)–(5)	Alternative Monitoring Method	Yes	Additional requirements in §63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	
63.8(g)	Data Reduction	Yes	

63.9(a)	Notification Requirements	Yes	
63.9(b)(1)–(5)	Initial Notifications	Yes	
63.9(c)	Request for Compliance Extension	Yes	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of Performance Test	Yes	
63.9(f)	Notification of VE/Opacity Test	Yes	Notification not required for VE/opacity test under §63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)–(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved]
63.9(h)(5)–(6)	Notification of Compliance Status	Yes	
63.9(i)	Adjustment of Deadlines	Yes	
63.9(j)	Change in Previous Information	Yes	
63.10(a)	Recordkeeping/Reporting	Yes	
63.10(b)	General Requirements	Yes	
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(2)–(4)		No	[Reserved]
63.10(c)(5)–(8)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved]
63.10(c)(10)–(15)	Additional CMS Recordkeeping	Yes	PS–8A supersedes requirements for THC CEMS.
63.10(d)(1)	General Reporting Requirements	Yes	
63.10(d)(2)	Performance Test Results	Yes	

63.10(d)(3)	Opacity or VE Observations	Yes	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	Yes	
63.10(e)(1)–(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
63.10(f)	Waiver for Recordkeeping/Reporting	Yes	
63.11(a)–(b)	Control Device Requirements	No	Flares not applicable.
63.12(a)–(c)	State Authority and Delegations	Yes	
63.13(a)–(c)	State/Regional Addresses	Yes	
63.14(a)–(b)	Incorporation by Reference	Yes	
63.15(a)–(b)	Availability of Information	Yes	

APPENDIX 2 - ANNUAL COMBUSTION SYSTEM INSPECTION REPORT FORM

ANNUAL COMBUSTION SYSTEM INSPECTION REPORT

Reporting Year: _____

Section A.
Date(s) of Inspection:_____
An inspection of the components of the combustion systems of In-line Kiln/Raw Mill No. 2 (EU 044) was conducted to include the following:

- ☐ Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation; clean pilot flame sensor, as necessary.
- ☐ Ensure proper adjustment of primary and secondary combustion air, and adjust as necessary.
- ☐ Inspect hinges and door latches, and lubricate as necessary.
- ☐ Inspect primary air fan, dampers ducts/hoses for leaks
- ☐ Inspect door and door gaskets for proper sealing.
- ☐ Inspect motors for proper operation.
- ☐ Inspect refractory lining; clean and repair/replace lining as necessary.
- ☐ Inspect kiln shell for corrosion and/or hot spots.
- ☐ Kiln, preheater and stack, clean as necessary.
- ☐ Inspect fuel supply system, for proper operation.
- ☐ Inspect air pollution control device(s) for proper operation.
- ☐ Inspect gas-conditioning systems to ensure proper operation.
- ☐ Generally observe that the equipment is maintained in good operating condition.

Section B.
1. Any repair items resulting from inspection? ☐ Yes ☐ No
2. If yes to #1, were repair items completed within 10 days? ☐ Yes ☐ No ☐ N/A
3. If no to #2, was FDEP notified and approval requested for established date for completion of repair(s)? ☐ Yes ☐ No ☐ N/A
4. If applicable, attach date of completion and explanation of repair(s).

Section C.

I certify that the information contained in this report is true, accurate, and complete.

Name:_____

Signature:_____ Date:_____

Title:_____

Company: **CEMEX, Inc. (Florida Crushed Stone Company)**

APPENDIX 3 - INSPECTION AND PREVENTATIVE MAINTENANCE

The following is the inspection procedure for pulse-jet dust collectors. There are slight variations in the construction and operation of all dust collectors and baghouses but all will follow this form.

QUARTERLY PREVENTATIVE MAINTENANCE FOR PULSE-JET DUST COLLECTORS

Preliminary work:

1. Coordinate production operator in charge prior to preventative maintenance implementation.
2. Prepare tools, parts and all necessary things in order to complete the preventative maintenance activities.
3. Wear appropriate outfit and safety paraphernalia.
4. Follow proper lock-out procedure.

Scope of work:

DISCHARGE DEVICE OF DUST COLLECTOR:

1. Visually inspect the rotary feeder or tipping valve for material buildup or damage, if applicable.
2. Check packing for proper lubrication.
3. Check for loose connections and tight flange seal.
4. Check wear of sealing strips of rotor vane.

