November 28, 2022

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
Sector Policies and Programs Division
Research Triangle Park
North Carolina, 27711
Attn: Brian Storey, PE

Re: USEPA 114 Information Request for unregulated HAP pursuant to the CAA and as required by Louisiana Environmental Action Network et al. v. EPA, 955 F.3d 1088(D.C. Cir 2020)

Dear Ladies and Gentlemen:

CEMEX Construction Materials Florida, LLC ("CEMEX"), Pursuant to Section 114 of the Clean Air Act (CAA), 42 U.S.C. §7414(a), is hereby responding to the Information Request Questionnaire (Enclosure 1) dated October 3, 2022. Please note, this correspondence is provided within the specified 60 days.

CEMEX has undertaken an inquiry designed to reasonably identify available existing information or documents in its possession, custody, or control. Such available information forms the basis of this response as of the date of its submission. CEMEX reserves the right to supplement, modify, and/or amend its response if new or additional information becomes available. In making this response, CEMEX expressly reserves all rights, defenses, claims, or remedies, and makes no admission of fact, law, or liability.

Should you have any questions or comments, feel free to contact me by phone: (865) 719-9925 or e-mail lillianf.deprimo@cemex.com.

Sincerely,

Lillian DePrimo
Vice President Environmental Cement

CEMEX
6212 Cement Plant Road, Knoxville, TN 37924. USA, (865) 541-5500, (865) 541-5595

Section 114 Information Request

Table of Contents

CEMEX Construction Materials Florida, LLC

Brooksville South Cement Plant

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL
Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part A. Facility Information

A-01. Name and address of legal OWNER of the facility (if more than one owner, provide the name, address, and percent ownership for each owner using the additional columns to right):

Name	CEMEX CONSTRUCTION MATERIALS FLORIDA, LLC
Address	1501 Belvedere Road
City	West Palm Beach
State	Florida
Zip	33406
Percent Ownership	100%

A-02. Name and address of legal OPERATOR of the facility, if different than the legal OWNER:

Name	
Address	
City	
State	
Zip	

A-03. Name and complete street address of facility (physical location):

Facility Name	CEMEX Brooksville South Cement Plant
Address	10311 Cement Plant Road
City	Brooksville
State	Florida
Zip	34601
County	Hernando

A-04. Provide mailing address of the facility if different than physical location:

Address	
City	
State	
Zip	
County	

A-05. Facility contact able to answer technical questions about the completed survey:

Name (first name, last name)	Lillian F Deprimo
Title	Vice President Environmental Cement
Telephone number and extension	865-719-9925
E-mail	lillianf.deprimo@cemex.com

A-06. What is the facility size classification for hazardous air pollutant (HAP) emissions? *(Enter "Yes" or "No")*

EPA Major Source of Hazardous Air Pollutants (HAP)	Yes
EPA Area source (based on potential to emit) of HAP	No
EPA Area source (Synthetic Minor) of HAP	No

A-07. Facility NAICS codes. *Note: The primary NAICS code represents the line of business that generates the most income for the facility.*

Primary NAICS code	327310
Other facility NAICS codes	

A-08. Company Size *(Enter "Yes" for all that apply) Note: Approximate number of all employees (worldwide) of the business enterprise that owns this facility, including where applicable, the parent company and all subsidiaries, branches, and unrelated establishments owned by the parent company.*

< 1,000 employees	
≥ 1,000 employees	

A-09 Parent Company Annual Revenue
Please provide the estimated annual revenue ($) generated by the parent company (identified in A-01) in FY2021.

FY2021 Annual Revenue of Parent Company	*See Part E (01) Tab

A-10. Federal and State rule/permit coverage. (Enter "Yes" for all that apply to this facility).

Subpart LLL (Portland Cement Manufacturing)	YES
Other NESHAP *(SPECIFY rule name and subpart)*	
Other *(SPECIFY rule name and subpart)*	
New Source Performance Standards (NSPS):	
40 CFR 60 subpart F (Portland Cement Plants)	Yes
Other NSPS (SPECIFY rule name and subpart)	
Other NSPS (SPECIFY rule name and subpart)	
Title V:	
(SPECIFY rule that led to title V permit requirement)	Yes
State Air Toxics:	
(SPECIFY rule name and subpart)	
(SPECIFY rule name and subpart)	
Other: *(SPECIFY emission unit and rule)*	
Other: *(SPECIFY emission unit and rule)*	

A-11. Normal Facility Production Hours

Hours/day:	24 Hours
Shifts/day:	*See Part E (01) Tab
Days/week:	
Weeks/year:	

A-12. Clinker Production. Amount of clinker produced the most recent year of normal operation. Total capacity of clinker production.

Tons of clinker produced in last normal operating year:	1,213,630 *See Part E (01) Tab
Maximum tons of clinker able to be produced in one year (plant capacity):	2,005,300

A-13. Please provide a copy of a schematic or process flow diagram of the plant Portland cement manufacturing operations. Include identifying labels for equipment to be used for the remainder of this questionnaire.

Schematic or Process Flow Diagram File Name*	CEMEX Brooksville South Flow Diagram.pdf

*Please include Unit ID No., APCD ID No., Controlled Emissions Point ID No., and Un-controlled Emissions Point ID No. where applicable in the Schematic or Process Flow Diagram (PFD). It is assumed the PFD will be submitted electronically, as a separate file.

A-14. Please provide all of the pertinent information listed below. Please provide electronic copies, if available, and indicate items provided below. *(Enter "Yes" for all that apply).*

Title V Permit or State Air Operating Permit*	Yes

*If the permit is available online, please provide the URL for the file location.

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part B. Facility Equipment Regulated under Subpart LLL (Portland Cement Manufacturing NESHAP)

Please enter information for units subject to Subpart LLL, excluding any fugitive dust sources, material handling/conveying sources of emissions, or the emissions controls associated with these sources. See "Terms" Tab for an explanation of terms.
Please insert Rows as needed.

B-01. Related Equipment List

Unit Identification Numbers(s) (Unit ID No.) (Matches Unit ID on Schematic or Process Flow Diagram)	**Unit ID No. as designated in Title V or State Operating Permit** (Complete if ID numbers used in this form are different from those in permit)	**Subpart LLL Affected Source/Equipment Type**	**New, Existing, or Reconstructed**	**Source Classification Code** (See Validation Sheet for description of codes)	**Add-on Controls** (Y or N)	**When were controls installed?**	**Operating in 2021?** (Y or N) If "No," list last year of operation	**Additional Notes/Comments**
EU-020		Raw Mill	Existing	30500613			Yes	Raw Mill(In-Line Kiln 1, In-Line Raw Mill, Coal Mill,
EU-020		Clinker Cooler	Existing	30500614			Yes	Clinker Cooler 1(In-Line Kiln 1, In-Line Raw Mill,
EU-013		Finish Mill	Existing	30500717			Yes	Finish Mill 1
EU-020		Kiln (incl. alkali bypass and inline coal mill)	Existing	30500622	Yes	2020 SNCR, 2015 DSI	Yes	Kiln 1(In-Line Kiln 1, In-Line Raw Mill, Coal Mill,
EU-044		Kiln (incl. alkali bypass and inline coal mill)	Existing	30500623	Yes	2008 SNCR, 2015 DSI	Yes	Kiln 2(In-Line Kiln 2, In-Line Raw Mill, Clinker
EU-044		Raw Mill	Existing	30500613			Yes	Raw Mill(In-Line Kiln 2, In-Line Raw Mill, Clinker
EU-044		Clinker Cooler	Existing	30500614			Yes	Clinker Cooler 2(In-Line Kiln 2, In-Line Raw Mill,
EU-052		Finish Mill	Existing	30500717			Yes	Finish Mill 2

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part C. Processing Rates and Controls Used for Kilns Regulated under Subpart LLL

Please provide information below for all kilns/clinker coolers at your facility; provide information for 2021 if available, or other year (please specify): **Calendar Year (CY) 2021**

Please insert Rows as needed.

Please use the Notes/Comments column for any additional clarification, or APCDs if sufficient columns are not available. Additionally, Tab E provides space for additional comments

C-01. For Kiln/Clinker Cooler With Common Exhaust

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
EU-020	727800	397928	7686	Coal & Petroleum Coke	Use the space in C-01.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.	*See Part E (01) Tab	Membrane Filter Baghouse	EU-020	Dry Sorbent Injection System	EU-004	SNCR						
EU-044	1277500	815702	7360	Coal & Petroleum Coke		*See Part E (01) Tab	Membrane Filter Baghouse	EU-044	Dry Sorbent Injection System	EU-047	SNCR						

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-01.1 Common Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-01)	EU-020	EU-044			
Additional Fuels	No. 2 Fuel Oil	No. 2 Fuel Oil			
		Alternative Fuels			

C-02. For Each Kiln With Separate Exhaust

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
					Use the space in C-02.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.												

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-02.1 Separate Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-02)					
Additional Fuels					

C-03. For Each Idled Kiln, Not in Operation

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Current Idle Period (days/months/years)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
					Use the space in C-03.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.												

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-03.1 Separate Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-03)					
Additional Fuels					

C-04. For Each Clinker Cooler with Separate Exhaust

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part D. Detailed Control Device and Emission Release Information for Sources Regulated under Subpart LLL

Please provide information below for all air pollution control devices at your facility; provide information for 2021 if available, or other year (please specify):
Please insert Rows as needed.

CY 2021

D-01. Add-on air pollution control devices (APCD)

APCD ID No. (This should match the ID's provided in Section C)	**Device Type***	**Pollutant Controlled** (separate pollutants with comma)	**Capture Efficiency, if known** (percent)	**Control Device Efficiency, if known** (percent)	**Methods Used for Determining Capture & Control Efficiencies****	**What process units are vented through this point? Unit ID No.** (Use Same IDs as Provided in Section B-01 (column A), and Section C) (separate IDs with comma)
EU-020	Membrane Bags	Particulate Matter				EU-020
EU-044	Membrane Bags	Particulate Matter				EU-044
EU-004	Dry Sorbent Injection	SO2, HCl, Hg				EU-020
EU-047	Dry Sorbent Injection	SO2, HCl, Hg				EU-044
	SNCR	NOx				EU-020
	SNCR	NOx				EU-044

* For example, fabric filter, wet scrubber etc.

** Control & Capture Efficiency; a = Testing (specify method); b = Manufacturer's Specifications; c = Engineering Estimate

Please provide any additional information concerning the Control Devices identified in D-01, as needed, using the Part E tab of this workbook.

D-02. For each exhaust point/stack with a control device, please provide the following information, if known.

Controlled Emissions Point ID No. (This should match the ID's provided in Section C)	**What control devices are vented at this point?** (APCD ID No. from Section D-01)	**Latitude***	**Longitude***	**Flow Rate** (SCFM)
EU-020	EU-020	28.583456	-82.431853	247,696
EU-044	EU-044	28.582928	-82.430314	244,584

* Longitude and Latitude should be specified to 6 decimal places. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

D-03. For each exhaust point/stack not associated with a control device, please provide the following information, if known.

Un-controlled Emissions Point ID No. (This should match the ID's provided in Section C)	**What process units are vented though this point? Unit ID No.** (Use Same IDs as Provided in Section B-01 (column A), and Section C) (separate IDs with comma)	**Latitude***	**Longitude***	**Flow Rate, if known** (SCFM)

* Longitude and Latitude should be specified to 6 decimal places. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part E. Additional Information

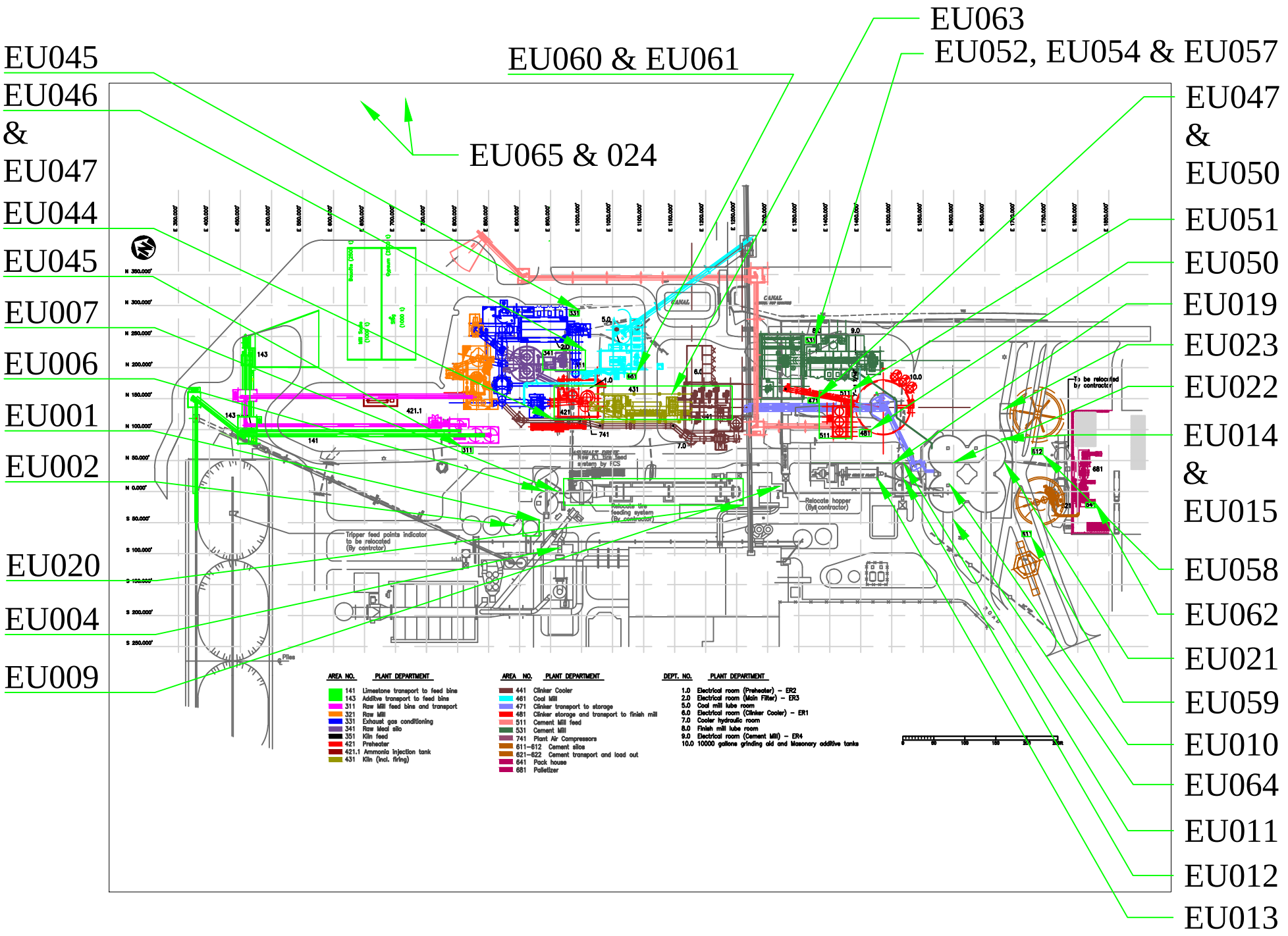
E-01. Provide any additional information in the space below as needed. Please identify the associated part of the workbook (e.g., C-01), as applicable.

Identify Questionnaire Part Associated with the Information Provided (e.g., C-01)	Identify Information Being Requested (e.g., "Process Modification")	Additional Information
A-08	Company Size	Not applicable
A-09	Parent Company Annual Revenue	Parent Company Annual Revenue information is not relevant; 2021 Report available via https://www.cemex.com/documents/20143/57102208/2021-20F-EN.pdf/3acbadfb-7481-5690-b4e0-a5eaa9ea9432?t=1651268726792
A-10	Title V	Chapter 403, Florida Statues (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213
A-11	Normal Facility Production Hours	The number of shifts and hours of operation vary based on market conditions.
A-12	Clinker Production. Amount of clinker produced the most recent year of normal operation. Total capacity of clinker production.	Normal Operation is not defined, we are maintaining consistency with Part C and Part D responses for calendar year 2021. Clinker production is based on the 2021 calendar year, production may vary based on market conditions.
B-01	New, Existing, or Reconstructed	No definition of New, Existing, Reconstructed has been given, we are using 40 CFR 63.2 “Existing source” definition
B-01	Add-On Controls	Considering request for Add-On Controls for main stack emissions only
C-01	Process Modifications	Cement plants are inherently complex, plant control operators make adjustments on a regular basis to maintain safety, environmental compliance, and quality of materials produced. Process Modifications is too broad of a question.
C-01		PLC vs OPC is not applicable per NESHAP and subsequent production rates are highly confidential
C-01.1	Additional Fuels List	See Title V Permit 0530021-088-AV section D.9. for a complete list of Alternative Fuels
D-01	APCD	Air Pollution Control devices listed for pyroprocessing system only
D-02	Stack Flow	Stack Flow for EU-020, EU-044 is an average stack flow for 2021 based on CEMS data.

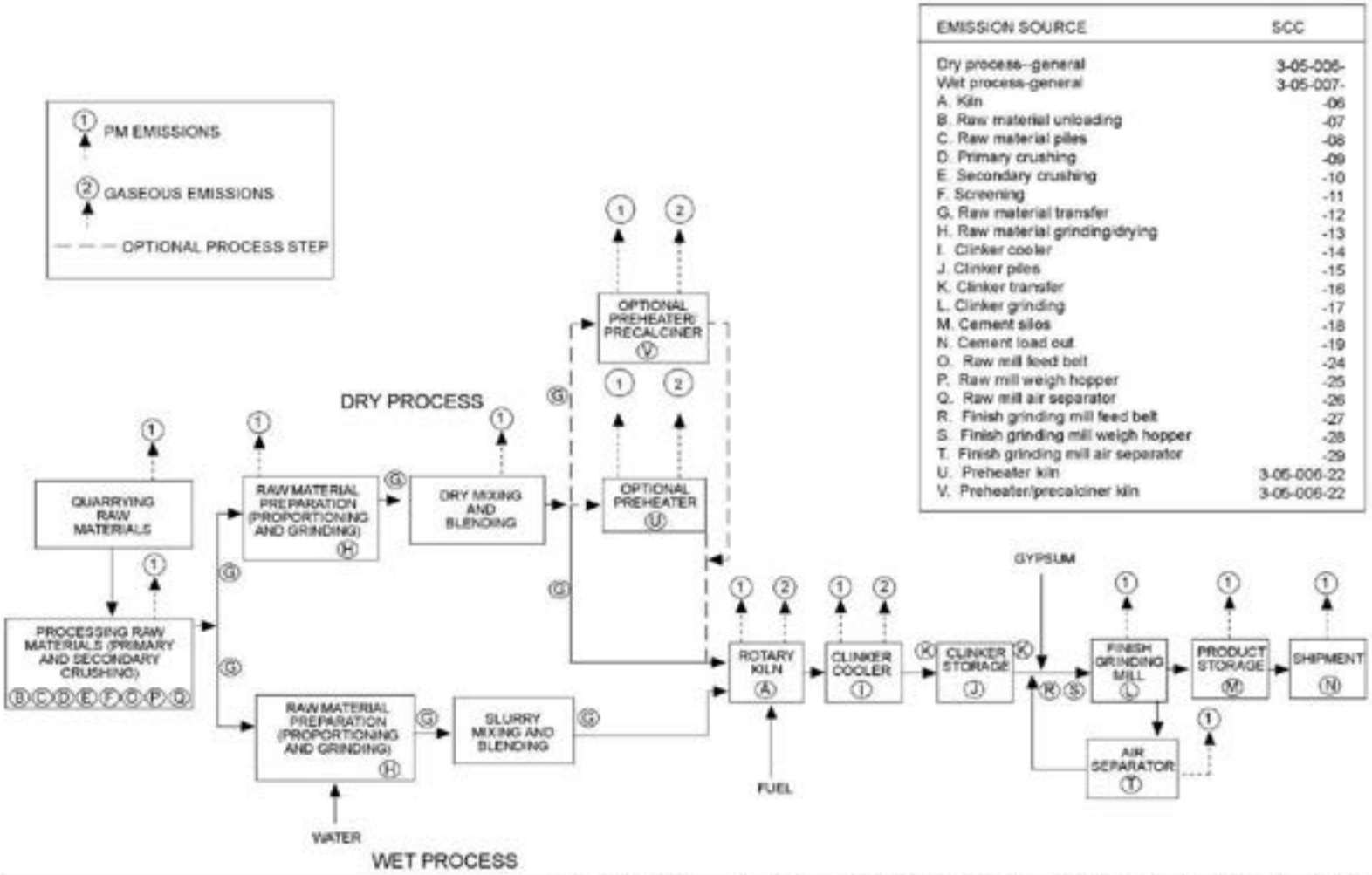
CEMEX Construction Materials Florida, LLC

Brooksville South Cement Plant

Process Flow Diagram


EU045
EU046
&
EU047
EU044
EU045
EU007
EU006
EU001
EU002
EU020
EU004
EU009
EU060 & EU061
EU065 & 024
EU063
EU052, EU054 & EU057
EU047
&
EU050
EU051
EU050
EU019
EU023
EU022
EU014
&
EU015
EU058
EU062
EU021
EU059
EU010
EU064
EU011
EU012
EU013
AREA NO. PLANT DEPARTMENT
141 Limestone transport to feed bins
143 Additive transport to feed bins
311 Raw Mill feed bins and transport
321 Raw Mill
331 Exhaust gas conditioning
341 Raw Meal silo
351 Kiln feed
421 Preheater
421.1 Ammonia injection tank
431 Kiln (incl. firing)
AREA NO. PLANT DEPARTMENT
441 Clinker Cooler
461 Coal Mill
471 Clinker transport to storage
481 Clinker storage and transport to finish mill
511 Cement Mill feed
531 Cement Mill
741 Plant Air Compressors
611–612 Cement silos
621–622 Cement transport and load out
641 Pack house
681 Palletizer
DEPT. NO. PLANT DEPARTMENT
1.0 Electrical room (Preheater) – ER2
2.0 Electrical room (Main Filter) – ER3
5.0 Coal mill lube room
6.0 Electrical room (Clinker Cooler) – ER1
7.0 Cooler hydraulic room
8.0 Finish mill lube room
9.0 Electrical room (Cement Mill) – ER4
10.0 10000 gallons grinding aid and Masonary additive tanks
Tripper feed points indicator to be relocated (By contractor)
Relocate hopper (By contractor)
Piles

APPENDIX B. PROCESS FLOW DIAGRAM



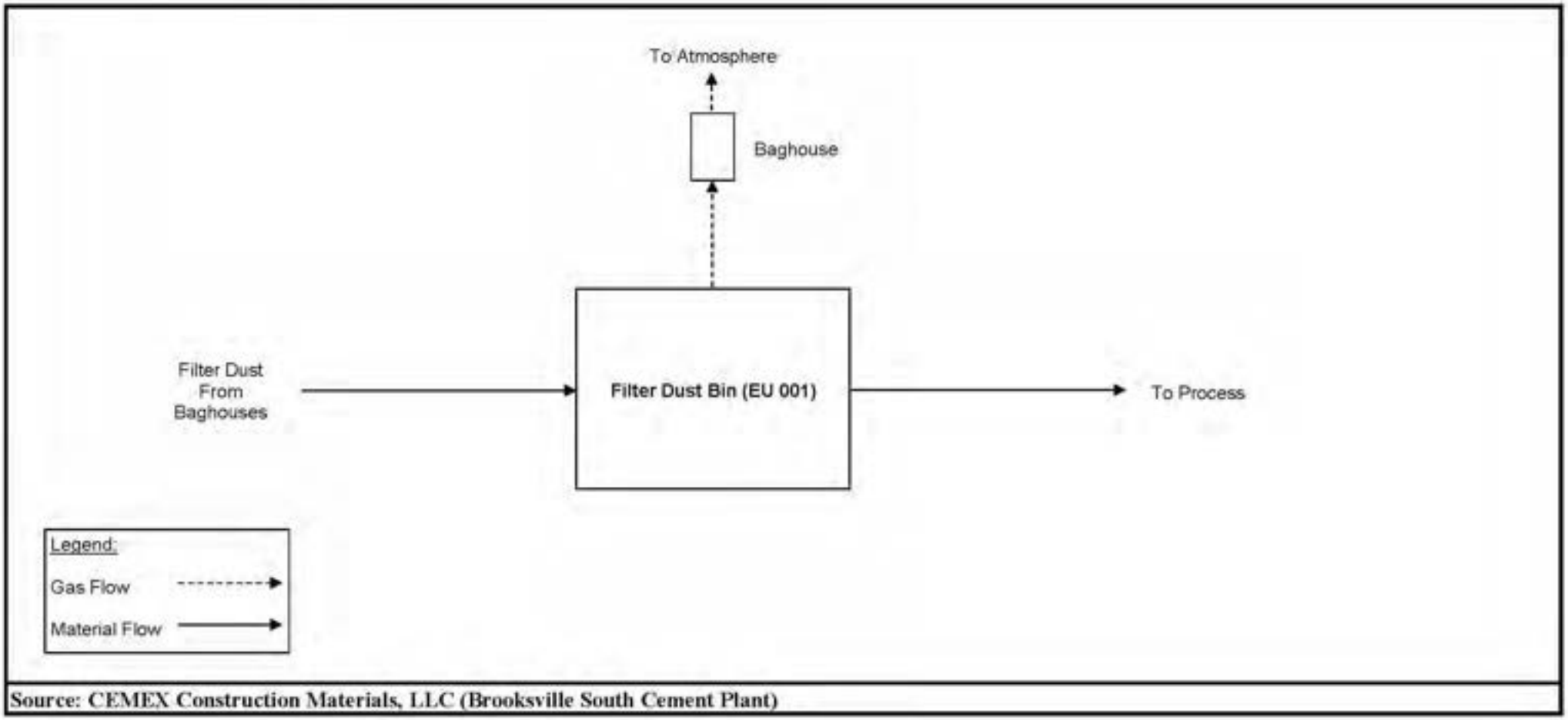
EMISSION SOURCE	SCC
Dry process--general	3-05-006-
Wet process-general	3-05-007-
A. Kiln	-06
B. Raw material unloading	-07
C. Raw material piles	-08
D. Primary crushing	-09
E. Secondary crushing	-10
F. Screening	-11
G. Raw material transfer	-12
H. Raw material grinding/drying	-13
I. Clinker cooler	-14
J. Clinker piles	-15
K. Clinker transfer	-16
L. Clinker grinding	-17
M. Cement silos	-18
N. Cement load out	-19
O. Raw mill feed belt	-24
P. Raw mill weigh hopper	-25
Q. Raw mill air separator	-26
R. Finish grinding mill feed belt	-27
S. Finish grinding mill weigh hopper	-28
T. Finish grinding mill air separator	-29
U. Preheater kiln	3-05-006-22
V. Preheater/precalciner kiln	3-05-006-22

CEMEX Construction Materials Florida, LLC, Brooksville South Cement Plant
Source: AP-42

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 001 - Filter Dust Bin

Attachment: **Process Flow Diagram**

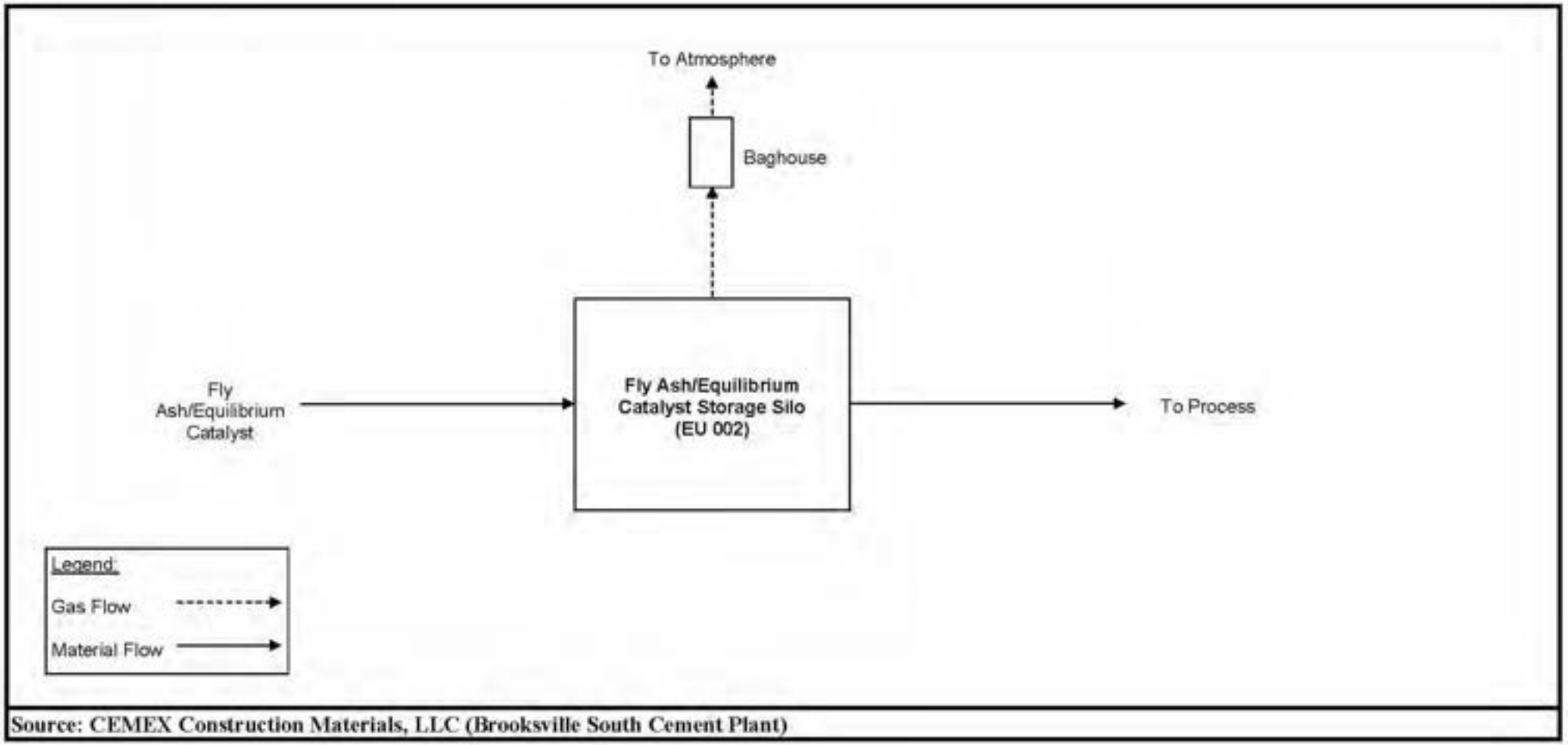


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 002 - Fly Ash/Equilibrium Catalyst Storage Silo

Attachment: Process Flow Diagram

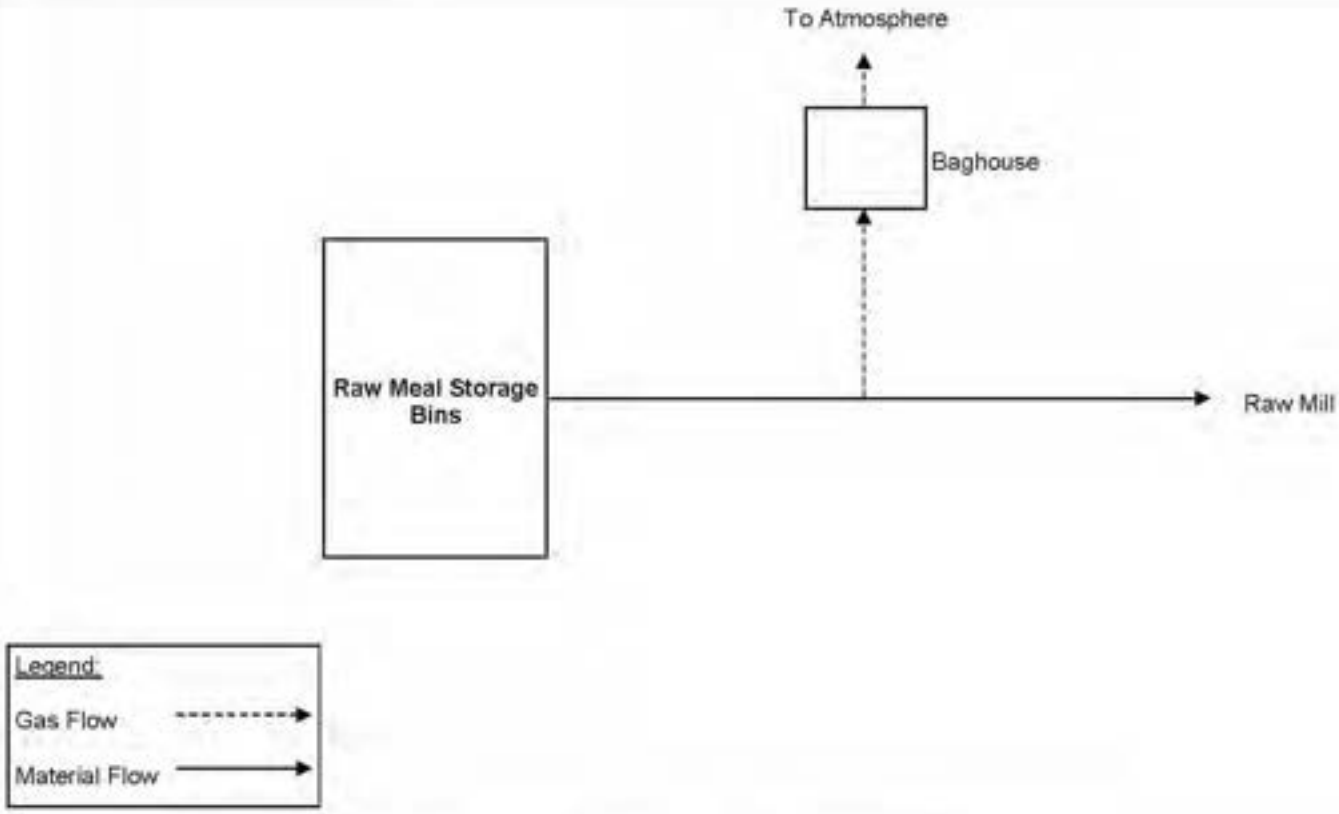


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 004 - Raw Meal Transfer

Attachment: Process Flow Diagram

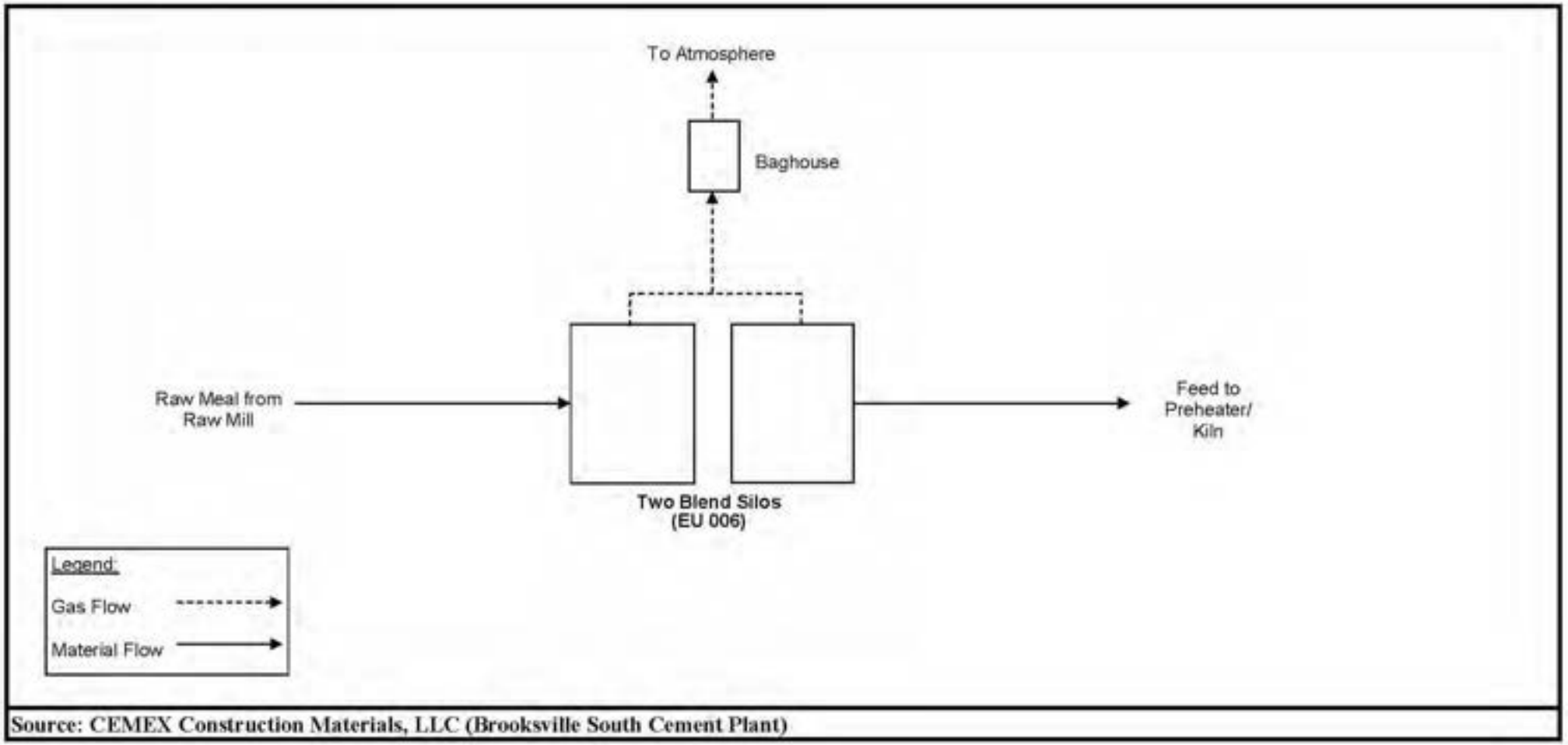


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 006 - Two Blend Silos

Attachment: Process Flow Diagram

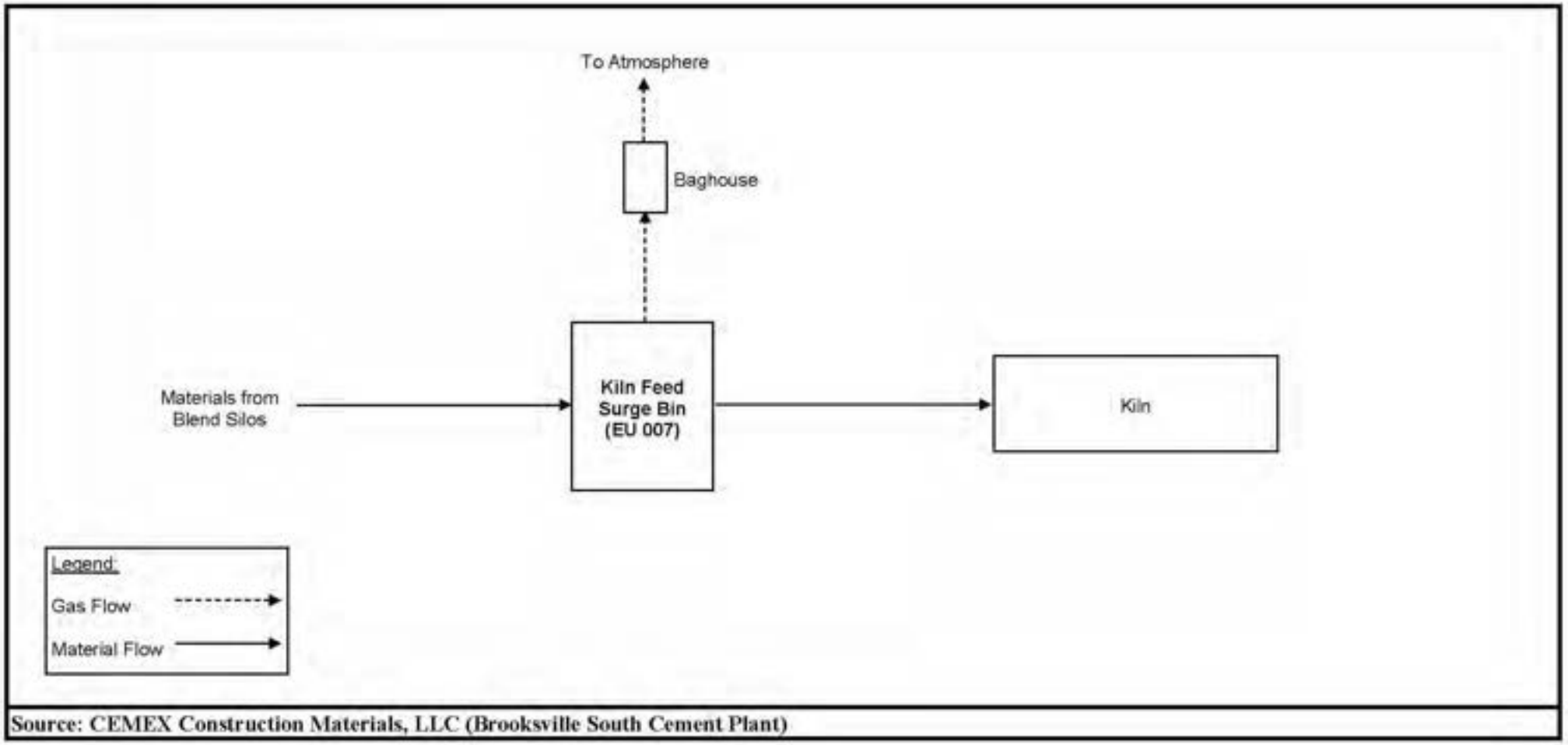


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 007 - Kiln Feed Surge Bin

Attachment: **Process Flow Diagram**

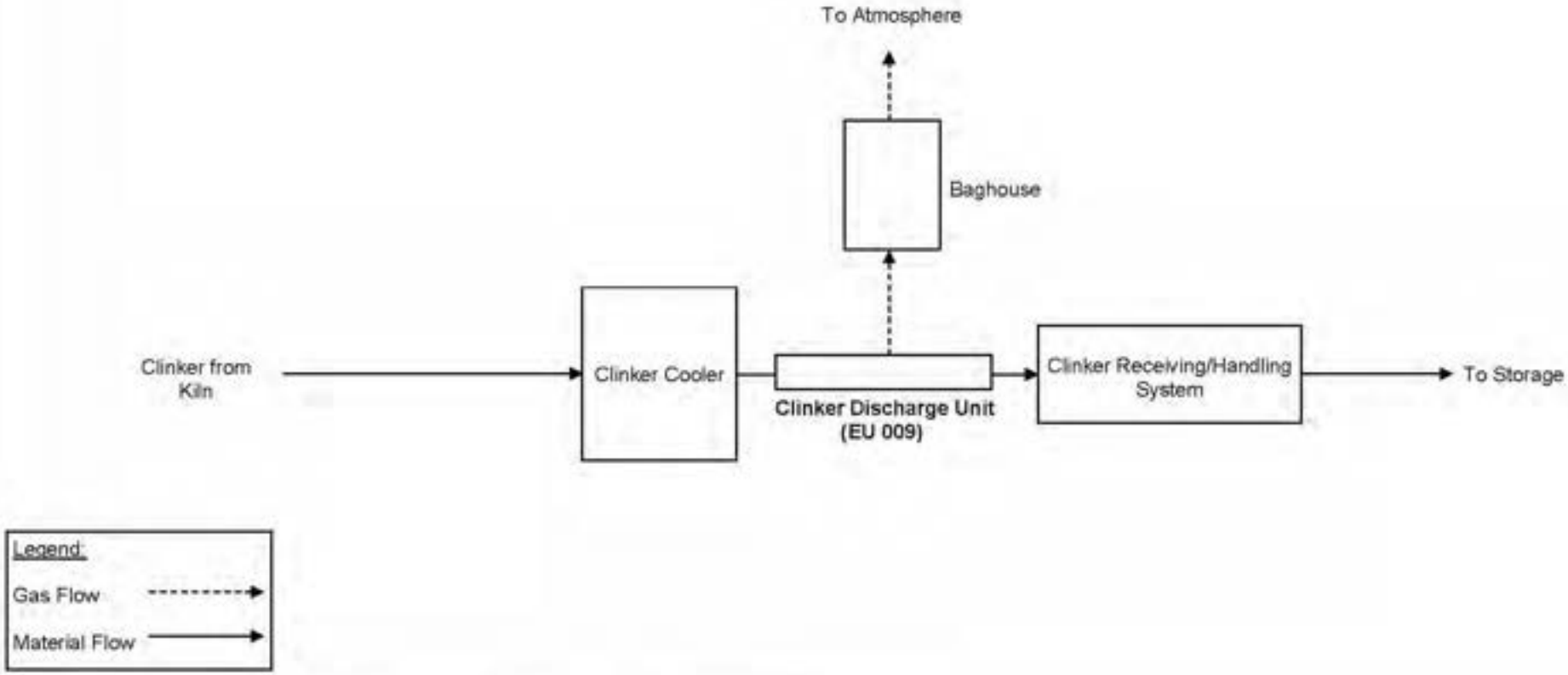


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 009 - Clinker Cooler Discharge

Attachment: Process Flow Diagram

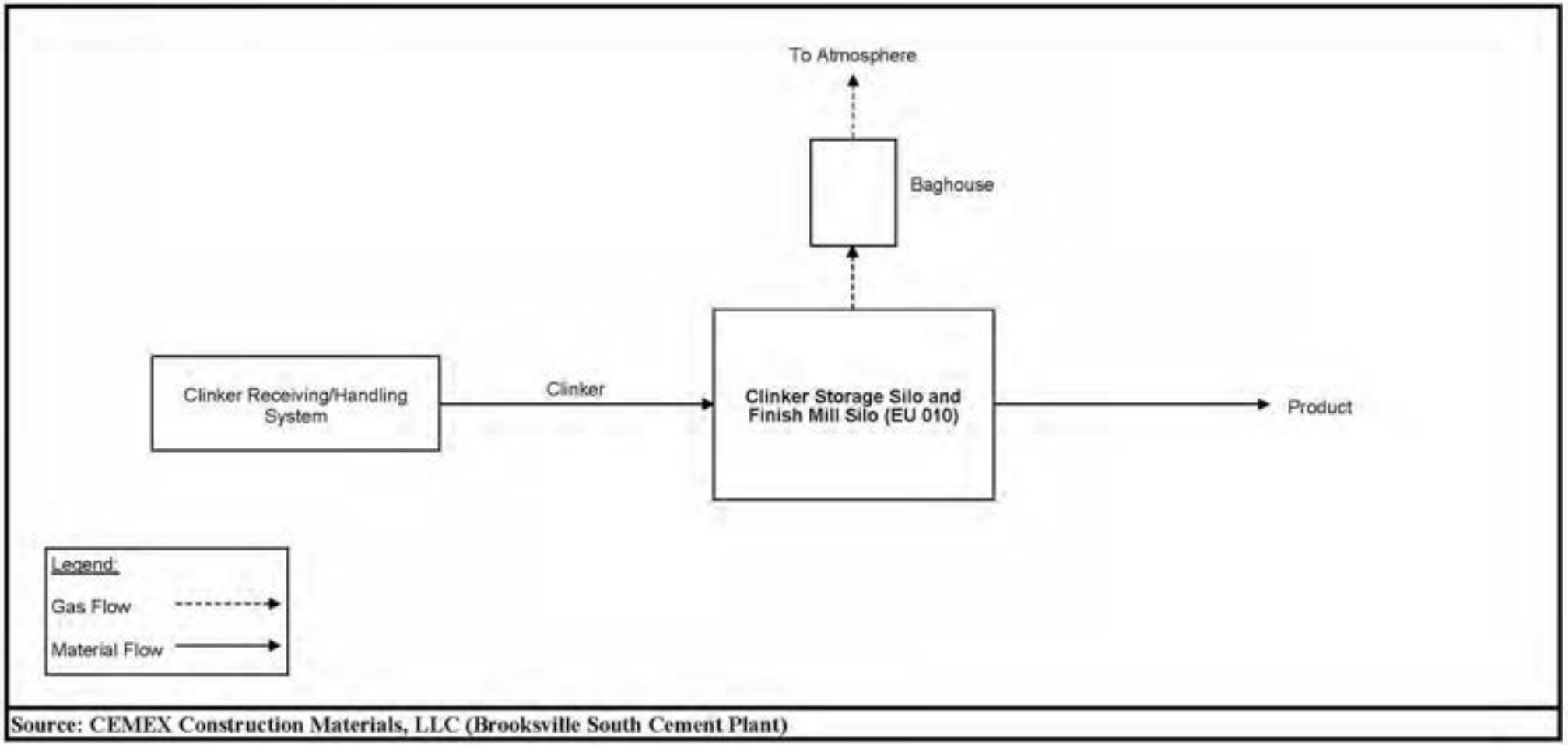


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 010 - Clinker Storage Silos and Loadout Spout