BEARINGS AND SCREW SHAFT:

1. Check bearings for wear and lubricant.
2. Check screw shaft and flights for deformation and wear.
3. Lubricate packing rings.
4. Check hanger bearings for wear and damage, replace if necessary.

SCREW TROUGH:

1. Remove cement accumulation in all surfaces.
2. Check joints regarding cracks, damage, and defects for repair.

DRIVE MOTOR OF SCREW CONVEYOR AND FAN:

1. Check for material buildup, remove if necessary.
2. Check all mounting bolts for secure fastening.
3. Check drive components for wear and looseness.

GEARBOX OF SCREW CONVEYOR:

1. Check oil level in the gearbox. Correct if necessary.
2. Check oil sample regarding color and consistency. Change if sample is polluted.
3. Check the tightness of all mounting bolts.

4. Test run the unit and observe for abnormal noise and vibration during operation.
5. Check for oil leaks. Repair immediately if present.

RADIAL FAN:

1. Open inspection manhole and inspect the impeller blade.
2. Remove hardened cement accumulation in the impeller blade and foreign matters inside.
3. Check bearing status. If necessary change the lubricant.
4. Check v-belts for tension, wear and damage.
5. Check for the tightness of the set screws and alignment of the pulleys.
6. Check for tightness of all mounting bolts.
7. Check the stands from cracks and deformation.
8. At running condition, check for leaks in the housing and rubber connection. If present, repair immediately. Also observe for abnormal noise in the bearings and vibration in the machine noise in the bearings and vibration in the machine.

FILTER HOUSING:

1. Remove all hardened cement accumulation around the chamber.
2. Check for holes and wear of filter bags through the use of visualite.
3. Check doors for tightness and easy open/close. Clean doors and rubber seal to avoid sticking.
4. Check all snap rings for correctness.
5. Check hopper for wear or damage.
6. Check baffles for wear.
7. Clean the clean gas chamber.
8. Check for material buildup in dust pipe.

CLEANING MECHANISM:

1. Check cleaning mechanism for correct functioning. Make sure that all diaphragm valves are in good operating condition.
2. Check for solenoid function. Time interval of solenoid to trigger should be equal in each cycle.
3. Check all valves and pipes for leaks.
4. Remove, dismantle and clean the float valve of water separator in the compressed air line.

If any piece of equipment is found with abnormalities and needs to be corrected, then a work order will be made up for each dust collector specifying a description of the problem with any recommendations for improvement (one work order per piece of abnormal equipment). All records of inspections and repairs will be held for 5 years.

APPENDIX 4 - MONTHLY VISIBLE EMISSIONS INSPECTION REPORT (MVEIR)

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM VEIR

EU 045 - Filter Dust Bin Baghouse (Plant ID No. 331.BF640)					Military Time		Method			
					Start	Stop	Type/Date	Wind	Wind	Observation?
	Operating	Observer's		Date	Time	Time	22 / Cert	Speed	Direction	YES/NO
	Capacity	Name	Signature							
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 045 - Filter Dust Bin Loadout Spout Baghouse (Plant ID No. 311.LS609)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM MVEIR

EU 046 - Blend Silo Baghouse (Plant ID No. 341.BF400)					Military Time		Method			
					Start	Stop	Type/Date	Wind	Wind	Observation?
	Operating Capacity	Observer's Name	Signature	Date	Time	Time	22 / Cert	Speed	Direction	YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 047 - Blend Silo Discharge Baghouse (Plant ID No. 341.BF410)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM [illegible]EIR

EU 047 - Kiln Feed Bin Baghouse (Plant ID No. 351.BF410)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 047 - Kiln Feed Transport Baghouse (Plant ID No. 351.BF420)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM VEIR

EU 048 - Clinker Transport Baghouse (Plant ID No. 471.BF110)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 048 - Clinker Silo Discharge 1 Baghouse (Plant ID No. 481.BF155)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM VEIR

EU 050 - Clinker Silo Discharge 2 Baghouse (Plant ID No. 481.BF165)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 050 - Clinker Storage Silo Baghouse (Plant ID No. 471.BF120)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM [illegible]EIR

EU 051 - Finish Mill Additives Baghouse (Plant ID No. 511.BF650)					Military Time		Method			
					Start	Stop	Type/Date	Wind	Wind	Observation?
	Operating	Observer's		Date	Time	Time	22 / Cert	Speed	Direction	YES/NO
	Capacity	Name	Signature							
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 054 - Finish Mill Bucket Elevator (Plant ID No. 531.BF020)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM VEIR

EU 057 - Finish Mill Cement Transport (Plant ID No. 531.BF400)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 057 - Finish Mill Rejects Transport (Plant ID No. 531.BF290)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM [illegible]EIR

EU 058 - Cement Silo 5 Baghouse (Plant ID No. 612.BF005)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 058 - Cement Silo 5 Loading Bin Baghouse (Plant ID No. 612.BF620)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM V/EIR

EU 058 - Cement Silo 5 Loadout Spout N Baghouse (Plant ID No. 622.LS140)					Military Time		Method			
					Start	Stop	Type/Date	Wind	Wind	Observation?
	Operating	Observer's		Date	Time	Time	22 / Cert	Speed	Direction	YES/NO
	Capacity	Name	Signature							
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 058 - Cement Silo 5 Loadout Spout S Baghouse (Plant ID No. 622.LS160)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM VEIR

EU 059 - Multi-Cell Cement Silo Baghouse (Plant ID No. 611.BF005)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										
EU 059 - Multi-Cell Cement Silo Alleviator Baghouse (Plant ID No. 611.BF045)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM [illegible]EIR

EU 059 - Multi-Cell Loadout Transport Baghouse (Plant ID No. 611.BF610)					Military Time		Method			
	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	Type/Date 22 / Cert	Wind Speed	Wind Direction	Observation? YES/NO
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

EU 059 - Multi-Cell Loadout Spout Baghouse (Plant ID No. 611.LS760)										
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

Brooksville South Monthly Visible Emissions Test Form, 1 Minute Duration

FORM VEIR

Packing Plant (Plant ID No. 641.BF150)					Military Time		Method			
					Start	Stop	Type/Date	Wind	Wind	Observation?
	Operating	Observer's		Date	Time	Time	22 / Cert	Speed	Direction	YES/NO
	Capacity	Name	Signature							
JANUARY										
FEBRUARY										
MARCH										
APRIL										
MAY										
JUNE										
JULY										
AUGUST										
SEPTEMBER										
OCTOBER										
NOVEMBER										
DECEMBER										

NOTE: If Visible Emissions are observed, conduct six-minute Method 9 within 1 hour of Visible Emissions.

Complete Corrective Action Form CARM If emissions Are Observed

APPENDIX 5 - CORRECTIVE ACTION REPORT MONTHLY (CARM) FORM

CORRECTIVE ACTION REPORT
Monthly Observations

Problem Description and Corrective Action Taken	Equip. #	Date and Time (Militatry time)	Step 1 Check for emissions Conduct 6-minute Method 9 Visible Emissions within 1 hr of Initial VE		Step 2 Six-minute Method 9 Emissions > 10	
			Yes - Go to step 2	No-Return to normal sched.	YES	NO
1.					Continue to take further corrective action and conduct and record daily 6 - minute Method 9* observations until the problem is corrected. **Record positive observation and include on semi-annual report**	**Conduct and record daily 6-minute Method 9* observations until the problem is corrected.**
Corrective Action Started						
Corrective Action Completed						
Completed By						
2						
Corrective Action Started						
Corrective Action Completed						
Completed By						
3						
Corrective Action Started						
Corrective Action Completed						
Completed By						

*Attach VE Method 9 Form.

APPENDIX 6 - DAILY VISIBLE EMISSIONS INSPECTION REPORT (DVEIR)

Week of: _____ Brooksville South Daily Visible Emissions Inspection Report

(Complete when equipment is operating at the highest feed rate expected for the day)

Operating Capacity	Observer's Name	Signature	DATE mm/dd/yy	START TIME (Military)	STOP TIME (Military)	SIX MINUTE METHOD 22 EMISSIONS OBSERVED?	
						YES - Initiate Corrective Action w/in one hour (GO TO CARD (form))	NO
EU 052 - Finish Mill - Kiln 2 System							
Monday							
Tuesday							
Wednesday							
Thursday							
Friday							
Saturday							
Sunday							