Attachment: Process Flow Diagram

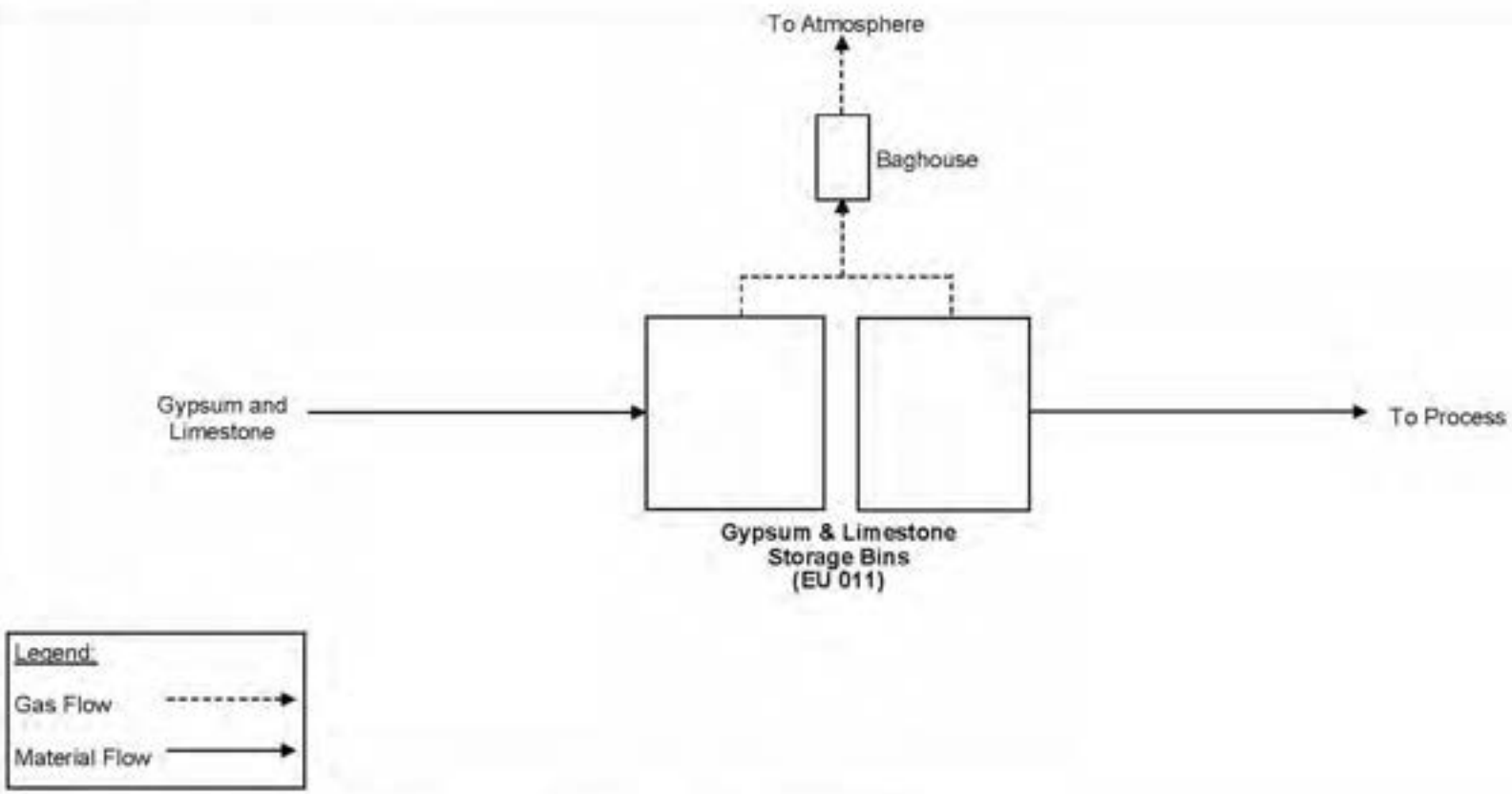


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 011 - Gypsum and Limestone Bins

Attachment: Process Flow Diagram

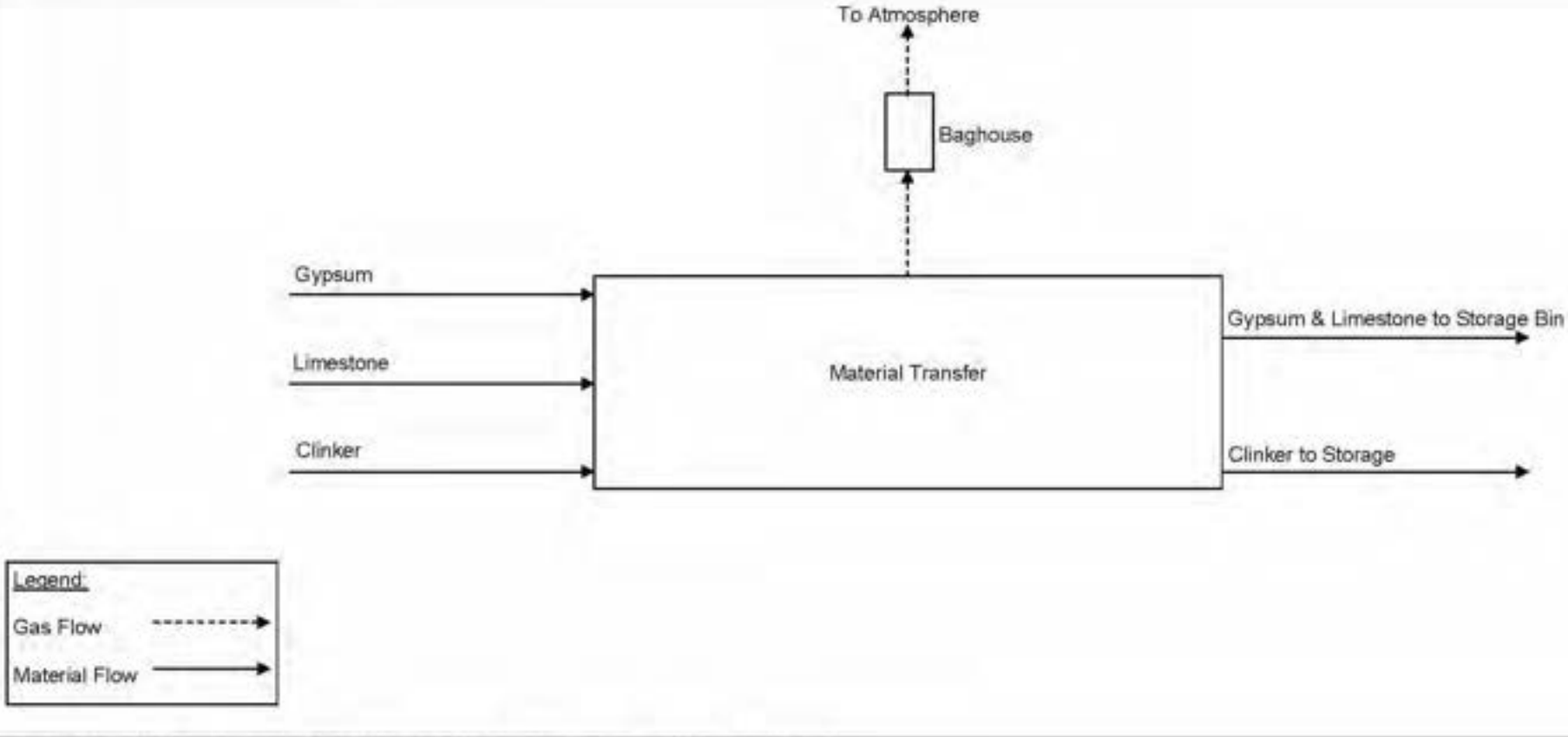


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 012 - Silo Discharge and Clinker Feeder

Attachment: Process Flow Diagram

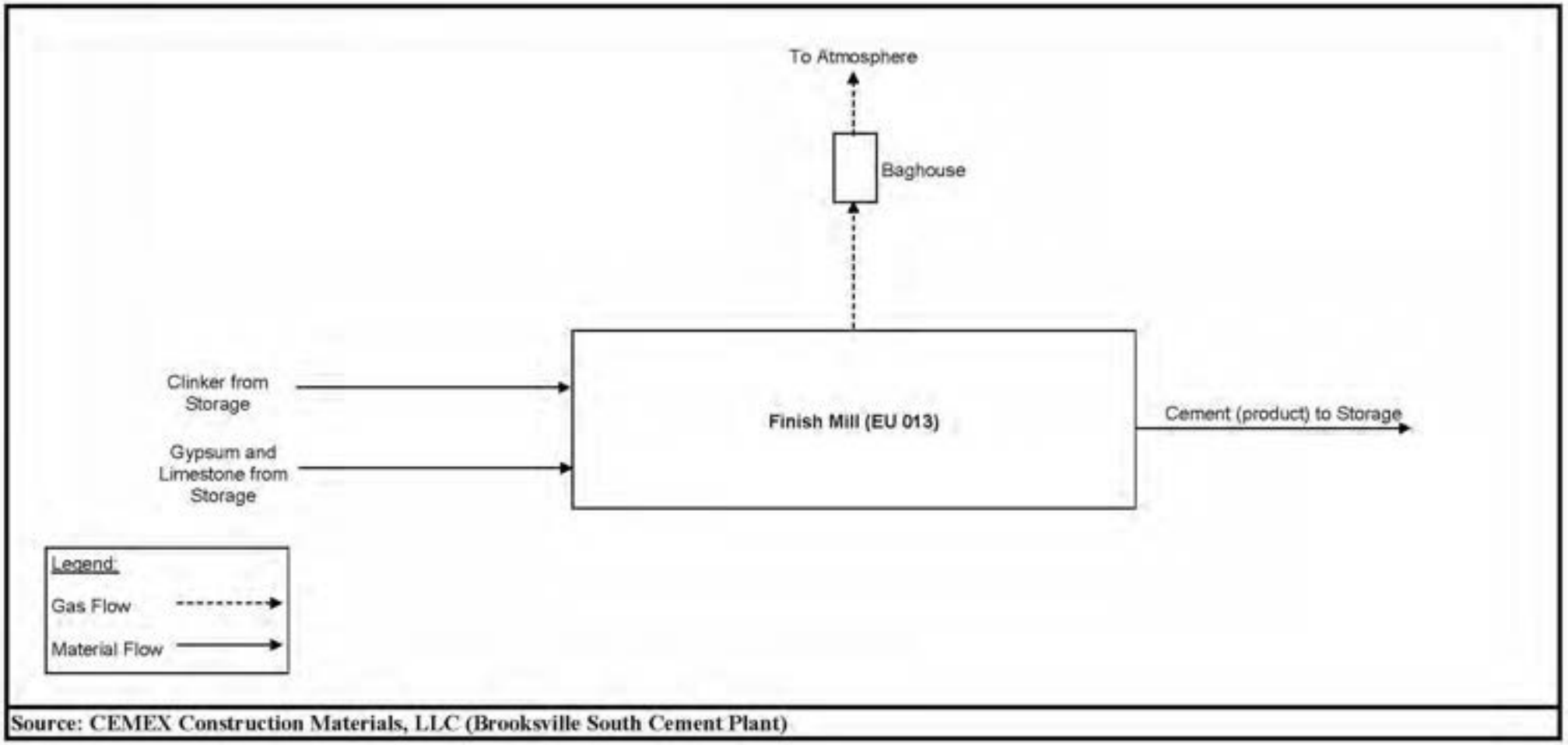


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 013 - Finish Mill

Attachment: **Process Flow Diagram**

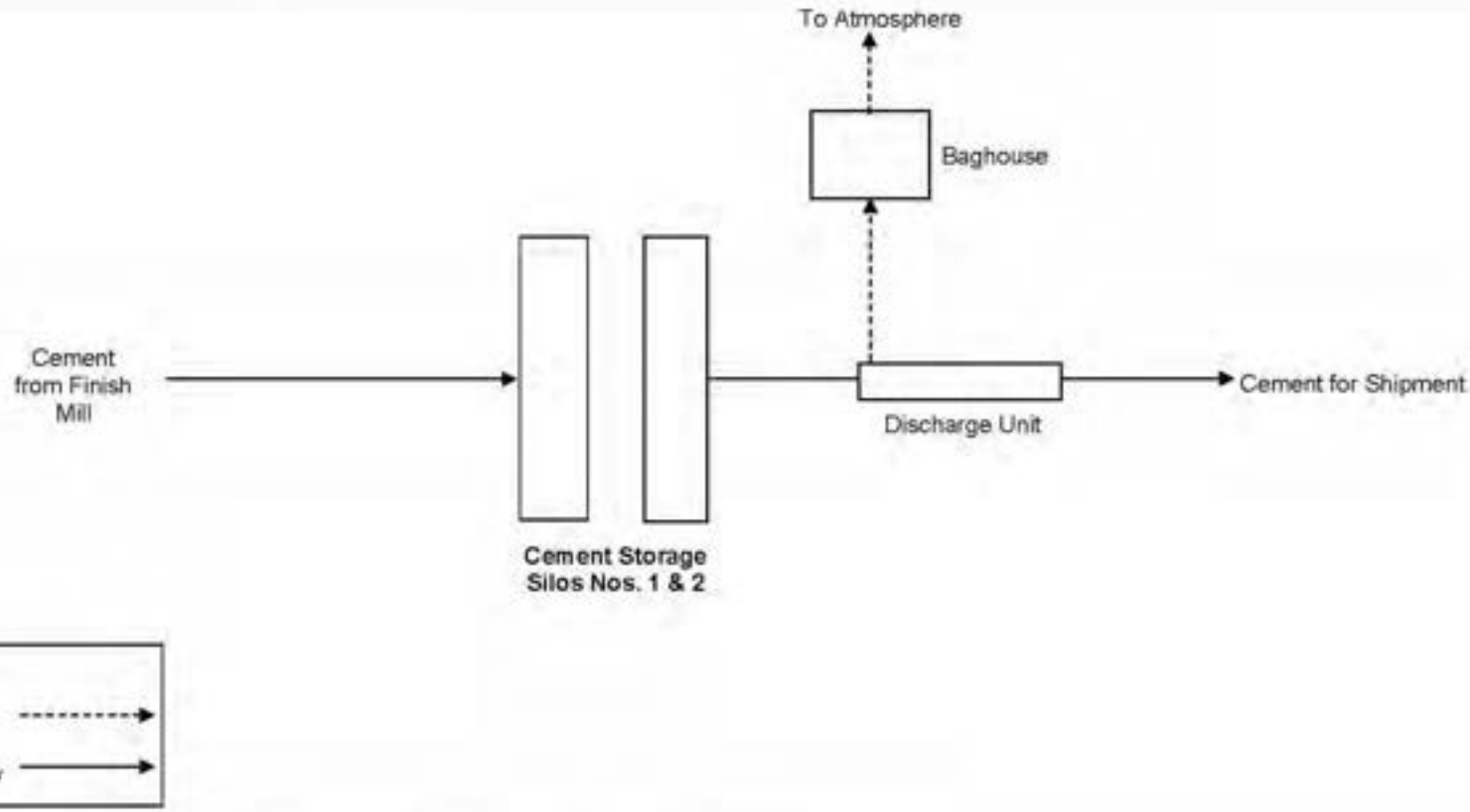


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 014 - A-Side Cement Storage Silos #1 & #2 Discharge System

Attachment: Process Flow Diagram

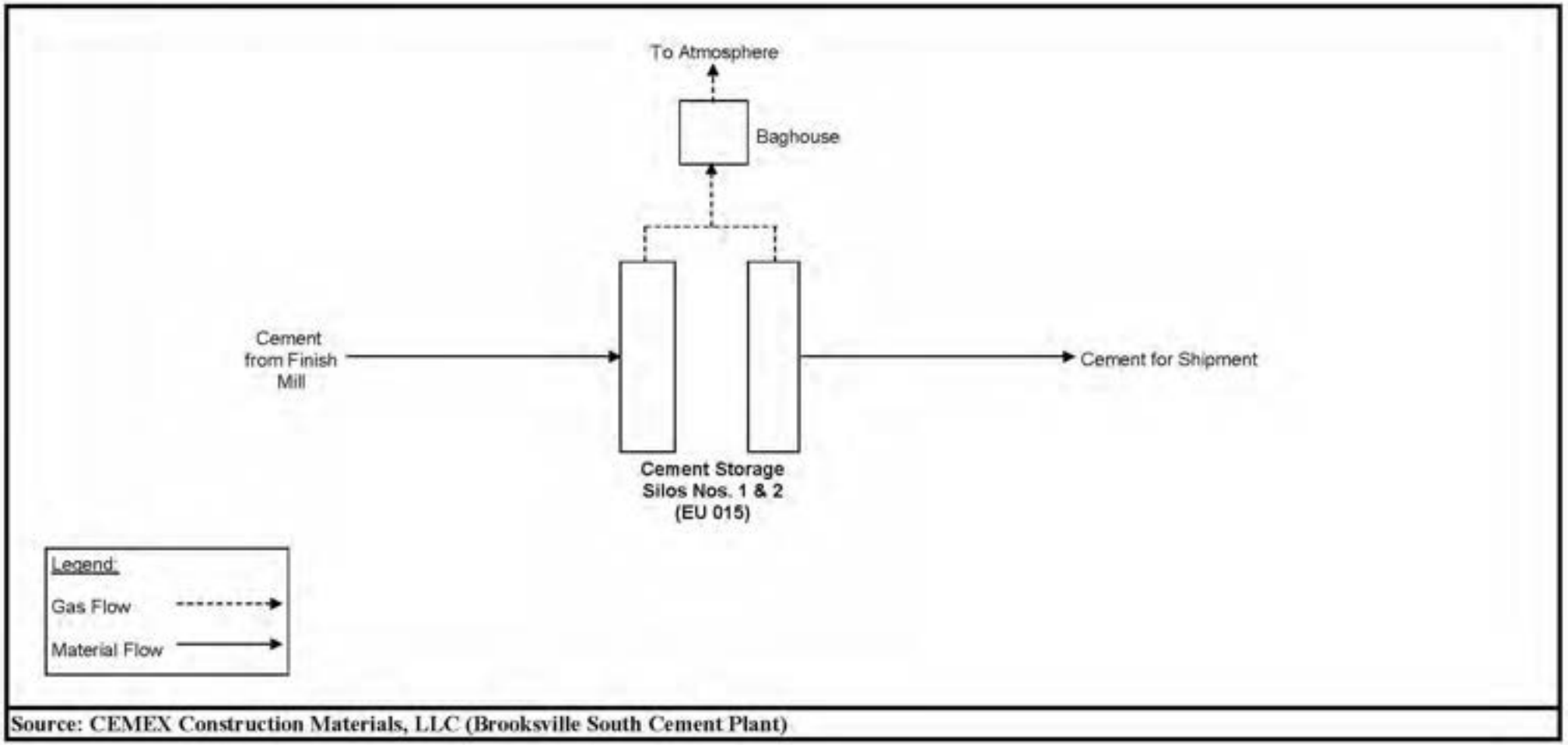


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 015 - Cement Storage Silos #1 & #2

Attachment: Process Flow Diagram

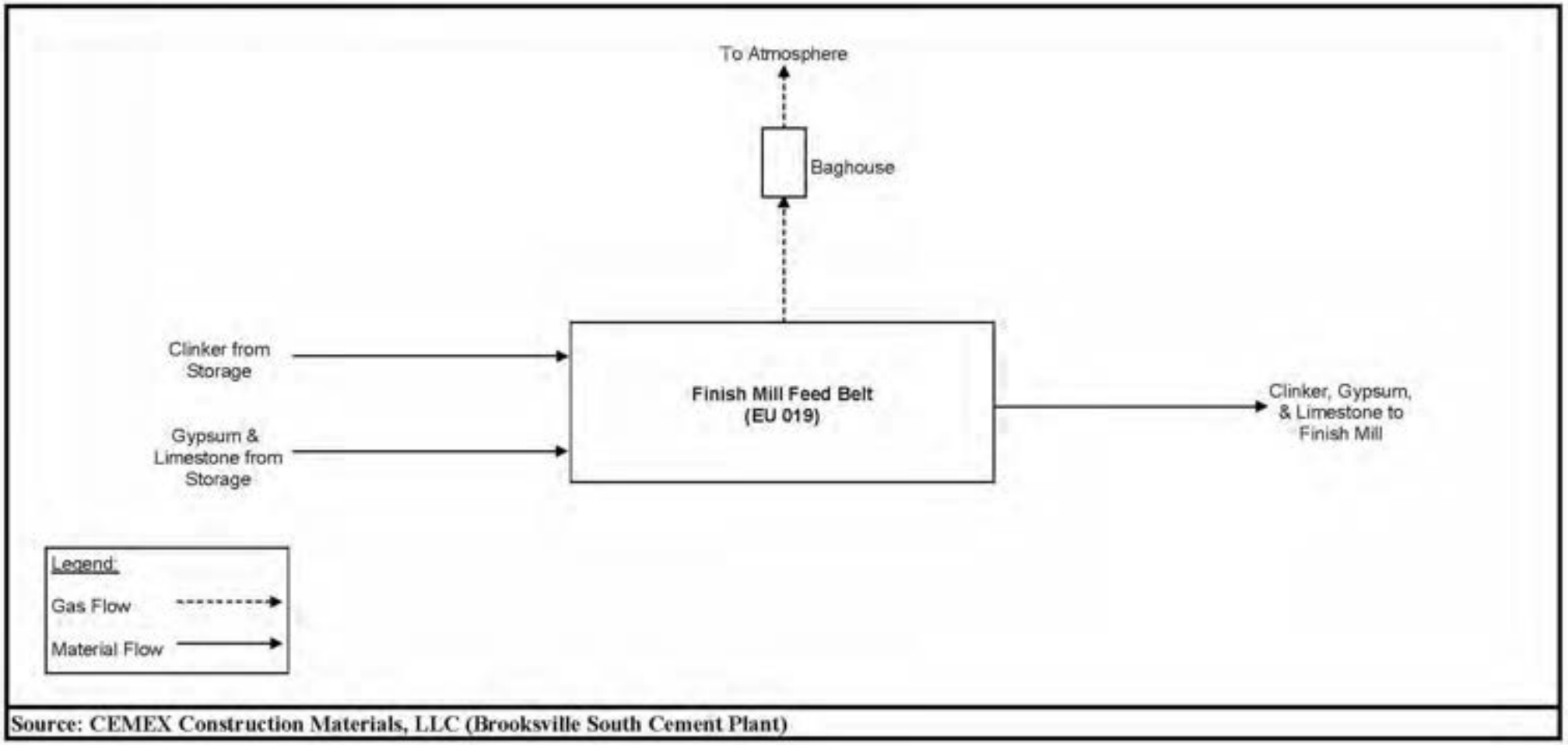


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 019 - Finish Mill Feed Belt

Attachment: **Process Flow Diagram**

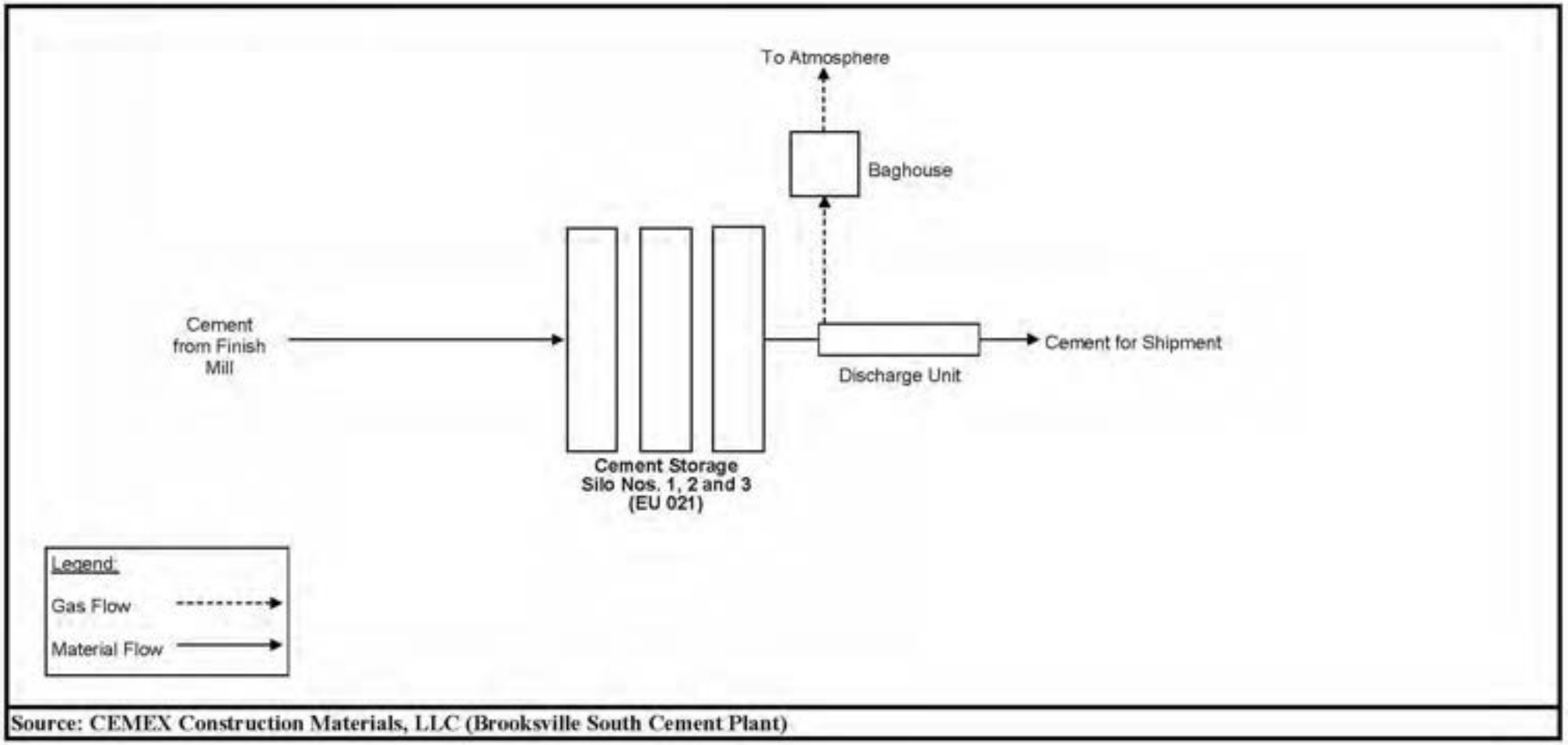


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 021 - B-Side Cement Storage Silos #1 #2 & #3 Discharge System

Attachment: Process Flow Diagram

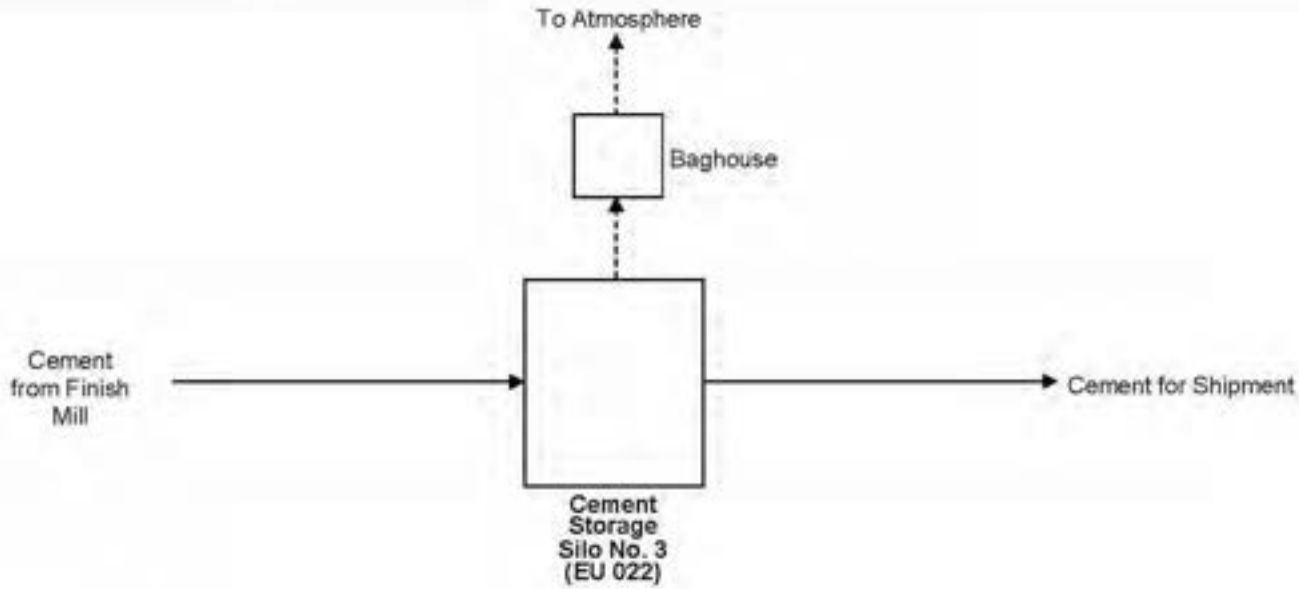


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 022 - Cement Storage Silo #3

Attachment: **Process Flow Diagram**

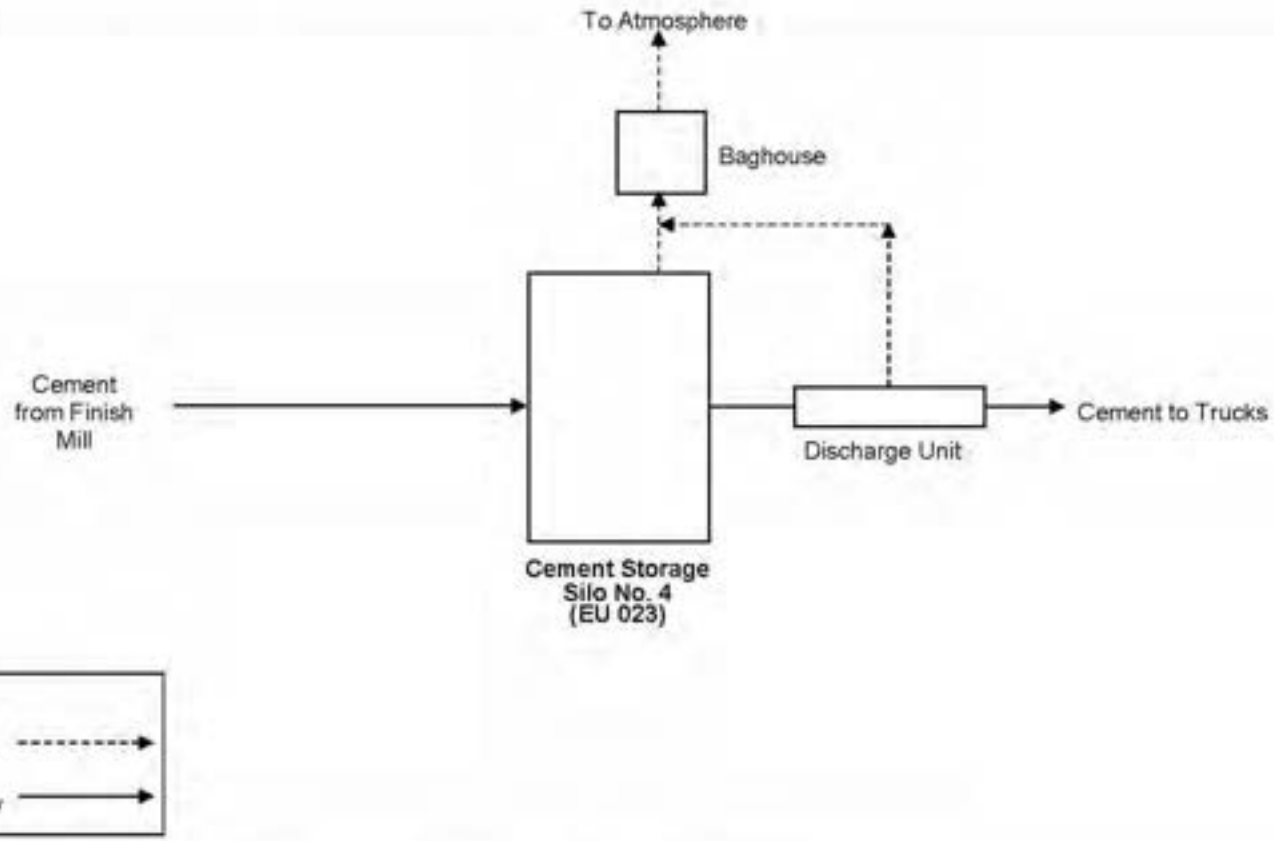


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 023 - Cement Storage Silo #4 and Truck Loadout System

Attachment: **Process Flow Diagram**

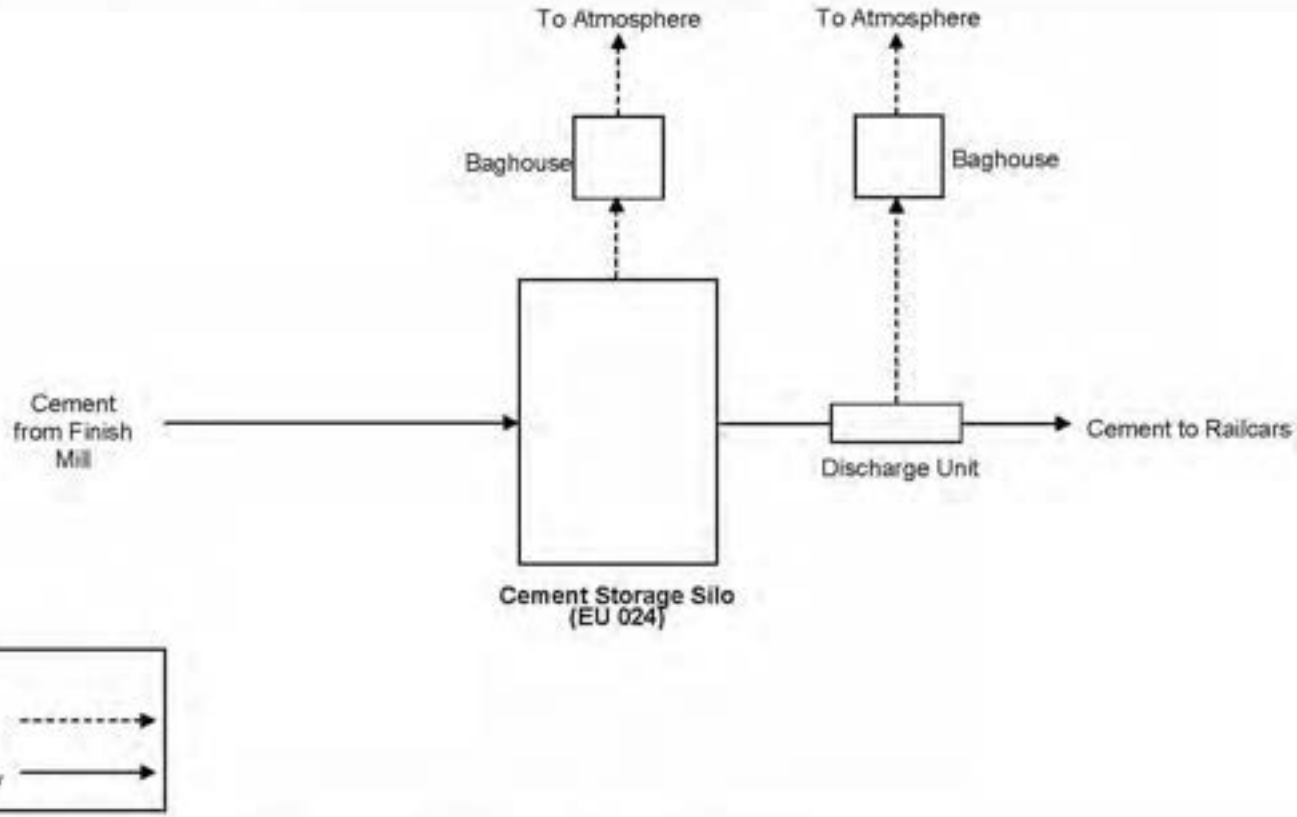


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 024 - Cement Storage Silo and Railcar Loadout System

Attachment: Process Flow Diagram

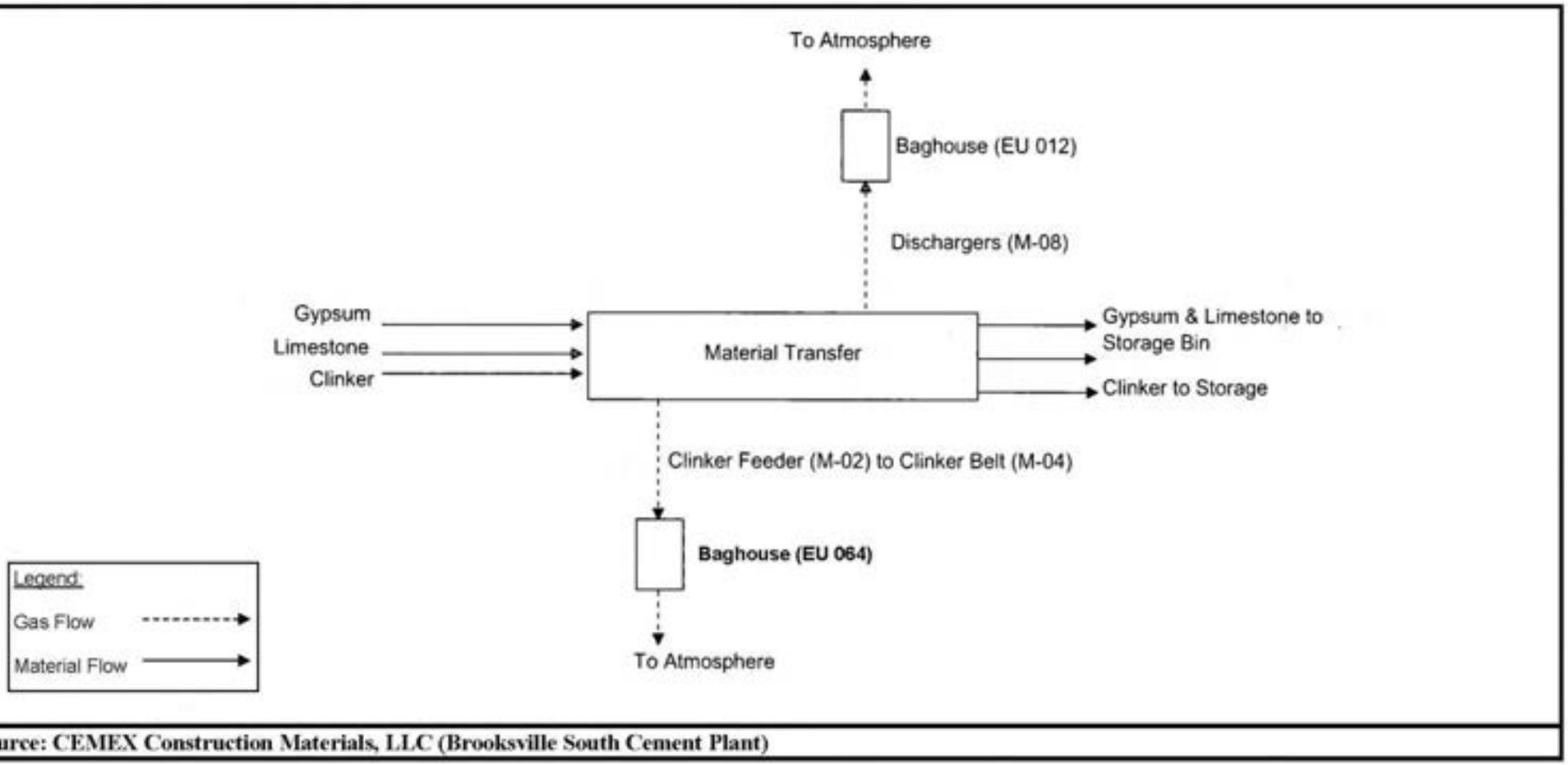


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 064 - Kiln No. 1 Clinker Belt Dust Control

Attachment: **Process Flow Diagram**

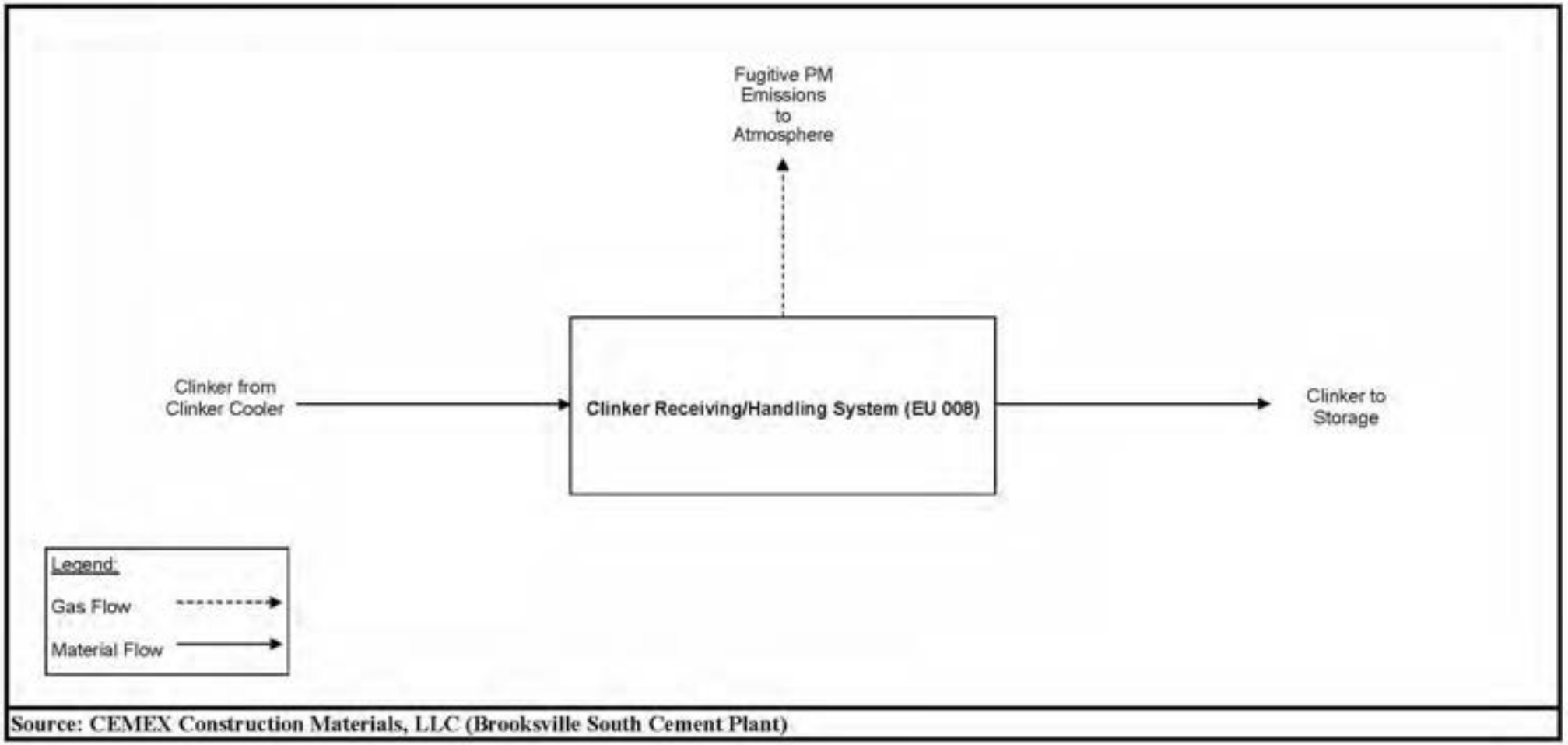


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 008 - Clinker Receiving / Handling System