APPENDIX 7 - VISIBLE EMISSIONS OBSERVATION FORM

	Operating Capacity	Observer's Name	Signature	Date	Start Time	Stop Time	SIX MINUTE METHOD 22 EMISSIONS OBSERVED?			
							YES - Initiate Corrective Action w/in one hour (GO TO CAR form)			NO
EU 052 - Finish Mill, Kiln 2 System										
Monday										
Tuesday										
Wednesday										
Thursday										
Friday										
Saturday										
Sunday										

APPENDIX 8 - CORRECTIVE ACTION REPORT DAILY (CARD) FORM

CORRECTIVE ACTION REPORT

Daily Observations

Problem Description and Corrective Action Taken	Equip. #	Date and Time (Military time)	Step 1 Check for emissions Conduct second M22 observation within 24 hrs of Initial VE		Step 2 Conduct second M22 observation within 24 hrs of Initial VE		Step 3 Conduct 30-minute Method 9 within 48 hours of Initial VE (Step 1), Emissions > 10?	
			Yes - Go to step 2	No-Return to normal sched.	Yes - Go to step 3	No-Return to normal sched.	YES	NO
1.							Record positive observation for the day. Record excess emissions in semi-annual report. Take further corrective actions and record actions taken. Continue with daily 30-min M9 testing until <10%--if <10% opacity, return to Step 1	**Record observation and return to normal scheduled daily M22 monitoring**
Corrective Action Started								
Corrective Action Completed								
Completed By								
2								
Corrective Action Started								
Corrective Action Completed								
Completed By								
3								
Corrective Action Started								
Corrective Action Completed								
Completed By								

*Attach VE Method 9 Form.

FORM CARD

11/19/08, Rev. 0

APPENDIX 9 - STARTUP PROCEDURES

Baghouse Startup Procedures

Proper start-up procedures will help extend the life of new filter media in a dust collector. What is generally accepted as start-up procedures is the process designed to intentionally develop a dust cake on the bags. This is referred to as seasoning, or conditioning, the filter media. In a fabric filter dust collector, the filter media is used to support a dust cake. A dust cake is the porous layer of collected particulate that develops during the conditioning period of new collector bags and following each cleaning cycle. The process can be accelerated in many installations by introducing a pre-coat material, such as agricultural lime, into the system. Commercial pre-coats also are available. Following installation of the filter bags and inspection of the related auxiliary equipment, the exhaust fan can be started. However, it is extremely important that the new filter bags are not exposed to the full volume (acfm) of the fan.

First, close the fan damper (or inlet dampers) to one-half open until the monitoring gauge reads about 50% to 65% of the manufacturer's recommended maximum flange-to-flange differential drop. At roughly 75% of the manufacturer's recommended differential pressure, the cleaning system can be initiated. Normal operation and periodic cleaning will bring the pressure drop to a calculable and historically stable level.

Depending on the application, development of this differential pressure may take a number of hours or even days. This is necessary to ensure that the new filter media is exposed to low filtering velocities of dust-laden air. Reducing the volume decreases the airstream's velocity (air-to-cloth ratio), thus protecting the virgin bags from a high velocity impingement of dust. Should the bags be exposed to the fan's full volume, fine particles may embed themselves into the inner fibers of the bags and create a blinding condition. This also can damage the fibers of the media, reducing the life of the bags.

Kiln Startup Procedures

It is important that ignition be achieved as soon as fuel is injected and, if the flame fails during warm-up, the kiln should be purged with 5 times the volume of kiln, preheater, ducting, and dust collector before re-ignition is attempted. Volatile hydrocarbons accumulate rapidly in the kiln and, if then re-ignited, will potentially explode.

Warm-up follows agreement by production and maintenance management that all work is completed, that all tools and materials have been removed and that all doors are closed. Work may, with discretion, continue in the cooler during warm-up but no workers should remain in the cooler at the time of ignition.

Commonly, warm-up from cold takes 24 hours from ignition to feed-on, but may be increased if extensive refractory work requires curing. The introduction of feed (usually 50% of full rate), and the increase of fuel, speed and feed to normal operation can take another 8 hours from feed-on. The ID fan should be operated at approximately 10% 0_2 at the back of the kiln to feed-on whereupon the normal 0_2 target is adopted.

For coal fired kilns, warm-up uses gas or oil with switch-over to coal at the time of feed-on. If the coal mill uses hot gas from the cooler, there may be a delay before heat is available from clinker.