Attachment: Process Flow Diagram

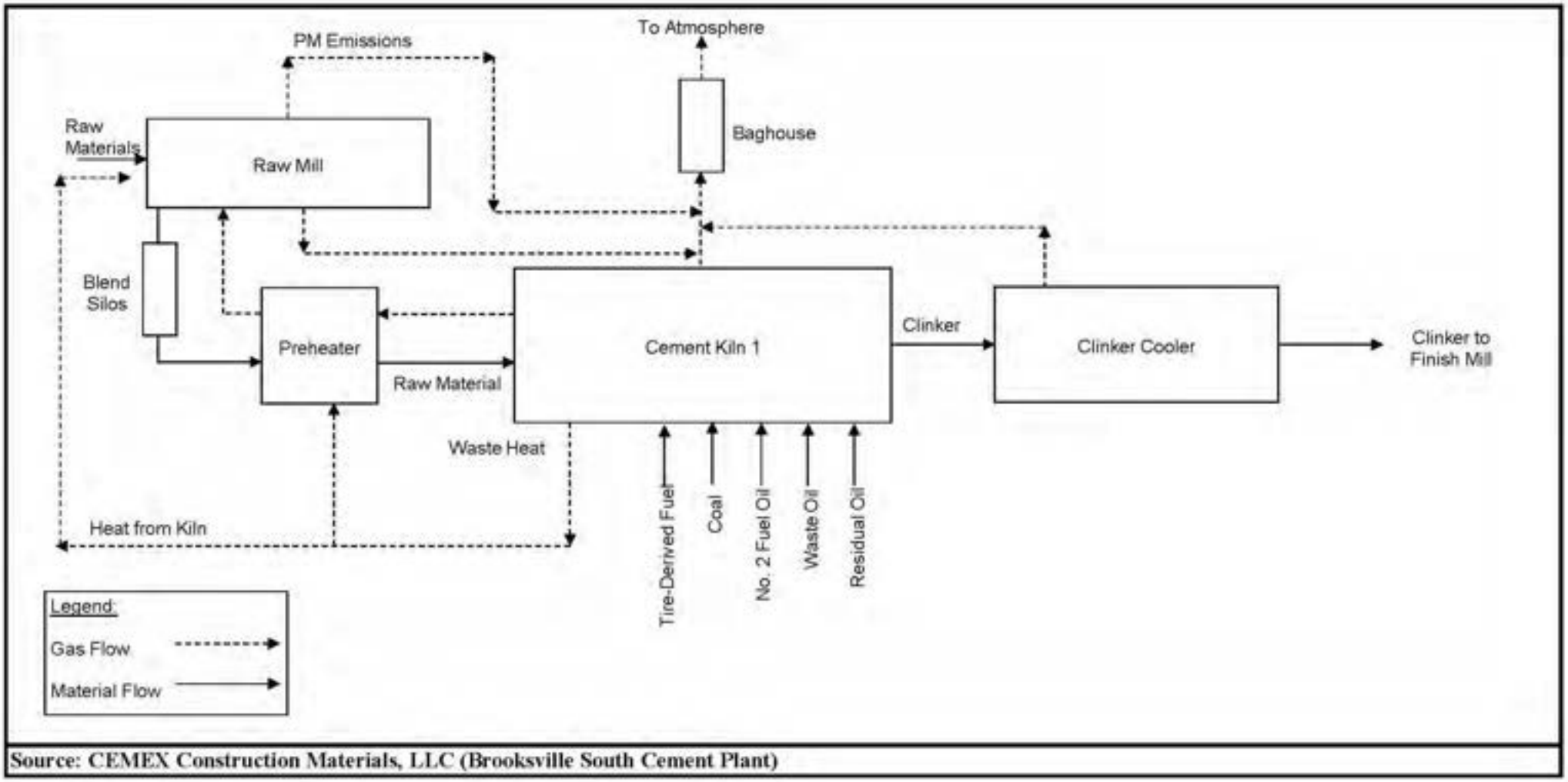


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 020 - In-Line Cement Kiln 1, In-Line Kiln/Raw Mill and Clinker Cooler 1

Attachment: **Process Flow Diagram**

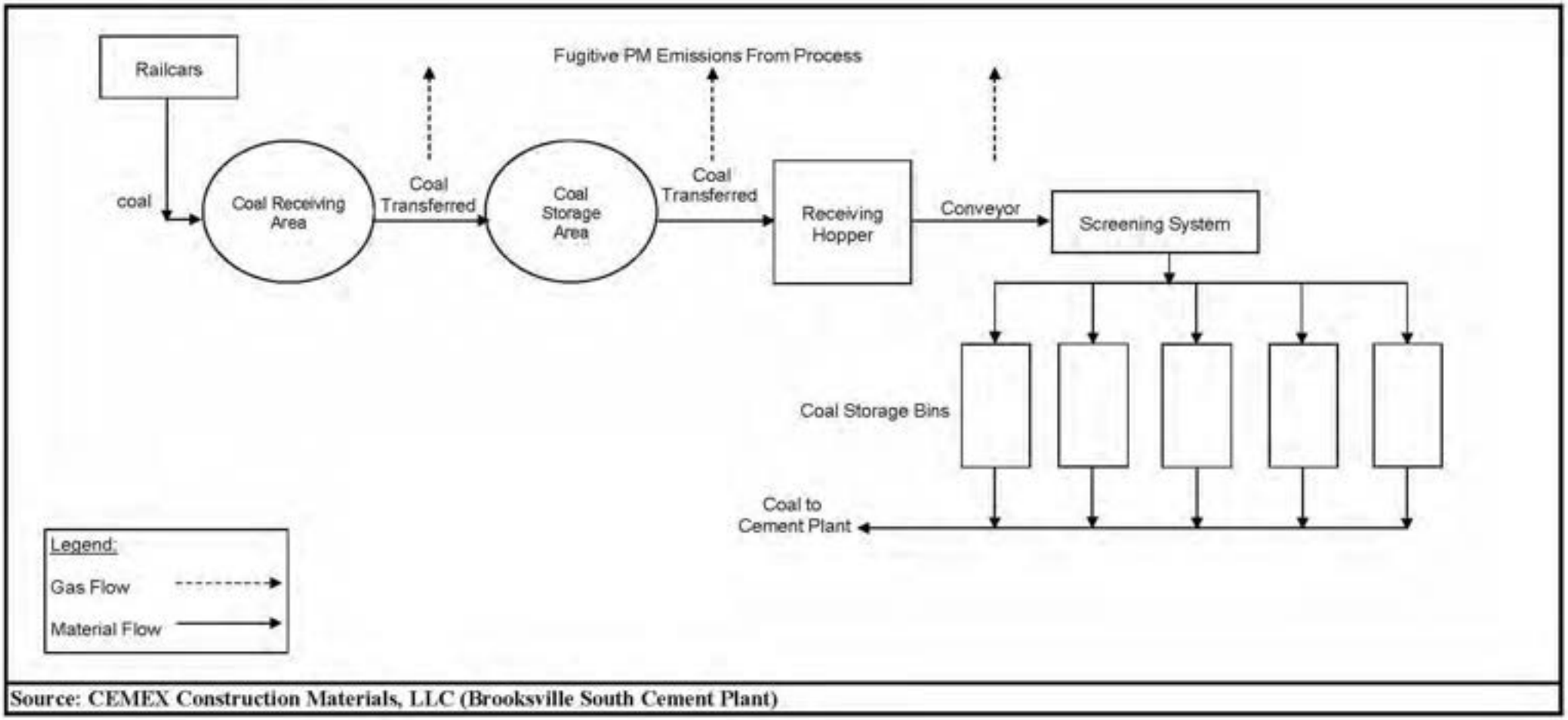


Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

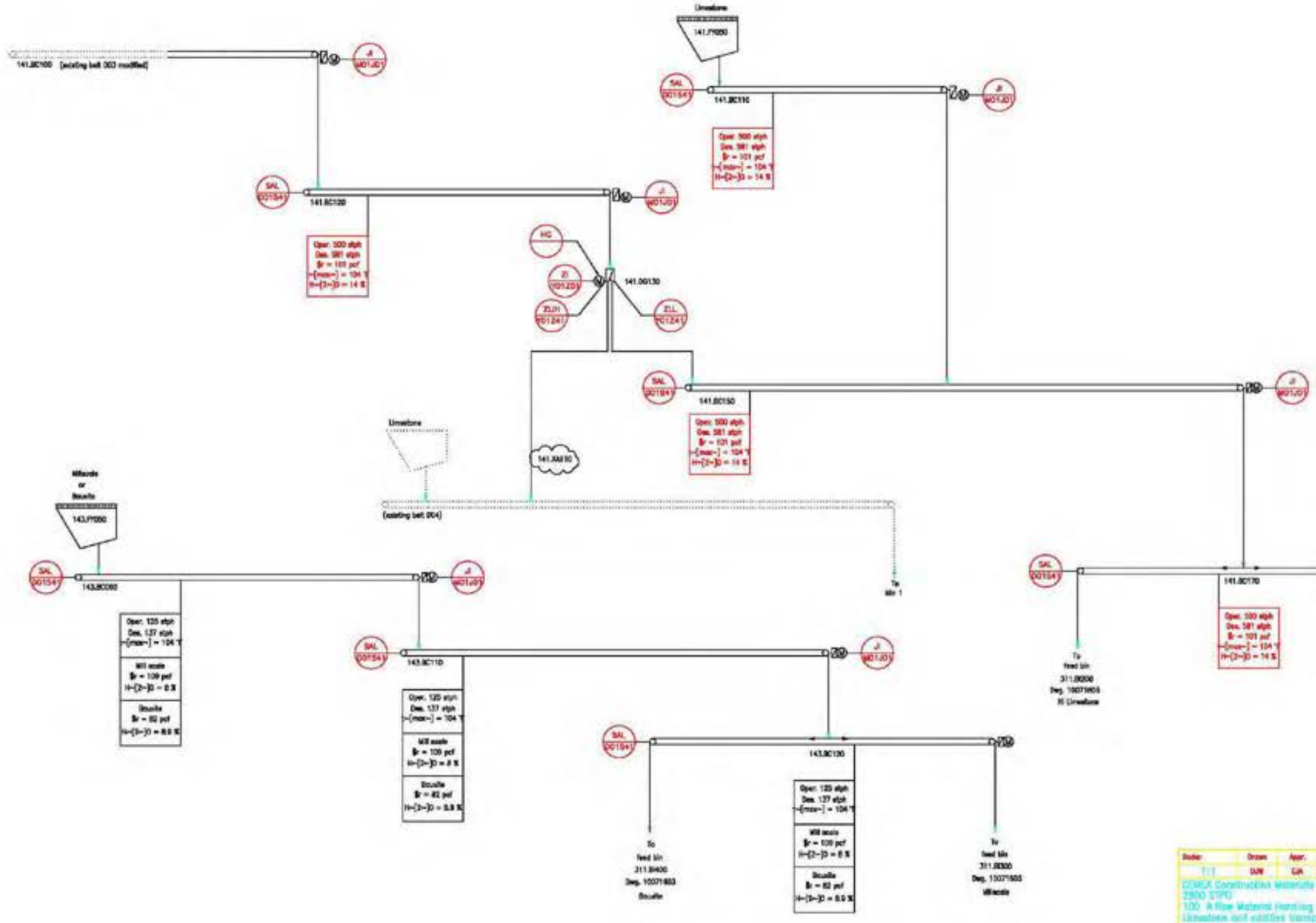
Facility ID: 0530021
Poject No. 307_16_26
Date: 20-Sep-2017

EU 042 - Coal Receiving, Handling and Transfer System (fugitives)

Attachment: **Process Flow Diagram**



Source: CEMEX Construction Materials, LLC (Brooksville South Cement Plant)

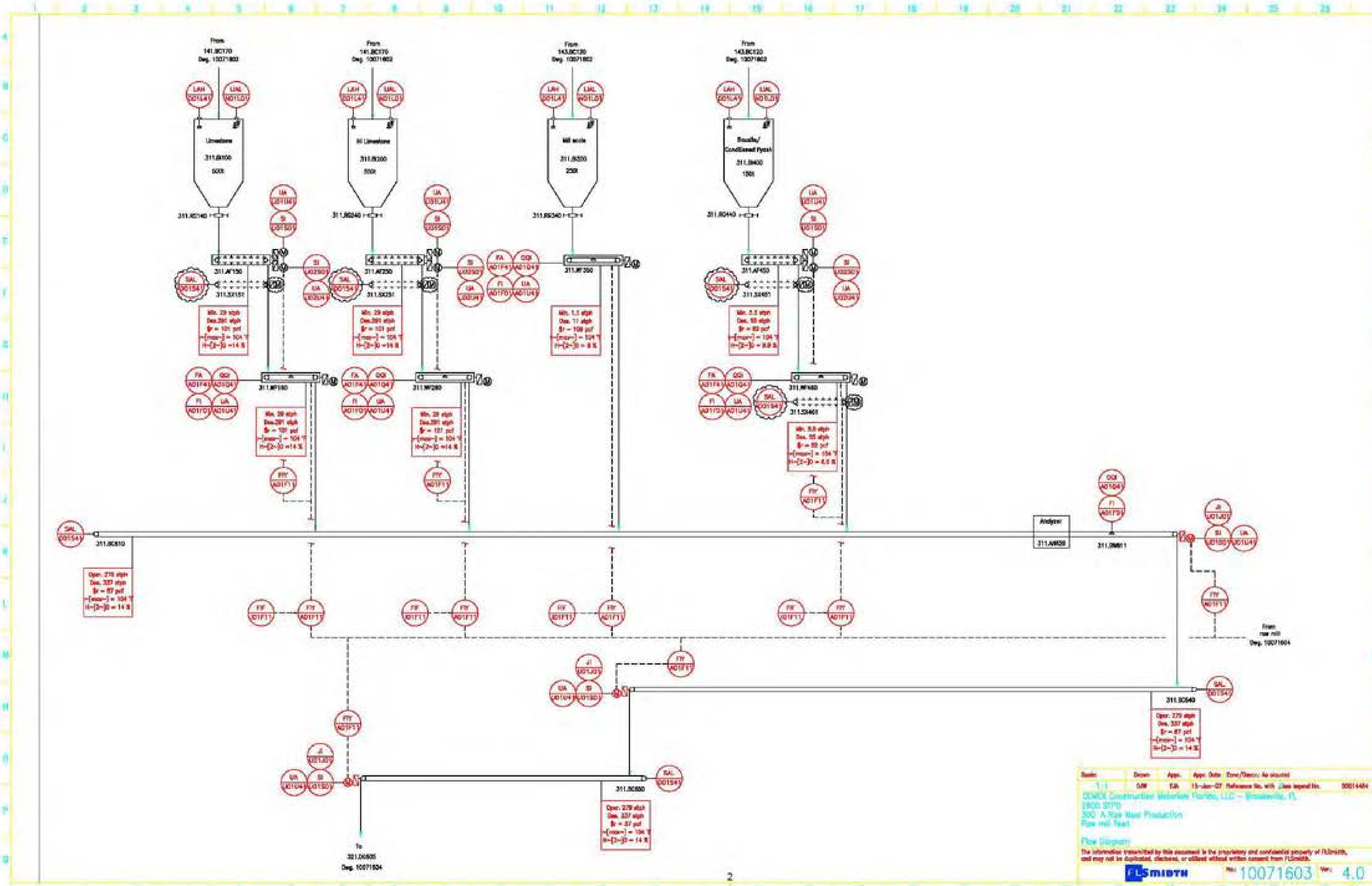


Scale:	Drawn	Appr.	Appr. Date	Zone/Sheet: As created
T/I	DJW	LJA	15-Jun-07	Reference No. with Lines legend No. 00014494

CEMEX Construction Materials Florida, LLC – Brooksville, FL
2800 STPD
100 A Raw Material Handling
Limestone and additive transport

Flow Diagram

FLSmidth No.: 10071602 Ver.: 4.0



From
141.BC170
Limestone
Hi Limestone
Mill scale
Bauxite/
Conditioned Flyash
LAH
LIAL
SAL
FA
FI
FIY
FIC
SI
JI
LIA
QQI
Analyser
To
Scale:
Drawn
App.
Appr. Date
Zone/Stanc: As shown
1:1
15-Jan-07
Reference No. with class legend No.
2800 STPD
Flow Diagram
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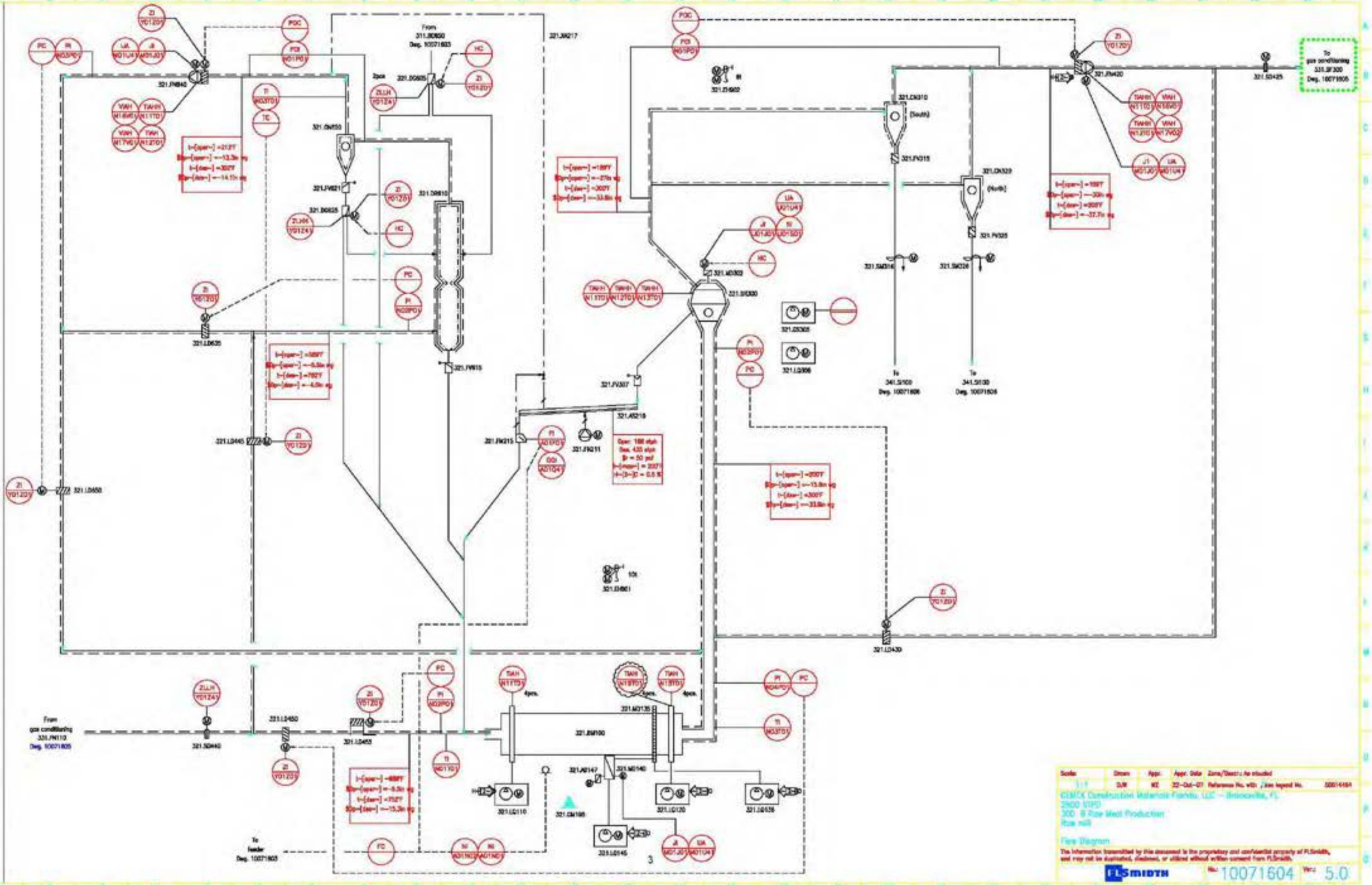
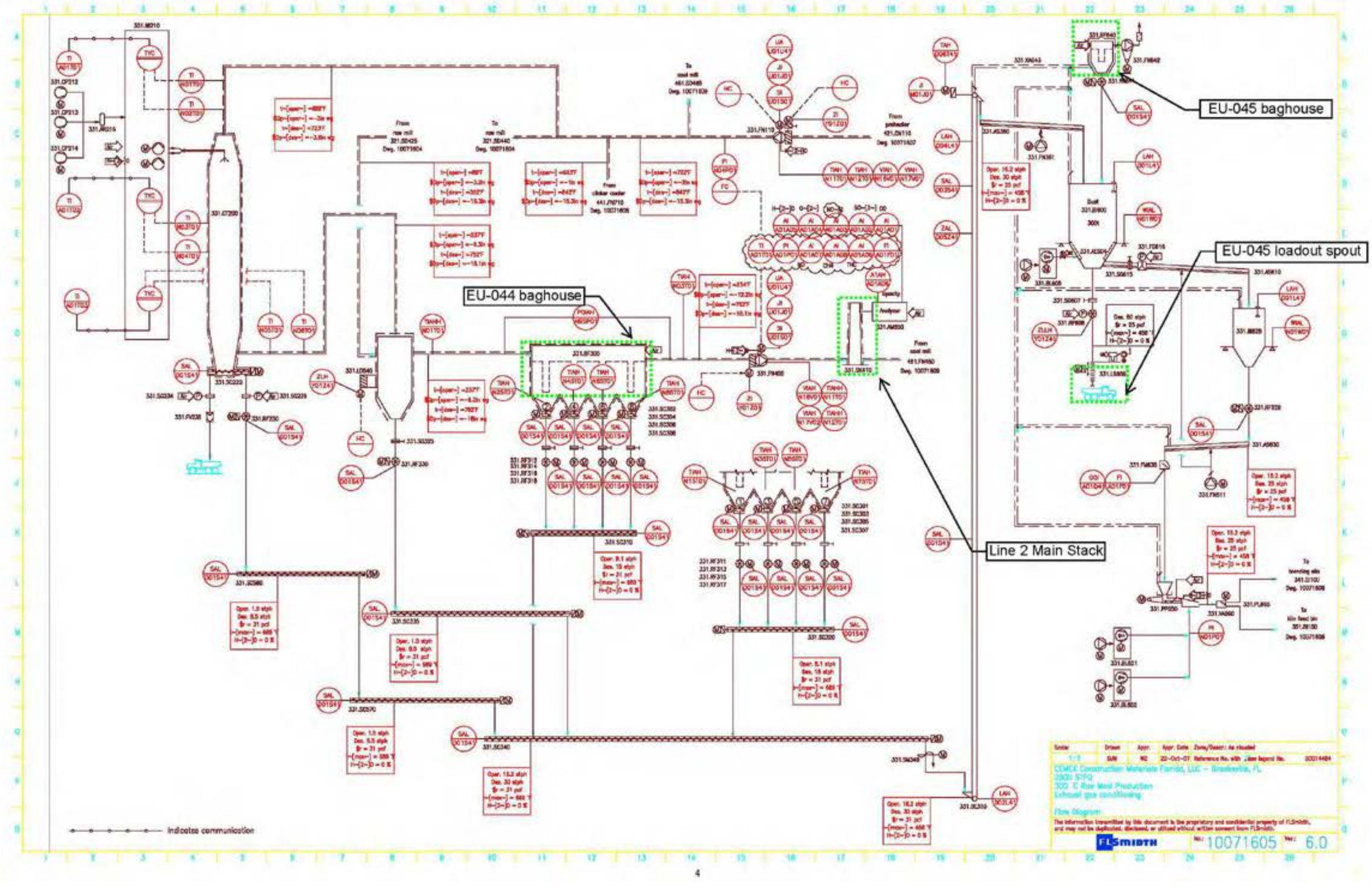
FLSMIDTH
10071603
4.0

2

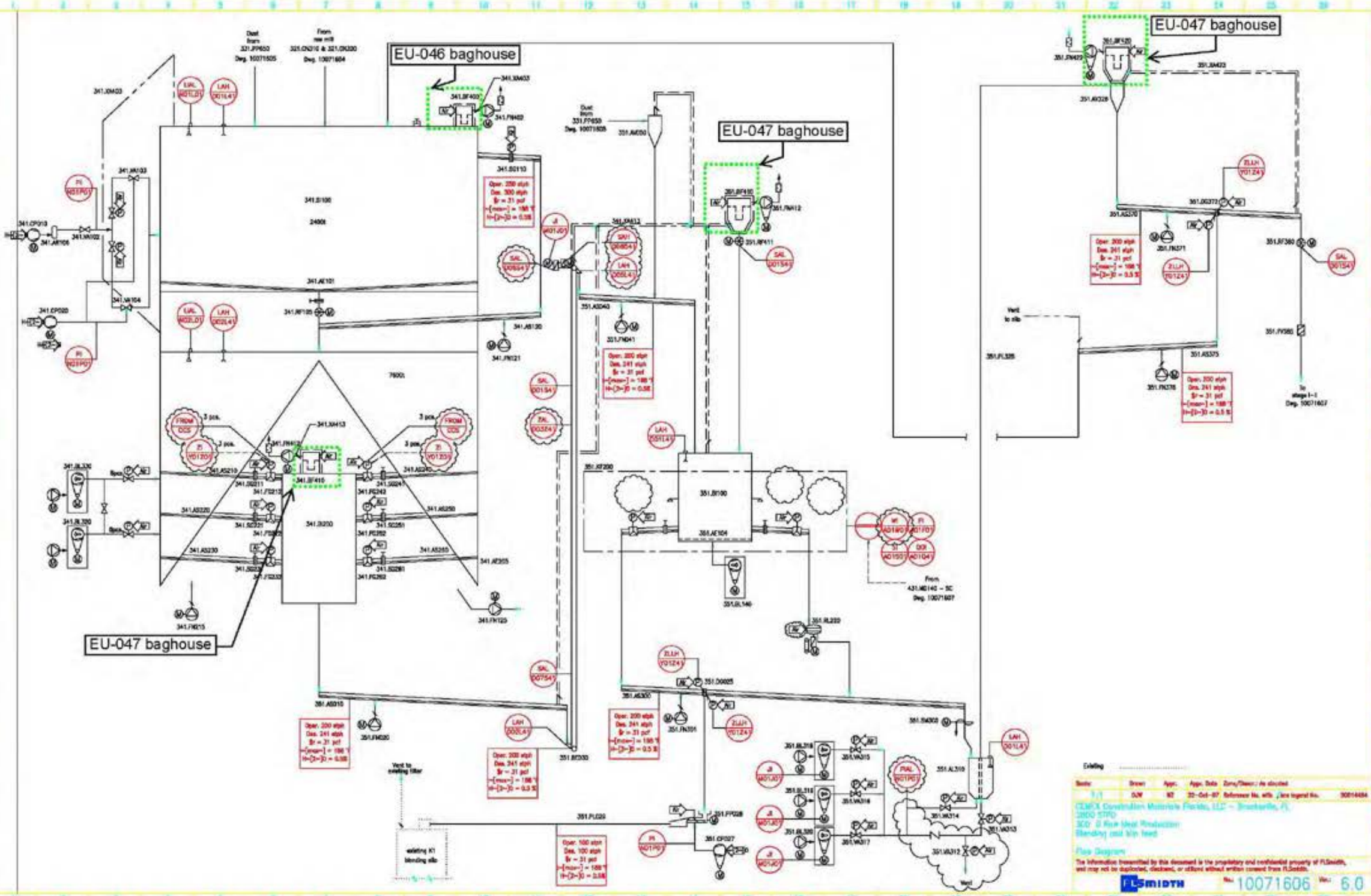
EU-044: In-Line Cement Kiln 2, Pre-Heater, Pre-Calciner and Clinker Cooler

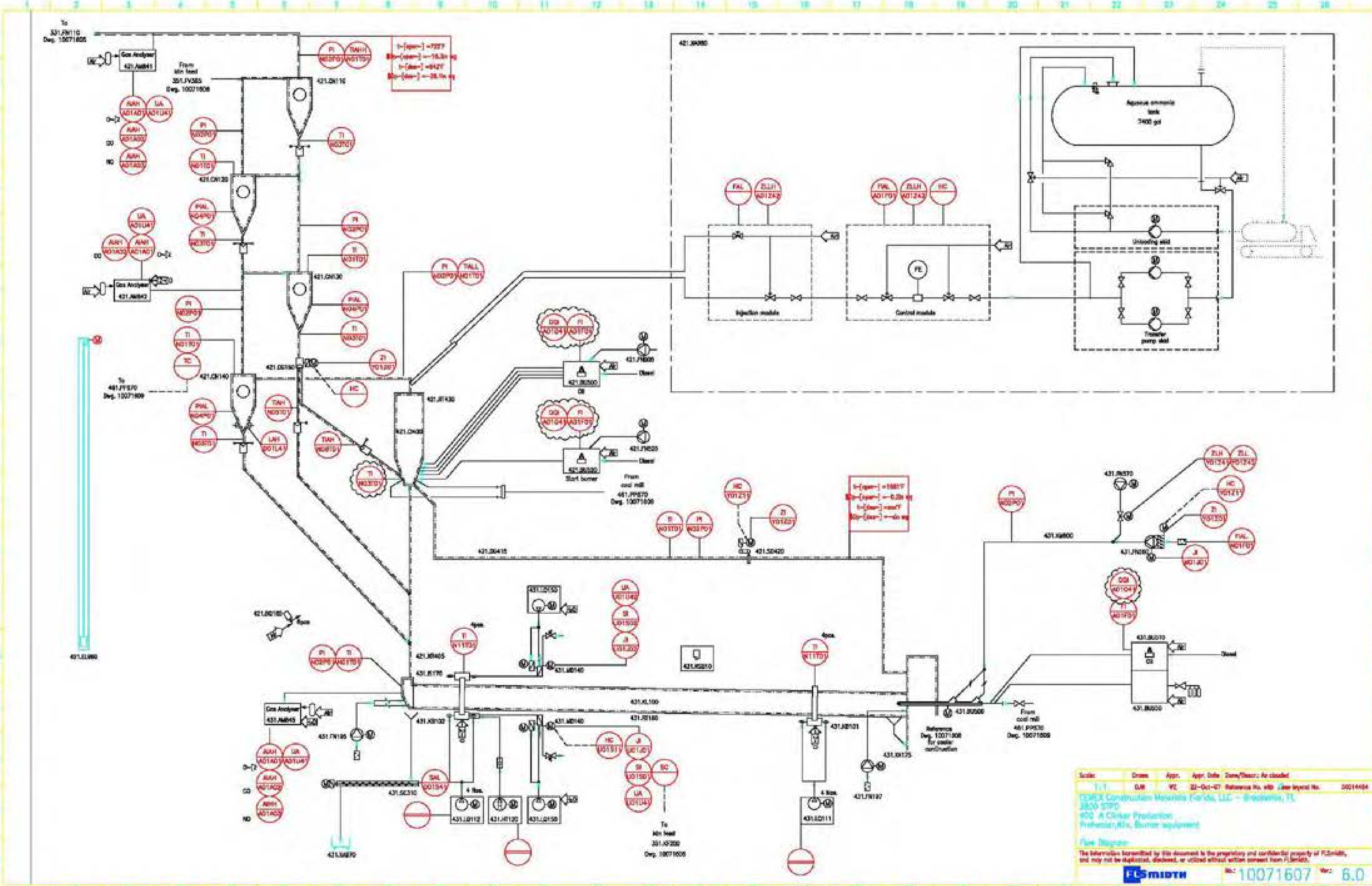


EU-044: In-Line Cement Kiln 2, Pre-Heater, Pre-Calciner and Clinker Cooler and EU-045: Filter Dust Bin and Filter Dust Bin Loadout Spout



EU-046: Blend Silo and EU-047: Kiln Feed Transport, Blend Silo Discharge and Kiln Feed Bin





Scale:	Drawn	Appr.	Appr. Date	Zone/Descr.: As clouded
1:1			22-Oct-07	

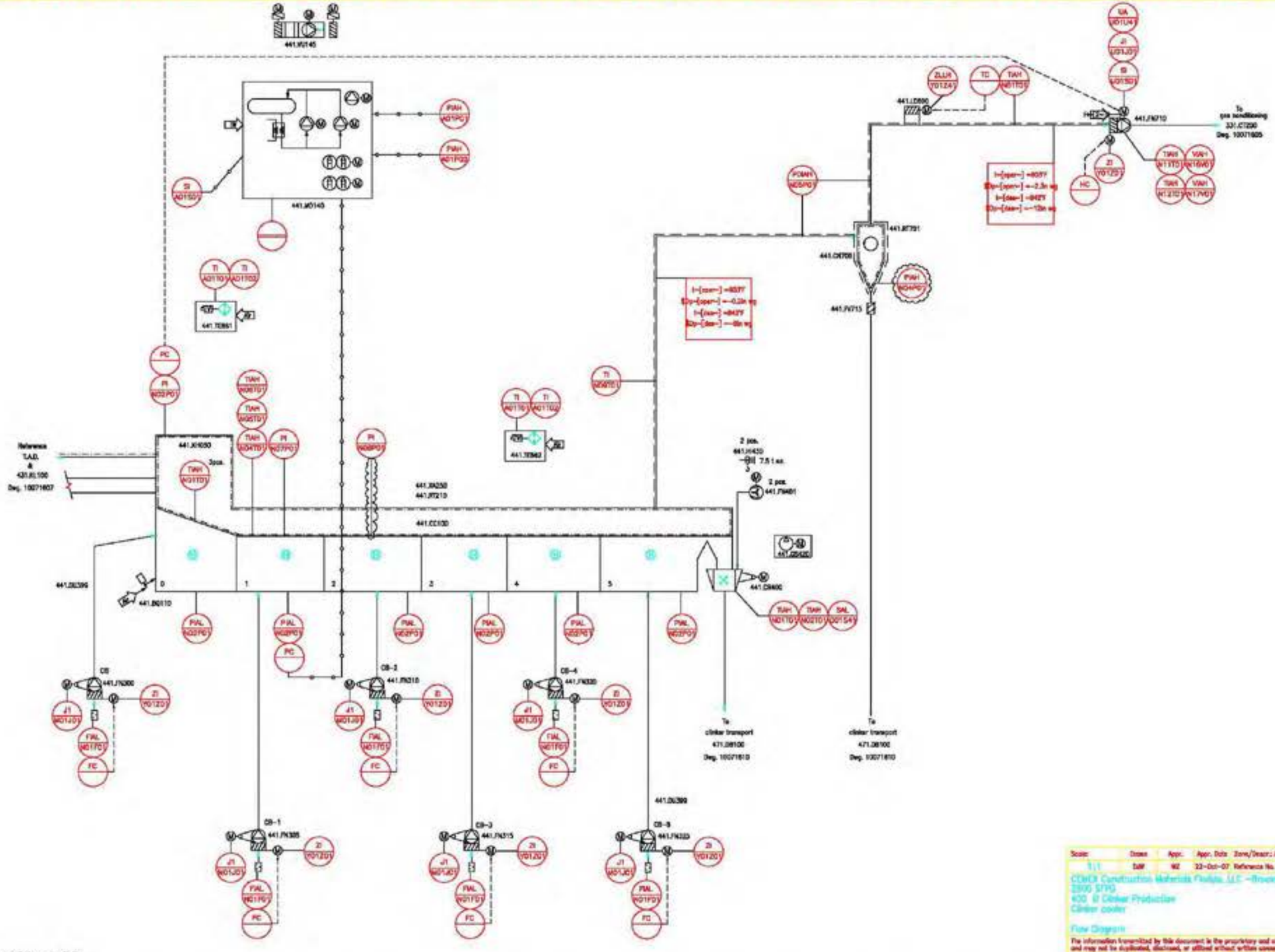
CEMEX Construction Materials Florida, LLC – Brooksville, FL

402 A Clinker Production

Preheater, Kiln, Burner equipment

Flow Diagram

FLSMIDTH No. 10071607 Ver. 6.0



Scale: 1:1
Drawn
Appr.
Appr. Date: 22-Oct-07
Zone/Descr.: As located
Reference No. with: See legend No.

CEMEX Construction Materials Florida, LLC –Brooksville, FL
2800 STPD
400 Clinker Production
Clinker cooler

Flow Diagram

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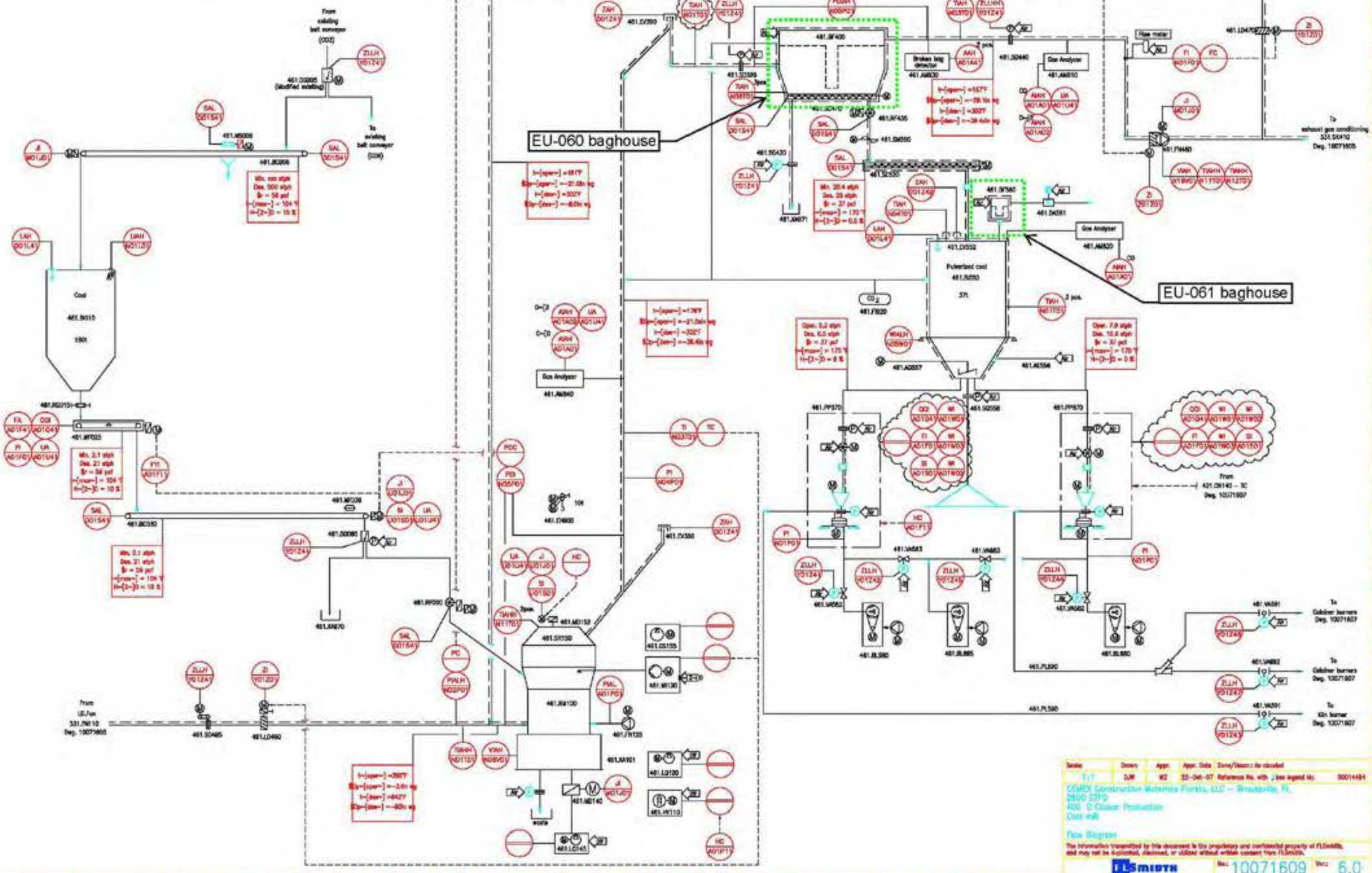
FLSMIDTH

No.: 10071608

Rev.: 5.0

EU-060: Coal Mill and EU-061: Fine Coal Bin



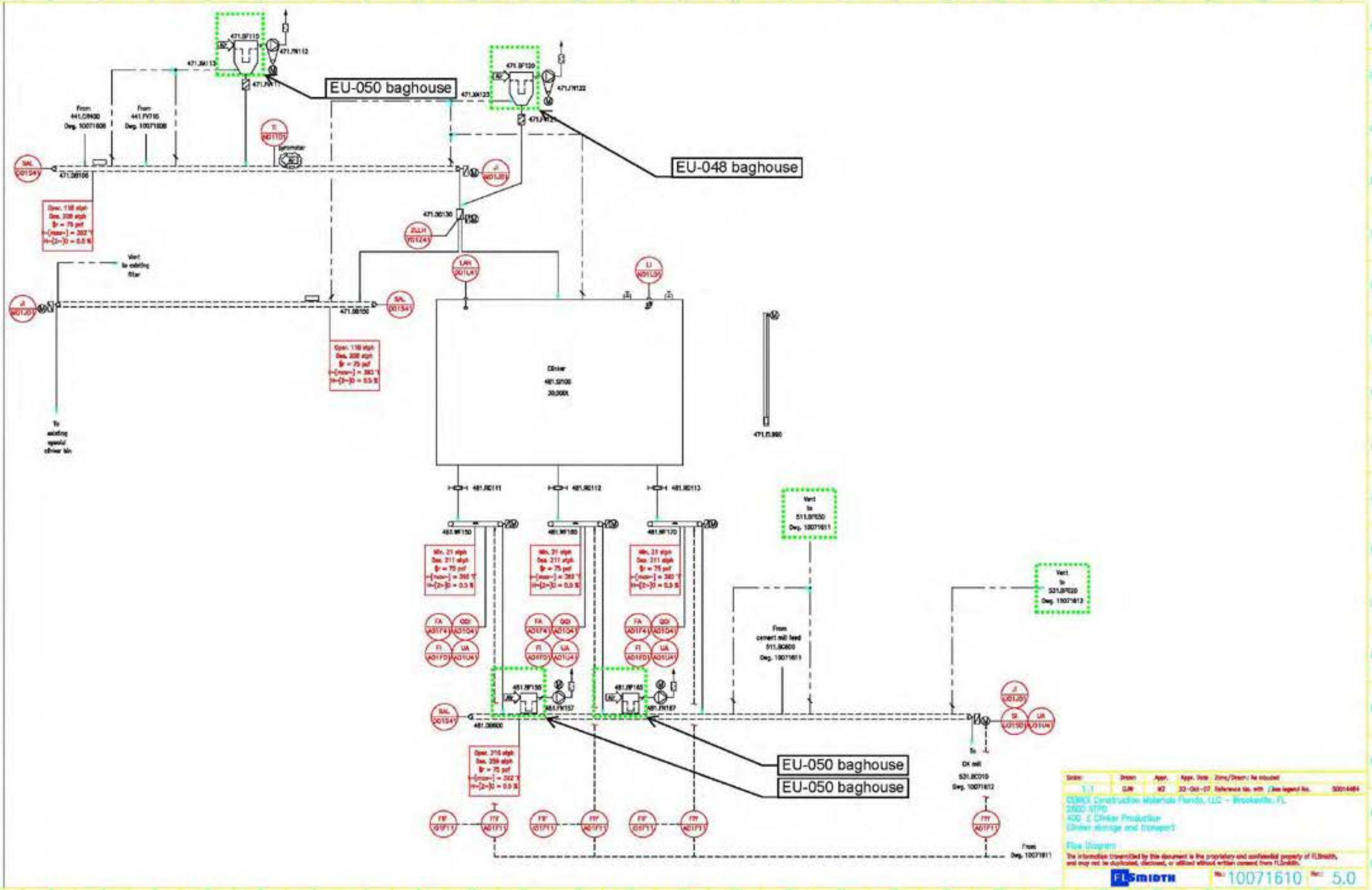
Scales	Drawn	Appr.	Appr. Date	Zone/Sheet/ As-sheeted
1:1	DJM	KZ	22-Oct-07	Reference No. with / see signed-in: 50014484

CEMEX Construction Materials Florida, LLC – Brooksville, FL
2800 23rd D
400 t/ Clinker Production
Coal mill

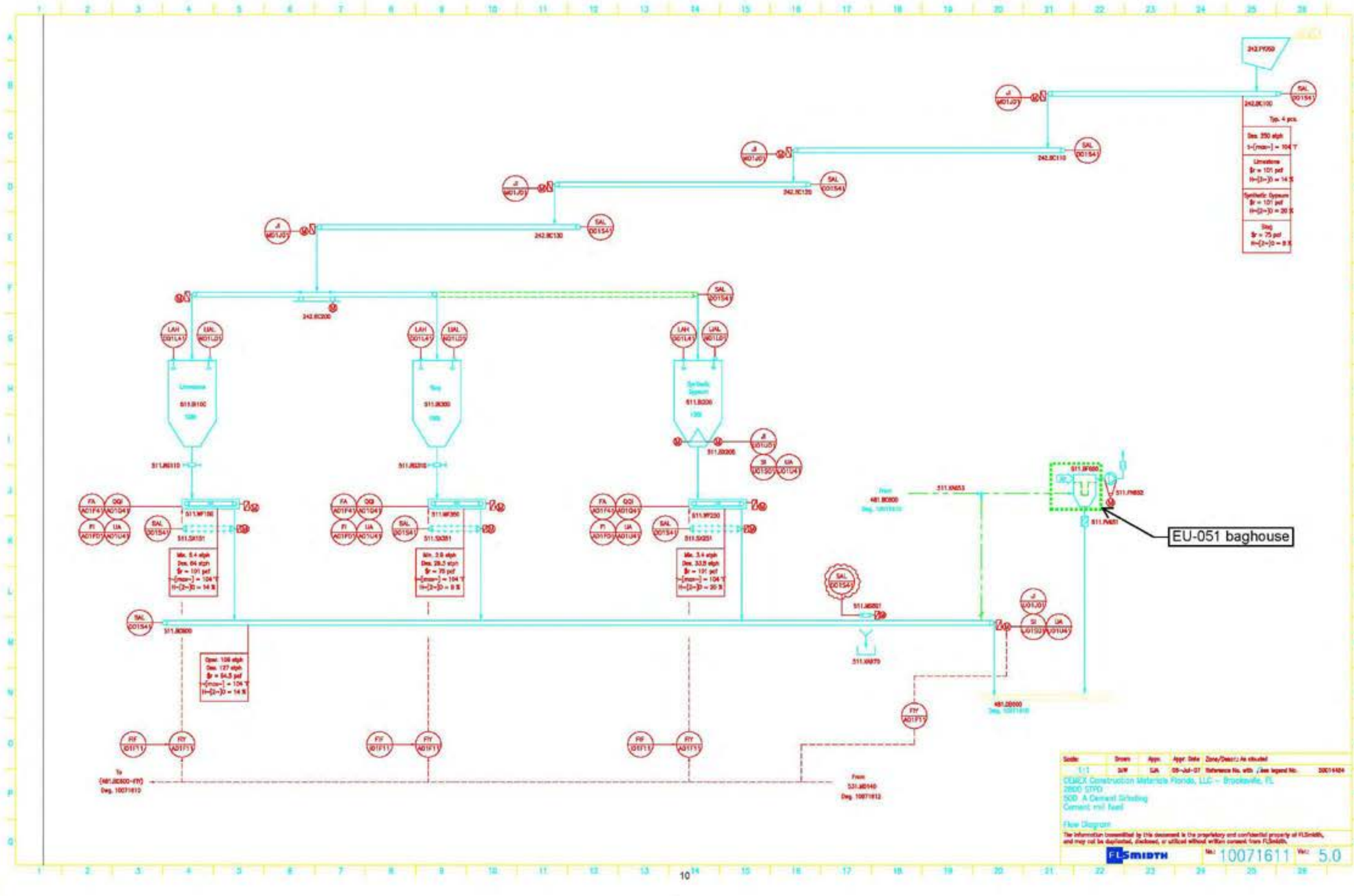
Flow Diagram

FLSmidth No.: 10071609 Rev.: 6.0

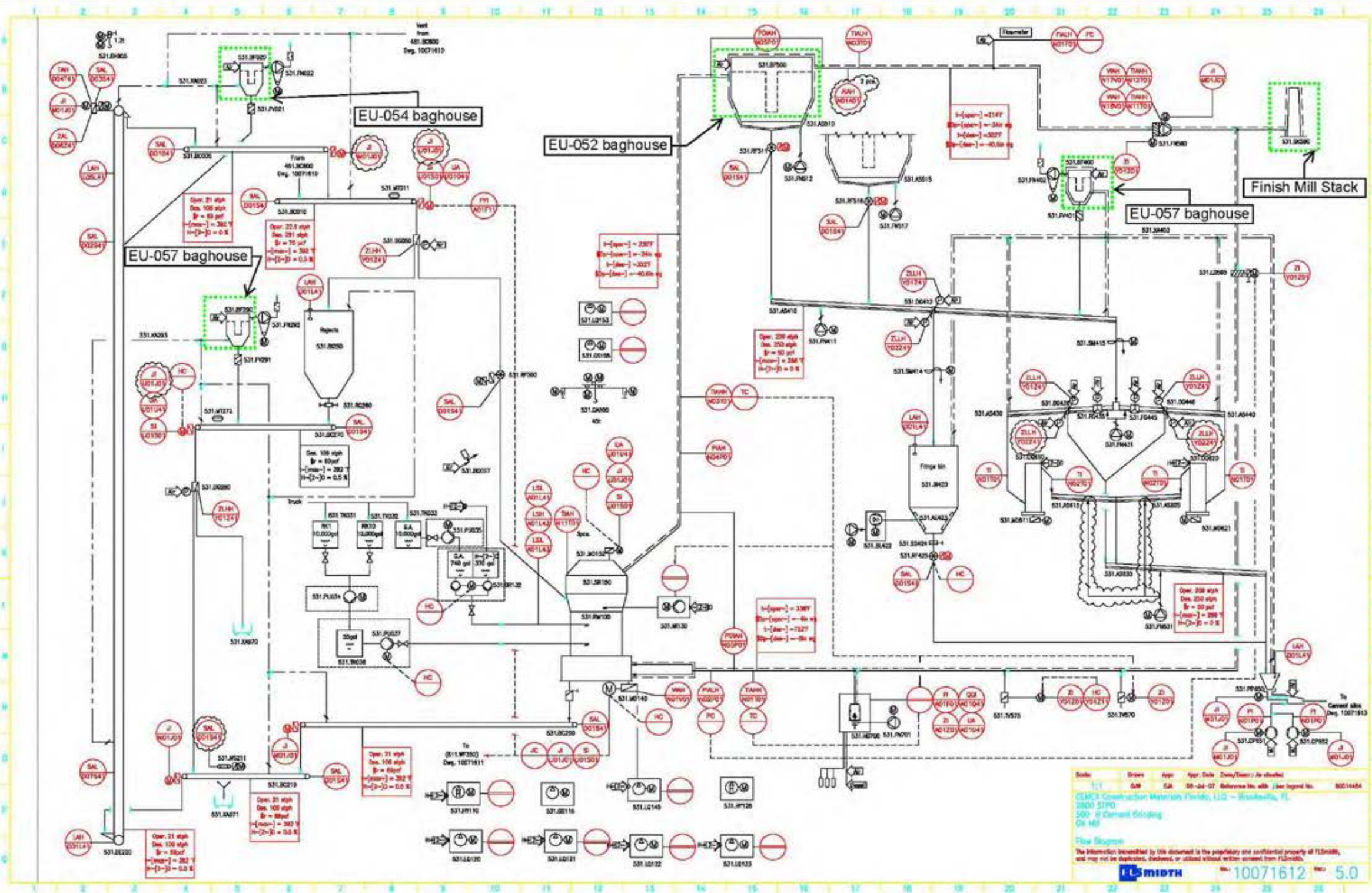
EU-048: Clinker Transport and EU-050: Clinker Storage Silo, Clinker Silo Discharge 1 and Clinker Silo Discharge 2



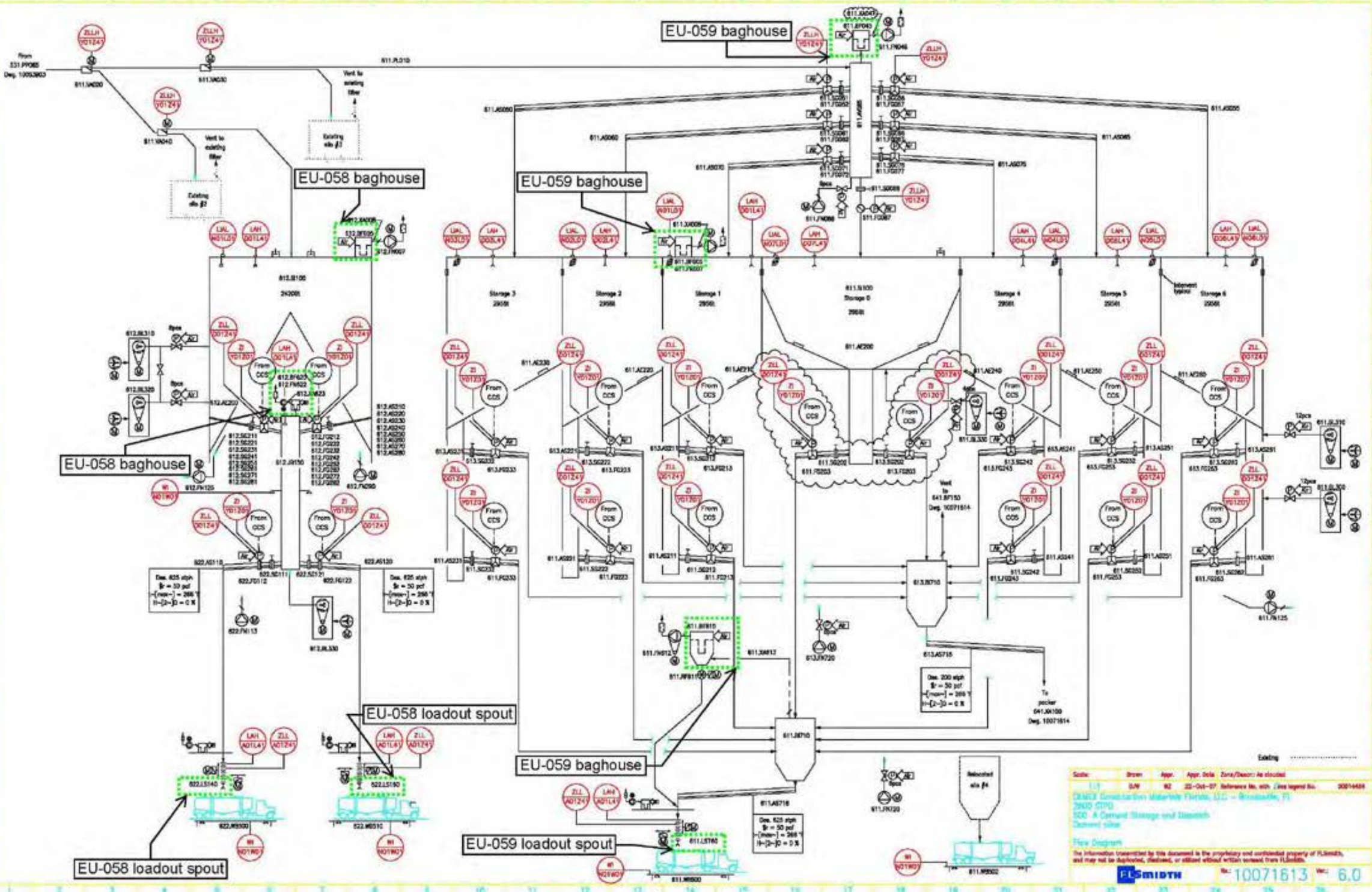
EU-051: Finish Mill Additives



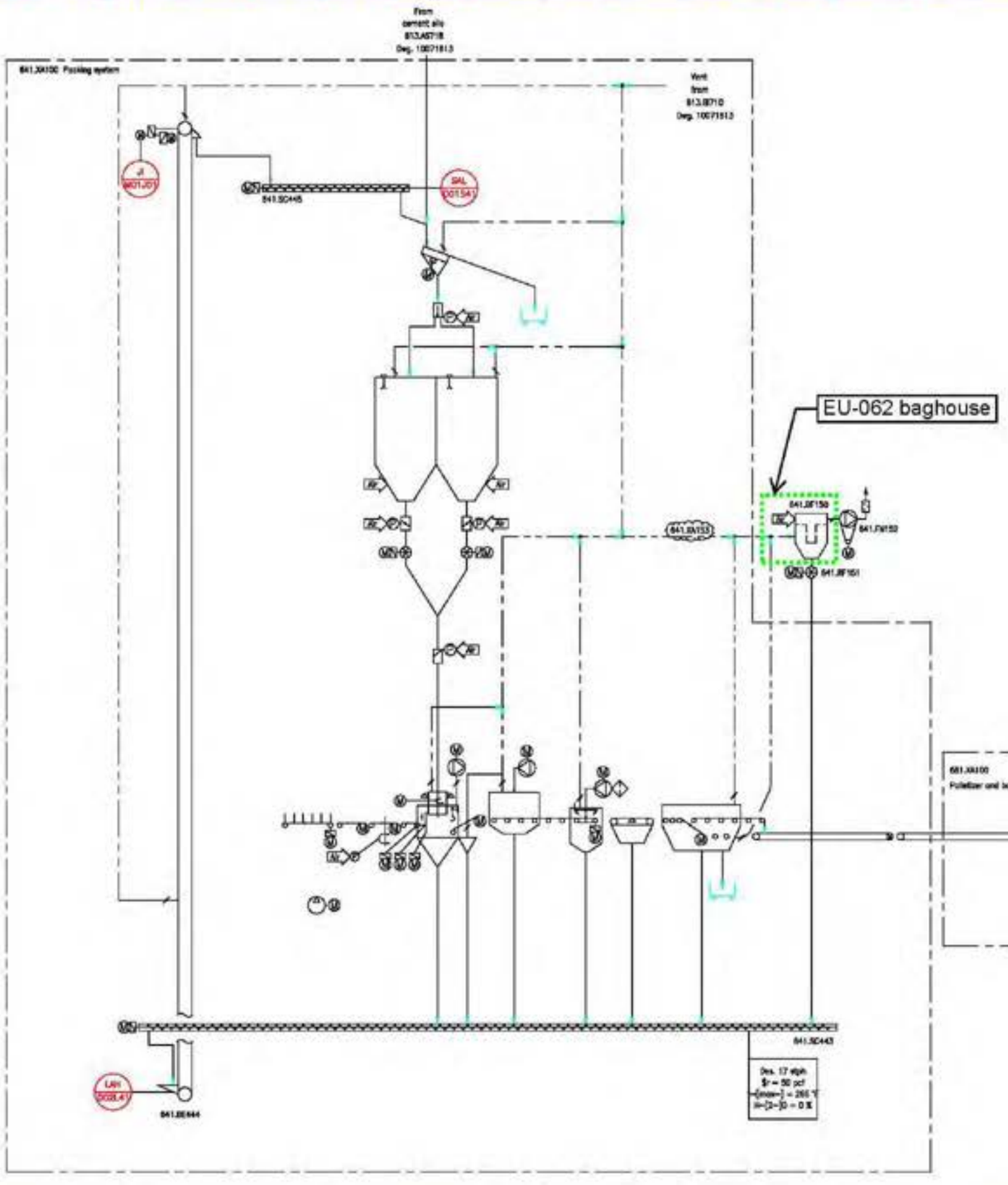
EU-052: Finish Mill and Air Heater, EU-054: Finish Mill Bucket Elevator and EU-057:Finish Mill Cement Transport and Finish Mill Rejects Transport



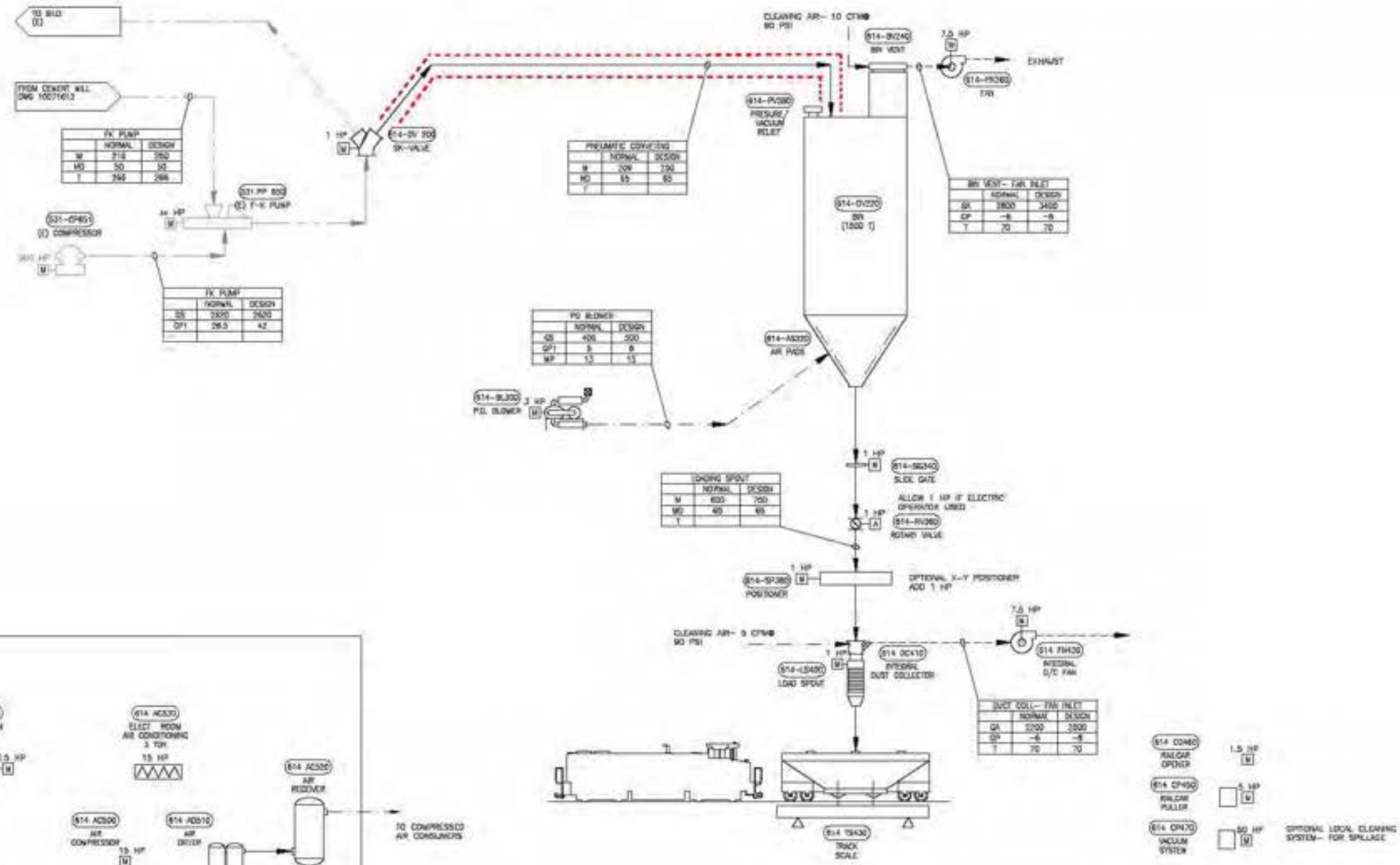
EU-058: Cement Silo 5, Cement Silo 5 Loading Bin, Cement Silo 5 Loadout Spout N and Cement Silo 5 Loadout Spout S and EU-059: Multi Cell Cement Silo, Multi Cell Cement Silo Alleviator, Multi Cell Loadout Transport and Multi Cell Loadout Spout



EU-062: Packing Plant



EU-065: Cement Storage Silo and Railcar Loadout System



RAIL SHIPPING UTILITIES

LEGEND

(EQUIP. NO.) DESCRIPTION	EQUIPMENT NUMBER WITH DESCRIPTION
(EQUIP. NO.) (X) DESCRIPTION	EXISTING EQUIPMENT NUMBER WITH DESCRIPTION
XXXX	EXPECTED OPERATING QUANTITY
XXXXX	EQUIPMENT DESIGN CAPACITY
A PNEUMATIC OPERATOR	H MANUAL OPERATOR
E ELECTRIC OPERATOR	C COMBUSTION ENGINE
F HYDRAULIC OPERATOR	M ELECTRIC MOTOR
G GRAVITY OPERATOR	VS VARIABLE SPEED

LINE STYLES	LINE DESIGNS
———	NEW EQUIPMENT
———	NEW FLOW
— — —	NEW AIR FLOW
— — —	DUST COLLECTION
———	EXISTING EQUIPMENT & FLOW
———	FUTURE EQUIPMENT & FLOW
———	UTILITIES

DEFINITIONS OF UNITS

AT	AMBIENT TEMPERATURE	°F
DP	DEW POINT	°F
F	FLUID FLOW RATE	gpm
FM	FLUID MASS FLOW RATE	lb/min
FP	FLUID PRESSURE	psi
GA	ACTUAL GAS FLOW RATE	acfm
GD	GAS DENSITY	lb/ft3
GH	GAS MOISTURE (VOLUME)	%
GM	GAS MASS FLOW RATE	lb/min
GS	STANDARD GAS FLOW RATE (70°F)	scfm
GP	GAS STATIC PRESSURE	in WG
GP1	GAS STATIC PRESSURE	psi
GV	GAS VELOCITY	ft/min
LA	DUST LOADING	gr/acf
LS	DUST LOADING	gr/scf
M	MATERIAL FLOW RATE (DRY)	stph
MW	MATERIAL FLOW RATE (WET)	stph
MD	MATERIAL BULK DENSITY	lb/ft3
MH	MATERIAL MOISTURE (MASS)	%
MP	MOTOR POWER RATING	hp
MS	MATERIAL SIZE	mesh
Q	DRY LAV HEAT FLOW RATE	10^6 Btu/hr
T	TEMPERATURE	°F

Attachment 3: Process Flow Diagram for Cement Storage Silo & Railcar Loadout System with Baghouses- Line 2

PRELIMINARY NOT FOR CONSTRUCTION

OWNER REVIEW NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	ORGNR	APP
A	ISSUED FOR OWNER REVIEW	5/18/2015	–	SJH

DRN. BY: JTC
SCALE: NONE
PROJECT NO: 15007

STATUS: PRELIMINARY

Phoenix
Process Engineering, Inc.
1053 Corn Springs Road, Suite 305
Table Grove, Illinois 61570
phoenix@phoenixprocess.com
Phone 630-441-9709
FAX 630-441-9737

CEMEX

CLIENT: CEMEX
PROJECT: RAILCAR LOADOUT
LOCATION: BROOKSVILLE, FL
DWG PART: FLOWSHEET
RAIL LOADOUT

DATE	DRAWING NUMBER	REVISION
5/18/2015	15007-FS-001	A

CEMEX Construction Materials Florida, LLC

Brooksville South Cement Plant

Title V

Permit No. 0530021-088

CEMEX Construction Materials Florida, LLC
CEMEX Brooksville South Cement Plant

Facility ID No. 0530021
Hernando County

Title V Air Operation Permit Revision

Permit No. 0530021-088-AV
(4th Revision of Title V Air Operation Permit No. 0530021-073-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Telephone: (850) 717-9000
Email: DARM_Permitting@dep.state.fl.us

Compliance Authority:

Florida Department of Environmental Protection
Southwest District
13051 North Telecom Parkway, Suite 101
Temple Terrace, Florida 33637-0926
Telephone: (813) 470-5700
Fax: (813) 470-5995
E-mail: SWD_Air@dep.state.fl.us

Title V Air Operation Permit Revision

Permit No. 0530021-088-AV

Table of Contents

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

PERMITTEE:
CEMEX Construction Materials Florida, LLC
10311 Cement Plant Road
Brooksville, Florida 34601

Permit No. 0530021-086-AV
CEMEX Brooksville South Cement Plant
Facility ID No. 0530021
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The existing CEMEX Brooksville South Cement Plant is in Hernando County at Cement Plant Road in Brooksville, Florida. UTM Coordinates are: Zone 17, 359.78 km East, and 3162.59 km North. Latitude is: 28°35'13.57" North; and, Longitude is: 82°25'39.39" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0530021-073-AV Effective Date: February 26, 2018
0530021-088-AV Effective Date: May 21, 2021
Renewal Application Due Date: July 16, 2022
Expiration Date: February 26, 2023

David Lyle Read, P.E., Environmental Administrator
Office of Permitting and Compliance
Division of Air Resource Management

DLR/pks

Subsection A. Facility Description.

The facility consists of two Portland cement manufacturing lines, a coal yard and all the required auxiliary equipment. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS). The facility is located approximately 20 km east of the Prevention of Significant Deterioration of Air Quality (PSD) Class I Chassahowitzka Wilderness Area. The placard page above indicates the exact geographical coordinates.

The CEMEX plant comprises two Portland cement manufacturing lines; associated raw and product material handling activities; coal handling activities and auxiliary equipment; as well as, all of the land designated as the South Brooksville facility.

Portland Cement Line 1 includes an in-line kiln/raw mill, coal mill, clinker cooler and associated process equipment. Waste heat from the kiln is used to provide heat to the raw mill, coal 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 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 emissions generated from the transfer of clinker from the receiving hopper to the belt conveyor are controlled using an atomized water dust suppression system. 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 fly ash handling systems (including transfer and silo storage) are totally enclosed and vented (including pneumatic system exhaust) through fabric filters. Continuous monitors are operated for particulate matter (PM), total hydrocarbons (THC), mercury (Hg), nitrogen oxides (NO_X), sulfur dioxide (SO_2), carbon dioxide (CO_2) and oxygen (O_2); however, the NOx and SO_2 continuous monitors are not used to demonstration compliance with NOx and SO_2 emissions standards. SO_2 is used for surrogate monitoring for HCl.

For the Portland Cement Line 1, the maximum clinker production rate is 83.0 tons per hour (TPH) on a 24-hour average basis and 727,800 tons in any consecutive 12-month period. Fuels fired in the pyroprocessing system consist only of coal, petcoke, natural gas, No. 2 distillate fuel oil, residual fuel oil, "on-specification" used oil, and tire derived fuel (TDF), including shredded and whole tires. No. 2 fuel oil is used for the cement kiln No. 1's startup/preheating operation. “On-specification” used oil is allowed to be fired as a blend with purchased fuel oil as a startup fuel only. The TDF may be introduced at the base of the preheater (i.e., kiln No. 1's inlet) or at the hot end of the kiln with a Tire Injection Mechanism (TIM). The firing of the TDF does not commence unless the kiln No. 1 has reached an operating temperature (at least 1,400 ºF), which is measured at the cement kiln No. 1's inlet.

Portland Cement Line 2 includes a raw mill system, a dry process preheater/precalciner kiln system, clinker handling system, finish grinding operations, three cement loadout silos, and coal handling and grinding operations. NO_X emissions are controlled by the use of Selective Non-catalytic Reduction (SNCR) technology. SO_2 emissions are controlled by use of low sulfur raw materials and inherent scrubbing by finely divided lime in the calciner and limestone in the raw mill. Carbon monoxide (CO) and volatile organic compounds (VOC) emissions are controlled by promoting complete combustion in the kiln and calciner and minimizing carbon and the oil/grease content of raw materials. Particulate matter (PM/PM_{10}) from the pyroprocessing system and the clinker cooler are controlled by fabric filter baghouses. Mercury emissions are controlled by material balance with a minimum of quarterly analyses of raw material samples and making and maintaining records of monthly and rolling 12-month mercury throughput. All of the materials handling activity particulate matter emissions are controlled by fabric filters. 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. Continuous monitors are operated for PM, Hg, NO_X, SO_2, CO, THC, CO_2 and O_2.

Portland Cement Line 2 has a capacity of 156 TPH of clinker production and 240 TPH of Portland cement production. Daily and annual rates are 1,277,500 tons per year (3,500 tons/day, 24-hour average) of clinker production, and 1,800,000 tons per year (5,760 760 tons/day or 240 ton/hr) of cement production. Fuels allowed to be used in the pyroprocessing system are natural gas, distillate fuel oil, on specification used oil, coal,

petroleum coke, propane, flyash, tire derived fuels and certain categories of alternative fuels. Line 2 also includes a coal processing operation that crushes coal and petroleum coke and has an annual processing capacity of 175,200 tons of coal and petroleum coke and may also utilize alternative fuels as specified in this permit.

Subsection B. Summary of Emissions Units.

EU ID No.	Facility's Internal ID No.	Brief Description
Brooksville South Portland Cement Line 1 - *Regulated Emissions Units*		
Raw Mill and Raw Meal Handling and Storage System		
001	D-75	Filter Dust Bin (was Pre-Mix Bin) with Baghouse
002	D-67	Fly Ash/Equilibrium Catalyst Storage Silo with Baghouse
004	F-14	Raw Meal Transfer with Baghouse
	TBD	Dry Sorbent Injection System
006	G-12 (A & B)	Two Blend Silos with Baghouse
007	H-15	Kiln Feed Surge Bin with Baghouse
Clinker Handling and Storage		
008	S-04	Clinker Receiving/Handling System
009	K-07 & L-03	Clinker Cooler Discharge with Baghouse
010	L-05, L-06, L-07 & TBD	Clinker Storage Silos and Loadout Spout with Baghouses
Finish Mill System		
011	L-08	Gypsum and Limestone Bins with Baghouse
012	M-08 M-04	EP-01 Silo Discharge with Baghouse (M-08) and EP-02 Clinker Feeder Baghouse (M-04).
013	N-13	Finish Mill with Baghouse
019	M-05	Finish Mill Feed Belt with Baghouse
014	Q-17	A-Side Cement Storage Silos #1 & #2 Discharge System with Baghouse
015	Q-15	Cement Storage Silos #1 & #2 with Baghouse
Pyroprocessing System		
020	E-42	In-Line Cement Kiln 1, In-Line Kiln/Raw Mill, Coal Mill and Clinker Cooler 1 with Baghouse
Cement Silos and Loadout		
021	Q-18	B-Side Cement Storage Silos #1, #2 & #3 Discharge System with Baghouse
022	Z-15	Cement Storage Silo #3 with Baghouse
023	TBD	Cement Storage Silo #4 and Truck Loadout System with Baghouse
024	Z-18	Cement Storage Silo and Railcar Loadout System with Baghouses
064	M-03	Kiln No. 1 Clinker Belt Dust Control
Brooksville South Portland Cement Plant 2 - *Regulated Emissions Units*		
Pyroprocessing System		
044	331.BF300	In-Line Cement Kiln 2, Pre-Heater, Pre-calciner and Clinker Cooler

EU ID No.	Facility's Internal ID No.	Brief Description
Raw Mill and Raw Meal Handling and Storage System		
045	331.BF640	Filter Dust Bin
	311.LS609	Filter Dust Bin Loadout Spout
046	341.BF400	Blend Silo
047	351.BF420	Kiln Feed Transport
	341.BF410	Blend Silo Discharge
	351.BF410	Kiln Feed Bin
	331.XA120	Dry Sorbent Injection System
Clinker Handling and Storage		
048	471.BF110 & 471.BF150	Clinker Transport
050	471.BF120	Clinker Storage Silo,
	481.BF155	Clinker Silo Discharge 1
	481.BF165	Clinker Silo Discharge 2
Finish Mill System		
051	511.BF650	Finish Mill Additives
052	531.BF500	Finish Mill and Air Heater
054	531.BF020	Finish Mill Bucket Elevator
057	531.BF400	Finish Mill Cement Transport
	531.BF290	Finish Mill Rejects Transport
Cement Silos and Loadout		
058	612.BF005	Cement Silo 5
	612.BF620	Cement Silo 5 Loading Bin
	622.LS140	Cement Silo 5 Loadout Spout N
	622.LS160	Cement Silo 5 Loadout Spout S
059	611.BF005	Multi Cell Cement Silo
	611.BF045	Multi Cell Cement Silo Alleviator
	611.BF610	Multi Cell Loadout Transport
	611.LS760	Multi Cell Loadout Spout
062	641.BF150	Packing Plant
065	614.BV240 & 614.DC410	Cement Storage Silo and Railcar Loadout System with Baghouses

EU ID No.	Facility's Internal ID No.	Brief Description
Coal Grinding & Handling System		
060	461.BF400	Coal Mill
061	461.BF560	Fine Coal Bin
Emergency Diesel Generator		
063	N/A	Emergency Diesel Generator
Alternative Fuel Handling and Processing		
Not Numbered		Alternative Fuel Handling and Processing
Brooksville South Portland Cement Line 1 and Portland Cement Line 2		
042	N/A	Coal Receiving, Handling and Transfer System (fugitives)
Not Numbered		Facility wide Fugitive Emissions

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received July 29, 2020, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 004, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 019, 020, 021, 022, 023, 024, 042, 044, 045, 046, 047, 048, 050, 051, 052, 054, 057, 058, 059, 060, 061, 062, 063, 064, 065
40 CFR 60, Subpart F -- Standards of Performance for Portland Cement Plants.	001, 002, 004, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 019, 020, 021, 022, 023, 024, 044, 045, 046, 047, 048, 050, 051, 052, 054, 057, 058, 059, 062, 063, 064, 065
40 CFR 60, Subpart Y -- Standards of Performance for Coal Preparation Plants	042, 060, 061
40 CFR 60, Subpart IIII -- Compression Ignition Internal Combustion Engines	063
40 CFR 63, Subpart A, NESHAP General Provisions	001, 002, 004, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 019, 020, 021, 022, 023, 024, 042, 044, 045, 046, 047,

Regulation	EU No(s).
Federal Rule Citations	
	048, 050, 051, 052, 054, 057, 058, 059, 060, 061, 062, 063, 064, 065
40 CFR 63, Subpart LLL, National Emissions Standards for Hazardous Air Pollutants from Portland Cement Manufacturing Industry	001, 002, 004, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 019, 020, 021, 022, 023, 024, 044, 045, 046, 047, 048, 050, 051, 052, 054, 057, 058, 059, 062, 063, 065
40 CFR 63, Subpart ZZZZ -- Reciprocating Internal Combustion Engines	063
State Rule Citations	
Rule 62-4, Florida Administrative Code (F.A.C.) (Permits)	001, 002, 004, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 019, 020, 021, 022, 023, 024, 042, 044, 045, 046, 047, 048, 050, 051, 052, 054, 058, 059, 060, 061, 062, 063, 064, 065
Rule 62-204, F.A.C. (Air Pollution Control – General Provisions)	
Rule 62-210, F.A.C. (Stationary Sources – General Requirements)	
Rule 62-212.400, F.A.C.(Prevention of Significant Deterioration)	
Rule 62-213, F.A.C. (Operation Permits for Major Sources of Air Pollution)	
Rule 62-296, F.A.C. (Stationary Sources – Emission Standards)	
Rule 62-297, F.A.C. (Stationary Sources – Emissions Monitoring)	

{Permitting Note (for informational purposes only): The facility is subject to the federal requirements of the Greenhouse Gas Reporting Program codified at 40 CFR 98. This reporting rule is not a requirement of the State of Florida.}

Table of Contents

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. **Not federally Enforceable.** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas and yards.
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne..
e. Landscaping or planting of vegetation.
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
g. Confining abrasive blasting where possible.
h. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received September 21, 2017

Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details and requirements.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V

source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: https://floridadep.gov/air/permitting-compliance/content/title-v-fees. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW9. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 – June 30 and July 1 – December 31. The reports shall be

submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19(d), 40 CFR 61.10(h) & 40 CFR 63.10(a)(5)]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

Other Requirements

Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any requirement of an NSPS or NESHAP provisions.

FW10. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case, exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

FW11. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

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The specific conditions in this section apply to the following emissions unit(s):

EU ID No.	Facility's Internal ID No.	Brief Description
001	D-75	Filter Dust Bin with Baghouse
002	D-67	Fly Ash/Equilibrium Catalyst Storage Silo with Baghouse
004	F-14	Raw Meal Transfer with Baghouse
	TBD	Dry Sorbent Injection System
006	G-12(A & B)	Two Blend Silos with Baghouse
007	H-15	Kiln Feed Surge Bin with Baghouse
009	K-07 & L-03	Clinker Cooler Discharge with Baghouse
010	L-06 to L-05, L-07 & TBD	Clinker Storage Silos and Loadout Spout with Baghouses
011	L-08	Gypsum and Limestone Bins with Baghouse
012	M-08 and M-04	EP-01 Silo Discharge with Baghouse (M-08) and EP-02 Clinker Feeder Baghouse (M-04)
013	N-13	Finish Mill with Baghouse
014	Q-17	A-Side Cement Storage Silos #1 & #2 Discharge System with Baghouse
015	Q-15/Z-15	Cement Storage Silo Nos. 1 and 2 with Baghouses
019	M-05	Finish Mill Feed Belt with Baghouse
021	Q-18	B-Side Cement Storage Silos #1, #2 & #3 Discharge System with Baghouse
022	Z-15/Q-15	Cement Storage Silo No. 3 with Baghouses
023	TBD	Cement Storage Silo #4 and Truck Loadout System with Baghouse
024	Z-18	Cement Storage Silo and Railcar Loadout System with Baghouses
064	M03	Kiln No. 1 Clinker Belt Dust Control

{Permitting Note: These emissions units are regulated under Rule 62-297.620(4), F.A.C., Exceptions and Approval of Alternate Procedures and Requirements; Rules 62-212.400 and 62-212.400(4), F.A.C., Prevention of Significant Deterioration (PSD-FL-091K) and Best Available Control Technology, respectively and, 40 CFR 63, Subpart LLL, National Emissions Standards for Hazardous Air Pollutants from Portland Cement Manufacturing Industry, adopted in Rule 62-204.800, F.A.C.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum process/transfer/throughput rates and other critical operational parameters for these emission units are given below:

EU ID No.	Description	Stack [1]	BH [2]	Temp [3]	Flow [4]	Throughput
001	Filter Dust Bin - storage bin for fines (dust)	125/2.0	low	77	6,800 6,686	45 tons/hour (TPH)

EU ID No.	Description	Stack [1]	BH [2]	Temp [3]	Flow [4]	Throughput
002	Fly Ash/Equilibrium Catalyst Storage Silo	125/2.0	low	77	4,200 4,130	25 TPH
004	Raw Meal Transfer - raw meal being transferred from the storage bins to the raw mil	70/1.0	low	180	1,200 970	138 TPH
006	Two Blend Silos - storage silos for the raw meal being transferred from the raw mill	240/3.5	low	180	17,000 13,745	138 TPH
007	Kiln Feed Surge Bin - is an activity of materials being pre-heated in the pre-heater and transferred to the kiln	50/2.0	medium	200	6,000 4,704	138 TPH
009	Clinker Cooler Discharge - is an activity of clinker transfer from the clinker cooler to the deep bucket conveyor	10/1.0	medium	250	5,100 3,717	83 TPH
010	Clinker Storage Silos - unit is an activity of clinker being transferred to the finish mill	200/1.5	Medium	200	2,600 2,038	83 TPH
	Clinker Loadout Spout – activity of clinker loadout, primarily for removal of off-spec clinker activity of clinker	20/1	Low	80	2,000 1,913	
011	Gypsum and Limestone Bins - is an activity of gypsum and limestone being stored and transferred	135/1.5	Medium	200	5,000 3,920	75 TPH
012	Silo Discharge and Clinker Feeder -is an activity of clinker, gypsum or limestone being transferred from their silos	135/2.5	low	100	9,000 8,316	122 TPH
013	Finish Mill - combines clinker, limestone and gypsum to form cement	70/5.0	medium	210	40,000 30,892	125 TPH; 876,000 TPY
014	A-Side Cement Storage Silos #1 & #2 Discharge System - unloading of cement from the three storage silos	50/1.5	Low	160	3,200 2,121	300 TPH
015	Cement Storage Silo Nos. 1 and 2 with Baghouses - is an activity of cement being pneumatically transferred to two storage silos from the finish mill	200/2.0	Low	180	7,400 5,983	365 TPH each & 2,676,000 TPY each

EU ID No.	Description	Stack [1]	BH [2]	Temp [3]	Flow [4]	Throughput
019	Finish Mill Feed Belt - is an activity of transferring clinker, gypsum or limestone to the finish mill	29/2.0	Low	85	9,000 8,820	120 TPH
021	B-Side Cement Storage Silos #1, #2 & #3 Discharge System - used for the unloading of cement from a storage silo	50/1.5	Low	160	3,200 2,121	300 TPH
022	Cement Storage Silo No. 3 with Baghouses - is an activity of cement being pneumatically transferred to a silo from the finish mill	200/2.0	Low	180	5,300 ---	365 TPH; 2,676,000 TPY
023	Cement Storage Silo #4 and Truck Loadout System - is an activity of cement being pneumatically transferred to the silo from the finish mill and cement loaded into trucks	75/0.8	Low	77	860 829	125 TPH: silo & 390 TPH: trucks
024	Cement Storage Silo and Railcar Loadout System - is an activity of cement being pneumatically transferred to the railcar silo from the cement storage silos #1, #2, and #3	80/1.5	Low	77	6,000 5,899	30 TPH: silo & 100 TPH: railcars
		10/0.5	Low	77	500 490	
064	Kiln No. 1 Clinker Belt Dust Control	27/1.0	Low	175	2125 1732	122 TPH

1. Height (ft)/diameter(ft)
2. Baghouse temperature range.
3. Nominal temperature degrees Fahrenheit (ºF)
4. Nominal flow in actual cubic feet per minute (acfm) and standard cubic feet per minute (scfm).

[Rules 62-4.160(2) & 62-204.800, 62-210.200(PTE); and, Permit Nos. 0530021-043-AC/PSD-FL-091K, 0530021-064-AC & 0530021-74-AC]

A.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

A.3. Methods of Operation. The emissions units either process or transfer materials used in the production of Portland cement. The dry fly ash handling system (including transfer and silo storage) is totally enclosed and vented (including pneumatic system exhaust) through fabric filters. [Rule 62-213.410, F.A.C. and Permit No. 0530021-043-AC/PSD-FL-091K]

A.4. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; Permit Nos. 0530021-043-AC/PSD-FL-091K &0530021-053-AC/ PSD-FL-091M]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions (VE) for the DSI System that is Part of EU-004. Visible emissions from the DSI system shall not equal or exceed 20% opacity. [Rules 62-296.320(4)(b), F.A.C.]

A.6. VE. For each emissions unit (except the DSI system that is a part of EU-004), visible emissions shall not exceed 5 percent opacity, since each emissions unit's potential particulate matter emissions are less than 100 TPY and is equipped with a baghouse control system. As long as the visible emissions do not exceed 5 percent opacity, compliance is assumed for the particulate matter limitations established in **Specific Condition A.7.** If the Department has reason to believe that the particulate matter emissions standards in **Specific Condition A.7.** are not being met, it shall require that compliance be demonstrated by the test method specified in **Specific Condition A.10.** [Permit No. 0530021-043-AC/PSD-FL-091K and BACT]

A.7. Particulate Matter Emissions. The maximum allowable particulate matter emissions are:

EU ID No	Brief Description	Emission Limits	Basis
001	Filter Dust Bin	0.015 gr/acf; 0.7 lb/hr; 3.07 TPY	BACT [1]
002	Fly Ash/Equilibrium Catalyst Storage Silo	0.015 gr/acf; 0.4 lb/hr; 1.75 TPY	BACT
004	Raw Meal Transfer	0.015 gr/acf; 0.2 lb/hr; 0.88 TPY	BACT
006	Two Blend Silos	0.015 gr/acf; 2.2 lb/hr; 9.64 TPY	BACT
007	Kiln Feed Surge Bin	0.015 gr/acf; 0.8 lb/hr; 3.50 TPY	BACT
009	Clinker Cooler Discharge	0.015 gr/acf; 0.66 lb/hr; 2.9 TPY	BACT
010	Clinker Storage Silos	0.015 gr/acf; 0.3 lb/hr; 1.31 TPY	BACT
011	Gypsum and Limestone Bins	0.015 gr/acf; 0.6 lb/hr; 2.63 TPY	BACT
012	Silo Discharge and Clinker Feeder	0.015 gr/acf; 1.2 lb/hr; 5.26 TPY	BACT
013	Finish Mill	0.015 gr/acf; 5.1 lb/hr; 22.34 TPY	BACT
014	A-Side Cement Storage Silos #1 & #2 Discharge System	0.015 gr/acf; 0.4 lb/hr; 1.75 TPY	BACT
015	Cement Storage Silos #1 & #2	0.015 gr/acf; 1.0 lb/hr; 4.38 TPY	BACT
019	Finish Mill Feed Belt	1.16 lb/hr; 5.08 tons/rolling 12-months	BACT
021	B-Side Cement Storage Silos #1, #2 & #3 Discharge System	0.015 gr/acf; 0.4 lbs/hr; 1.75 TPY	BACT
022	Cement Storage Silo #3	0.015 gr/acf; 0.68 lb/hr; 3.00 TPY	BACT
023	Cement Storage Silo #4 and Truck Loadout System	0.015 gr/acf; 0.11 lb/hr; 0.48 TPY	BACT
024	Cement Storage Silo and Railcar Loadout System	0.02 gr/acf	BACT
064	Kiln No. 1 Clinker Belt Dust Control	0.015 gr/acf; 0.27 lb/hr; 1.02 TPY	BACT

1. PSD-FL-091K replaces all previous PSD permits and represents latest BACT, NSPS and NESHAP emission limits.

[Permit No. 0530021-043-AC/PSD-FL-091K and BACT]

Monitoring of Operations

A.8. Operations and Maintenance Plan. The owner or operator shall prepare for each affected source subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan.

{Permitting Note: Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1347(a) shall be a violation of the standard.}

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1347(a) and (b)]

A.9. Finish Mill: Opacity Monitoring. The owner or operator of a finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs (PM control devices) of this affected source, in accordance with the procedures of Method 22 of Appendix A-7, 40 CFR Part 60. 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 six (6) minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

a. *Initial Action.* Initiate, within one-hour, the corrective actions specified in the site-specific operating and maintenance plan developed in accordance with paragraphs 40 CFR 63.1347; and,

b. *Follow-up.* Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up 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 follow-up Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with Method 9 of Appendix A-4, 40 CFR Part 60. The duration of the Method 9 test shall be thirty (30) minutes.

{Permitting Note: According to 40 CFR 63.1350(f)(1)(ii)-(iii), monitoring requirements of NESHAP Subpart LLL, the frequency of opacity monitoring may be decreased if no opacity is observed during Method 22 testing.}

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(f)(2)&(3)]

A.10. Opacity Monitoring. The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a). [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(f)]

A.11. NESHAP Subpart LLL Periodic Opacity Monitoring: The permittee must conduct required opacity monitoring in accordance with the following provisions:

a. The permittee must conduct a monthly 10-minute VE test of each of the EUs in this subsection in accordance with Method 22 of appendix A-7 to 40 CFR 60. The performance test must be conducted while the EUs are in operation.

b. If no VE are observed in 6 consecutive monthly tests for any EU, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that EU. If VE are observed during any semi-annual test, the permittee must resume performance testing of that EU on a monthly basis and maintain that schedule until no VE are observed in 6 consecutive monthly tests.

c. If no VE are observed during the semi-annual test for any EU, the permittee may decrease the frequency of performance testing from semi-annually to annually for that affected source. If VE are observed during any annual performance test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.

d. If VE are observed during any Method 22 performance test, the permittee must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A-4 to 40 CFR 60. The Method 9 performance test must begin within 1 hour of any observation of VE.

[40 CFR 63.1350(f)(1)(i)-(iv) and Permit No. 0530021-74-AC]

Test Methods and Procedures

A.12. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM_{10}.)
9	Visual Determination of the Opacity of Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; 40 CFR 63.1349(b)(2), F.A.C.; and Permit No. 0530021-043-AC/PSD-FL-091K]

A.13. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.14. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU (excluding the DSI system that is a part of EU-004) shall be tested to demonstrate compliance with the emissions standards for VE. For EU No. 022 (Emission Point Z-15) , the opacity test observation period shall include the period of typical operation during which the highest opacity emissions can reasonably be expected to occur. [Rules 62-297.310(5)(b) & 62-297.310(8), F.A.C.]

A.15. Compliance With NESHAP Subpart LLL Emission Limits: The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate compliance with the emission standards and operating limits by using the test methods and procedures in 40 CFR 63.1349 and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as well as all other relevant information. The plan to be followed during testing shall be made available to the Department prior to testing, if requested. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1348(a) and 40 CFR 63.1349(a)]

Recordkeeping and Reporting Requirements

A.16. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice and Reporting of Malfunctions	Notice per occurrence; quarterly report on demand.	**A.18.**
Reporting Requirements from 40 CFR 63 Subpart LLL	As required by Subpart LLL.	**A.20.**

[Rule 62-213.440(1)(b), F.A.C.]

A.17. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

A.18. Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

A.19. Notification Requirements. The notification provisions of 40 CFR 63, Subpart A are applicable. The owner or operator may send EPA a copy of the notice sent to the Department to satisfy the requirements of 40 CFR 63.1353 for that notification. Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353(a) and (b)(1) - (6)]

A.20. Reporting Requirements. The reporting provisions of 40 CFR 63, Subpart A are applicable. The owner or operator may send EPA a copy of the report sent to the Department to satisfy the requirements of 40 CFR 63.1354 for that report. The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354(a) and (b)(1) - (10)]

A.21. Recordkeeping Requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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. The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3). In addition: (1) all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9; (2) all records of applicability determination, including supporting analyses; and (3) if the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. [Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

A.22. Bin Vent Modification Records for EU Nos. 015 & 022. The permittee shall keep records of all current bin vent modifications and component replacements. These records may include, but are not limited to, manufacturer data sheets and shall provide reasonable assurance that the emissions point Z-15 bin vent can meet its current PM and VE limitations. These records shall be in a form readily available for inspection by the Department and/or Compliance Authority. [Rule 62-210.700(5) F.A.C.; and Permit No. 0530021-074-AC]

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The specific conditions in this section apply to the following emissions unit:

EU ID No.	Facility's Internal ID No.	Brief Description
008	S-04	Clinker Receiving/Handling System

This emissions unit is an integrated system for handling clinker that includes an above-ground clinker receiving hopper that is loaded by front-end loader. Clinker is transported from the hopper to the deep-bucket clinker conveyor by a belt conveyor. The fugitive particulate matter emissions generated from the transfer of clinker from the receiving hopper to the belt conveyor are controlled by the use of an atomized water, or equivalent, dust suppression system.

{Permitting Note: This emissions unit is regulated under Rules 62-212.400 and 62-212.400(4), F.A.C., Prevention of Significant Deterioration (PSD-FL-091K) and Best Available Control Technology, respectively; and, 40 CFR 63, Subpart LLL, National Emissions Standards for Hazardous Air Pollutants from Portland Cement Manufacturing Industry.}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum process/transfer/throughput rate of clinker is 100 tons/hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and Permit No. 0530021-043-AC/PSD-FL-091K]

B.2. Emissions Unit Operating Rate Limitation after Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

B.3. Method of Operation. The emissions unit receives clinker from front-end loaders and transfers the clinker using a belt conveyor to the deep-bucket clinker conveyor system. [Rule 62-213.410, F.A.C.; and Permit No. 0530021-043-AC/PSD-FL-091K]

B.4. Water Spray System. A water spray system shall be used as necessary to control fugitive dust emissions during clinker unloading operations from train cars or trucks to the receiving hopper. [Rules 62-210.200(PTE), 62-212.400 (PSD), and 62-296.320(4)(c), F.A.C.]