Prior to bringing the kiln on-line, the kiln/raw mill I.D. fan and baghouse are powered to normal operating conditions. The kiln is then preheated with unused No. 2 fuel oil for a period of up to 24-36 hours; depending upon how long the kiln has been shut down.

Once the kiln is sufficiently hot and while still firing unused No. 2 fuel oil, raw meal feed is fed to the preheater at about 30-40 percent of normal feed rate. This material will coat the kiln and will produce clinker that is discharged to the clinker cooler. When there is heat in the clinker cooler, the coal mill is brought on-line and coal firing to the kiln main burner is initiated. At this point, raw meal feed to the preheater is incrementally increased. As the kiln stabilizes, the raw meal feed is incrementally increased until the system is operating at full capacity. Typically, the time from feed-on to full capacity is 3-4 hours.

During the startup of the kiln/raw mill, there could be periods when emissions are higher than normal (pounds per ton of clinker) due to imbalances of feed and fuel. These periods will be minimized through good operating practices. The emissions of PM/PM_{10} are not expected to exceed permit limits (pounds per ton of clinker) during startup.

This start-up procedure assumes the kiln system has been preheated for desired refractory dry-out but the system is cold. In connection with the normal startup procedure where the linings have been dried out, the heat procedure can be reduced from the stated 72 hours to 24 hours. All fans, conveyors, air purging system, and associated equipment should be run for a minimum of eight hours and all necessary adjustments made prior to start-up.

Kiln Heat-Up

1. Start the main dust collector fan with damper closed.
2. Open the main dust collector fan damper gradually so that a negative pressure is generated at the dust collector inlet.
3. Open the damper of the preheater I.D. fan 10%.
4. Start the primary air fan and open the associated damper 10%.
5. Start the kiln burner.
6. Check that the fuel is ignited and if necessary, adjust primary air, fuel rate and draft through kiln so that a stable flame is obtained.
7. Increase the fuel volume gradually and slowly.
8. Adjust the draft level in kiln by means of the preheater I.D. fan damper, and main baghouse fan.
9. CAUTION: The flame must not cause sooting. Quite often, this will require that the O_2 content indicated by the kiln back-end analyzer is 6-8%.
10. It will normally be necessary to start clinker cooler fans to provide adequate combustion air.
11. Start the preheater I.D. fan, if necessary to maintain proper combustion.
12. Start rotating the kiln in accordance with the manufacturer's rotation schedule.
13. Check the supporting roller lubrication – the journals must not become dry.
14. Continuous rotation on the auxiliary drive is required if the kiln is exposed to cooling, e.g. heavy rain showers.
15. After 16 hours of preheating the temperature of the kiln lining should be sufficiently high to ensure ignition of the coal from the operation nozzle, which is put into operation as follows:

    A. Turn off the oil flow to the oil burner.
    B. Retract the oil burner completely.
    C. Replace the oil burner by a burner with an operating nozzle that is ready for operation.

16. After 18 - 20 hours when the kiln gets very hot, raw feed should be introduced to the preheater. A raw feed weight equal to 0.1% of the daily clinker output is a good estimate. When this material gets into the kiln it will help protect the refractory by coating the bricks and filling voids.
17. At the end of the kiln heat-up the remaining clinker cooler fans should be started to protect the grate plates.
18. Start the cooler vent fan to maintain the firing hood pressure by automatic control.
19. Regulate the draft (by adjusting the preheater I.D. fan damper) and the fuel flow to attain an oxygen content of 4 – 6% in the kiln inlet.

Kiln Startup

1. Recirculate kiln feed at the desired starting feed rate. It should be a minimum of 50% of feed rate at full production.
2. Start kiln shell cooling fans.

3. Start cooler drives on minimum speed. Increase the air flows on the front fans to normal operating values and put into automatic control. This will provide sufficient combustion air at startup.
4. Start main kiln drive on minimum speed.
5. Perform the following operations in rapid, but correct, sequence:

    A. Start the I.D. fan if not yet started.
    B. Start the feed to the preheater.
    C. Increase the draft when the feed enters the preheater.
    D. Increase the kiln speed to 1 rpm.
    E. Open the primary air fan damper to 40% (approximately).
    F. Gradually increase the fuel to the kiln and simultaneously adjust the draft to obtain proper oxygen level at the inlet to the kiln.
    G. Open the tertiary air damper.
    H. Adjust the draft and tertiary air to balance the oxygen levels at preheater exit and kiln inlet.