B.5. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Permit No. 0530021-043-AC/PSD-FL-091K]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for **Specific Conditions B.6 - B.7.** are based on the specified averaging time of the applicable test method.

B.6. Particulate Matter. The allowable particulate matter emissions from the clinker handling system shall not exceed 0.7 lb/hr. [Permit No. 0530021-043-AC/PSD-FL-091K]

B.7. Visible Emissions. Visible emissions shall not exceed 10 percent opacity. Compliance with the visible emissions limit in this condition assures compliance with the particulate matter emissions limit in **Specific Condition B.6.** However, if visible emissions exceeds 10 percent opacity, then the owner or operator shall install hoods, ducts, and air pollution control equipment that will reduce the particulate matter emissions to the standard listed in **Specific Condition B.6.** [Permit No. 0530021-043-AC/PSD-FL-091K and 40 CFR 63.1345]

Monitoring of Operations

B.8. Operations and Maintenance Plan. The owner or operator of each Portland cement plant shall prepare for each affected source subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1347(a)]

{Permitting Note: Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1347(a) shall be a violation of the standard.}

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1347(a) and (b)]

B.9. Opacity Monitoring. The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1345 (See **Specific Condition B.7.**) shall conduct required opacity monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (vii) of 40 CFR 63.1350 and in accordance with the site-specific monitoring plan developed under 40 CFR 63.1350(p). [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(f)]

Test Methods and Procedures

B.10. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

B.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.12. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU shall be tested to demonstrate compliance with the emissions standards for visible emissions. [Rule 62-297.310(8)(a), F.A.C. and, 40 CFR 63.1349(b)(2)]

B.13. Compliance With NESHAP Subpart LLL Emission Limits: The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate compliance with the emission standards and operating limits by using the test methods and procedures in 40 CFR 63.1349 and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as well as all other relevant information. The plan to be followed during testing shall be made available to the Department prior to testing, if requested. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1348(a) and 40 CFR 63.1349(a)]

Recordkeeping and Reporting Requirements

B.14. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice and Reporting of Malfunctions	Notice per occurrence; quarterly report on demand.	**B.15., B.17. and B.18.**

[Rule 62-213.440, F.A.C.]

B.15. Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

B.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

B.17. Notification Requirements. The notification provisions of 40 CFR 63, Subpart A are applicable. The owner or operator may send EPA a copy of the notice sent to the Department to satisfy the requirements of 40 CFR 63.1353 for that notification. Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353(a) and (b)(1) - (6)]

B.18. Reporting Requirements. The reporting provisions of 40 CFR 63, Subpart A are applicable. The owner or operator may send EPA a copy of the report sent to the Department to satisfy the requirements of 40 CFR 63.1354 for that report. The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354(a) and (b)(1) - (10)]

B.19. Recordkeeping Requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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. The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3). In addition: (1) all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9; (2) all records of applicability determination, including supporting analyses; and (3) if the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. [Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

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The specific conditions in this section apply to the following emissions unit:

EU ID No.	Facility's Internal ID No.	Brief Description
020	E-42	In-Line Cement Kiln 1, In-Line Kiln/Raw Mill, Coal Mill and Clinker Cooler 1

Portland Cement Line 1 is designed for 83-TPH of cement clinker product. The cement kiln, in-line raw mill, coal mill and clinker cooler of Portland Cement Line 1 prior to 2012 exhausted to a common baghouse and exhaust stack with Florida Power Development, LLC (FPD) power plant. On June 30, 2018, the FPD power plant has been permanently shut down and currently is in the process of being dismantled. Kiln 1 continues to operate as a stand-alone cement kiln.

Waste heat from the kiln is used to provide heat to the raw mill, coal mill and the kiln preheater, which is used to drive off moisture from the materials used for making clinker. The movement of raw materials, recycled materials, and product are through enclosed transfer systems. All gas streams from the various transfer systems vent through a single baghouse system into the ambient air. The existing site is zoned for mining, so limestone and clay used in the production of cement are supplied on site. The kiln is allowed to fire coal, petcoke, natural gas, distillate and residual fuel oil, on-specification used oil, and shredded and whole tires.

Key pollutants from the Kiln 1 system include PM of various size categories, CO, NO_x, THC, SO_2, Hg, HCl, dioxin/furans (D/F) and greenhouse gases (GHGs) – primarily CO_2. PM emissions from the kiln system are controlled by the main baghouse. Emissions of CO and THC are controlled by good combustion practices, and NO_x emissions are controlled by best management practices and through a Selective Non-Catalytic Reduction (SNCR) system. Gas conditioning tower is used to control the baghouse inlet temperature and D/F formation by injecting water to cool preheater exhaust gases. Continuous monitors are operated for PM, THC, Hg, NO_X, SO_2, CO_2 and O_2; however, the NO_x and SO_2 continuous monitors are not used to demonstration compliance with NO_x and SO_2 emissions standards specified in this emissions unit. SO_2 is used for surrogate monitoring for HCl. The stack height is 322 feet, with an exit diameter of 18.65 feet and a nominal exit temperature of 250ºF. The nominal volumetric flow rate is 363,000 acfm (250,000 dscfm).

{Permitting Note: This emissions unit activity is regulated under Rules 62-212.400 and 62-212.400(4), F.A.C., Prevention of Significant Deterioration (PSD-FL-091K) and BACT, respectively and, Maximum Available Control Technology (MACT), 40 CFR 63, Subpart LLL, National Emissions Standards for Hazardous Air Pollutants from Portland Cement Manufacturing Industry}

General

C.1. Performance Testing.

a. If the source plans to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under 40 CFR 63, Subpart LLL, the source must conduct a performance test as specified in 40 CFR 63.1349(b).

b. In preparation for and while conducting a performance test required in 40 CFR 63.1349(b), the permittee may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the following conditions are met. The permittee shall submit temperature and other monitoring data that are recorded during the pretest operations.

(1) The permittee shall provide the Department written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under 40 CFR 63, Subpart LLL for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must 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 (a) of this condition, including when the planned operational change period would begin.

(2) The performance test results must be documented in a test report according to 40 CFR 63.1349(a).
(3) A test plan must be made available to the Department prior to performance testing, if requested.
(4) The performance test must be completed within 360 hours after the planned operational change period begins.

[40 CFR 63.1348(c).]

Essential Potential to Emit Parameters

C.2. Permitted Capacity. For the Cement Kiln No. 1, the maximum clinker production rate shall not exceed 83.0 tons/hour, 24-hour average and 727,800 tons in any consecutive 12-month period. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and Permit No. 0530021-043-AC/PSD-FL-091K]

C.3. Hours of Operation.

a. *Hours.* This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
b. *Tires.* Shredded and whole tire derived fuel (TDF) utilization shall not exceed 8,300 hours/year.

[Permit No. 0530021-043-AC/PSD-FL-091K]

C.4. Fuels.

a. The only fuels allowed to be fired are coal, petcoke, natural gas, No. 2 distillate fuel oil, residual fuel oil, "on-specification" used oil, and TDF (including shredded and whole tires).
b. The new No. 2 fuel oil shall be used for the cement kiln 1's startup/preheating operation.
c. "On-specification" used oil is allowed to be fired as a blend with purchased fuel oil as a startup fuel only.
d. The TDF may be introduced at the base of the preheater (i.e., the kiln 1 inlet) or whole tires may be fired at the front of the kiln using a TIM. The firing of the TDF shall not commence or be conducted unless the kiln 1 has reached an operating temperature, which shall be measured at the inlet of cement kiln 1 of at least 1,400 ºF for one hour and the oxygen level in the kiln, as measured at the cement plant's induced draft fan, is at least 2 percent (1-hour average).

[Rule 62-213.410, F.A.C.; and Permit No. 0530021-043-AC/PSD-FL-091K]

C.5. Methods of Operation for the SNCR System. The permittee shall operate the SNCR system according to the manufacturer's specifications. [Permit No. 0530021-081-AC]

{Permitting Note: The SNCR system is not required by any regulatory requirement and is voluntarily installed by the permittee. The permittee may use the SNCR as a method to reduce NOx emissions for compliance to the current NOx emission limit. Based on the historically low level of SO_2 emissions, the production of $PM_{2.5}$ due to ammonia slip is minimal. However, the permittee shall use best management practices to limit ammonia slip.}

Emission Limitations and Standards

Unless otherwise specified, the averaging times for **Specific Condition C.6.** are based on the specified averaging time of the applicable test method.

C.6. Emission Limits. Based on a maximum preheater feed rate of 138.0 TPH to kiln No. 1 and 83 TPH of cement clinker produced, the allowable pollutant emissions shall not exceed the following:

Poll. [1]	Unit [2]	Units [3]	Comp. [4]	Basis

		lb/ton-f	lb/hr	TPY	lb/ton-c	lb/Mt-c	ng/dscm TEQ	ppmvd		
PM	KC&M	0.40	49.5	216	---	---	---	---	ST	BACT [5]
	KC&M	---	---	---	Formula [6]	---	---	---	ST(3hr)/ CPMS [7]	LLL
SO_2	KC&M	0.60	50.0	325	---	---	---	---	ST	BACT [5]
NO_X	KC&M	2.9	359.0	1,572	---	---	---	---	ST	BACT [5]
D/F	KM	---	---	---	---	---	0.2@ 7% O_2 [8]	---	ST	LLL
Hg	KM	---	---	---	---	55 [9]	---	---	SBT [10]	LLL
THC	KM	---	---	---	---	---	---	24 @ 7% O_2 [11]	CEMS	LLL
HCl	KM	---	---	---	---	---	---	3 @ 7% O_2 [12]	CEMS [14]	LLL
Opacity	KC&M	10 percent [13]							ST	BACT
Startup Shutdown	K	Work practices per §63.1346(f), No emission limits								
	C	Work practices per §63.1348(b)(9), No emission limits								

1. Pollutant: PM = particulate matter; SO_2 = sulfur dioxide; NO_X = nitrogen oxides; D/F = dioxin and furans; THC = total hydrocarbons; HCl = hydrogen chloride; O_2 = Oxygen. PSD-FL-091K replaces all previous PSD permits and represents latest BACT, NSPS and NESHAP emission limits and compliance methods.
2. Emission subunit: K = kiln; C = clinker cooler; M = raw mill.
3. Units of emission limits: lb/ton-f = pounds per ton of feed; lb/hr = pounds per hour; lb/ton-c = pounds per ton of clinker; lb/Mt-c = pounds per million tons of clinker; ng/dscm TEQ = nanograms per dry standard cubic meter, toxic equivalents; ppmvd = parts per million volume dry.
4. Comp. = method of compliance: ST = annual stack test; CEMS = continuous emission monitor system; SBT = sorbent trap; CMS = continuous monitoring system; CPMS = continuous parametric monitoring system.
5. Original Best Available Control Technology determination (PSD-FL-091 and PSD-FL-091K).
6. Use formula given in 40 CFR 63.1343(b)(2) Equation 1.
7. Per NESHAP Subpart LLL compliance to emission limit by Method 5 or 5i. CPMS used for monitoring operation limit.
8. If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less this limit is changed to 0.40 ng/dscm.
9. The emission limit is based on 30 kiln operating days.
10. Hg CEMS can be used in lieu of sorbent trap to show compliance.
11. Measured as propane. Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP. The emission limit is based on 30 kiln operating days.
12. Pursuant to 40 CFR 63.1350(1)(3), if a source is equipped with a wet or dry scrubber or tray tower, and they choose to monitor SO_2 emissions, SO_2 emissions shall be monitor continuously according to the requirements of 40 CFR 60.63(e) through (f) of part 60, Subpart F. The emissions limit is based on 30 kiln operating days.
13. Meeting the 10 percent opacity (through annual VE testing) requirement for the kiln, raw mill and clinker cooler fulfills BACT requirement. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.
14. Alternatively, SO_2 CEMS can be used as a surrogate for HCl emissions pursuant to 40 CFR 63.1350(l)(3).

[Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.; Permit Nos. 0530021-043-AC/PSD-FL-091K, 0530021-053-AC/PSD-FL-091M, &0530021-056-AC; and 40 CFR 63.1343(b)]

C.7. Sulfur Dioxide - Sulfur Content. The maximum sulfur content of virgin fuel oil and/or the blend of on-specification used oil and purchased fuel oil is 1.5%, by weight, for the purpose of preheating the cement kiln 1. [Permit No. 0530021-043-AC/PSD-FL-091K]

C.8. On-Specification Used Oil. The burning of on-specification used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. *Blending*. The permittee may blend "on-specification" used oil generated at the CEMEX Company's Gregg Mine, the Cement Plant Complex, or purchased on-specification used oil with the purchased new fuel oil, which is to be used only as a startup fuel for preheating the cement Kiln No. 1. "On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279.11 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property	Allowable Level[1]
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash Point	100°F Minimum
Total Halogens	4,000 ppm maximum[2]

Notes:
1. Applicable standards for the burning of used oil containing polychlorinated byphenlys (PCB) are imposed by 40 CFR 761.20(e).
2. The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).
3. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR 266 Subpart H when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

b. *Hazardous Waste.* Permittee agrees that the used oil to be blended and burned at this facility shall not be a hazardous waste as defined in Rule 62-210.200, F.A.C., or 40 CFR 261, and will not include fuels or blended fuels consisting in whole or part of hazardous waste or which include mixtures of any solid waste generated from the treatment, storage, or disposal of hazardous waste, and such burning shall be in compliance with Section 403.769(3), F.S.

[Rule 62-210.200, F.A.C.; 40 CFR 261 and 279.11; and Permit No. 0530021-072-AC]

C.9. Operating Limits for Kilns and In-line Kiln/Raw Mills.

a. *Temperature*. The owner or operator of a kiln subject to a D/F emission limitation under 40 CFR 63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) does not exceed the applicable temperature limit specified in paragraph (b) of 40 CFR 63.1346. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under 40 CFR 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 40 CFR 63.1346 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 40 CFR 63.1346 and established during the performance test when the raw mill was not operating, is not exceeded.

b. *Temperature Limit*. The temperature limit for affected sources meeting the limits of paragraph (a) of 40 CFR 63.1346 is determined in accordance with 40 CFR 63.1349(b)(3)(iv).

[Rule 62-204.800, F.A.C. and 40 CFR 63.1346]

Monitoring of Operations

C.10. Instrument Calibration. Instruments shall be calibrated and maintained to continuously measure the amounts of coal used in the kiln 1, materials fed to the kiln 1, and clinker cooler 1. [Permit No. 0530021-043-AC/PSD-FL-091K]

C.11. Tire-Derived Fuel. The utilization/firing rate of tire-derived fuel (TDF) shall be quantified (weighed) continuously and recorded. [Permit No. 0530021-043-AC/PSD-FL-091K]

C.12. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(8)(b), F.A.C. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.; and 40 CFR 64]

C.13. O&M Plan. The owner or operator of each Portland cement plant shall prepare for each affected source subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The O&M Plan shall also address periods of Startup and Shutdown required by 40 CFR 63.1347(a)(1). The plan shall be available upon request for inspection and copying by the Department. [Rule 62-204.800, F.A.C.; 40 CFR 63.1347(a); and, Permit No. 0530021-043-AC/PSD-FL-091K]

Continuous Monitoring Requirements

C.14. O_2 CEMS. The owner or operator shall calibrate, maintain and operate a continuous emissions monitoring system to measure O_2 emissions in the cement kiln and clinker cooler control device stack. The calibration of the continuous monitoring system shall be in accordance with 40 CFR 60, Appendix B, Performance Specification 3. [Rule 62-297.520, F.A.C.; Permit No. 0530021-043-AC/PSD-FL-091K; and 40 CFR 60, Appendix B]

C.15. THC CEMS. The permittee shall operate a THC CEMS in accordance with the requirements in 40 CFR 63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for the CEMS, the THC span value (as propane) is 50 parts per million by volume, wet (ppmvw) and the reference method (RM) is Method 25A of Appendix A to 40 CFR Part 60. The permittee shall install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8A of Appendix B to 40 CFR Part 60 and comply with all of the requirements for continuous monitoring systems found in the general provisions, Subpart A of 40 CFR 63. The permittee shall operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of Appendix F in 40 CFR Part 60. [Permit No. 0530021-043-AC/PSD-FL-091K; and 40 CFR 63.1349(b)(4)(i) & 63.1350(i)(1)]

C.16. HCl CEMS. The permittee shall operate an HCl CEMS in accordance with the requirements in 40 CFR 63.1350(l). The permittee shall show compliance with the HCl emissions limit by operating an HCl CEMS in accordance with Performance Specification 15 (PS 15) of Appendix B to 40 CFR Part 60, or, upon promulgation, in accordance with any other performance specification for HCl CEMS in appendix B to 40 CFR Part 60. The permittee shall operate, maintain and quality assure an HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of Appendix F to 40 CFR Part 60 except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. If the permittee installs and operates an HCl CEMS in accordance with PS18 performance specification for HCl CEMS in appendix B to 40 CFR Part 60, the permittee must operate, maintain and quality assure the HCl CEMS using the procedure of Appendix F to 40 CFR Part 60 applicable to the performance specification. The permittee shall use Method 321 of Appendix A to 40 CFR Part 63 as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in 40 CFR 63.1350(l)(1)(i) and 63.1350(l) (1)(ii) apply to HCl CEMS other than those installed and certified under PS 15. [Permit No. 0530021-043-AC/PSD-FL-091K and 40 CFR 63.1350(l)(1)]

C.17. Hg CEMS or Sorbent Trap. The permittee shall operate a mercury CEMS (or sorbent trap) in accordance with the requirements of 40 CFR 63.1350(k). The mercury CEMS shall be installed and operated in accordance with Performance Specification 12A (PS 12A) of Appendix B to 40 CFR Part 60 or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B (PS 12B) of appendix B to 40 CFR Part 60. The permittee shall continuously monitor mercury according to 40 CFR 63.1350 (k)(1) through (k)(5). The permittee shall also develop an emissions monitoring plan in accordance with 40 CFR 63.1350 (p)(1) through (p)(4). [Permit No. 0530021-043-AC/PSD-FL-091K and 40 CFR 63.1350(k)]

C.18. D/F Emissions /Temperature Monitoring. The permittee shall operate a continuous monitor for the temperature at the inlet to the in-line kiln/raw mill baghouse in accordance with paragraph (3) of 40 CFR 63.1349(b), paragraphs (1) through (5) of 63.1350(g) and paragraphs (1) through (4) of 40 CFR 63.1350(m) to demonstrate continuous compliance with the D/F emissions standard. An emissions monitoring plan must be developed in accordance with paragraphs (1) through (4) of 40 CFR 63.1350(p). [40 CFR 63.1349(b)(3), 63.1350(g), 63.1350(m) & 63.1350(p)]

C.19. Parametric PM Monitoring. Per 40 CFR 60.63(c) Monitoring of Operations, each kiln or clinker cooler subject to a PM emissions limit in 40 CFR 60.62, the permittee shall demonstrate compliance through an initial performance test. The permittee shall conduct the performance test using EPA Method 5 or Method 5I. The permittee shall also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS). [40 CFR 63.1349(b)(1) and 63.1350(b)]

Test Methods and Procedures

C.20. Test Methods. Required tests shall be performed in accordance with 40 CFR 63 Subpart LLL and the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content.
5	Method for Determining Particulate Matter Emissions.
6 or 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources.
7 or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources.
9	Visual Determination of the Opacity of Emissions from Stationary Sources.
23	Determination of Dioxins/Furans Emissions from Stationary Sources.
25A	Gaseous Organic Concentration (Flame Ionization) - for THC.
29	Determination of Metals Emissions from Stationary Sources (Mercury).
321	Gaseous HCl Emissions at Portland Cement Kilns by FTIR.
ASTM D6784-02	Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method).
ASTM D2622-92, ASTM D4294-90 or both ASTM D4057-88 & ASTM D129-91	Determination of Sulfur Content. *
ASTM D93	Determination of Flash Point. *
ASTM E442	Determination of Total Halogens. *

Method	Description of Method and Comments
SW-846 (3040-7130)	Determination of Arsenic, Cadmium, Chromium and Lead from On-Specification Used Oil. *

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 & 62-297.310(8), F.A.C., Permit No. 0530021-043-AC/PSD-FL-091K; and 40 CFR 63.1349]

*{*Permitting Note: These methods refer to 40 CFR 279 material testing requirements.}*

C.21. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

C.22. Annual Stack Testing (PM, NO_X, SO_2, and VE). During each calendar year (January 1st to December 31st), the permittee shall conduct emission tests on the main stack for PM, NO_X, and SO_2 at 90 percent of production capacity or greater. Annual VE test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310(8), F.A.C.; and NESHAP Subpart LLL; and Permit Nos. 0530021-043-AC/PSD-FL-091K & 0530021-056-AC]

{Permitting Note: The VE test duration shall be 30 minutes since the kiln does not have a multi-valued opacity standard.}

C.23. Performance Testing.

a. The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate compliance with the emission standards and operating limits (See **Specific Condition C.6**) by using the test methods and procedures in 40 CFR 63.1349(b) and 40 CFR 63.7. Performance test results shall be documented in complete test reports that contain the information required by 40 CFR 63.1349(a)(1) through (a)(10), as well as all other relevant information. The plan to be followed during testing shall be made available to the Department prior to testing, if requested.

b. Performance tests to demonstrate compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified in 40 CFR 63.1349(b)(1) through (b)(3).

c. Except as provided in 40 CFR 63.1348(b), performance tests are required at regular intervals for affected sources that are subject to a D/F, organic HAP or HCl emissions limit.

d. Performance tests required every 30 months shall be completed no more than 31 calendar months after the previous performance test except where that specific pollutant is monitored using CEMS; performance tests required every 12 months shall be completed no more than 13 calendar months after the previous performance test.

[Rules 62-204.800 and 62-297.310(8)(a)4., F.A.C.; and 40 CFR 63.1348(a), 40 CFR 63.1349(a), (b)(1)(i), (ii), (iii) & (v), (b)(3)(i), (ii), (iii) & (iv), (c), &, (e)]

{Permitting Note: D/F & HCl testing is at 30-month interval. CMS annual auditing interval is calendar year and not every 13 months.}

C.24. On-Specification Used Oil Analysis:

a. *Fuel Specifications*. Compliance with the on-specification used oil fuel specifications in **Condition C.8.** shall be demonstrated by a fuel analysis or certified by fuel supplier.

b. *Sulfur Content*. Compliance with the fuel sulfur content of the blend of on-specification used oil and purchased on-specification used oil with the purchased new fuel oil shall be demonstrated by a certified

ASTM fuel oil analysis or certified by fuel supplier. Only the ASTM test methods as specified in **Specific Condition C.20** may be used if conducting fuel analysis.

c. *Records*. Records shall be retained for at least 5-years and made available to the Department upon request.
[Rule 62-213.440(1)(b)2, F.A.C.; 40 CFR 279.72(a); and Permit No. 0530021-072-AC]

C.25. D/F Compliance Tests. D/F compliance testing in the RMD and raw mill up (RMU) modes of operation shall be conducted once every 30-months in frequency as required by NESHAP Subpart LLL 40 CFR 63.1349. [Rule 62-204.800(11)(b), F.A.C.; Permit No. 0530021-084-AC/PSD-FL-091N; and, 40 CFR 63.1349].

Recordkeeping and Reporting Requirements

C.26. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice and Reporting of Malfunctions	Notice per occurrence; report quarterly on demand.	**C.27., C.33., C.34.**
Used Oil Analysis	Quarterly.	**C.30.**

[Rule 62-213.440, F.A.C.]

C.27. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

C.28. Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

C.29. Fuel Usage Records. The records of fuel usage with the fuel analysis and the daily production rates (including clinker production rate) and kiln feed rates shall be recorded. [Permit No. 0530021-043-AC/PSD-FL-091K]

C.30. Tire-Derived Fuel. The quantity of all deliveries of TDF shall be documented and kept on record/file. [Permit No. 0530021-043-AC/PSD-FL-091K]

C.31. On-specification Used Oil. The results of each sample analysis shall be submitted to the Compliance Authority with the quarterly report. The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the cement kilns storage tank shall be reported quarterly (i.e., Jan.-Mar., April-June, July-Sept., and Oct.-Dec.) during the month following the ending quarter. [Permit No. 0530021-043-AC/PSD-FL-091K]

C.32. Kiln No. 1 Operational Data. The owner or operator shall keep records of all periods of operation of Kiln No. 1. The records shall show each time that the raw mill was taken out of service or put back in service. [Permit No. 0530021-084-AC/PSD-FL-091N]

C.33. Test Notification. The notification provisions of 40 CFR 63, Subpart A are applicable. The owner or operator may send EPA a copy of the notice sent to the Department to satisfy the requirements of 40 CFR 63.1353 for that notification. Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9. The owner or operator shall notify the Compliance Authority in writing prior to any required tests in accordance with this permit, 40 CFR 63 Subpart LLL, and the Department consent order (OGC File No. 09-0690) in effect for this emission unit. [Rules 62-204.800, and 62-213.440, F.A.C.; and 40 CFR 63.1353(a) and (b)(1) - (6)].

C.34. Reporting Requirements. The reporting provisions of 40 CFR 63, Subpart A are applicable as defined in 40 CFR 63.1354 (see Table 1 to Subpart LLL). The owner or operator may send EPA a copy of the report sent to the Department to satisfy the requirements of 40 CFR 63.1354 for that report. The owner or operator of an affected source shall comply with the applicable reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354]

C.35. Recordkeeping Requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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. The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3). In addition: (1) all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9; (2) all records of applicability determination, including supporting analyses; and (3) if the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. [Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

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Subsection D. Brooksville Portland Cement Line 2 – In-Line Cement Kiln 2, Pre-Heater, Pre-Calciner and Clinker Cooler 2

The specific conditions in this section apply to the following emissions unit:

EU ID No.	Baghouse ID No.	Brief Description
044	331.BF300	In-Line Cement Kiln 2, Pre-heater, Pre-Calciner and Clinker Cooler (Pyroprocessing System)

Portland Cement Line 2 is designed for 156 TPH of cement clinker production. This clinker is ground with calcium sulfate (gypsum) to produce Portland cement at the rate of 240 TPH. The in-line kiln/raw mill and clinker cooler vent through a single baghouse system into the ambient air. 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. The kiln is allowed to fire coal, petroleum coke, natural gas, flyash, propane, distillate fuel oil, on-specification oil, whole tires and alternative fuels. NO_X emissions are controlled by the use of Selective Non-Catalytic Reduction (SNCR) technology. SO_2 emissions are controlled by use of low sulfur raw materials and inherent scrubbing by finely divided lime in the calciner and limestone in the raw mill. CO and VOC emissions are controlled by promoting complete combustion in the kiln and calciner and minimizing carbon and oily content of raw materials. PM/PM_{10} from the pyroprocessing system and the clinker cooler is controlled by a large fabric filter baghouse. Mercury emissions are controlled by material balance, dust transfer, and/or activated carbon injection. Continuous emissions monitors are operated for PM (via CPMS), Hg, NO_X, SO_2, CO_2, THC and O_2. Line 2 commenced operation on November 29, 2008. The stack characteristics for this unit are: Stack Height = 318 feet, Exit Diameter = 10.1 feet, Volumetric Flow Rate = 330,000 acfm and Exit Temperature = 250° F.

{Permitting Note: This emissions unit is subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry, adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart A – General Provisions. This emissions unit is also subject to the requirements of the state rules, particularly Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. These units may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C., and Permit No. 0530021-044-AC/PSD-FL-351E]

D.2. Allowable Fuels.

a. Fuels fired in the pyroprocessing system (kiln and calciner) shall consist only of natural gas, coal, distillate oil, petroleum coke, flyash, on-spec oil, whole tires, and alternative fuels. Propane may be fired and shall not exceed a maximum hourly rate of 5,200 gallons/hr.

b. Whole tires may be fired directly in the pyroprocessing system. Whole tires shall be fed into the kiln system near the hot side using a TIM near where the clinker exits the kiln or at the transition section between the base of the precalciner and the point where gases exit the kiln or anywhere in the calciner. The tire feeder mechanisms at the upper end near where the fed from the calciner enters the kiln and at the locations in the calciner shall be designed with a double airlock.

[Rule 62-210.200 (PTE), F.A.C., and Permit No. 0530021-044-AC/PSD-FL-351E]

D.3. Fuels and Materials Not Allowed. The owner or operator shall not introduce hazardous wastes, petroleum contaminated soil or materials, used oil, oil fuels, or solid fuels. Only those fuels allowed by this permit including the alternative fuels described below can be used. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.4. Process Rate Limitations. The kiln shall not produce more than 156 tons of clinker per hour, and 3,500 tons in any 24-hr period (146 tons per hour, 24-hour average). Production shall be further limited to 1,277,500 tons of clinker in any consecutive 12-month period (3,500 tons/day).

The clinker production rate identified in the above paragraph shall be determined by the following equation:

Clinker Production = [(Feed)(Kiln Feed LOI Factor) + (Fly Ash Injection)(Fly Ash LOI Factor)]

Where:

- Fly ash is determined from the rotary feed system or equivalent.
- Loss-on-ignition (LOI) for the kiln feed and fly ash is based on a monthly average determined from daily measurements.

[Rule 62-210.200 (PTE), F.A.C., and Permit No. 0530021-044-AC/PSD-FL-351E]

D.5. Cement Kiln Dust. Cement kiln dust shall be recirculated in the process and shall not be directly discharged from process or emission control equipment unless authorized by the Department. Cement kiln dust removed from process equipment during maintenance and repair shall be confined and controlled at all times and shall be managed in accordance with the applicable provisions of 40 CFR 261. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.6. Whole Tire Management. Tires and tire derived fuel shall be stored, handled and managed in accordance with the provisions of Chapter 62-711, F.A.C. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.7 Performance Testing.

a. If the source plans to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under 40 CFR 63, Subpart LLL, the source must conduct a performance test as specified in 40 CFR 63.1349(b).

b. In preparation for and while conducting a performance test required in 40 CFR 63.1349(b), the permittee may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the following conditions are met. The permittee shall submit temperature and other monitoring data that are recorded during the pretest operations.

(1) The permittee shall provide the Department written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under 40 CFR 63, Subpart LLL for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must 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 (a) of this condition, including when the planned operational change period would begin.

(2) The performance test results must be documented in a test report according to 40 CFR 63.1349(a).

(3) A test plan must be made available to the Department prior to performance testing, if requested.

(4) The performance test must be completed within 360 hours after the planned operational change period begins.

[40 CFR 63.1348(c).]

Use of Alternative Fuels

D.7. Equipment. The permittee is authorized operate the following permanent equipment for firing alternative fuels (AF) in the pyroprocessing kiln system.

a. *Mechanical and Pneumatic Handling and Feed Systems*. Each feed system shall be designed to handle alternative fuels with multiple points of injection to accommodate various AF particle size, density and heating value. The nominal feed rate of each feed system is 15 tons of AF per hour.

(1) The mechanical feed system(s) shall consist of mechanical feeder(s), weighing mechanism(s), load hopper(s) with required conveyors, storage bins, and other associated equipment.

(2) The pneumatic feed systems shall consist of a system of mechanical feeder(s) and associated system of air movement equipment and related ductwork, weighing mechanism(s), loading hopper(s) with required conveyors, storage bins, and other associated equipment.

b. *Kiln Burner, AF Handling and Firing Systems*. The permittee is authorized to replace the current kiln burner system with a multi-channel fuel burner(s) and/or other related feed equipment specifically designed for co-firing AF with authorized fuels in the kiln.

c. *Feed Systems*. To the extent practicable, components of the feed systems shall be substantially enclosed or covered to prevent the loss of any AF and fugitive dust emissions. Each feed system shall be integrated into the existing kiln data system. The AF feed rate shall be recorded along with the other fuel feed rates.

d. *Fuel Preparation Equipment*. The permittee is authorized to install grinding, shredding, screening, and sizing equipment to prepare the AF. This equipment will be powered by electric motors or diesel engines. In addition, the diesel engines shall comply with any applicable NSPS or NESHAP standards.

[Permit No. 0530021-039-AC]

D.8. AF Prohibited Materials. The permittee is prohibited from firing the following materials in the pyroprocessing system: hazardous waste as defined in 40 CFR 261, nuclear waste, and radioactive waste. The permittee shall not knowingly fire biomedical waste, asbestos-containing materials per 40 CFR 61 Subpart M, whole batteries, and unsorted municipal waste. These prohibited materials shall not be used to manufacture engineered fuels.

If the permittee identifies delivered prohibited materials, the supplier shall be contacted and the material shall be returned, disposed, or any other appropriate legal method of handling the material shall be employed. The permittee shall maintain records of delivery, sampling and analysis, and actions taken to correct abnormalities. Such records shall be stored onsite for at least five years and available for inspection upon request.

[Rule 62-296.320, F.A.C and Permit No. 0530021-039-AC]

D.9. AF. Subject to the AF Acceptance Criteria, the permittee is authorized to co-fire authorized fuels with any of the following AF.

a. *Tire-Derived Fuel (TDF)*, which includes whole and shredded tires with or without steel belt material including portions of tires such as tire fluff. The kiln is currently permitted to use whole tires using the existing tire injection mechanism system.

b. *Plastics*, which includes materials such as polyethylene plastic used in agricultural and silvicultural operations. This may include incidental amounts of chlorinated plastics.

c. *Roofing Materials*, which consists of roofing shingles and related roofing materials with the bulk of the incombustible grit material separated and which is not subject to regulations as an asbestos-containing material per 40 CFR 61 subpart M.

d. *Agricultural Biogenic Materials*, which includes materials such as peanut hulls, rice hulls, corn husks, citrus peels, cotton gin byproducts, animal bedding and other similar types of materials.

e. *Cellulosic Biomass - Untreated*, which includes materials such as untreated lumber, tree stumps, tree limbs, slash, bark, sawdust, sander dust, wood chips scraps, wood scraps, wood slabs, wood millings, wood shavings and processed pellets made from wood or other forest residues.

f. *Cellulosic Biomass - Treated*, which includes preservative-treated wood that may contain treatments such as creosote, copper-chromium-arsenic (CCA), or alkaline copper quaternary (ACQ), painted wood, or resinated woods (plywood, particle board, medium density fiberboard, oriented strand board, laminated beams, finger-jointed trim and other sheet goods). The permittee shall not fire more than 1,000 lb/hour averaged on a 7-day block average basis of segregated streams of wood treated with copper-chromium-arsenic (CCA) compounds.

g. *Carpet-Derived Fuel*, which includes shredded new, reject or used carpet materials.

h. *Alternative Fuel Mix*, which includes a blended combination of two or more of any of the above materials.

i. *Biosolids*, which includes organic materials sanitized to meet EPA Class A sanitization standards and is derived from treatment processes of public treatment water systems.

j. *Engineered Fuel (EF)* is engineered to have targeted, consistent fuel properties such as: calorific value, moisture, particle size, ash content, and volatility. The specific targeted properties are established based on available alternative fuel material supply and are carefully controlled through blending of non-hazardous combustible materials or through separation of non-hazardous incombustible materials from combustible materials (mixes of any alternative fuels where the blending and processing may also include the addition of on-specification used oils or other non-hazardous liquids to ensure consistent and predictable fuel properties). EF is engineered largely from the above materials and could consist of animal meal, automotive manufacturing byproducts, clean-up debris from natural disasters, processed municipal solid waste, dried/sanitized biosolids, paint filter cake, hospital materials (non-infectious), pharmaceuticals (expired prescriptions), cosmetics, and confiscated narcotics.

[Rule 62-210.200(PTE), F.A.C. and Permit No. 0530021-039-AC]

D.10. Receiving AF. For AF received at the plant, the permittee shall comply with the following requirements:

a. All AF materials received at the plant shall be in covered trucks and/or enclosed containers. When unloading and handing AF, the permittee shall take reasonable precautions to prevent fugitive dust emissions.

b. The permittee shall record the amount the category/type and amount of each AF received.

c. Each AF material received shall be sampled and analyzed in a manner consistently with industry standards for quality assurance and quality control to ensure that representative data is collected. The permittee shall obtain the analytical results of a representative sample of the AF prior to the initial delivery, quarterly for the first year, and if the analysis meets permit requirements the frequency of sampling and analysis shall be annual every January thereafter, if that material is present. All records and results of the analysis will be maintained at the facility as required for currently permitted fuels.

d. Fuel Analyses Parameters: The following information shall be included when reporting the analytical results for an AF: higher heating value (Btu/lb) of AF; moisture, ash, volatiles, fixed carbon, sulfur and chlorine content (percent by weight); arsenic, beryllium, cadmium, chromium, lead, and mercury contents (ppm). All concentrations are on a dry basis. Reject roofing shingles, combusted separately as item **D.9.c.** (Roofing Materials) and if included in item **D.9.j** (Engineered Fuel) shall include a certification from the manufacturer to be made without asbestos.

[Rule 62-296.320, F.A.C and Permit No. 0530021-039-AC]

D.11. Processed/Prepared AF. The AF shall be stored:

a. Under cover or in covered trailers, containers or buildings;

b. On top of a paved or compacted clay surface; and

c. By Best Management Practices to promote containment and prevent contamination of air, water and soil.

[Rule 62-296.320, F.A.C. and Permit No. 0530021-039-AC]

D.12. On-Specification Used Oil.

a. *Records*: The quantity of used oil accepted and the date of acceptance.

b. *Retention of Records*: All records shall be maintained for at least 3 years.

The on-specification used oil shall not exceed the following allowable levels and specifications.

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 °F minimum
Total halogens	4,000 ppm maximum

1. Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).
2. The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).
3. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR 266 subpart H when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

[40 CFR 279 Subpart B]

D.13. Off-Specification Used Oil. The off-specification used oil shall meet the requirements of 40 CFR 279 Subpart G including the following:

a. *Total Halogen Content*: The total halogen content shall be below 1,000 ppm.

b. *Records*: The quantity of used oil accepted and the date of acceptance.

c. *Retention of Records*: All records shall be maintained for at least 3 years.

[40 CFR 279 Subpart G]

D.14. Shakedown of Equipment and AF Assessments. The permittee shall comply with the emissions standards and terms of all valid air permits during shakedown of the equipment allowed under **Specific Condition D.8** and AF assessments.

a. *Equipment Shakedown*. After completing the construction of each system listed in **Specific Condition D.8**, the permittee is authorized 90 operational days irrespective of fuel fired to ensure proper installation as well as develop good operating practices for the AF resulting in steady operation of the kiln system.

b. *AF Assessments*. For each category of AF, the permittee is authorized 60 operational days to introduce new AF into either the main kiln burner system or the precalciner/calciner to develop good operating practices for normal kiln system operation.

The Division of Air Resource Management may approve a written request by the permittee for an additional shakedown and assessment periods due to specific extenuating circumstances.

[Permit No. 0530021-039-AC]

D.15. AF Operation. Alternative fuels shall only be fired once the kiln has achieved normal operation, temperatures and production (i.e., when raw materials are introduced).

a. AF shall be introduced only in the high-temperature combustion zones of the main kiln burner, the precalciner burner or appropriate secondary firing points in the precalciner/preheater.

b. The Permittee shall make every effort during the shakedown and assessment periods to promote efficient combustion and minimize emissions impacts.

c. Operators shall discontinue firing AF if one of the CEMS, PM-CPMS, or other continuous monitors indicates a non-compliance issue related to alternative fuels.

[Rule 62-204.800, F.A.C.; Permit Nos. 0530021-039-AC & 0530021-056-AC; 40 CFR 60 Appendix A; and 40 CFR 63.1349, 1350 & 1354

D.16. Compliance Stack Tests. The required stack tests for PM and D/F shall be conducted while firing an AF that has completed the AF assessment period. [Permit No. 0530021-039-AC]

{Permitting note: These emissions are not expected to be affected by alternative fuels.}

D.17. Sampling Criteria. Each AF material received shall be sampled and analyzed in a manner consistent with industry standards for quality assurance and quality control to ensure that representative data is collected. At a minimum, the frequency of sampling and analysis shall be consistent with the frequency of sampling and analysis of coal. All records and results of the analysis shall be maintained at the facility as required for currently permitted fuels. [Permit No. 0530021-039-AC]

D.18. AF Assessment and Analytical Methods. The permittee shall use the following analytical methods to determine the composition of the AF:

Parameter	Analytical Methods
Moisture, Volatiles, Ash and Fixed Carbon	Proximate Analysis appropriate for given fuel
Carbon, Hydrogen, Nitrogen Sulfur and Oxygen	Ultimate Analysis appropriate for given fuel
Heating Value	ASTM E711 - 87(2004) Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, or ASTM D5468 - 02(2007) Standard Test Method for Gross Calorific and Ash Value of Waste Materials, or Proximate Analysis appropriate for given fuel
Chlorine	EPA SW-846 or EPA Method 9056
Mercury	EPA 7470A/7471A
Other Metals	EPA SW-846 or EPA Method 6010B

Other equivalent methods may be used with prior written approval of the Division of Air Resource Management.

[Permit No. 0530021-039-AC]

D.19. Sampling/Analysis by Permittee. For each AF assessment, the permittee shall obtain analytical results of the AF as required in **Specific Condition D.11**, the operator shall take a representative as-fired sample of the AF and have it analyzed for the parameters listed in **Specific Condition D.10.d**. [Permit No. 0530021-039-AC]

D.20. AF Target Levels. Targets levels are the desired AF properties for as-fired fuel in the system. Target Levels are not enforceable.

Parameter	Target Levels [a]
Higher Heating Value	> 5,000 Btu/lb
Arsenic	< 2,000 ppm by weight

Parameter	Target Levels [a]
Beryllium	< 20 ppm by weight
Cadmium	< 200 ppm by weight
Chromium	< 200 ppmw (mg/kg)
Lead	< 1,000 ppmw (mg/kg)
Mercury	< 0.3 ppm by weight

a. Heating value is on dry basis. All concentrations are dry basis. Target levels are based on USGS data of coal samples, (http://pubs.usgs.gov/of/2010/11961)

[Permit No. 0530021-039-AC]

{Permitting Note: Title V permitting requires all fuel materials be analyzed for mercury content to determine compliance with an input limit of 122 pounds of mercury per 12-month period.}

D.21. Shakedown Notifications. Within fifteen days of completing construction, the permittee shall notify the Compliance Authority and provide a schedule for shakedown and the initial AF assessment. The Compliance Authority may waive this deadline. [Permit No. 0530021-039-AC]

D.22. AF Assessment Notifications. At least five days prior to firing each new type of AF material listed in Specific Condition 4, the permittee shall notify the Compliance Authority with a proposed schedule. The Compliance Authority may waive this deadline. [Permit No. 0530021-039-AC]

D.23. Records of Fuels and Heat Input. The permittee shall record the fuel-firing rate continuously. The permittee shall maintain records of the quantity and representative analysis of fuels purchased, and such records shall include the parameters listed in **Specific Condition D.19**. The permittee shall make and maintain records of heat input to the pyroprocessing system on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel-firing rate by the heating value representative of that fuel from the records of fuel analysis. Such records shall be completed for each block-hour, within 15 minutes of the end of each block-hour. [Permit No. 0530021-018-AC/PSD-FL-351C, Specific Condition A.24.]

D.24. Reports for Shakedown and AF Assessments. During periods of authorized shakedowns and AF assessments, the permittee shall document the shakedown and/or AF assessment period. These periods may end early when the operator is confident that good operating practices have been defined for the AF that result in steady kiln system operation. Within 45 days of completing a shakedown and/or assessment of each AF material listed in **Specific Condition D.10**, the permittee shall provide a written report summarizing the following information collected from the shakedown and/or AF assessment period.

a. For a 24-hour period representing good operating practices and steady kiln operation, report: the representative analysis of the AF fired; hourly AF and fossil fuel firing rates; hourly clinker production; hourly CO, NO_X, SO_2 and THC emissions data from the CEMS; the 6-minute block averages from the CMS; and the inlet temperature to main kiln baghouse (3-hour average). Identify the good operating practices resulting in steady kiln operation.

b. The AF assessments may occur over several years. Emissions from the initial AF assessment of a new fuel may be excluded from the report requiring a comparison of actual-to-baseline emissions (Rules 62-212.300(1)(e) and 62-210.370, F.A.C.) since operators are still establishing good operating practices and the AF will not have been available for the full calendar year. To exclude emissions data collected during an authorized shakedown and/or AF assessment period from this report, the permittee shall submit the following information for: total clinker production; fossil fuel fired; AF fired; total CO, NO_X, SO_2 and THC emissions (tons). Excluded data shall be replaced with data estimated from: the

actual clinker production rate; and an emissions factor based on the average emission rates from the rest of the year (i.e., all periods except the shakedown and/or AF assessment periods).

[Permit No. 0530021-039-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for **Specific Conditions D.29** are based on the specified averaging times of the applicable test method.

{Permitting Note: The emission limits for particulate matter and visible emissions imposed by Rule 62-212.400 and BACT are as stringent or more stringent than the limits imposed by the applicable NSPS or NESHAP rules. However, the BACT requirements do not waive or vary any monitoring or record keeping requirements of the NSPS and NESHAP rules.}

D.25. Emissions Limits. Emissions unit 044 has one emission point, the stack of the Kiln #2. Emissions from this unit shall not exceed the following:

Poll. [1]	Unit [2]	Units [3]						Method of Comp. [4]	Basis
		lb/ton-f	lb/hr	lb/ton-c	lb/Mt-c	ng/dscm TEQ	ppmvd		
PM	KC&M	0.112	28.8	0.185	---	---	---	ST (3 hr) [5]	BACT [6]
	KC&M	---	---	Formula [7]	---	---	---	ST (3 hr)/ CPMS [8]	LLL
PM_{10}	KC&M	0.097	25.0	0.160				ST (3 hr) [5]	BACT [6]
SO_2	KC&M	---	28.8	0.185	---	---	---	CEMS (24 hr) [9]	BACT [6]
NO_X	KC&M	---	227	1.56	---	---	---	CEMS (30 day) [10]	BACT [6]
CO	KC&M	---	450.0	2.88	---	---	---	CEMS (24 hr) [11]	BACT [6]
VOC	KC&M	---	15.0	0.096	---	---	---	CEMS (30 day) [12]	BACT [6]
D/F	KM	---	---	---	---	0.2 @ 7% O_2 [13]	---	ST	LLL
Hg	KM	---	---	---	55 @ 7% O_2 [14]	---	---	SBT or CEMS [15]	LLL
		122 lb/yr						Annual	Avoid PSD [16]
THC	KM	---	---	---	---	---	24 @ 7% O_2 [17]	CEMS	LLL
HCl	KM	---	---	---	---	---	3 @ 7% O_2 [18]	CEMS [23]	LLL
Opacity	KC&M	10 percent [19]						ST	BACT [6]

1. Pollutant: PM = particulate matter; PM10 = PM with a mean diameter of 10 micron or less; SO_2 = sulfur dioxide; NO_X = nitrogen oxide; CO = carbon monoxide; VOC = volatile organic compounds; D/F = dioxin and furans; Hg = mercury; THC = total hydrocarbons; and HCl = hydrogen chloride. PSD-FL-351E replaces all previous PSD permits and represents latest BACT, NSPS and NESHAP emission limits and compliance methods.
2. Emission subunit: K = kiln; C = clinker cooler; and M = raw mill.
3. Units of emission limits: lb/ton-f = pounds per ton of preheater feed; lb/hr = pounds per hour; lb/ton-c = pounds per ton of clinker; lb/Mt-c = pounds per million tons of clinker; ng/dscm TEQ = nanograms per dry standard cubic meter, toxic equivalents; ppmvd = parts per million volume dry.
4. Comp. = method of compliance: ST = annual stack test; CEMS = continuous emission monitor system; SBT = sorbent trap; CMS = continuous monitoring system; CPMS = continuous parametric monitoring system.

5. The averaging time for PM and PM_{10} correspond to the required length of sampling for initial and subsequent emission stack tests.
6. Best Available Control Technology determination (PSD-FL-351 and PSD-FL-351E).
7. Use the formula given in 40 CFR 63.1343(b)(2) Equation 1.
8. NESHAP Subpart LLL compliance to emission limit shall be demonstrated by Method 5 or 5i and CPMS.
9. The averaging time for SO_2 shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours of validated monitoring data.
10. NO_X emissions shall not exceed 227 lbs/hr (30-day rolling average) or 1.56 pounds per ton of clinker.
11. The averaging time for CO shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.
12. The averaging time for VOC shall be a 30-day block average.
13. If the average temperature at the inlet to the first PM control device during the D/F performance test is 400 °F or less this limit is changed to 0.40 ng/dscm.
14. The emission limit is based on 30 kiln operating days.
15. Hg CEMS can be used in lieu of sorbent trap CEMS to show compliance.
16. Yearly limit to stay below Florida PSD threshold for Hg of 200 lb/yr.
17. Measured as propane. Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP. The emission limit is based on 30 kiln operating days.
18. Pursuant to NESHAP Subpart LLL, §63.1350(l)(3), if the source is equipped with a wet or dry scrubber or tray tower, and the permittee chooses to monitor SO_2 emissions, monitor SO_2 emissions continuously according to the requirements of § 60.63(e) through (f) of part 60 subpart F. The emission limit is based on 30 kiln operating days.
19. Meeting the 10 percent opacity (through annual VE testing) requirement for the kiln, raw mill and clinker cooler fulfills BACT requirements. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.
20. Alternatively, SO2 CMS can be used as a surrogate for HCl emissions pursuant to NESHAP Subpart LLL of 40 CFR 63.1350(l)(3)

[Rules 62-4.160(2), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.; Permit Nos. 0530021-044-AC/PSD-FL-351E, 0530021-052-AC/PSD-FL-351F, & 0530021-056-AC; and 40 CFR 63.1343(b)]

D.26. Mercury (Hg) into the Pyroprocessing System Limited. The total mass of mercury compounds introduced into the pyroprocessing system, expressed as Hg, in raw mill feed and fuels shall not exceed 122 pounds in any consecutive 12-month period. [Permit No. 0530021-044-AC/PSD-FL-351E]

Excess Emissions

D.27. Malfunction of the SNCR System. Malfunction of the SNCR System is defined as any unavoidable mechanical and/or electrical failure that prevents introduction of ammonia based solutions into the kiln system. In accordance with the limits in **Specific Condition D.26**, the exclusion of NO_X data collected during periods of malfunction and/or repair of the SNCR system is allowed when demonstrating compliance with the 30-day NO_X standard. No more than 6 hours per calendar day and no more than 30 hours in any 30-day operating block may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Southwest District of any malfunction of the SNCR system. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.28. Data Exclusion for CO. In accordance with the limits in **Specific Condition D.26.**, the exclusion of CO data collected during periods of startup, shutdown, and malfunction of the kiln system is allowed when demonstrating compliance with the 24-hour lb/ton CO standard after the initial 180-day period after initial startup. No more than 7 hours per calendar day and no more than 28 hours in any calendar month may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Southwest District of any startup, shutdown, or malfunction of the system which an exclusion of data will occur. [Permit No. 0530021-044-AC/PSD-FL-351E]

Monitoring of Operations

D.29. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does

not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.; and 40 CFR 64.]

D.30. O&M Plan for Baghouses. The owner or operator shall have on file an operation and maintenance plan (O&M plan). The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. [Permit No. 0530021-044-AC/PSD-FL-351E]

Continuous Monitoring Requirements

D.31. NO_X, SO_2, CO, CO_2 and VOC CEMS. The owner or operator shall install, calibrate, maintain, and operate CEMS in the in-line kiln/raw mill stack to measure and record the emissions of NO_X, SO_2, CO, CO_2 and VOC from the in-line kiln/raw mill, in a manner sufficient to demonstrate compliance with the emission limits given in **Specific Condition D.26.** Compliance with the emission limit for NO_X shall be based on a 30-day calendar rolling average that shall be recomputed daily from the individual hourly averages. Compliance with the emission limits for SO_2 and CO shall be based on a rolling 24-hour average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours. 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 a minimum of one measurement every minute. The CEMS system shall express the results in units of pounds per ton of clinker produced, and pounds per hour.

The selection, installation, calibration, maintenance, operation, record keeping, and reporting of the CEMS shall comply with the requirements of 40 CFR 60.7 and 60.13; 40 CFR 60 Appendix B, Performance Specifications; and, Appendix F, Quality Assurance Procedures.

Permittee may demonstrate by an annual Method 25A test, the fraction of THC that is methane and/or ethane. The methane/ethane fraction determined by this annual Method 25A test can then be subtracted from the THC CEMS data to demonstrate compliance with the VOC BACT limit.

[Rule 62-210.800 F.A.C., & BACT; Permit No. 0530021-044-AC/PSD-FL-351E; and 17-M-AP]

{Permitting Note: The "30-day rolling average NO_X emission rate" is the arithmetic average of all valid hourly NO_X emission data measured by the continuous emission monitoring equipment (converted to lb/ton of clinker and lb/hr) for a given operating day and the twenty-nine unit operating days immediately preceding that unit operating day. Pursuant to 40 CFR 60, Subpart F, an operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating. A new 30-day average is calculated each unit operating day as the average of all hourly NO_X emissions rates for the preceding 30 unit operating days if a valid NO_X emission rate is obtained for at least 75 percent of all operating hours. Zero emissions from non-unit operating days shall not be included in the averaging period in order to show compliance with the emissions limits.}

D.32. THC CEMS. The permittee shall operate a THC CEMS in accordance with the requirements in §63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for the CEMS, the THC span value (as propane) is 50 ppmvw and the reference method (RM) is Method 25A of appendix A to 40 CFR Part 60. The permittee shall install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8A of appendix B to 40 CFR Part 60 and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A. The permittee shall operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in 40 CFR Part 60. [40 CFR 63.1349(b)(4)(i), 63.1350(i)(1); and Permit No. 0530021-044-AC/PSD-FL-351E]

D.33. HCl CEMS. The permittee shall operate an HCl CEMS in accordance with the requirements in §63.1350(l). The permittee shall show compliance with the HCl emissions limit by operating an HCl CEMS in accordance with Performance Specification 15 (PS 15) of appendix B to 40 CFR Part 60, or, upon promulgation, in accordance with any other performance specification for HCl CEMS in appendix B to 40 CFR Part 60. The permittee shall operate, maintain and quality assure an HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of appendix F to 40 CFR Part 60 except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. If the permittee installs and operates an HCl CEMS in accordance with PS18 performance specification for HCl CEMS in appendix B to 40 CFR Part 60, the permittee must operate, maintain and quality assure the HCl CEMS using the procedure of appendix F to 40 CFR Part 60 applicable to the performance specification. The permittee shall use Method 321 of appendix A to 40 CFR Part 63 as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs 40 CFR 63.1350(l)(1)(i) and 40 CFR 63.1350(l) (1)(ii) apply to HCl CEMS other than those installed and certified under PS 15. [40 CFR 631350(l)(1); and Permit No. 0530021-044-AC/PSD-FL-351E]

D.34. Hg CEMS or Sorbent Trap. The permittee must operate a mercury CEMS or sorbent trap EMS in accordance with the requirements of §63.1350(k). The mercury CEMS shall be installed and operated in accordance with Performance Specification 12A (PS 12A) of appendix B to 40 CFR Part 60 or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B (PS 12B) of appendix B to 40 CFR Part 60. The permittee shall continuously monitor mercury according to paragraphs 40 CFR 63.1350 (k)(1) through (k)(5). The permittee shall also develop an emissions monitoring plan in accordance with paragraphs 40 CFR 63.1350 (p)(1) through (p)(4). [40 CFR 631350(k); and Permit No. 0530021-044-AC/PSD-FL-351E]

D.35. Temperature Monitor. A continuous monitor for the temperature at the inlet to the in-line kiln/raw mill baghouse is required pursuant to 40 CFR 63.1349(b)(3) and 63.1350(g). [40 CFR 63.1349(b)(3) and 63.1350(g); and Permit No. 0530021-044-AC/PSD-FL-351E]

D.36. Parametric PM Monitoring. Per 40 CFR 60.63(c) Monitoring of Operations, each kiln or clinker cooler subject to a PM emissions limit in 40 CFR 60.62, the permittee shall demonstrate compliance through an initial performance test. The permittee shall conduct the performance test using EPA Method 5 or Method 5I. The permittee shall also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS). [NESHAP 40 CFR 63.1349(b)(1) and 63.1350(b); and PSD-FL-351E]

Test Methods and Procedures

D.37. Test Methods. In addition to the continuous monitoring requirements of this permit, the owner or operator shall demonstrate compliance with the emission limits of this permit for emissions unit 044 annually using the test methods of 40 CFR 60 Appendix A specified below. The tests conducted annually for the relative accuracy test audit (RATA) for the CEM system may be used to satisfy this requirement provided the owner or operator satisfies the prior notification requirements and emission testing requirements of this permit for performance and compliance tests. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5*	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM_{10}). The minimum sample volume shall be 30 dry standard cubic feet.

Method	Description of Method and Comments
6 or 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
7 or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10 or 10A	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
23	Dioxin and Furan
25 or 25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
29**	Determination of Metals (Mercury) Emissions from Stationary Sources
321	Gaseous HCl Emissions from Portland Cement Kilns by FTIR
* The minimum sample volume shall be 30 dry standard cubic feet. ** or the Ontario Hydro Method for Subpart LLL Hg Tests	

Each test shall be conducted while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity.

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.310(8), F.A.C; Permit No. 0530021-044-AC/PSD-FL-351E; and 40 CFR 63.1349]

D.38. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

D.39. PM Stack Tests. In addition to the continuous monitoring requirements of this permit, the owner or operator shall demonstrate compliance with the PM/PM_{10} emission limits of **Specific Condition D.26**of this subsection by conduction annual stack tests. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.40. Emissions Tests and Fuel Scenarios. Emission tests of emissions unit 044 were conducted for the pollutants in **Specific Condition D.26** upon initial operation under the fuel scenario representing the highest potential for generating emissions:

PRIMARY FUEL	SECONDARY FUELS
Coal	Whole tires directly into the pyroprocessing system, petroleum coke, and flyash and alternative fuels

Subsequent annual testing under this fuel firing scenario is not required for any firing scenario that is used for less than 400 hours in the previous year, as documented by fuel firing records. If all of the secondary fuels listed above are not available at the time of testing, the tests shall be based on the fuels that are available. If another secondary fuel becomes available in the future, additional tests shall be conducted with that fuel, if such tests are deemed necessary by the Department, before that fuel is used.

[Permit No. 0530021-044-AC/PSD-FL-351E].

D.41. Test Reports. The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR (Facility-Wide Testing Requirements) of this permit. The permittee shall use the most accurate of the approaches below to compute the emissions of a pollutant.

a. If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the permittee shall use the CEMS to compute the emissions of the pollutant.

b. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be calculated using the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the permittee shall use that methodology, unless the permittee demonstrates to the Department that an alternative approach is more accurate.

c. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the permittee shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the permittee demonstrates to the Department that an alternative approach is more accurate.

[Rules 62-210.370 and 62-297.310(8), F.A.C.]

Recordkeeping and Reporting Requirements

D.42. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

D.43. Records of Process and Production Rates. The owner or operator shall make and maintain records of the process rate of dry preheater feed in units of tons per hour and tons per consecutive 12-month period, and the production rate of clinker and cement in units of tons per hour and tons per consecutive 12-month period. The owner or operator shall make and maintain records of the production of Portland cement in units of tons per consecutive 12-month period. Records in units of tons per hour shall be based on either hourly averages or daily averages and shall be completed no later than the day following the day of the record. Records in units of tons per consecutive 12-month period shall be made from monthly records of process and production rates for the past 12 months, and shall be completed no later than the 10th day of each following month. [BACT; and, Permit No. 0530021-044-AC/PSD-FL-351E]

D.44. Records of Fuels and Heat Input. The owner or operator shall record the fuel firing rate continuously. The owner or operator shall maintain records of the quantity and representative analysis of fuels purchased, and such records shall include the sulfur content, and heat content of the fuel for coal, petroleum coke, natural gas, fuel oil, propane, flyash, and whole tires. The records also shall include proximate and ultimate analyses. The owner or operator shall make and maintain records of heat input to the pyroprocessing system on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel firing rate by the heating value representative of that fuel from the records of fuel analysis. Such records shall be completed for each block-hour, within 15 minutes of the end of each block-hour. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.45. Records of Startup, Shutdown and Malfunction. The owner or operator shall make and maintain records of periods of startup, shutdown and malfunction. These records shall show the dates, times and duration of these episodes and shall document suspected cause of each episode, corrective actions taken by the owner or operator and actions taken to reduce excess emissions. [Permit No. 0530021-044-AC/PSD-FL-351E]

D.46. Test Notification. The notification provisions of 40 CFR 63, Subpart A are applicable. The owner or operator may send EPA a copy of the notice sent to the Department to satisfy the requirements of 40 CFR 63.1353 for that notification. Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9. The owner or operator shall notify the Compliance Authority in writing prior to any required tests in accordance with this permit, 40 CFR 63 Subpart LLL. [Rules 62-204.800, and 62-213.440, F.A.C.; and 40 CFR 63.1353(a) and (b)(1) - (6)].

D.47. Reporting Requirements. Reporting Requirements. The reporting provisions of 40 CFR 63, Subpart A are applicable as defined in 40 CFR 63.1354 (see Table 1 to Subpart LLL). The owner or operator may send EPA a copy of the report sent to the Department to satisfy the requirements of 40 CFR 63.1354 for that

report. The owner or operator of an affected source shall comply with the applicable reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A. [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354]

D.48. Recordkeeping Requirements. The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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. The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3). In addition: (1) all documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9; (2) all records of applicability determination, including supporting analyses; and (3) if the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. [Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

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The specific conditions in this section apply to the following emissions units:

Emissions Unit No.	Baghouse ID No.	Emissions unit Description
Raw Mix and Raw Meal Handling and Storage System		
045	331.BF640	Filter Dust Bin
	311.LS609	Filter Dust Bin Loadout Spout
046	341.BF400	Blend Silo
047	351.BF420	Kiln Feed Transport
	341.BF410	Blend Silo Discharge
	351.BF410	Kiln Feed Bin
	331.XA120	Dry Sorbent Injection System
Clinker Handling and Storage		
048	471.BF110 & 471.BF150	Clinker Transport
050	471.BF120	Clinker Storage Silo
	481.BF155	Clinker Silo Discharge 1
	481.BF165	Clinker Silo Discharge 2
Finish Mill System		
051	511.BF650	Finish Mill Additives
052	531.BF500	Finish Mill and Air Heater
054	531.BF020	Finish Mill Bucket Elevator
057	531.BF400	Finish Mill Cement Transport
	531.BF290	Finish Mill Rejects Transport
Cement Silos & Loadout		
058	612.BF005	Cement Silo 5
	612.BF620	Cement Silo 5 Loading Bin
	622.LS140	Cement Silo 5 Loadout Spout N
	622.LS160	Cement Silo 5 Loadout Spout S
059	611.BF005	Multi Cell Cement Silo
	611.BF045	Multi Cell Cement Silo Alleviator
	611.BF610	Multi Cell Loadout Transport
	611.LS760	Multi Cell Loadout Spout
062	641.BF150	Packing Plant
065	614.BV240 & 614.DC410	Cement Storage Silo and Railcar Loadout System with Baghouses

Emissions of NO_X, SO_2, CO and VOC are controlled by emissions units 044 and 052. Emissions from handling, conveyance, and transfer points are controlled by baghouses. Emissions from raw materials piles, loading operations, transportation, etc., are controlled by reasonable precautions including paving, road sweeping, watering, planting grass, etc. Emissions of acid gases, including HCl emissions, are controlled by the DSI system included as part of emissions unit 047.

{Permitting Note: These emissions units are subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359); 40 CFR 60, Subpart F, Standards of Performance for Portland Cement Plants; 40 CFR 63 Subpart A, General Provisions and 40 CFR 60, Subpart A, General provisions, adopted by reference into Rule 62.204.800, F.A.C. These emissions units are also subject to the requirements of the state rules, particularly Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}

Essential Potential to Emit (PTE) Parameters

E.1. Finish Mill Permitted Capacity. The finish mill (EU 052) shall not process more than 240 tons per hour of finish mill feed (feed $_{FM}$) and 1,800,000 tons annually. [Rule 62-210.200 (PTE), F.A.C.; and Permit No. 0530021-044-AC/PSD-FL-351E]

E.2. Clinker Transport Permitted Capacity. The maximum process/transfer/throughput rate of clinker through the Clinker Transport System (EU No. 048) is 156 tons per hour. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0530021-068-AC]

E.3. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. . [Rule 62-210.200(PTE); and Permit Nos. 0530021-044-AC/PSD-FL-351E & 0530021-068-AC]

Control Technology

E.4. Clinker Transport System Baghouse. EU No. 048 has a design throughput capacity of 156 tons per hour of clinker and the baghouse (471.BF150) has a design air flowrate of 3,200 dry standard cubic feet per minute (dscfm). [Permit No. 0530021-068-AC]

Air Heater Performance

E.5. Air Heater Associated With the Finish Mill (EU052). Following are the performance restrictions for the air heater:

a. *Heat Input.* The maximum heat input of the air heater shall be limited to 45 MMBtu/hr.

b. Hours. The operation of the air heater shall be limited to 2,500 hours per year.

c. Fuel. The air heater may be fired only with propane and maximum 0.05% sulfur distillate oil.

[Rule 62-212.400, F.A.C. (BACT); and Permit No. 0530021-044-AC/PSD-FL-351E]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for **Specific Conditions E.6 – E.8** are based on the specified averaging time of the applicable test method.

E.6. Emissions Limits. Particulate matter emissions from each of the emissions units in this subsection (except EU-052 and EU-065, see **Specific Conditions E.7** and **E.8** of this subsection) shall be controlled by a baghouse which shall be installed, operated and maintained to meet a design specification of 0.01 grains/dscf for PM and 0.007 grains/dscf for PM_{10} emissions. Visible emissions from the material handling emissions units shall not exceed 5% opacity (no visible emissions). [Rules 62-4.070(3), 62-210.700(5) and 62-212.400, F.A.C., and BACT; and, Permit No. 0530021-044-AC/PSD-FL-351E]

{Permitting Note: The applicant advised that the baghouses are designed to control PM/PM_{10} to 0.01 grains/dry standard cubic foot (gr/dscf) and 0.007 gr/dscf, respectively. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all these emission unit systems will be less than 66.5/46.5 TPY, respectively. This annual emission estimate is the proposed PM/PM_{10} for all these units and there is a reduction from the particulate matter potential emissions of the "as built" configuration project. Exceedance of the 5% opacity limit shall be deemed an exceedance of the allowed BACT limit condition so long as the opacity does not exceed 10% is not an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL.}

EMISSIONS UNIT	BAGHOUSE ID NO.	EMISSION LIMIT PM/PM_{10} (lb/hr)	AVERAGING TIME [1]	OPACITY (%) [2]
Process: Raw Mix and Raw Meal Handling and Storage System				
045	331.BF640 311.LS609	0.60/0.42	3 hours	5
046	341.BF400	0.55/0.39	3 hours	5
047	351.BF420 341.BF410 351.BF410	2.64/1.84	3 hours	5
Process: Clinker Handling and Storage				
048	471.BF110 & 471.BF150	0.41/0.29	3 hours	5
050	471.BF120 481.BF155 481.BF165	0.99/0.70	3 hours	5
Process: Finish Mill System				
051	511.BF650	0.57/0.40	3 hours	5
054	531.BF020	0.60/0.42	3 hours	5
057	531.BF400 531.BF290	0.44/0.31	3 hours	5
Process: Cement Silos & Loadout				
058	612.BF005 612.BF620 622.LS140 622.LS160	0.95/0.65	3 hours	5
059	611.BF005 611.BF045 611.BF610 611.LS760	0.78/0.54	3 hours	5
062	641.BF150	1.17/0.82	3 hours	5

1. The averaging times for PM and PM_{10} correspond to the required length of sampling for the emission tests.
2. The averaging time for visible emissions shall be a 6-minute block average computed from a minimum of one measurement every 15 seconds. The 6-minute block averages shall start at the beginning of each hour.

[Rules 62-210.700(5) and 62-212.400, F.A.C.; BACT; and, Permit Nos. 0530021-044-AC/PSD-FL-351E, 0530021-068-AC & Permit No. 0530021-079-AC]

E.7. Emission Limits for Finish Mill and Air Heater – Emissions Unit 052. This emissions unit shall comply with the following emission limits:

Pollutant	SO_2	NO_X	CO	PM/PM_{10}	Opacity
Mode	*lb/hr*	*lb/hr*	*lb/hr*	*lb/ton feed* $_{FM}$	*(%)*
Air Heater On	2.1	5.40	1.5	0.029/0.020	5%
Air Heater Off	N/A	N/A	N/A	0.029/0.020	5%

[Permit No. 0530021-044-AC/PSD-FL-351E]

E.8. Visible Emission for Cement Silo and Railcar Loadout – Emissions Unit 065. Visible emissions from this emissions unit shall not equal or exceed 10% opacity. [40 CFR 60.62(c)]

Monitoring of Operations

E.9. CAM Plan. EUs. 046, 047, 048, 050, 054, 057, 058 and 059 are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(8)(b), F.A.C. [Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C., and 40 CFR 64]

E.10. Fuel Oil Sulfur Limit. Compliance with the distillate fuel oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur and including the value with annual test reports. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM methods D5453-00, D129-91, D1552-90, D2622-94, or D4294-90. More recent versions of these methods may be used. For the initial and each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. [Rules 62-210.700(5) and 62-212.400, F.A.C., BACT; and, Permit No. 0530021-044-AC/PSD-FL-351E]

E.11. Opacity Monitoring Requirements for Emissions Unit 065. Opacity monitoring shall be conducted in accordance with the provisions of 40 CFR 63.1350(f)(1)(i) through (vii) and in accordance with the site-specific monitoring plan developed under 40 CFR 63.1350(p). [40 CFR 63.1350(f)(1), and 40 CFR 60.64(b)(3)]

E.12. Opacity Monitoring. The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1345 shall conduct required opacity monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (vii) of 40 CFR 63.1350 and in accordance with the site-specific operation and maintenance plan developed under 40 CFR 63.1350(p). [Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(f)]

Test Methods and Procedures

E.13. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
6 or 6C	Sulfur Dioxide (SO_2) or SO_2 – Instrumental
7 or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10 or 10A	Carbon Monoxide (NDIR) or CO for Certifying CEMS
22	Visual Determination of Fugitive Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.310(8), F.A.C; and Permit No. 0530021-044-AC/PSD-FL-351E]

E.14. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

E.15. Annual and Prior to Renewal Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU (excluding the DSI system that is a part of EU-047) shall be tested to demonstrate compliance with the emissions standards for visible emissions. The required minimum period of observation for a visible emissions test shall be 30 minutes, except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Emissions unit 052 shall also be tested once every five years for CO, PM/PM_{10} and NO_X. [Rule 62-297.310(5)(b) & (8), F.A.C.; and, Permit Nos. 0530021-044-AC/PSD-FL-351E & 0530021-068-AC]

E.16. Testing Requirements for Finish Mill (E.U. 052). The finish mill shall be stack tested with the air heater on once every five years to demonstrate compliance with the emission standards for CO, PM/PM_{10}, NO_X and visible emissions as indicated in the table and **Specific Condition E.7.,** above. Compliance with the SO_2 limit shall be demonstrated by compliance with the maximum 0.05% sulfur fuel limitation. [Rule 62-297.310(8)(a) 4.a., F.A.C.; and, Permit No. 0530021-044-AC/PSD-FL-351E]

{Permitting Note: On August 30, 2010, CEMEX requested to install equipment for the effective routing of filter dust from Kiln 2 baghouse/dust bin to Finish Mill 2 (E.U. 052). The existing dust collector (E.U. 047-Kiln Feed Bin) is used to vent the new dust silo. The potential to emit, as calculated by CEMEX, is expected to be less than 0.1 tons per year. They stated that the permitted rate of the finish mill will not be increased and there will be no net increase in the potential to emit from the finish mill baghouse. They added that the scope of material handling, within the system, will not increase and that since the filter dust is consumed at the finish mill, it will ultimately replace a like volume of other input(s). On the basis of the request and follow up information presented and under the authority of Rule 62-210.300(a), F.A.C. Categorical and Conditional Exemptions, the Department concluded that Kiln 2 filter dust storage/conveyance/intergrinding project did not require a construction permit.

Recordkeeping and Reporting Requirements

E.17. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of oil and propane use.	As requested.	**E.19**

[Rule 62-213.440, F.A.C.]

E.18. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

E.19. Notification, Recordkeeping and Reporting Requirements for E.U. 052. The permittee shall maintain records of the amount of oil and propane used in the finish mill air heater. [Rules 62-212.400, (BACT), and 62-297.310., F.A.C.; and, Permit No. 0530021-044-AC/PSD-FL-351E]

Other Requirements

E.20. O&M Plan for Baghouses. Particulate matter emissions from each emission unit shall be controlled by a baghouse. The owner or operator shall prepare an operation and maintenance plan (O&M Plan) for these emissions units in accordance with 40 CFR 63, Subpart LLL. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Southwest District office as part of the Title V permit renewal review. [Rule 62-213.440, F.A.C., and 40 CFR 63.1350]

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The specific conditions in this section apply to the following emissions units:

EU ID No.	Emissions Unit Description
060	Coal Mill
061	Fine Coal Bin

Coal and petroleum coke are received by railcar. The milled fuels are stored in a pulverized fuel storage bin for pneumatic conveyance to the main burner and precalciner burner.

All enclosed sources associated with the coal and petroleum coke handling and milling operation are controlled with baghouses. Fugitive emissions from coal and petroleum coke handling and conveying are minimized by inherent moisture and by the application of water as necessary for suppression of unconfined emissions of particulate matter.

{Permitting Note: Emissions units 060 and 061 are subject to 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants (40 CFR 60.250 – 60.254) and 40 CFR 60 Subpart A. These emissions units are also subject to the requirements of the state rules, particularly the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}

Essential Potential to Emit (PTE) Parameters

F.1. Process Rate Limitation. The coal mill shall not crush more than 20.0 tons per hour of coal and/or petroleum coke, based on a 30-day average. The coal mill shall not crush more than 175,200 tons annually. [Rule 62-210.200 (PTE), F.A.C.; and, Permit No. 0530021-044-AC/PSD-FL-351E]

F.2. Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C., and, Permit No. 0530021-044-AC/PSD-FL-351E]

F.3. O&M Plan for Baghouses. The owner or operator shall have on file an operation and maintenance plan (O&M Plan) for EU 060. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. [Permit No. 0530021-044-AC/PSD-FL-351E; and 40 CFR 63.1350]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for **Specific Conditions F.4.** are based on the specified averaging time of the applicable test method.

F.4. Emissions Limits. The emissions units, and corresponding points, shall have the following emission limits:

EMISSIONS UNIT NO.	EMISSION POINT	DESCRIPTION	OPACITY LIMIT
060	461.BF400	Coal Mill	10%
061	461.BF560	Fine Coal Bin	5%

Particulate matter emissions from these emissions units shall be controlled by baghouses which shall be installed, operated and maintained to meet a design specification of 0.01 grains/dscf for PM and 0.007 grains/dscf for PM_{10} emissions.

[Rules 62-210.700(5), 62-212.400, and BACT; and, Permit No. 0530021-044-AC/PSD-FL-351E]

Test Methods and Procedures

F.5. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.310(8), F.A.C; Permit No. 0530021-044-AC/PSD-FL-351E; and 40 CFR 60.254(a)]

F.6. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

F.7. Annual Emission Tests Required. The owner or operator shall demonstrate compliance with the visible emissions standard for emissions units 060 and 061 annually using EPA Method 9, as described in 40 CFR 60 Appendix A. Should subsequent particulate matter (PM) testing be required for both emissions units, compliance shall be demonstrated using EPA Method 5. [Rules 62-297.310 and 62-297.620(4), F.A.C.; BACT; and, Permit No. 0530021-044-AC/PSD-FL-351E]

Recordkeeping and Reporting Requirements

F.8. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

F.9. Records of Process Rates. The owner or operator shall make and maintain records showing the monthly processing rate of coal and petroleum coke crushed in the coal mill. Records of the processing rate for each month shall be completed no later than 10 days following the end of the month. [Permit No. 0530021-044-AC/PSD-FL-351E]

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The specific conditions in this section apply to the following emissions unit:

E.U. ID No.	Brief Description
063	Emergency Diesel Generator for Line 2

This emergency diesel generator is a six-cylinder Detroit Diesel Corporation family 7DDXL14 model rated at 685 horsepower with an engine displacement of 14 liters. It was manufactured in March of 2007. It is run approximately one hour per month for maintenance checks.

The following table provides important details for this emissions unit:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last mod. or reconst.
063	685	03/01/2007	2007	Diesel	Emergency	2.33	06R09 71420	N/A

{Permitting Note: This emissions unit, a compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocal Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C. and 40 CFR 60, Subpart IIII, NSPS. This RICE is not used for fire pumps. This permit section addresses "new" stationary CI RICE greater than 500 HP and less than or equal to 750 HP, with displacement less than 10 liters per cylinder, that are located at a major source of HAP and that have been modified, reconstructed or commenced construction on or after 12/19/2002 and have a post-2007 model year.}

Essential Potential to Emit (PTE) Parameters

G.1. Allowable Fuel. The Stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content.* The sulfur content shall not exceed = 15 ppm = 0.0015% weight for Non-Road fuel.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 80.510(b)]

G.2. Hours of Operation

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)]

b. *Maintenance and Testing*. Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 60.4211(f)]

c. *Other Situations*. Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4219]

Emission Limitations

G.3. NMHC + NO_X Emissions. Non-Methane Hydrocarbons (NMHC) and NOx emissions shall not exceed 4.0 g/KW-hr. [40 CFR 60.4205(b)]

G.4. CO Emissions. Carbon monoxide emissions shall not exceed 3.5 g/KW-hr. [40 CFR 60.4205(b)]

G.5. PM Emissions. Particulate matter emissions shall not exceed 0.2 g/KW-hr. [40 CFR 60.4205(b)]

Monitoring of Operations

G.6. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)]

G.7. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

Compliance Requirement

G.8. Compliance Requirement. No stack testing for compliance with emissions limits is required. Owner or operator must demonstrate compliance according to the method below:

Certification. Purchase an engine certified according to 40 CFR Part 89 or Part 94, as applicable, for the same model year and maximum engine power. [40 CFR 60.4211(c)]

*{Permitting Note: This engine must be certified to meet the non-road Tier 3 standards found in 40 CFR 89.112 and 89.113. Alternatively, if the engine is certified to a cleaner voluntary emission standard, the EPA certified Blue Sky series engines that have a lower limit for PM (0.12 gr/kw-hr), then the records in **Specific Conditions G.10** and **G.11** below are not required}*

Testing Requirement

G.9. Performance Test. No annual performance tests are required for this emissions unit. [40 CFR 60.4211(c)]

Recordkeeping and Reporting requirement

G.10. Required Records. Owner or operator must keep records of the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214]

G.11. Record Retention.

a. *Form.* The owner or operator must keep records in a suitable and readily available form for expeditious reviews.

b. *Duration.* The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

General Provisions

G.12. Subpart A. The owner or operator must comply with the general provisions in 40 CFR 60 Subpart A, except 60.18. (See Appendix NSPS, Subpart A – General Provisions.) [40 CFR 60.4218]

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Subsection H. Brooksville Portland Cement Lines 1 and 2 – Coal Receiving, Handling, and Transfer Activities

The specific conditions in this section apply to the following emissions unit:

E.U. ID No.	Brief Description
042	Coal Receiving, Handling and Transfer Activities (fugitives)

This emissions unit is an activity of receiving, storage, and transferring/conveying up to 300,000 tons per year of coal to cement lines 1 and 2. The coal will be received in unit trains and will be bottom-dumped from moving rail cars through an open elevated trestle to a coal receiving area. From this area, the coal will be moved to a storage area by a bulldozer with the storage pile being shaped and compacted during the transfer. The resulting coal storage area will cover approximately 7.8 acres and will be approximately 10 feet high. The coal storage area will have a capacity of approximately 55,000 tons. The coal will be recovered from the coal storage pile by a rubber tired front-end loader and transferred to a receiving hopper. The maximum daily coal transfer rate from the storage pile to the cement plants' receiving system will be about 1200 tons per day. From the receiving hopper, the coal will be transferred by covered conveyor belt to a screening system and then to coal bins that will supply to each cement line.

{Permitting Note: This emissions unit/activity is regulated under Rule 62-210.300, F.A.C., Permits Required; and shared by Cement Lines No. 1 and No. 2.}

Essential Potential to Emit (PTE) Parameters

H.1. Hours of Operation. The emissions unit/activity is allowed to operate continuously, i.e., 8,760 hours/year. [Permit No. 0530021-043-AC/PSD-FL-091K]

H.2. Method of Operation. This emissions unit is permitted to receive, store, and transfer/convey coal to the cement lines 1 and 2. [Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition **H.3.** of this subsection is based on the specified averaging time of the applicable test method.

H.3. Visible Emissions. Visible emissions shall not exceed 10 % opacity from the receiving, handling or transferring of coal. [Permit No. 0530021-043-AC/PSD-FL-091K]

Monitoring of Operations

H.4. Coal Handling Operations. Water sprays or chemical wetting agents and stabilizers shall be applied to the storage piles, handling equipment, etc., as necessary during dry periods and as necessary to all coal handling facilities to minimize visible emissions. [Permit No. 0530021-043-AC/PSD-FL-091K]

H.5. Control of Fugitives. Water sprays or chemical wetting agents and stabilizers shall be used at the coal receiving area, the coal storage area, and the coal transfer system to control fugitive particulate matter emissions. [Rule 62-296.320(4)(c)3., F.A.C. and Permit No. 0530021-043-AC/PSD-FL-091K]

H.6. Conveyors. All conveyors and conveyor transport points are enclosed to preclude particulate matter missions (except those directly associated with the coal stacker/reclaimer or emergency stakeout stacker/reclaimer or emergency stakeout). [Rule 62-296.320(4)(c)3., F.A.C. and Permit No. 0530021-043-AC/PSD-FL-091K]

H.7. Water Spray. A water spray system shall be used as necessary to control fugitive dust emissions during coal unloading operation from train cars to the receiving area. [Rule 62-296.320(4)(c)3., F.A.C. and Permit No. 0530021-043-AC/PSD-FL-091K]

Test Methods and Procedures

H.8. Visible Emissions. Visible emissions shall be demonstrated using EPA Method 9. [Permit No. 0530021-043-AC/PSD-FL-091K]

H.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

H.10. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), each EU shall be tested to demonstrate compliance with the emissions standards for visible emissions. [Rule 62-297.310(8), F.A.C.]

Reporting and Recordkeeping Requirements

H.11. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Table of Contents

CEMEX Construction Materials Florida, LLC

Miami Cement Plant

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL
Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part A. Facility Information

A-01. Name and address of legal OWNER of the facility (if more than one owner, provide the name, address, and percent ownership for each owner using the additional columns to right):

Name	CEMEX CONSTRUCTION MATERIALS FLORIDA, LLC
Address	1501 Belvedere Road
City	West Palm Beach
State	Florida
Zip	33406
Percent Ownership	100%

A-02. Name and address of legal OPERATOR of the facility, if different than the legal OWNER:

Name	
Address	
City	
State	
Zip	

A-03. Name and complete street address of facility (physical location):

Facility Name	CEMEX Miami Cement Plant
Address	1200 NW 137th Avenue
City	Miami
State	Florida
Zip	33182
County	Miami-Dade

A-04. Provide mailing address of the facility if different than physical location:

Address	
City	
State	
Zip	
County	

A-05. Facility contact able to answer technical questions about the completed survey:

Name (first name, last name)	Lillian F Deprimo
Title	Vice President Environmental Cement
Telephone number and extension	865-719-9925
E-mail	lillianf.deprimo@cemex.com

A-06. What is the facility size classification for hazardous air pollutant (HAP) emissions? *(Enter "Yes" or "No")*

EPA Major Source of Hazardous Air Pollutants (HAP)	Yes
EPA Area source (based on potential to emit) of HAP	No
EPA Area source (Synthetic Minor) of HAP	No

A-07. Facility NAICS codes. *Note: The primary NAICS code represents the line of business that generates the most income for the facility.*

Primary NAICS code	327310
Other facility NAICS codes	

A-08. Company Size *(Enter "Yes" for all that apply) Note: Approximate number of all employees (worldwide) of the business enterprise that owns this facility, including where applicable, the parent company and all subsidiaries, branches, and unrelated establishments owned by the parent company.*

< 1,000 employees	
≥ 1,000 employees	

A-09 Parent Company Annual Revenue
Please provide the estimated annual revenue ($) generated by the parent company (identified in A-01) in FY2021.

FY2021 Annual Revenue of Parent Company	*See Part E (01) Tab

A-10. Federal and State rule/permit coverage. (Enter "Yes" for all that apply to this facility).

Subpart LLL (Portland Cement Manufacturing)	YES
Other NESHAP *(SPECIFY rule name and subpart)*	
Other *(SPECIFY rule name and subpart)*	
New Source Performance Standards (NSPS):	
40 CFR 60 subpart F (Portland Cement Plants)	Yes
Other NSPS (SPECIFY rule name and subpart)	
Other NSPS (SPECIFY rule name and subpart)	
Title V:	
(SPECIFY rule that led to title V permit requirement)	Yes
State Air Toxics:	
(SPECIFY rule name and subpart)	
(SPECIFY rule name and subpart)	
Other: *(SPECIFY emission unit and rule)*	
Other: *(SPECIFY emission unit and rule)*	

A-11. Normal Facility Production Hours

Hours/day:	24 Hours
Shifts/day:	*See Part E (01) Tab
Days/week:	
Weeks/year:	

A-12. Clinker Production. Amount of clinker produced the most recent year of normal operation. Total capacity of clinker production.

Tons of clinker produced in last normal operating year:	965,653 *See Part E (01) Tab
Maximum tons of clinker able to be produced in one year (plant capacity):	1,300,000

A-13. Please provide a copy of a schematic or process flow diagram of the plant Portland cement manufacturing operations. Include identifying labels for equipment to be used for the remainder of this questionnaire.

Schematic or Process Flow Diagram File Name*	Miami Process Flow Diagram.pdf

*Please include Unit ID No., APCD ID No., Controlled Emissions Point ID No., and Un-controlled Emissions Point ID No. where applicable in the Schematic or Process Flow Diagram (PFD). It is assumed the PFD will be submitted electronically, as a separate file.

A-14. Please provide all of the pertinent information listed below. Please provide electronic copies, if available, and indicate items provided below. *(Enter "Yes" for all that apply).*

Title V Permit or State Air Operating Permit*	Yes

*If the permit is available online, please provide the URL for the file location.

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part B. Facility Equipment Regulated under Subpart LLL (Portland Cement Manufacturing NESHAP)

Please enter information for units subject to Subpart LLL, excluding any fugitive dust sources, material handling/conveying sources of emissions, or the emissions controls associated with these sources. See "Terms" Tab for an explanation of terms.
Please insert Rows as needed.

B-01. Related Equipment List

Unit Identification Numbers(s) (Unit ID No.) (Matches Unit ID on Schematic or Process Flow Diagram)	**Unit ID No. as designated in Title V or State Operating Permit** (Complete if ID numbers used in this form are different from those in permit)	**Subpart LLL Affected Source/Equipment Type**	**New, Existing, or Reconstructed**	**Source Classification Code** (See Validation Sheet for description of codes)	**Add-on Controls** (Y or N)	**When were controls installed?**	**Operating in 2021?** (Y or N) If "No," list last year of operation	**Additional Notes/Comments**
EU-018		Raw Mill	Existing	30500613			Yes	Raw Mill(In-Line Kiln , In-Line Raw Mill, Clinker
EU-018		Clinker Cooler	Existing	30500614			Yes	Clinker Cooler 1(In-Line Kiln , In-Line Raw Mill,
EU-018		Kiln (incl. alkali bypass and inline coal mill)	Existing	30500622	Yes	2016 Dry Scrubber, 2018 Dry Sorbent Injection	Yes	Kiln (In-Line Kiln , In-Line Raw Mill, Clinker Cooler)
EU-020		Other (specify in notes/comments column)	Existing	30500799			Yes	Coal Mill(Coal Mingled Exhaust)
EU-001		Finish Mill	Existing	30500717			Yes	Finish Mill 1
EU-002		Finish Mill	Existing	30500717			Yes	Finish Mill 2
EU-003		Finish Mill	Existing	30500717			Yes	Finish Mill 3
EU-012		Finish Mill	Existing	30500717			No, 2008	Finish Mill 4
EU-013		Finish Mill	Existing	30500717			Yes	Finish Mill 5
EU-028		Finish Mill	Existing	30500717			Yes	Finish Mill 6

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part C. Processing Rates and Controls Used for Kilns Regulated under Subpart LLL

Please provide information below for all kilns/clinker coolers at your facility; provide information for 2021 if available, or other year (please specify): **Calendar Year (CY) 2021**

Please insert Rows as needed.

Please use the Notes/Comments column for any additional clarification, or APCDs if sufficient columns are not available. Additionally, Tab E provides space for additional comments

C-01. For Kiln/Clinker Cooler With Common Exhaust

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
EU-018	1,300,000	965,653	7644	Coal, Petroleum Coke, Used Oil	Use the space in C-01.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.	*See Part E (01) Tab	Membrane Filter Baghouse	EU-018	Dry Sorbent Injection System		Dry Scrubber						

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-01.1 Common Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-01)	EU-018				
Additional Fuels	No. 2 Fuel Oil				
	Alternative Fuels				

C-02. For Each Kiln With Separate Exhaust

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
					Use the space in C-02.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.												

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-02.1 Separate Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-02)					
Additional Fuels					

C-03. For Each Idled Kiln, Not in Operation

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Current Idle Period (days/months/years)	Primary Fuel	Additional Fuels	Process Modifications* (list all applicable)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments
					Use the space in C-03.1 to list any additional fuels, permitted or otherwise, burned by the Unit identified in this table.												

* For example, dust shuttling, PLC, overfire air, etc. For PLC, indicate what percentage of production is PLC vs. OPC. Use Part E tab of this workbook to provide the information if additional space is needed.

C-03.1 Separate Exhaust Kilns: Additional Fuels List

Unit ID No. (from C-03)					
Additional Fuels					

C-04. For Each Clinker Cooler with Separate Exhaust

Unit ID No. (Use Same ID as Provided in Section B-01, Column A)	Maximum Capacity of Unit (tons/yr)	Actual Production of Unit (tons/yr)	Actual Unit Operating Hours (Should be no more than 8,760) (hr/yr)	APCD Control Device Type No. 1	APCD Control Device ID No. 1	APCD Control Device Type No. 2 (where applicable)	APCD Control Device ID No. 2 (where applicable)	APCD Control Device Type No. 3 (where applicable)	APCD Control Device ID No. 3 (where applicable)	APCD Control Device Type No. 4 (where applicable)	APCD Control Device ID No. 4 (where applicable)	Controlled Emissions Point ID No. (Details provided in Section D)	Un-controlled Emissions Point ID No. (Details provided in Section D)	Additional Notes/Comments

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part D. Detailed Control Device and Emission Release Information for Sources Regulated under Subpart LLL

Please provide information below for all air pollution control devices at your facility; provide information for 2021 if available, or other year (please specify):
Please insert Rows as needed.

CY 2021

D-01. Add-on air pollution control devices (APCD)

APCD ID No. (This should match the ID's provided in Section C)	**Device Type***	**Pollutant Controlled** (separate pollutants with comma)	**Capture Efficiency, if known** (percent)	**Control Device Efficiency, if known** (percent)	**Methods Used for Determining Capture & Control Efficiencies****	**What process units are vented through this point? Unit ID No.** (Use Same IDs as Provided in Section B-01 (column A), and Section C) (separate IDs with comma)
EU-018	Membrane Filter	Particulate Matter				EU-018
	Dry Sorbent Injection	Hg				
	Dry Scrubber	SO2, HCl				
EU-020	Membrane Filter	Particulate Matter				EU-020

* For example, fabric filter, wet scrubber etc.

** Control & Capture Efficiency; a = Testing (specify method); b = Manufacturer's Specifications; c = Engineering Estimate

Please provide any additional information concerning the Control Devices identified in D-01, as needed, using the Part E tab of this workbook.

D-02. For each exhaust point/stack with a control device, please provide the following information, if known.

Controlled Emissions Point ID No. (This should match the ID's provided in Section C)	**What control devices are vented at this point?** (APCD ID No. from Section D-01)	**Latitude***	**Longitude***	**Flow Rate** (SCFM)
EU-018	EU-018	25.786883	-80.423025	257,791
EU-020	EU-020	25.786447	-80.422439	19,300

* Longitude and Latitude should be specified to 6 decimal places. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

D-03. For each exhaust point/stack not associated with a control device, please provide the following information, if known.

Un-controlled Emissions Point ID No. (This should match the ID's provided in Section C)	**What process units are vented though this point? Unit ID No.** (Use Same IDs as Provided in Section B-01 (column A), and Section C) (separate IDs with comma)	**Latitude***	**Longitude***	**Flow Rate, if known** (SCFM)

* Longitude and Latitude should be specified to 6 decimal places. If coordinates are not known, please provide a scaled site diagram, with a latitude/longitude reference point, indicating stack locations.

Portland Cement 114 Request Form

National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL)

Please copy this Microsoft Excel workbook as needed, and complete one file for each Portland Cement Manufacturing facility operated by your company.