6. Personnel must be stationed in the preheater tower in order to monitor the passage of raw meal. If there is any indication of blocking, the control room must be informed immediately and the kiln operation stopped until the blockage is cleared.
7. Increase the feed and speed of kiln as soon as possible. The preheater is more efficient at high feed rates.
8. Increase the cooler undergrate air flow rates.
9. When the material arrives at the burning zone it may be necessary to reduce the kiln speed to prevent the material from passing the burning zone too quickly. It is very important that the initial material charge is well burned so that the visibility in kiln is not lost due to dust formations. The clinker must be well burnt all the time. If not, increase the raw meal temperature by increasing the draft and fuel quantity.
10. Increase the kiln speed and feed gradually so that the exit gas temperature after the preheater does not exceed safe levels.
11. The maximum production rate can generally be achieved within a few hours after the startup.

Raw Mill Startup

Typically, the raw mill is brought on-line during the pre-heat of the kiln once there is sufficient heat for the raw mill to operate.

The kiln and raw mill usually operate together in what is referred to as the compound mode of operation. This operating mode occurs approximately 90 percent of the time. The remaining 10 percent of the time, the kiln operates alone in what is referred to as the direct operating mode. The raw mill is a source of particulate matter and a source of combustion products when the raw mill heater operates. The raw mill exhaust gases are discharged through the kiln baghouse.

With the kiln in the direct operating mode, the raw mill is brought on-line by opening the dampers isolating the raw mill; and as quickly and simultaneously as possible starting the raw mill fan, the raw mill and the raw mill feed.

During the startup of the raw mill while the kiln is operating, there can be a brief imbalance in the airflow through the kiln system resulting in short-term spikes in emissions from the kiln. These short-term emission spikes will be minimized by best operating practices. The raw mill startup is not expected to affect PM/PM_{10} emissions.

Clinker Cooler Startup

The clinker cooler I.D. fan and baghouse are powered prior to clinker being discharged from the kiln into the clinker cooler. The air flow and clinker flow through the cooler during startup will be controlled to optimize heat recovery. The time to bring the cooler on-line and to full capacity is dependent upon the time required to bring the kiln/raw mill to full capacity. Typically, this time period will be 3-4 hours. Emissions from the cooler are limited to PM and PM_{10}. During the startup period, no excess emissions are expected from the clinker cooler.

It may, from time to time, be necessary to start the grate cooler and the clinker conveying system in order to transport away the materials. In order not to fill up the cooler, the grates should be moved for about 10 minutes every hour at minimum speed. To ensure effective cooling at the cooler inlet, it may at the same time be necessary to start the first fans of the cooler to ensure that there is sufficient air for combustion.

The clinker cooler startup should occur around the same time as the kiln feed startup.

1. Start clinker pan conveyors.
2. Start clinker crusher.
3. Start timer and operation of tipping valves.
4. Start cooler vent fan and adjust draft to maintain a negative pressure in the kiln firing hood.
5. Progressively, start cooler undergrate fans to provide enough combustion air to the kiln, and keep grate plate temperatures down.
6. As clinker begins to discharge into the cooler, the grates should be started to prevent any buildups.
7. Progressively, as the clinker production increases, the fan volumes should be increased, and the grates operated more frequently.

Coal Mill Startup

The coal mill is required to operate when the kiln is operating. The coal mill is a source of PM and PM_{10} emissions and discharges through a baghouse. The coal mill is started as soon as sufficient heat is available from the clinker cooler to dry the coal. The coal is mill is started by opening the dampers isolating the coal mill; and quickly and as simultaneously as possible starting the coal mill fan, the coal mill and the coal mill feed.

No excess emissions are expected as a result of the coal mill startup.

Material Handling Systems Startup

There are fabric filter dust collectors (baghouses) used to control PM/PM_{10} emissions from emission points associated with the raw mill, clinker handling, the finish mill, cement handling and coal handling. Startup of these systems involves powering the system I.D. exhaust fans and the baghouse cleaning systems prior to commencing process operations. No excess emissions are anticipated during the startup of any of these systems.

APPENDIX 10 - SHUTDOWN PROCEDURES

In-line Kiln/Raw Mill/Clinker Cooler No. 2 Shutdown Procedures

The kiln/raw mill, clinker cooler and coal mill have normal and emergency shutdown procedures. The emergency procedures will shutdown entire systems immediately and close dampers isolating the systems.