Part E. Additional Information

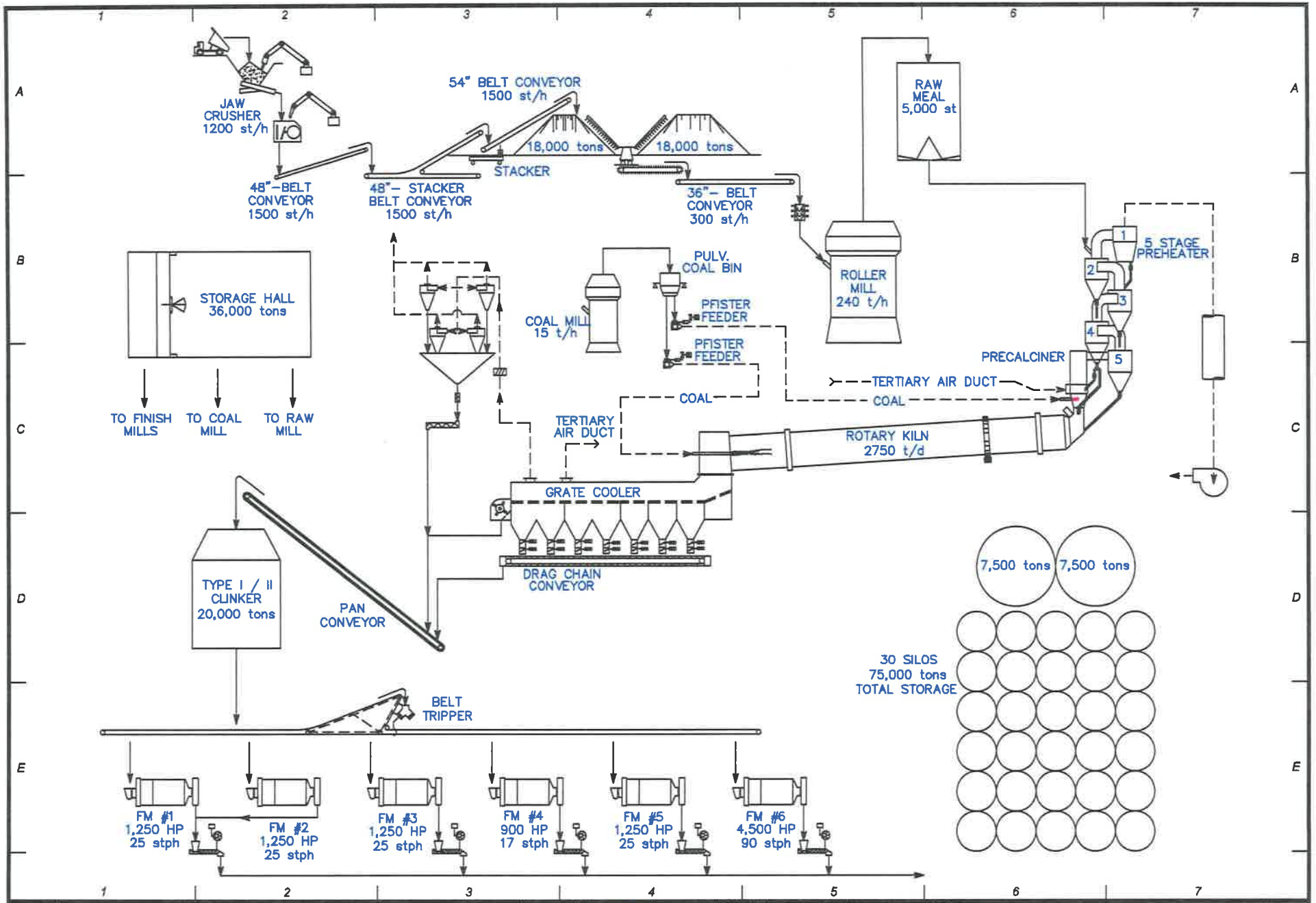
E-01. Provide any additional information in the space below as needed. Please identify the associated part of the workbook (e.g., C-01), as applicable.

Identify Questionnaire Part Associated with the Information Provided (e.g., C-01)	Identify Information Being Requested (e.g., "Process Modification")	Additional Information
A-08	Company Size	Not applicable
A-09	Parent Company Annual Revenue	Parent Company Annual Revenue information is not relevant, 2021 Report available via https://www.cemex.com/documents/20143/57102208/2021-20F-EN.pdf/3acbadfb-7481-5690-b4e0-a5eaa9ea9432?t=1651268726792
A-10	Title V	Chapter 403, Florida Statues (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213
A-11	Normal Facility Production Hours	The number of shifts and hours of operation vary based on market conditions.
A-12	Clinker Production. Amount of clinker produced the most recent year of normal operation. Total capacity of clinker production.	Normal Operation is not defined, we are maintaining consistency with Part C and Part D responses for calendar year 2021. Clinker production is based on the 2021 calendar year, production may vary based on market conditions.
B-01	New, Existing, or Reconstructed	No definition of New, Existing, Reconstructed has been given, we are using 40 CFR 63.2 “Existing source” definition
B-01	Add-On Controls	Considering request for Add-On Controls for main stack emissions only
C-01	Process Modifications	Cement plants are inherently complex, plant control operators make adjustments on a regular basis to maintain safety, environmental compliance, and quality of materials produced. Process Modifications is too broad of a question.
C-01		PLC vs OPC is not applicable per NESHAP and subsequent production rates are highly confidential
C-01.1	Additional Fuels List	See Title V Permit 0250014-070-AV section B.11. for a complete list of Alternative Fuels
D-01	APCD	Air Pollution Control devices listed for pyroprocessing system only and diverted gas stream exiting through coal mill stack
D-02	Stack Flow	Stack Flow for EU-018 is an average stack flow for 2021 based on CEMS data. EU-020 is based on a 2021 Stack Test

CEMEX Construction Materials Florida, LLC

Miami Cement Plant

Process Flow Diagram



REV.	DESCRIPTION	INITIALS	DATE

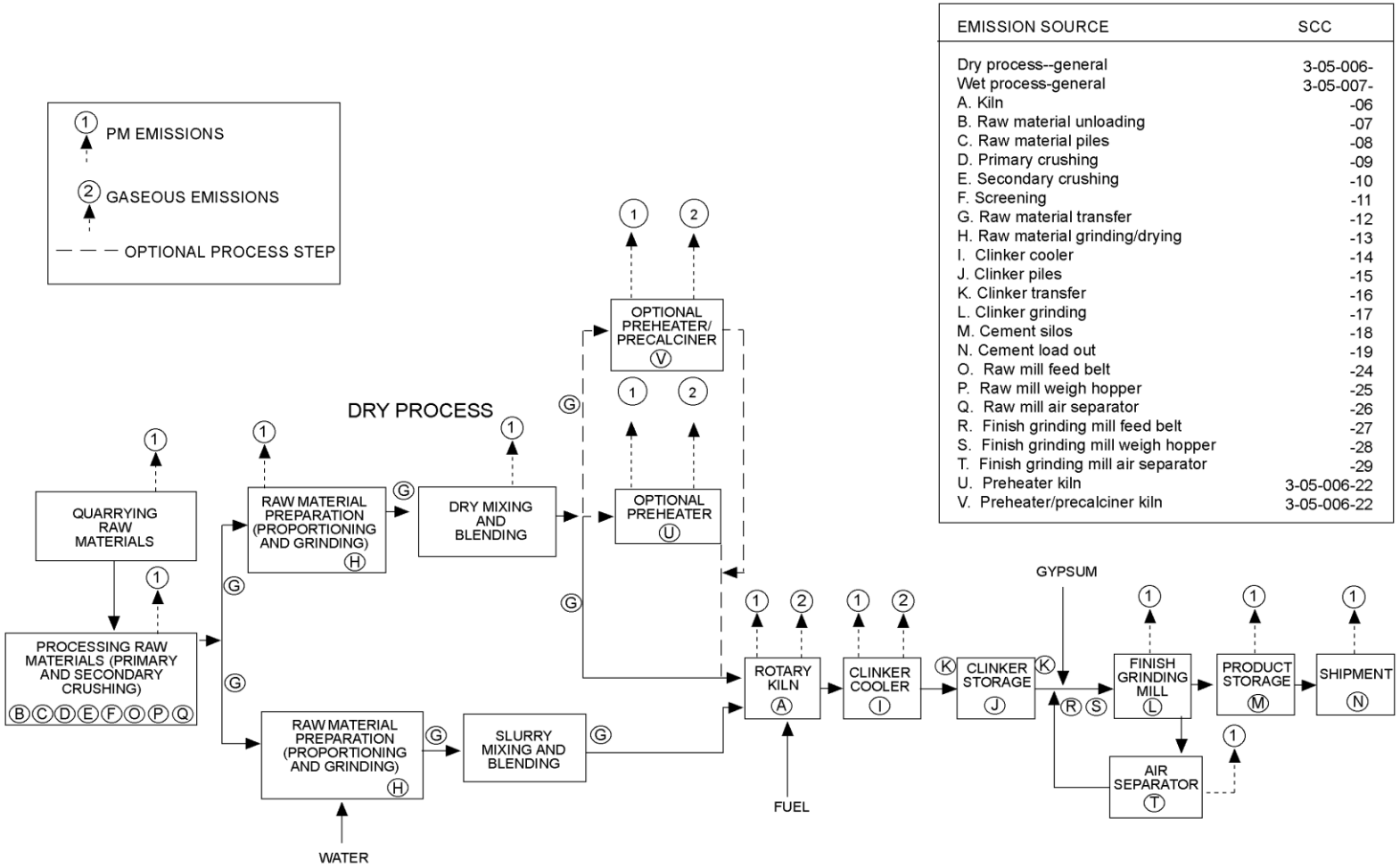
CEMEX
MIAMI CEMENT PLANT
MIAMI, FLORIDA

DRAWN BY: AL LUIS 8/1/07
REVIEWED:
SCALE:
AR NUMBER:
FILENAME AND LOCATION:

TITLE: **Process Flowsheet Miami Cement Mill**

DWG. NO.
SHT.
REV.

APPENDIX B. PROCESS FLOW DIAGRAM



EMISSION SOURCE	SCC
Dry process--general	3-05-006-
Wet process-general	3-05-007-
A. Kiln	-06
B. Raw material unloading	-07
C. Raw material piles	-08
D. Primary crushing	-09
E. Secondary crushing	-10
F. Screening	-11
G. Raw material transfer	-12
H. Raw material grinding/drying	-13
I. Clinker cooler	-14
J. Clinker piles	-15
K. Clinker transfer	-16
L. Clinker grinding	-17
M. Cement silos	-18
N. Cement load out	-19
O. Raw mill feed belt	-24
P. Raw mill weigh hopper	-25
Q. Raw mill air separator	-26
R. Finish grinding mill feed belt	-27
S. Finish grinding mill weigh hopper	-28
T. Finish grinding mill air separator	-29
U. Preheater kiln	3-05-006-22
V. Preheater/precalciner kiln	3-05-006-22

Process Flow Diagram; CEMEX Construction Materials Florida, LLC, Miami Cement Plant

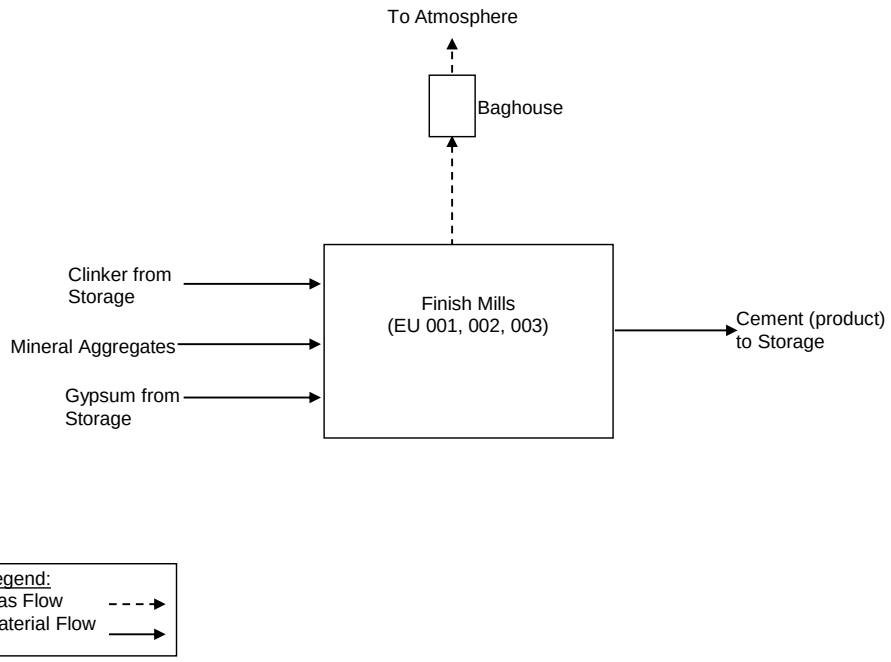


Figure EU001. Process Flow Diagram

Finish Mill No. 1 - EU001

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

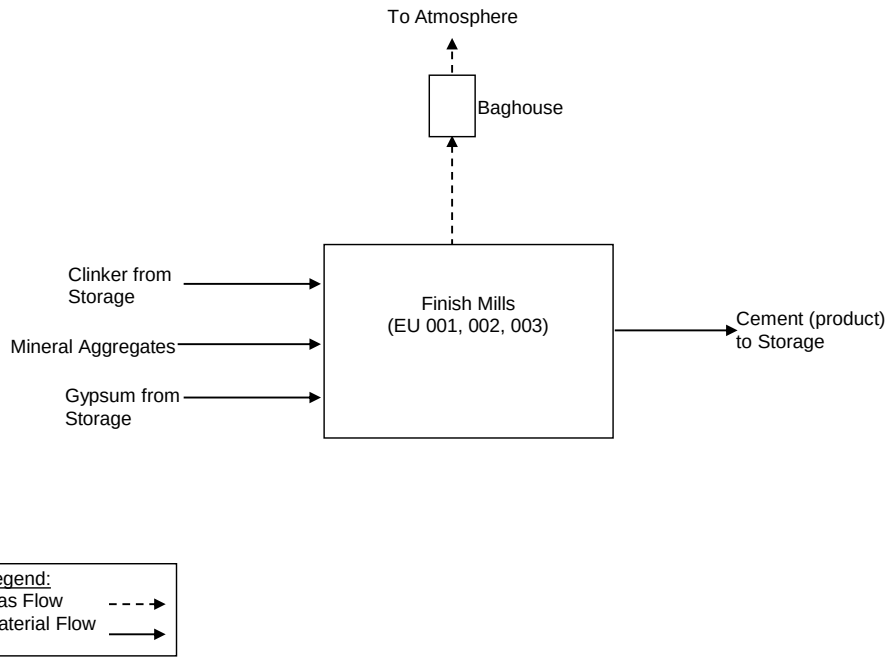


Figure EU002. Process Flow Diagram

Finish Mill No. 2 - EU002

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

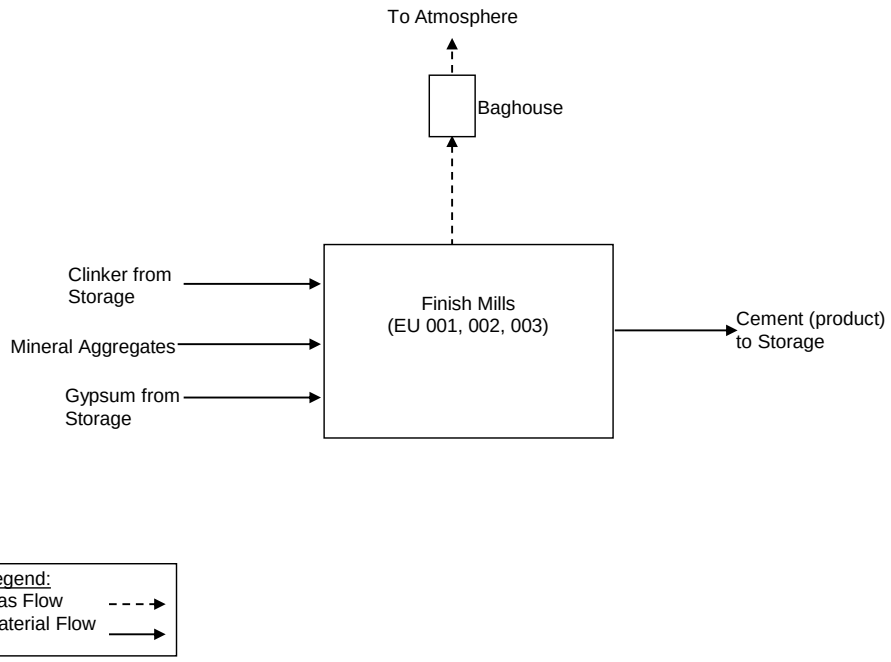


Figure EU003. Process Flow Diagram

Finish Mill No. 3 - EU003

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

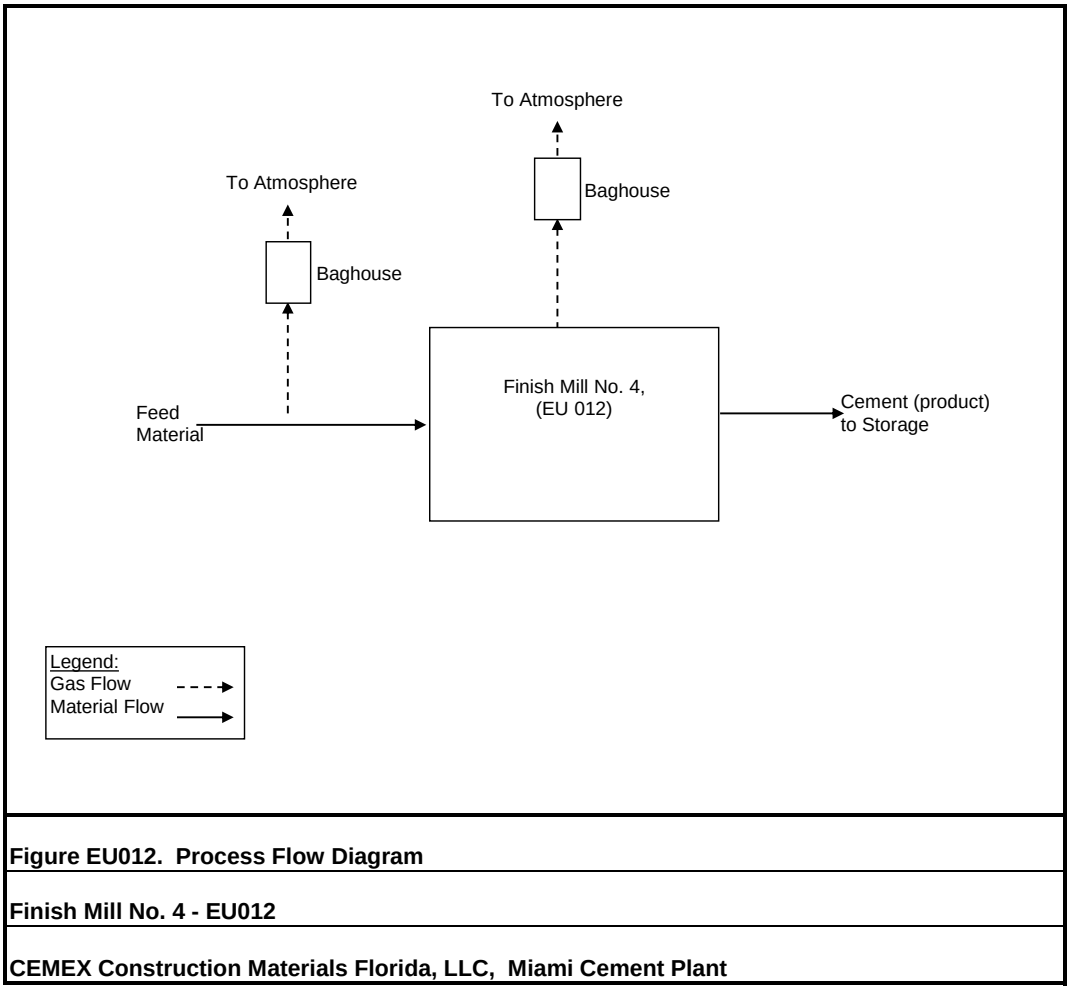


Figure EU012. Process Flow Diagram

Finish Mill No. 4 - EU012

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

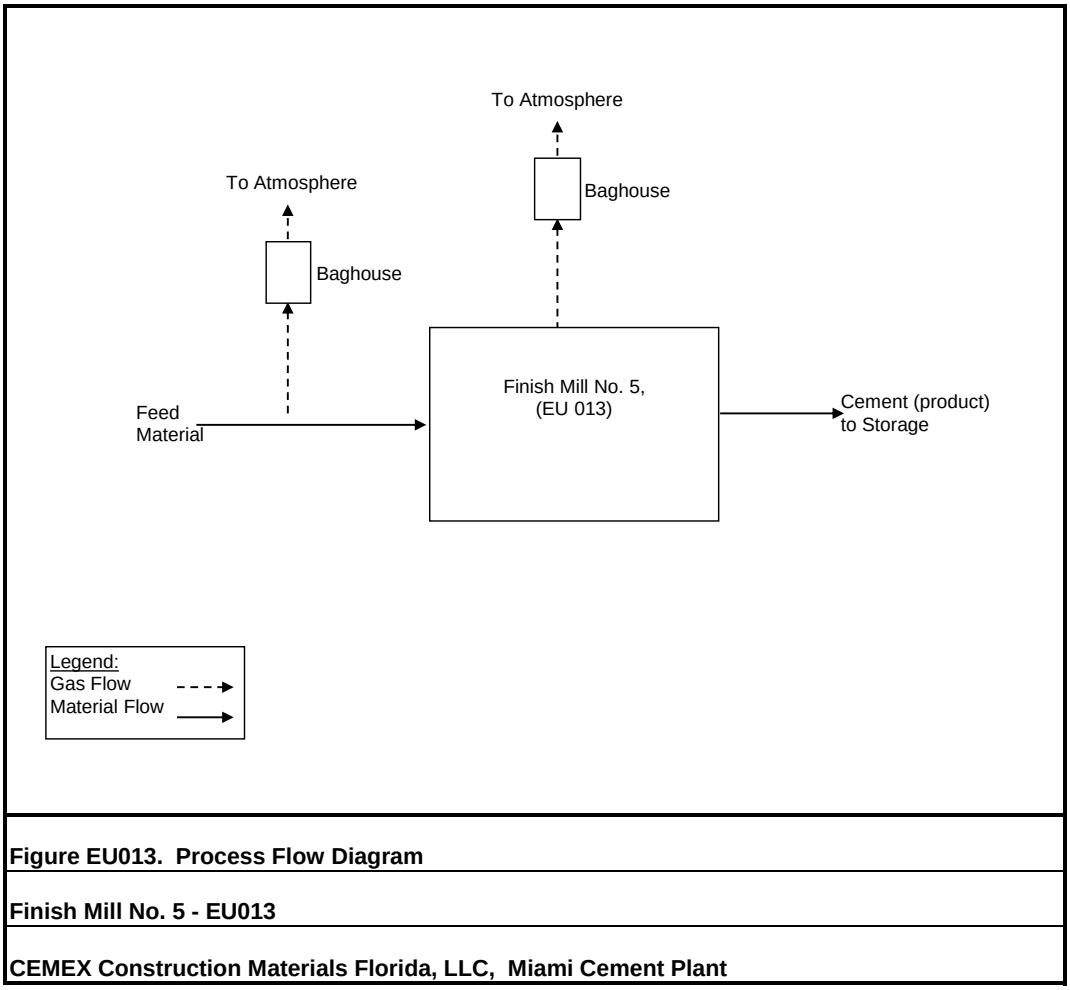


Figure EU013. Process Flow Diagram

Finish Mill No. 5 - EU013

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

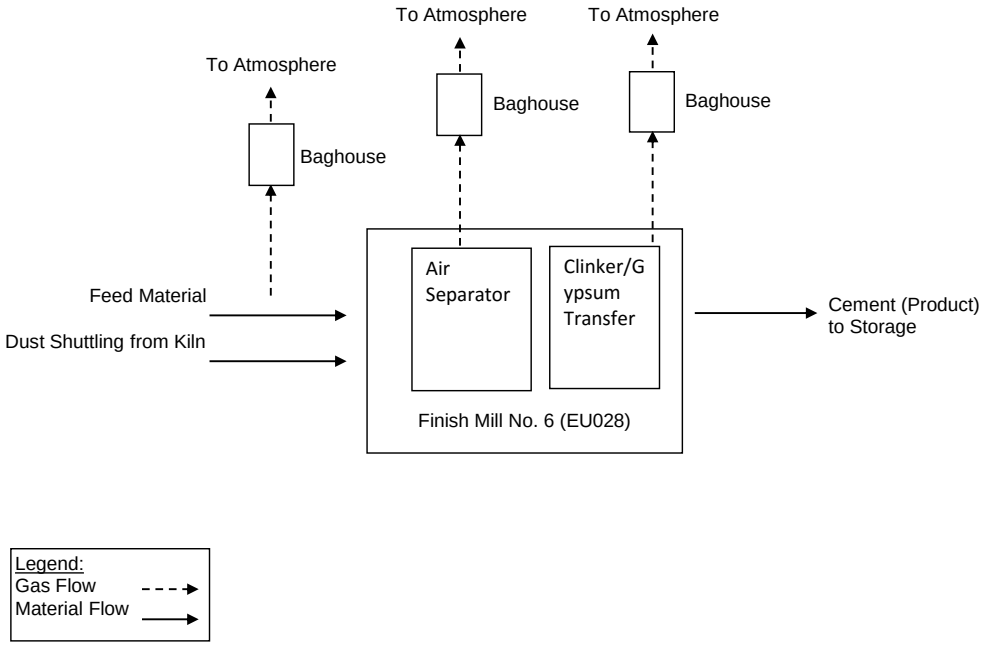


Figure EU028. Process Flow Diagram

Finish Mill No. 6 - EU028

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

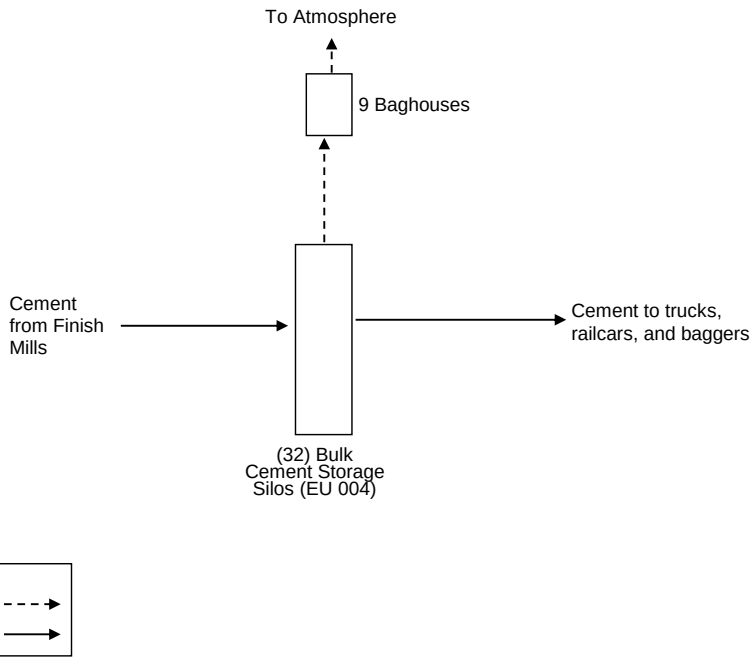


Figure EU004. Process Flow Diagram

(32) Bulk Cement Storage Silos - EU004

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

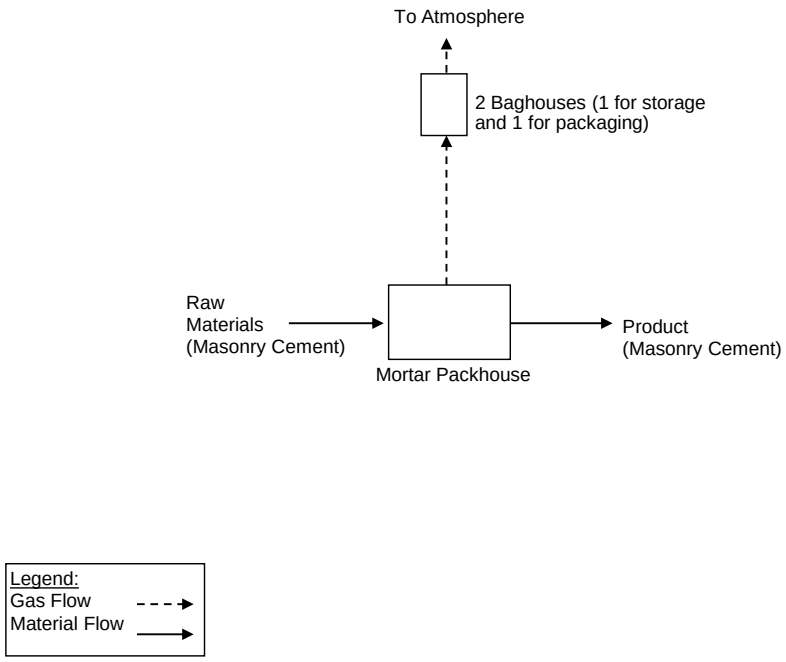
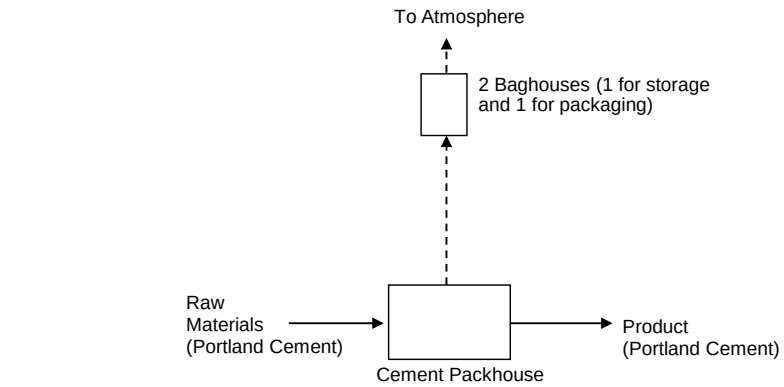


Figure EU005. Process Flow Diagram

Mortar Packhouse - EU005

CEMEX Construction Materials Florida, LLC, Miami Cement Plant



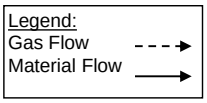


Figure EU006. Process Flow Diagram

Cement Packhouse - EU006

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

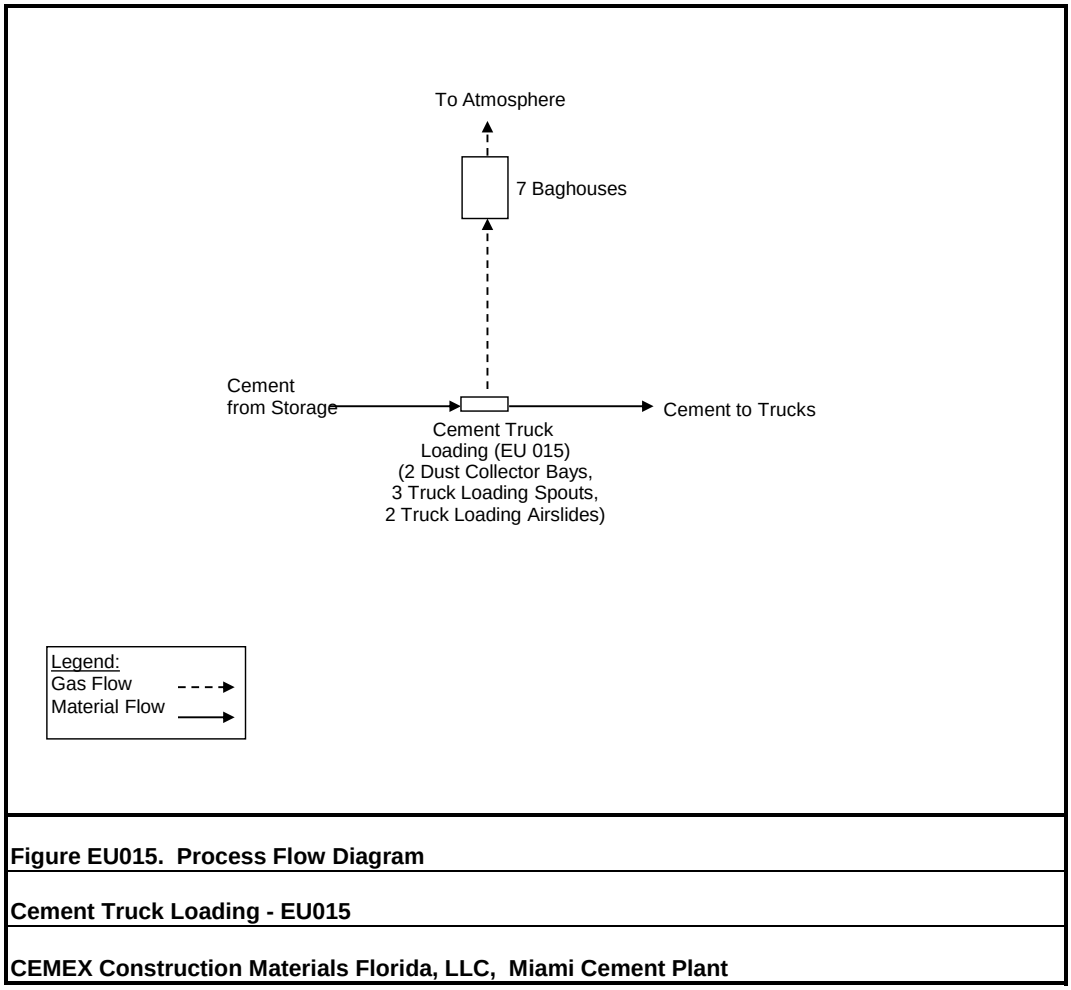


Figure EU015. Process Flow Diagram

Cement Truck Loading - EU015

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

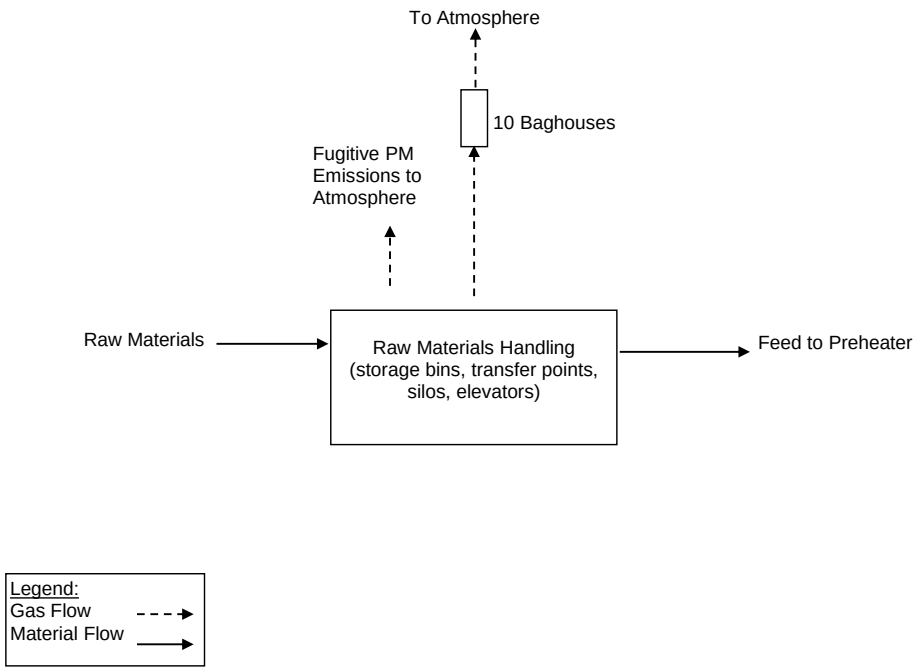


Figure EU017. Process Flow Diagram

Raw Materials Handling (Baghouses & Fugitives) - EU017

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

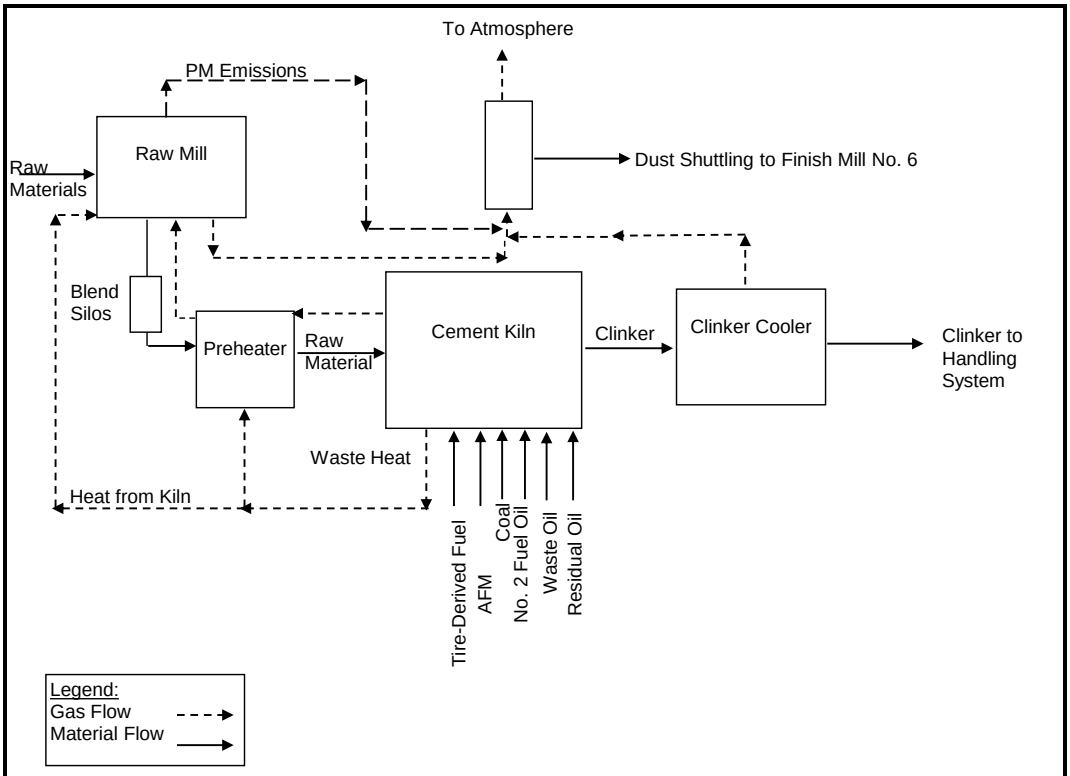


Figure EU018. Process Flow Diagram

In-Line Kiln/Raw Mill/Clinker Cooler/TIMS/Alternate Fuel- EU018

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

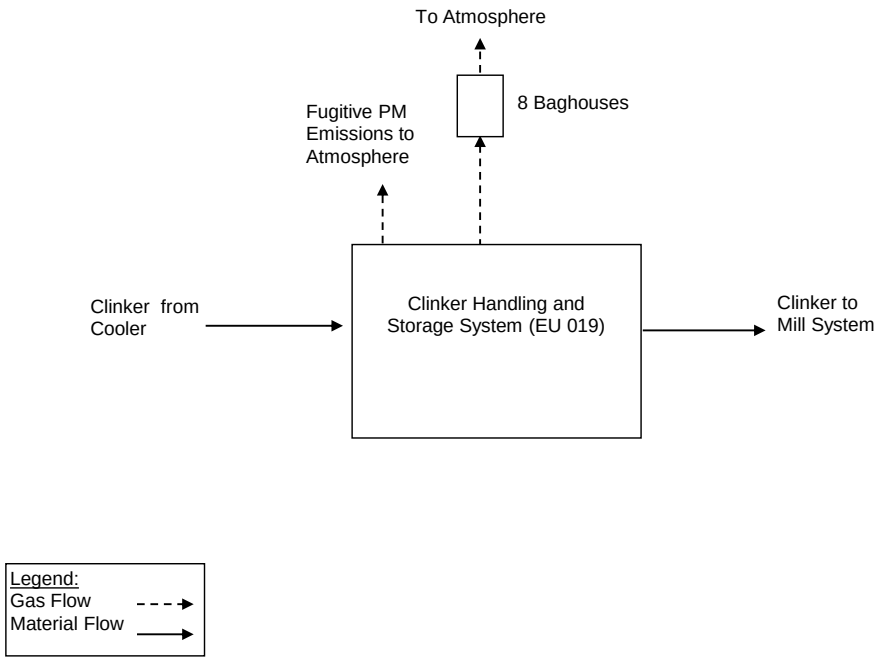


Figure EU019. Process Flow Diagram

Clinker Handling and Storage System - EU019

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

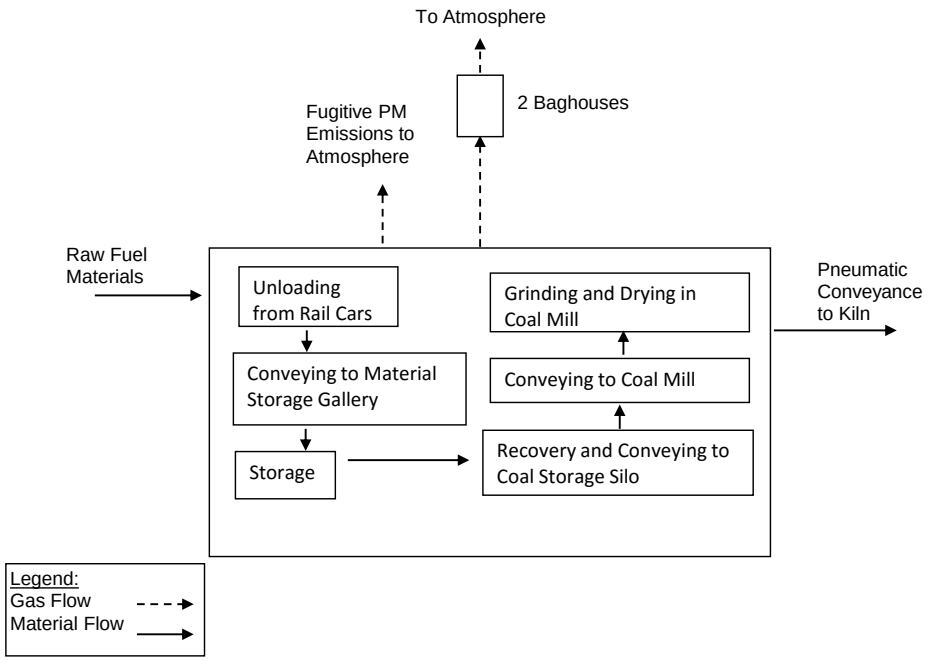


Figure EU020. Process Flow Diagram

Coal and Petroleum Coke Handling System - EU020

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

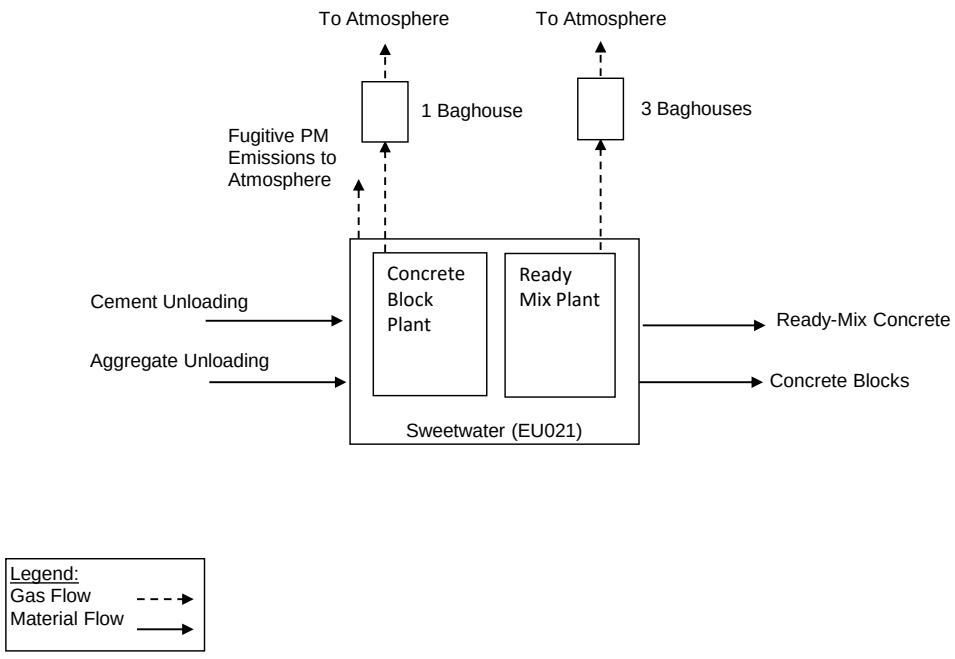
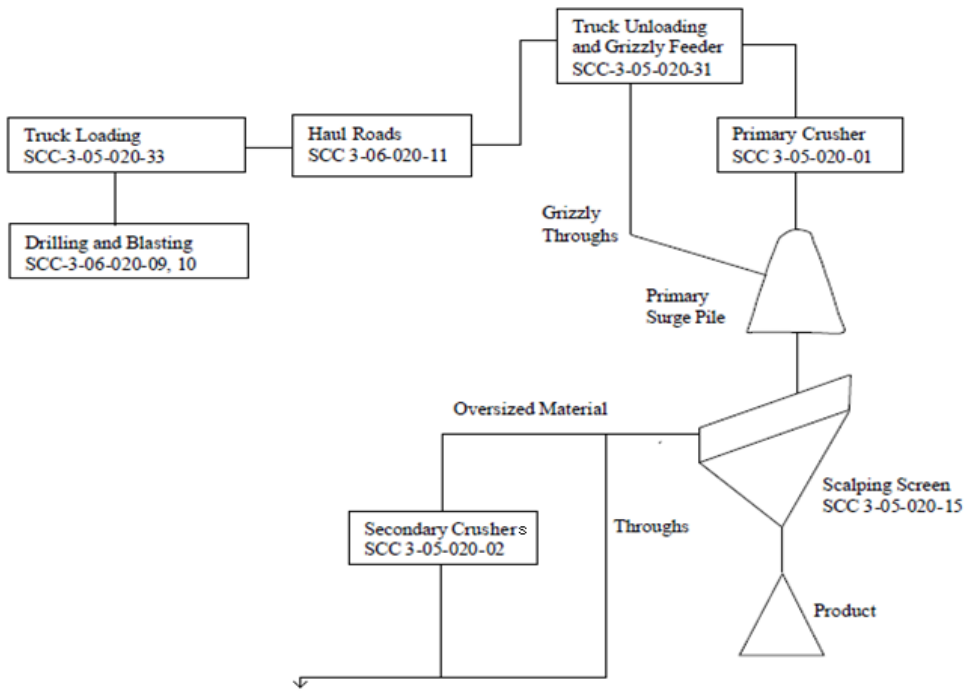


Figure EU021. Process Flow Diagram

Sweetwater Concrete Block and Concrete Batch Plants - EU021

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

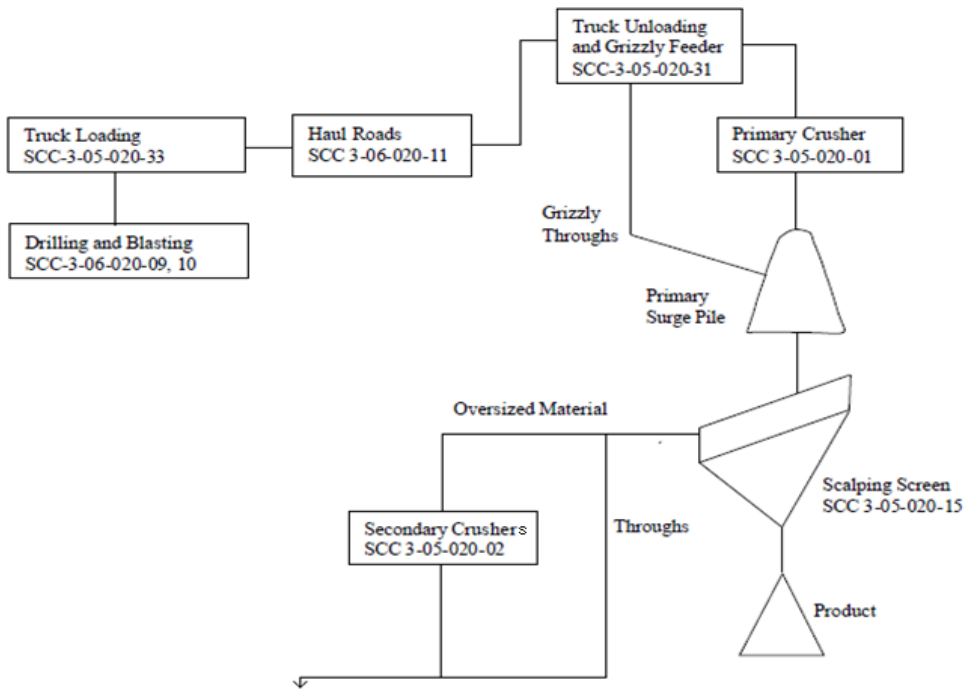


Source: AP-42

Figure EU022. Process Flow Diagram

Quarry: Aggregate Plant Crushers - EU022

CEMEX Construction Materials Florida, LLC, Miami Cement Plant



Source: AP-42

Figure EU023. Process Flow Diagram

Quarry: Affected Screening Operations/Belt Conveyers - EU023

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

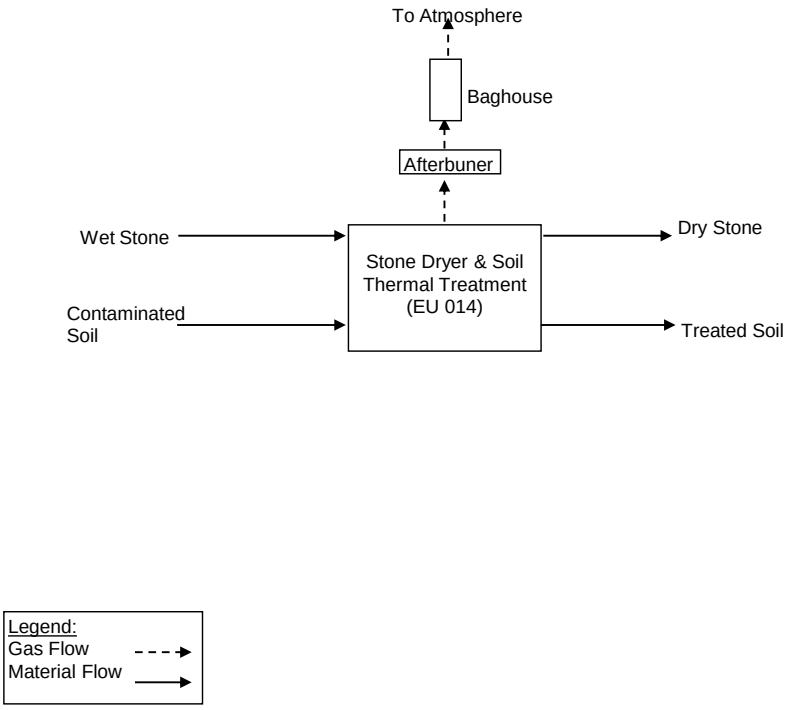


Figure EU014. Process Flow Diagram

Stone Dryer & Soil Thermal Treatment Facility - EU014

CEMEX Construction Materials Florida, LLC, Miami Cement Plant

CEMEX Construction Materials Florida, LLC

Miami Cement Plant

Title V

Permit No. 0250014-070

CEMEX Construction Materials FL, LLC
Miami Cement Plant

Facility ID No. 0250014
Miami-Dade County

Title V Air Operation Permit Renewal

Permit No. 0250014-070-AV

(Renewal of Title V Air Operation Permit No. 0250014-060-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Telephone: (850) 717-9000
Email: DARM_Permitting@dep.state.fl.us

Compliance Authority:

Department of Regulatory and Economic Resources
701 N.W. First Court, Suite 400
Miami, FL 33136

Telephone: (305) 372-6925
Email: airfacilities@miamidade.gov

Title V Air Operation Permit Renewal

Permit No. 0250014-070-AV

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FLORIDA DEPARTMENT OF
Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

PERMITTEE:
Miami Cement Plant
1200 NW 137th Avenue
Miami, Florida 33182

Permit No. 0250014-068-AV
Miami Cement Plant
Facility ID No. 0250014
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Miami Cement Plant is in Miami-Dade County at 1200 NW 137th Avenue, Miami. UTM Coordinates are: Zone 17, 558.2 kilometers (km) East and 2,851.2 km North. Latitude is: 25°46'46" North; and, Longitude is: 80°25'10" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0250014-068-AV Effective Date: December 16, 2021
Renewal Application Due Date: May 5, 2026
Expiration Date: December 16, 2026

David Lyle Read, P.E., Environmental Administrator
Office of Permitting and Compliance
Division of Air Resource Management

DLR/srl

Subsection A. Facility Description.