Shut-down may be either:

- Emergency, in which case all equipment upstream of the failure must be stopped immediately, or

- Controlled, in which case the feed bin and coal system should be emptied, the kiln load run out as far as possible, and the cooler emptied. The burner pipe is withdrawn, or cooling air is continued through the burner, and the kiln is rotated on a standard schedule for about 12 hours with the ID fan running at reduced speed.

Suggested inching is as follows:

Duration of Shutdown	Kiln Turning
0 - 2 hours	continuous
2 - 4 hours	1/4 turn every 15 minutes
4 - 12 hours	1/4 turn every hour

If the shut-down is for less than 24 hours and does not involve entering the kiln or preheater, then heat should be retained either by stopping the ID fan immediately and shutting the preheater dampers after 2 hours, or shutting down the fan after 2 hours.

The following procedures are followed for normal (controlled) shutdowns.

Normal Kiln/Raw Mill Shutdown

Shutdown of the kiln and raw mill, while operating in the compound operating mode, is accomplished by first shutting down the raw mill and then shutting down the kiln. The raw mill is shutdown by stopping raw meal feed, stopping the raw mill and stopping the raw mill fan quickly and as simultaneously as possible. The dampers isolating the raw mill are then quickly closed.

The kiln is shutdown by shutting off the kiln feed and cutting back on the fuel to the main kiln burner. The kiln exhaust fan is also cut back. The kiln continues turning as the fuel in the main burner is continually cut back and finally cut off. The kiln continues turning at a prescribed rate until cool. At this time, the kiln can stop being turned. The kiln baghouse remains powered as long as air is drafted through the kiln.

There are no excess emissions expected during kiln shutdown.

Shutdown Sequence

1. Stop the preheater I.D. fan. The following should happen automatically:

    A. The kiln feed will stop
    B. The kiln and calciner firing will stop
    C. The preheater fan damper will close
    D. The last two cooler fans will stop and the air flows to all other cooler fans will reduce to preset minimum

2. Stop the kiln drive.
3. Reduce the cooler grate speeds to minimum.
4. Reduce the primary air fan damper.
5. Stop the shell cooling fans.
6. Close the tertiary air damper.
7. Start kiln rotation operation as outlined above.
8. Stop the cooler grates and operate for 5 minutes every 30 minutes.

Extended Shutdowns

Where shutdown of kiln extends over a prolonged period of time, all machinery not required for rotation of kiln and cooling of burner pipe must be stopped

1. Stop the dust conveyance system when the system is empty.
2. Stop the compressors.
3. Prepare plans for subsequent clean-up operation in kiln, preheater, cooler, and baghouse.
4. After the kiln has cooled off, stop the primary air fan.
5. Stop the clinker conveying system.
6. Plan for maintenance and repair work prior to startup.

Normal Raw Mill Shutdown

The shutdown of the raw mill while the kiln continues to operate is accomplished by stopping the raw meal feed, the raw mill fan and the raw mill quickly and as simultaneously as possible. The dampers isolating the raw mill are then quickly closed. The shutdown of the raw mill can create a slight imbalance in the kiln system causing short-term spikes in emissions. The excess emissions will be minimized by good operating practices.

Normal Clinker Cooler Shutdown

The clinker cooler is shutdown following the shutdown of the kiln by cutting back on the airflow through the clinker cooler until any residual clinker in the cooler is sufficiently cool. At that time, the clinker cooler fan can be shut off. The clinker cooler baghouse operates at normal conditions during the entire time the clinker cooler fan operates. There are no excess emissions associated with the shutdown of the clinker cooler.

Normal Coal Mill Shutdown

The shutdown of the coal mill is associated with the shutdown of the kiln. The coal mill is shutdown by shutting off the coal mill feed, the coal mill and the coal mill fan quickly and as simultaneously as possible. The dampers isolating the coal mill are then quickly shut.

There are no excess emissions associated with the shutdown of the coal mill.

Material Handling Systems Shutdown

The dust collectors associated with the material handling emission points are operated until the associated processes are shutdown. Once no material is being processed, the dust collectors are shutdown by turning off power to the I.D. fans and the baghouse cleaning systems.

No excess PM or PM_{10} emissions are associated with the shutdown of these dust collectors.