The Miami Cement Plant is a Portland cement manufacturing plant that primarily consists of the following emission units (EU): a dry process preheater/precalciner (PH/C) kiln with an in-line raw mill, a limestone quarry and crushing system, facilities for receiving materials by rail and truck, storage piles for short term material storage, a storage building for intermediate raw material and clinker storage, a stone dryer and soil thermal treatment plant, 6 finish mills, 2 packhouses, 32 cement silos, a rail and truck bulk loadout facility, a liquid fuel tank farm and the Sweetwater Ready Mix Concrete Batch Facility and Concrete Block Plant, a concrete batching plant and concrete block plant owned by CEMEX located on an adjacent facility. This facility is also supported by a portable diesel engine-powered crusher.

Limestone is extracted from the quarry, processed and combined with various other materials (including, but not limited to, bauxite, ash, shale and gypsum) in the raw mill and mixed to achieve the desired chemical composition of calcium, silica, alumina, iron and other constituents. The mixture of raw materials, known as raw meal, is fed into a vertical roller mill to be ground into fine particulates. The raw meal is then fed into a rotary kiln.

The kiln fires mixes of permitted fuels to heat the raw meal, which chemically transforms the raw meal into clinker. After passing through the kiln, the clinker enters the clinker cooler. After being cooled, the clinker is discharged into storage silos. The kiln exhaust is partially vented to the raw mill to preheat the raw meal prior to being fed into the kiln preheater and partially vented to the coal mill to dry coal. Coal from the coal mill is processed and stored prior to combustion in the kiln and calciner burners.

Clinker is transported to the six horizontal, cylindrical finish mills (Finish Mill Nos. 1-6), which are filled with grinding media. Clinker and additives such as gypsum are ground into fine, powdered cement by the rotating mills.

Cement from the finish mills is pneumatically to a system of 32 bulk cement storage silos. Cement is withdrawn from these silos for distribution via trucks, railroad cars and bags. Cement is also transported to a packhouse with two bagging lines.

The adjacent Sweetwater Ready Mix Concrete Batch Facility and Concrete Block Plant consists of 2 twin-compartment cement silos, an aggregate handling system, a loadout system and the concrete block plant. Aggregates, including various sizes of gravel, natural sand and screenings, are mixed with finished cement, water and liquid admixtures in varying compositions to produce read-mix concrete or concrete blocks. Read-mix concrete is then loaded into mixing trucks, where it is mixed in transit to job sites. Concrete used to make blocks is loaded into a mixer machine which then feeds into block molds. The blocks are cured in unheated kilns before being transported to a paved yard for storage.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Finish Mill System: Finish Mill No. 1
002	Finish Mill System: Finish Mill No. 2
003	Finish Mill System: Finish Mill No. 3
004	Cement Handling System: (32) Bulk Cement Storage Silos
005	Cement Handling System: Mortar Packhouse
006	Cement Handling System: Cement Packhouse
012	Finish Mill System: Finish Mill No. 4
013	Finish Mill System: Finish Mill No. 5

014	Stone Dryer & Soil Thermal Treatment Facility
015	Cement Handling System: Cement Truck Loading
016	Facility Wide Fugitive Emissions
017	Cement Plant Raw Material Handling (Baghouses)
018	In-Line Kiln/Raw Mill/Clinker Cooler/TIMS/Alternative Fuel Feeder System
019	Clinker Handling and Storage System
020	Cement Plant Coal Handling System: Coal Mill System
021	Sweetwater Concrete Block and Concrete Batch Plants
022	Quarry Operations Subject to 40 CFR 60, Subpart OOO: Aggregate Plant Crushers
023	Quarry Operations Subject to 40 CFR 60, Subpart OOO: Other Affected Screening Operations/Belt Conveyors
025	Quarry Operations Not Subject to 40 CFR 60, Subpart OOO
028	Finish Mill System: Finish Mill 6
030	Quarry Operations: One (1) 800 TPH or Less Portable Crusher with a 600 HP or less Engine
Unregulated Emissions Units and Activities *(see Appendix U, List of Unregulated Emissions Units and/or Activities)*	
029	Two (2) Diesel Fuel Limited Use Reciprocating Internal Combustion Engines

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received May 4, 2021, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	**EU No(s).**
Federal Rule Citations	
40 CFR 60, Subpart A – NSPS General Provisions	001-006, 012, 013, 015, 017-020, 022, 023
40 CFR 60, Subpart F – NSPS for Portland Cement Plants	001-006, 013, 013, 015, 017, 019
40 CFR 60, Subpart Y – NSPS for Coal Preparation Plants	022, 023
40 CFR 60, Subpart OOO – NSPS for Nonmetallic Mineral Processing Plants	020
40 CFR 63, Subpart A – NESHAP General Provisions	001-006, 012, 013, 015, 017-020, 028, 029
40 CFR 63, Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry	001-006, 012, 013, 015, 017-020, 028
State Rule Citations	
Chapter 62-4, Florida Administrative Code (F.A.C.) – Permits	All

Chapter 62-204, F.A.C. (Air Pollution Control – General Provisions)	
Chapter 62-210, F.A.C. (Stationary Sources – General Requirements)	
Rule 62-212.400, F.A.C. (Prevention of Significant Deterioration)	
Chapter 62-213, F.A.C. (Operation Permits for Major Sources of Air Pollution)	
Chapter 62-296, F.A.C. (Stationary Sources – Emissions Standards)	
Chapter 62-297, F.A.C. (Stationary Sources – Emissions Monitoring)	
Local Rule Citations	
Chapter 24 – Code of Miami-Dade County	All

{Permitting Note (for informational purposes only): The facility is subject to the federal requirements of the Greenhouse Gas Reporting Program codified at 40 CFR 98. This reporting rule is not a requirement of the State of Florida.}

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The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

If the facility includes a landfill, insert the following odor remediation plan requirement from the waste rules.

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter (PM) from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas and yards;
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction and land clearing;
c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stockpiles and similar activities;
d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne;
e. Landscaping or planting of vegetation;
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter;
g. Confining abrasive blasting where possible; and
h. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 4, 2021.]

Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details and requirements.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous

calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: https://floridadep.gov/air/permitting-compliance/content/title-v-fees. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW9. Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 – June 30 and July 1 – December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19(d), 40 CFR 61.10(h) & 40 CFR 63.10(a)(5)]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

Other Requirements

FW10. Compliance Authority Reporting. The permittee shall submit all compliance related notifications and reports required of this permit to the Regulatory and Economic Resources (RER) at the following address:

Miami-Dade County
Regulatory and Economic Resources
Air Quality Management
701 NW 1 Court, Suite 400
Miami, Florida 33136-3912

[Rule 62-213.440, F.A.C.]

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Subsection A. Emissions Unit 017, Cement Plant Raw Material Handling System

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
017	Cement Plant Raw Material Handling System

This emissions unit consists of handling and storage operations (i.e., storage bins, transfer points, silos and elevators) for raw materials that are used to produce cement other than limestone. Fugitive PM is minimized by ~~gallery~~ enclosures and the use of baghouses on various emission points. When raw materials are disturbed during handling; or when silos are filled, and air with entrained PM is displaced, the baghouses minimize these fugitive PM emissions and reclaim raw materials that would have otherwise been lost.

The emission points and baghouses in this emissions unit are listed as follows:

Emission Point	Description of Emission Point
K21-BF1	Additive Transfer
K21-BF2	Additive Transfer (Vents Indoors)
K22-BF1	Soil/Ash Transfer
K22-BF2	Soil/Ash Transfer
K51-BF1	Slag/Soil Elevator (Vents Indoors)
391-BF1	Raw Meal Transfer Elevator
391-BF2	Raw Meal Silo
391-BF3	Dust Bin
391-BF4	Dust Collector for Lime Silo
431-BF1	Kiln Feed Transfer
431-BF2	Kiln Feed Transfer Return

{Permitting Note: This emissions unit is regulated under 40 CFR 60, Subpart A – General Provisions and Subpart F – Standards of Performance for Portland Cement Plants, adopted by reference in Rules 62-204.800(8)(c), F.A.C. and 62-204.800(8)(b)9., F.A.C., respectively; and 40 CFR 63, Subpart A – General Provisions and Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry, adopted by reference in Rules 62-204.800(11)(d)1., F.AC. and (11)(b)48., F.A.C., respectively. Pursuant to clarification from the EPA, a sorbent injection system is a control device, and is not an affected source under 40 CFR 63, Subpart LLL. Since Emissions Point 391-BF4 is associated with a sorbent injection system, it is not subject to the requirements of 40 CFR 63, Subpart LLL.}

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0250014-002-AC & 0250014-052-AC]

Control Technology

A.2. Dry Scrubber. The permittee is authorized to operate equipment necessary for a dry scrubber (lime injection) system. Emissions point 391-BF4 is associated with this equipment, and is not part of the mill sweep or air separator particulate matter (PM) control devices. [Rule 62-4.070(3), F.A.C.; and, Permit No. 0250014-052-AC]

A.3. Fly Ash Handling and Lime Injection System. The fly ash handling and lime injection system including transfer equipment, flyash bin, and pneumatic system exhaust, shall be totally enclosed and vented through fabric filters. [Permit Nos. 0250014-002-AC & 0250014-052-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Condition **A.4** and **A.5** are based on the specified averaging time of the applicable test method.

A.4. Visible Emissions (VE). The owner or operator of each raw material conveying system transfer point, bagging system and bulk loading or unloading system must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of 10 percent (%). [40 CFR 63.1345]

A.5. Particulate Emissions Limits. The maximum permitted particulate emissions rates from this emissions unit (from each of these emissions points) is 0.01gr/dscf. Pursuant to Rule 62-297.620(4), F.A.C., in lieu of particulate stack testing the permittee shall demonstrate compliance by adhering to an opacity limit of 5%. If the RER has reason to believe that the applicable particulate weight emission standard is not being met, RER shall require that compliance be demonstrated by the test method specified in the applicable rule. [Permit Nos. 0250014-002-AC & 0250014-052-AC]

{Permitting Note: Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition but not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL.}

Monitoring of Operations

A.6. NESHAP Subpart LLL General Monitoring Requirements.

a. The permittee must demonstrate compliance with 40 CFR 63, Subpart LLL on a continuous basis by meeting the requirements of 40 CFR 63.1350 (see Specific Conditions **A.7** and **A.8**).
b. Any instance where the permittee fails to comply with the continuous monitoring requirements of 40 CFR 63.1350 is a violation.

[40 CFR 63.1350(a)]

A.7. NESHAP Subpart LLL Opacity Monitoring Requirements. The permittee must conduct required emissions monitoring in accordance with the provisions of paragraphs **A.7.a** through **A.7.g**, and in accordance with the monitoring plan developed under 40 CFR 63.1350(p). The permittee must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (4), if applicable, of 40 CFR 63.1350.

a. The permittee must conduct a monthly 10-minute VE test of each affected source in accordance with Method 22 of 40 CFR 60, Appendix A-7. The performance test must be conducted while the affected source is in operation.
b. If no VE are observed in six consecutive monthly tests for any affected source, permittee may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If VE are observed during any semi-annual test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
c. If no VE are observed during the semi-annual test for any affected source, the permittee may decrease the frequency of performance testing from semi-annually to annually for that affected source. If VE are observed during any annual performance test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
d. If VE are observed during any Method 22 performance test, 40 CFR 60, Appendix A-7, the permittee must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of 40 CFR 60, Appendix A-4. The Method 9 performance test, of 40 CFR 60, Appendix A-4, must begin within 1 hour of any observation of VE.

e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 VE monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permittee must conduct a Method 22 performance test, of 40 CFR 60, Appendix A-7, according to the requirements of paragraphs **A.7.a** through **A.7.d** for each such conveying system transfer point located within the building, or for the building itself, according to paragraph **A.7.g**.
g. If VE from a building are monitored, the requirements of paragraphs **A.7.a** through **A.7.d** apply to the monitoring of the building, and the permittee must also test VE from each side, roof, and vent of the building for at least 10 minutes.

[40 CFR 63.1350(f)(1)]

*{Permitting Note: This emissions unit includes totally enclosed conveying transfer points in the lime injection system, defined in 40 CFR 63.1341 as "...a conveying system transfer point that is enclosed on all sides, top, and bottom,", which are subject to the NESHAP Subpart LLL requirements in 40 CFR 63.1350(f)(1)(v) (see Specific Condition **A.7.e**)}.*

A.8. NESHAP Subpart LLL Opacity Corrective Actions. If VE are observed during any Method 22 VE test conducted under paragraph (f)(1) of 40 CFR 63.1350 (see Specific Condition **A.7**), the permittee must initiate, within one-hour, the corrective actions specified in the operation and maintenance plan as required in 40 CFR 63.1347. [40 CFR 63.1350(f)(3)]

A.9. General Duty to Minimize Emissions. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1348(d)]

Test Methods and Procedures

A.10. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions From Stationary Sources
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

A.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you are a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test

Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

A.12. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this emissions unit shall be tested to demonstrate compliance with the VE standard in Specific Condition **A.5**. [Rule 62-297.310(8)(a)3., F.A.C.]

*{Permitting Note: EPA Method 9 tests conducted in accordance with the 40 CFR 63, Subpart LLL requirements in Specific Condition **A.7.d** may be used to demonstrate compliance with annual VE testing requirements in Rule 62-297.310, F.A.C.}*

A.13. Compliance Tests Prior To Renewal. For the purpose of renewal of this air operation permit, the permittee may satisfy the requirements of Rule 62-297.310(8)(b)1., F.A.C. (see Condition **TR7b.(1)** in Appendix TR) for this emissions unit by submitting the most recent VE test, as specified in Rule 62-297.310(10), F.A.C. (see Condition **TR9** in Appendix TR), provided such test occurred within the term of the current operating permit. [Rule 62-297.310(8)(b)2., F.A.C.]

Recordkeeping and Reporting Requirements

A.14. NESHAP Subpart LLL Reporting Requirements. The permittee shall comply with the reporting requirements specified in 40 CFR 63.10 (see Appendix NESHAP Subpart A) of the general provisions of 40 CFR 63, Subpart A as follows:

a. As required by 40 CFR 63.10(d)(2), the permittee shall report the results of performance tests as part of the notification of compliance status.
b. The permittee shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
    (1) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a).
    (2) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

[40 CFR 63.10(d)(2) and 63.1354(b)(1), (b)(2), (b)(9)(v) & (b)(9)(vii)]

A.15. NESHAP Subpart LLL, Notification and Recordkeeping Requirements. This emissions unit shall meet the applicable notification, recordkeeping and reporting requirements in 40 CFR 63.1353 and 40 CFR 63.1355. The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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 in electronic format. [40 CFR 63.1353 & 63.1355]

A.16. NSPS Subpart F Requirements. The permittee shall meet the applicable recordkeeping and reporting requirements in 40 CFR 60.65. [40 CFR 60.65]

A.17. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
018	In-Line Kiln, Raw Mill, Clinker Cooler, Tire Injection Mechanism System and Alternative Fuel Feeder System

This emissions unit consists of a dry process PH/C kiln, in-line raw mill and clinker cooler. The raw meal is fed into the kiln system where it passes through or bypasses a 5-stage preheater before entering the rotary kiln. The kiln burns fuels to heat the raw meal to a temperature where it chemically transforms into clinker before being cooled and transported to clinker storage units. The kiln is permitted to produce up to 4,050 tons of clinker per day and 1,300,000 tons of clinker per consecutive 12-month period. The kiln is permitted to burn coal, petroleum coke, propane, No. 2 fuel oil, residual fuel oil, limited amounts of on-specification and off-specification used oil and limited amounts of alternative fuels. Alternative fuels are fed into the kiln using mechanical and pneumatic handling and feeding systems. The tire injection mechanism system (TIMS) uses an automated pitching device to launch one tire at a time into the front of the kiln.

Kiln exhaust gas and waste heat vents into the preheater, raw mill and coal mill before exiting partially out of the main kiln stack and the coal mill stack. The main kiln stack is equipped with a baghouse for PM control and is shared by the kiln, some raw mill operations and the clinker cooler. The main kiln stack is 359 feet (ft) tall with an exit diameter of 11 ft. According to recent application data, exhaust gas exits the stack at volumetric flow rates of 348,377 actual cubic feet per minute (acfm) and 212,492 dry standard cubic feet per minute (dscfm) and an exit temperature of 282°F.

Mercury (Hg) emissions from coal combustion and raw meal heating are controlled by dust shuttling and activated carbon injection (ACI). The kiln uses dry sorbent injection (DSI) as needed to control acid gas emissions. Gas temperature inside the kiln system baghouse inlet is controlled to minimize dioxin/furan (d/f) emissions. The main kiln stack is equipped with continuous monitoring systems (CMS) for nitrogen oxide (NO_X) emissions, carbon monoxide (CO), total hydrocarbons (THC), sulfur dioxide (SO_2) used as a surrogate for hydrogen chloride (HCl) emissions compliance, Hg and carbon dioxide (CO_2). The main kiln stack and baghouse is labeled as follows:

Emission Point	Emission Point Description
421 – BF1	Main Stack with dust collector for preheater/precalciner/raw mill/kiln/clinker cooler

{Permitting Note: 40 CFR 63, Subpart A – General Provisions and Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry, adopted by reference in Rules 62-204.800(11)(d)1., F.AC. and (11)(b)48., F.A.C., respectively; and, Rule 62-212.400, F.A.C. – Prevention of Significant Deterioration (PSD), which required a Best Available Control Technology (BACT) Determination for VOC emissions in PSD-FL-324 (Permit Nos. 0250014-007-AC and 0250014-008-AC).}

Fuel Handling Equipment and Control Technology

B.1. Alternative Fuels Equipment. The permittee is authorized to operate the following permanent equipment for firing alternative fuels (AF) in the pyroprocessing kiln system.

a. *Mechanical and Pneumatic Handling and Feed Systems*. Each feed system shall be designed to handle alternative fuels with multiple points of injection to accommodate various AF particle size, density and heating value. The nominal feed rate of each feed system is 15 tons of AF per hour.

(1) The mechanical feed system(s) shall consist of mechanical feeder(s), weighing mechanism(s), load hopper(s) with required conveyors, storage bins, and other associated equipment.

(2) The pneumatic feed systems shall consist of a system of mechanical feeder(s) and associated system of air movement equipment and related ductwork, weighing mechanism(s), loading hopper(s) with required conveyors, storage bins, and other associated equipment.

b. *Kiln Burner, AF Handling and Firing Systems*. The permittee is authorized to replace the current kiln burner system with a multi-channel fuel burner(s) and/or other related feed equipment specifically designed for co-firing AF with authorized fuels in the kiln.
c. *Feed Systems*. To the extent practicable, components of the feed systems shall be substantially enclosed or covered to prevent the loss of any AF and fugitive dust emissions. Each feed system shall be integrated into the existing kiln data system. The AF feed rate shall be recorded along with the other fuel feed rates.
d. *Fuel Preparation Equipment*. The permittee is authorized to install grinding, shredding, screening, and sizing equipment to prepare the AF. This equipment will be powered by electric motors or diesel engines. In addition, the diesel engines shall comply with any applicable NSPS or NESHAP standards.

[Rule 62-296.320, F.A.C.; and, Permit No. 0250014-045-AC]

B.2. Dry Sorbent Injection (DSI) System. The permittee is authorized to operate a Sodimate, Big Bag Storage and Feed System (or equivalent DSI System) to inject sorbent material into the outlet of the preheater fan to control mercury emissions. [Permit No. 0250014-064-AC]

B.3. Pneumatic Kiln Feed Transfer System. The permittee is authorized to operate a back-up pneumatic kiln feed transfer system on the In-Line Kiln/Raw Mill/Clinker Cooler/TIMS/Alternative Fuel Feeder System to be used in the event the present kiln feed bucket elevator is down for repairs or maintenance. The back-up pneumatic kiln feed transfer system shall use two shut-off gates to divert the metered kiln feed from the existing air-slide 431-AS1 to a new FK pump that will pneumatically transport the kiln feed via enclosed pipe directly into the preheater system at the Stage 2 to Stage 1 riser duct. Due to longer than expected delivery dates for new shut-off gates, permittee may remove existing shut-off gates in existing air-slide 431-AS2 and relocate them to 431-AS1. [Permit No. 0250014-065-AC]

Essential Potential to Emit (PTE) Parameters

B.4. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0250014-002-AC & 0250014-041-AC]

B.5. Production Limits. The clinker production rate of the kiln shall not exceed 4,050 tons per day based on a 24-hour block average period (midnight to midnight) and 1,300,000 tons during any consecutive 12 months. The clinker production rate shall be determined as a function of the preheater dry feed rate and a conversion factor (multiplier) for the kiln system of 0.607. Continuous operation is allowed (8,760 hours per year) provided the annual clinker production is not exceeded. [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. 0250014-016-AC/PSD-FL-324A & 0250014-063-AC]

{Permitting Note: Pursuant to 40 CFR 63.1350(d) and 63.1355(e), the permittee is required to record and maintain records of the daily clinker production rate.}

B.6. Maximum Whole Tire Feed Rate. The whole tire feed rate shall not exceed 2.50 tons per hour, based on a 24-hour average. [Permit No. 0250014-063-AC]

B.7. Fly Ash Injection Limit. Fly ash injection to the precalciner shall not exceed 35 tons per hour (TPH, 24-hour average). [Permit Nos. 0250014-016-AC/PSD-FL-324A & 0250014-041-AC]

B.8. Heat Input Limit and Fuels. The design heat input rate to the pyroprocessing system (EU No. 018) is 485 MMBtu/hr on a 24-hour average and shall consist only of the following:
a. *Start-Up/Normal Operations Fuels*. Coal, natural gas, petroleum coke, propane, No. 2 fuel oil, residual fuel oil, and on-specification and off-specification used oil.
(1) *Coal and Petroleum Coke*. The design coal usage rate to the pyroprocessing system is 18.7 TPH based on a 24-hour average. The design petroleum coke usage rate is 16.3 TPH on a 24-hour basis.
(2) *Used Oil*.
(a) The constituents and properties of the *on-spec used oil* shall comply with the following allowable concentration levels as stipulated in Table 1 below, unless otherwise noted, and defined in 40

CFR 279.11, which is adopted by reference in Rule 62-710.210, F.A.C.

Table 1

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum (Permit No. 0250014-002-AC)
Flash Point	100°F minimum
Polychlorinated Byphenyls (PCBs)	Less than 2 ppm (Permit No. 0250014-002-AC)

(b) *On-specification/Off-specification used oil* burned at this facility shall not be a hazardous waste as defined by Rule 62-730.030, F.A.C., or 40 CFR Part 261 (July 1, 1996 version). It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. Used oil shall be burned in compliance with Section 403.769(3), F.S.

(c) *On-specification/Off-specification used oil* samples shall be analyzed by EPA Recommended Analytical Procedures for Used Oil for the following constituent/property, associated unit, and using the test methods indicated in Table 2 below.

Table 2

Constituent/Property	Unit	Test Method
Cadmium	ppm	EPA SW-846(6010)
Arsenic	ppm	EPA SW-846(6010)
Chromium	ppm	EPA SW-846(6010)
Lead	ppm	EPA SW-846(6010)
Total Halogens	ppm	EPA SW-846(9252)
Sulfur	Percent	ASTM D129 or ASTM D1552
Flash Point	°F	EPA SW-846(1010)
Heat of Combustion	Btu/gal	ASTM D240
Polychlorinated Byphenyls (PCBs)	ppm	EPA SW-846 (0010) and EPA 680

{Permitting Note: Other test methods may be used only after receiving written prior approval from the RER.}

(d) The maximum annual consumption rate of used oil shall not exceed 31,886,000 gallons.

[Rule 62-4.070(3), F.A.C and Permit No. 0250014-063-AC]

b. *Supplemental Fuels/Non Start-Up Fuels.*

(1) The following permitted non-hazardous solid waste may be used as supplemental fuel: whole tires and tire-derived fuels, booms and rags from clean petroleum spill clean ups, oil filters, unused paper by-products, clean non-chlorinated plastic by-products, and clean biomass. Clean biomass means clean cellulosic biomass and/or agricultural organic fibrous organic byproducts as defined Specific Condition **B.11**. This non-hazardous solid waste material shall not be used as a start-up fuel. [Miami-Dade County Environmental Quality Control Board, Board Order 99-55 dated December 9, 1999; Permit No. 0250014-002-AC]

(2) Before initiating the burning of whole tires, the gases exiting the kiln shall reach a minimum temperature of 1,400 degrees F for one hour and the oxygen level in the kiln, as measured at the

cement plant induced draft fan, shall reach at least 3 percent (1-hour average). Upon reaching steady state conditions, and within 6 hours, gases exiting the kiln shall be maintained at an outlet temperature of at least 1,750°F. [Permit Nos. 0250014-002-AC & 0250014-041 AC]

(3) *Tire Injection Mechanism System (TIMS) Equipment*. A tire injection mechanism system (TIMS) that consists of a door (portal) located externally on the left front face of the kiln burner hood, centered horizontally between the west burner hood wall and the burner pipe. It also has a tire feed belt, and a tire injection mechanism. The TIMS uses an automated "pitching" device to shoot a tire, one at a time, into the kiln. A single gate valve opens for a few seconds every time a tire is fed to the front of the kiln. [Permit No. 0250014-041-AC]

*{Pursuant to 40 CFR 63.1346(g) (see Specific Condition **B.24**), during startup, the permittee must combust natural gas, propane, distillate oil and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1,200°F. While Specific Condition **B.8.a** above allows the combustion of coal, petroleum coke, residual fuel oil and on- and off-specification used oil in the kiln during startup, the permittee is not authorized to burn these fuels during startup while the kiln is subject to 40 CFR 63, Subpart LLL.}*

B.9. Prohibited Materials. The permittee is prohibited from firing the following materials in the pyroprocessing system: hazardous waste as defined in 40 CFR 261, nuclear waste, and radioactive waste. The permittee shall not knowingly fire biomedical waste, asbestos-containing materials per 40 CFR 61, Subpart M, whole batteries, and unsorted municipal waste. These prohibited materials shall not be used to manufacture engineered fuels. If the permittee identifies delivered material that falls under Specific Condition **B.9**, the supplier shall be contacted and the material shall be returned, disposed, or any other appropriate legal method of handling the material shall be employed. The permittee shall maintain records of delivery, sampling and analysis, and actions taken to correct abnormalities. Such records shall be stored onsite for at least five years and available for inspection upon request. [Permit No. 0250014-045-AC]

B.10. Use of the Pneumatic Kiln Feed Transfer System. The pneumatic kiln feed transfer system shall only be used when the present kiln feed bucket elevator is down for repairs or maintenance. [Rule 62-210.200(PTE), F.A.C; and, Permit No. 0250014-065-AC]

{Permitting Note: The pneumatic kiln feed transfer system may be periodically tested for routine maintenance for less than 10 hours per 12-month period regardless of the operation of the present kiln feed bucket elevator. If the permittee plans to run the system for more than 10 hours per year while the present kiln feed bucket elevator is operating, the permittee must receive written approval from the Department.}

B.11. Alternative Fuels (AF). Subject to the AF Acceptance Criteria, the permittee is authorized to co-fire authorized fuels with any of the following AF.

a. *Tire-Derived Fuel (TDF)*, which includes whole and shredded tires with or without steel belt material including portions of tires such as tirefluff. The kiln is currently permitted to use tire-derived fuel.
b. *Plastics*, which includes materials such as polyethylene plastic used in agricultural and silvicultural operations. This may include incidental amounts of chlorinated plastics.
c. *Roofing Materials*, which consists of roofing shingles and related roofing materials with the bulk of the incombustible grit material separated and which is not subject to regulations as an asbestos-containing material per 40 CFR 61 subpart M.
d. *Agricultural Biogenic Materials*, which includes materials such as peanut hulls, rice hulls, corn husks, citrus peels, cotton gin byproducts, animal bedding and other similar types of materials.
e. *Cellulosic Biomass – Untreated and Treated*, which includes materials such as untreated lumber, tree stumps, tree limbs, slash, bark, sawdust, sander dust, wood chips scraps, wood scraps, wood slabs, wood millings, wood shavings and processed pellets made from wood or other forest residues in addition to preservative-treated wood that may contain treatments such as creosote, copper-chromium-arsenic (CCA), or alkaline copper quaternary (ACQ), painted wood, or resinated woods (plywood, particle board, medium density fiberboard, oriented strand board, laminated beams, finger-jointed trim and other sheet

goods). The permittee shall not fire more than 1,000 lb/hour averaged on a 7-day block average basis of segregated streams of wood treated with copper-chromium-arsenic (CCA) compounds. The kiln is currently permitted to use untreated cellulosic biomass and paper currency.

f. *Carpet-Derived Fuel*, which includes shredded new, reject or used carpet materials.
g. *Alternative Fuel Mix*, which includes a blended combination of two or more of any of the above materials.
h. *Biosolids*, which includes organic materials sanitized to meet EPA Class A sanitization standards and is derived from treatment processes of public treatment water systems.
i. *Engineered Fuel (EF)* is engineered to have targeted, consistent fuel properties such as: calorific value, moisture, particle size, ash content, and volatility. The specific targeted properties are established based on available alternative fuel material supply and are carefully controlled through blending of non-hazardous combustible materials or through separation of non-hazardous incombustible materials from combustible materials (mixes of any alternative fuels where the blending and processing may also include the addition of on-specification used oils or other non-hazardous liquids to ensure consistent and predictable fuel properties). EF is engineered largely from the above materials and could consist of animal meal, automotive manufacturing byproducts, clean-up debris from natural disasters, processed municipal solid waste, dried/sanitized biosolids, paint filter cake, hospital materials (non-infectious), pharmaceuticals (expired prescriptions), cosmetics, and confiscated narcotics.

[Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0250014-045-AC]

B.12. Receiving AF. For AF received at the plant, the permittee shall comply with the following requirements:

a. All AF materials received at the plant shall be in covered trucks and/or enclosed containers. When unloading and handing AF, the permittee shall take reasonable precautions to prevent fugitive dust emissions.
b. The permittee shall record the amount, the category/type and amount of each AF received.
c. Each AF material received shall be sampled and analyzed in a manner consistent with industry standards for quality assurance and quality control to ensure that representative data is collected. The permittee shall obtain the analytical results of a representative sample of the AF prior to the initial delivery, quarterly for the first year, and if the analysis meets permit requirements the frequency of sampling and analysis shall be annual every January thereafter, if that material is present. All records and results of the analysis shall be maintained at the facility as required for currently permitted fuels.
d. *Fuel Analyses Parameters*. The following information shall be included when reporting the analytical results for an AF: higher heating value (Btu/lb) of AF; moisture, ash, volatiles, fixed carbon, sulfur and chlorine content (percent by weight); arsenic, beryllium, cadmium, chromium, lead, and mercury contents (ppm). All concentrations are on a dry basis. Reject roofing shingles, combusted separately as the item in Specific Condition **B.11.c** (Roofing Materials) and if included in the item in Specific Condition **B.11.i** (Engineered Fuel) shall include a certification from the manufacturer to be made without asbestos.

[Permit No. 0250014-045-AC]

B.13. Sampling Criteria. Each AF material received shall be sampled and analyzed in a manner consistent with industry standards for quality assurance and quality control to ensure that representative data is collected. At a minimum, the frequency of sampling and analysis shall be consistent with the frequency of sampling and analysis of coal. All records and results of the analysis shall be maintained at the facility as required for currently permitted fuels. [Permit No. 0250014-045-AC]

B.14. AF Assessment and Analytical Methods. The permittee shall use the following analytical methods to determine the composition of the AF.

Parameter	**Analytical Methods**
Moisture, Volatiles, Ash, and Fixed Carbon	Proximate Analysis appropriate for given fuel
Carbon, Hydrogen, Nitrogen, Sulfur and Oxygen	Ultimate Analysis appropriate for given fuel

Parameter	Analytical Methods
Heating Value	ASTM E711 - 87(2004) Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, or ASTM D5468 - 02(2007) Standard Test Method for Gross Calorific and Ash Value of Waste Materials, or Proximate Analysis appropriate for given fuel
Chlorine	EPA SW-846 or EPA Method 9056
Mercury	EPA 7470A/7471A
Other Metals	EPA SW-846 or EPA Method 6010B

Other equivalent methods may be used with prior written approval of the Department. [Permit No. 0250014-045-AC]

B.15. Sampling/Analysis by Permittee. For each AF assessment, the permittee shall obtain analytical results of the AF as required in Specific Condition **B.12**, the operator shall take a representative as-fired sample of the AF and have it analyzed for the parameters listed in specific condition **B.12.d**. [Permit No. 0250014-045-AC]

B.16. Processed/Prepared AF. The AF shall be stored:
a. Under cover or in covered trailers, containers or buildings;
b. On top of a paved or compacted clay surface; and
c. By Best Management Practices to promote containment and prevent contamination of air, water and soil.
[Rule 62-296.320, F.A.C.; and, Permit No. 0250014-045-AC]

B.17. Alternative Fuels Storage. Alternative fuels shall be received and stored in containers, or on an impervious surface under roof outside the Northwest Wellfield Protection Area. [Permit Nos. 0250014-041-AC & 0250014-059-AC; and, Miami-Dade County Environmental Quality Control Board Order 99-55 dated December 9, 1999]

B.18. Hazardous Waste Burning. The permittee is not allowed to burn any type of hazardous waste in the kiln. [Miami-Dade County Environmental Quality Control Board Order 99-55 dated December 9, 1999]

B.19. AF Operation. Alternative fuels shall only be fired once the kiln has achieved normal operation, temperatures and production (i.e., when raw materials are introduced).
a. AF shall be introduced only in the high-temperature combustion zones of the main kiln burner, the precalciner burner or appropriate secondary firing points in the precalciner/preheater.
b. The permittee shall make every effort during the shakedown and assessment periods to promote efficient combustion and minimize emissions impacts.
c. Operators shall discontinue firing AF if one of the continuous emissions monitoring systems (CEMS) or other continuous monitors indicates a non-compliance issue related to alternative fuels.
[Rule 62-204.800, F.A.C.; 40 CFR 60 Appendix A, 40 CFR 63.1349, 1350 & 1354; and, Permit Nos. 0250014-045-AC & 0250014-059-AC]

Emission Limitations and Standards

B.20. Main Stack – Pyroprocessing System. In-Line Kiln/Raw Mill/Clinker Cooler Emissions Limits: Emissions from the kiln system shall not exceed the limits specified in Table 4 below, and allowable operating rates from Table 5.

Table 4

PARAMETER	EMISSION LIMIT [1][2][3][4][5]	AVERAGING TIME	COMPLIANCE METHOD	LIMIT BASIS
PM	163 TPY	12-month rolling	(See below)	Avoid PSD
	Equation 1 of 40 CFR 63.1343 (lb/ton clinker)	3 hours and 30-kiln operating day rolling	Annual Method 5 or 5I/CPMS, RM up and RM down and PM CPMS	40 CFR 63 Subpart LLL
PM_{10}	130 TPY	12-month rolling	(See above)	Avoid PSD
SO_2	325 TPY	12-month rolling	CEMS (PS2)	Avoid PSD
NO_X	2,600 TPY	12-month rolling	CEMS (PS2)	Avoid PSD
CO	1,827 TPY	12-month rolling	CEMS (PS4)	Avoid PSD
VOC	0.12 lb/ton clinker [6]	3 hours and 30-kiln operating day	Annual Method 25 or 25A and compliance with THC NESHAP emissions limit of 24 ppmvd @ 7% O_2	BACT
	Equivalent Emissions: 19.4 lb/hr (78 TPY)			
THC	24 ppmvd 7% O_2	CEMS, 30-kiln operating day	Continuous [5]	40 CFR 63 Subpart LLL
HCl	3 ppmvd 7% O_2	CEMS, 30-kiln operating day	Continuous [5][7]	40 CFR 63 Subpart LLL
Mercury	0.091 TPY	12-month rolling	See Specific Condition **B.38**	Avoid PSD
	55 lb/MM tons clinker	30-kiln operating day	CEMS or Sorbent Trap	40 CFR 63 Subpart LLL
Dioxins/Furans	0.20 ng/dscm TEQ or 0.40 ng/dscm TEQ	Three 3-hour runs	Method 23, RM-up & RM-down every 30 calendar	40 CFR 63 Subpart LLL

PARAMETER	EMISSION LIMIT [1][2][3][4][5]	AVERAGING TIME	COMPLIANCE METHOD	LIMIT BASIS
	(T < 400°F) at 7% O_2	(9 hours)	months	
Temperature	Baghouse Temperature (T) < T during Dioxin/Furan Tests	180 minutes	Continuous	40 CFR 63 Subpart LLL

[1]. As determined by **Specific Condition B.5**, the maximum clinker production rate is 4,050 TPD

[2]. Compliance Units. This facility shall demonstrate compliance based on these standards.

[3]. "Equivalent Emissions" represent annual emissions based on operation at the maximum permitted emissions and production rates. "Equivalent Emissions" are listed for informational purposes, for PSD applicability and recordkeeping/tracking purposes.

[4]. The original air construction permit for the kiln modernization project is Permit No. 0250014-002-AC. Subsequent permits modified limits: Permit No. 0250014-007-AC removed the beryllium emissions limit.
Permit No. 0250014-008-AC revised the SO2 limit from 0.7 lb/MMBtu to 2.23 lb/ton of clinker, revised the NOx emissions limit from 1.53 lb/MMBtu to 4.9 lb/ton of clinker, and revised the VOC emission limits from 0.1 to 0.12 lb/ton of clinker, 13.7 to 16.4 lb/hour, and 60 to 72 TPY (BACT). Permit No. 0250014-016-AC modified the VOC limit from 16.4 lb/hour to 19.4 lb/hour and 72 TPY to 78 TPY.
[Permit Nos. 0250014-016-AC/PSD-FL-324A, and 0250014-041-AC; Rules 62-4.070(3), 62-210.200(PTE), and 62-212.400(BACT), F.A.C.; 40 CFR 63, Subpart LLL]

[5]. Because the kiln system exhaust gas partially vents through the coal mill (EU020) stack, compliance testing for NESHAP LLL pollutants of PM, THC, Hg and HCl requires testing of kiln and coal mill. The combination of coal mill and kiln emissions determine compliance per 60 CFR 63.1348(a)(7)(ii). Note that the kiln partially exhausts through the coal mill stack and the coal mill exhaust does not exhaust to the kiln stack. PM emissions from the kiln and coal mill must be simultaneously tested and the results are combined using Eqn. 1 per 63.1343(a)(2). PM testing may be required more frequently than annual if the PM CPMS indicates high readings. See condition 40 CFR 63.1349(a) and (b)(1), and 40 CFR 63.1350(b)(1) for details on coal mill monitoring and PM CPMS monitoring with PM testing requirements. PM_{10} compliance can be demonstrated by PM testing. THC monitoring is combination of kiln CEMS and coal mill testing per 40 CFR 63.1348(b)(6)(ii). Permittee can alternatively comply by O-HAP testing and monitoring per 40 CFR 63.1350(j). Hg monitoring is combination of kiln CMS/sorbent trap and coal mill testing per 40 CFR 63.1348(b)(7)(ii). HCl monitoring is combination of kiln CMS and coal mill testing per 40 CFR 63.1348(b)(8)(iii). See also subsection F. (EU020) for details on required coal mill testing and monitoring. Oxygen monitoring is required for NESHAP LLL compliance, correction to 7% O_2. NESHAP pollutants compliance by CMS shall exclude all data during periods of startup and shutdown per 40 CFR 63.1343(a).

[6]. Monitoring for the VOC emission standards (excluding methane and ethane) shall be demonstrated by compliance with a THC emission standard of 24 ppmvd @ 7% O_2, on a 30-operating day rolling average, using the procedures described in NESHAP LLL (including methane and ethane).

[7]. HCl compliance may be demonstrated by surrogate monitoring by SO_2 CEMS or by minimal sorbent injection rate. See 40 CFR 63.1349(b)(6), CFR 63.1350(l)(3), and 40 CFR 63.1350(m) for details on HCl monitoring requirements.
Compliance Demonstration Notes:

[a] Annual testing of emissions shall be conducted during the worst case scenario that this facility would normally operate under and according to the testing requirements specified in Appendix TR – Facility-Wide Testing Requirements, and includes the protocol for different fuel scenarios. Fuels to be burned are specified in Specific Condition B.8.

[b] Annual Testing. At CEMEX's option, Method 25A can be corrected for methane through a concurrently conducted Method 18 determination or through another method approved by RER. If a concurrent demonstration of methane is not performed, then the results of the Method 25A determination shall be used to demonstrate compliance with the VOC emission limit. In other words, CEMEX has the option of using Method 25A alone if they stipulate that all of the THC is VOC.

[c] NO_X - The continuous emission monitoring system (CEMS) data shall be used to demonstrate compliance with the kiln/cooler/raw mill emissions limits. The CEMS calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B and Appendix F.

PARAMETER	EMISSION LIMIT [1][2][3][4][5]	AVERAGING TIME	COMPLIANCE METHOD	LIMIT BASIS
[d] Continuous process monitors for CO and/or O_2 to optimize combustion conditions for pollution control shall be part of the process. Oxygen monitoring is required for NESHAP LLL compliance oxygen corrections. When the oxygen monitor is not providing valid hourly values, a default value of 15 percent may be used.				

Table 5

ALLOWABLE OPERATING RATES			
In-Line Kiln/Raw Mill/Cooler			
Hours of operation per year	Hours	8,760	Averaging Period
Clinker Production	TPD	4,050	(24-hour average)
Gas temperature at inlet to kiln baghouse not to exceed the applicable limit established during D/F testing per 40 CFR 63.1350(f)			(180-minute rolling average)

[Rules 62-210.200(PTE) & 62-212.400(BACT), F.A.C.; 40 CFR 63, Subpart LLL; and, Permit Nos. 0250014-016-AC/PSD-FL-324A, & 0250014-063-AC]

B.21. Dioxins and Furans (D/F) Operating Limits for Kilns and In-line Kiln/Raw Mills.

a. The permittee must operate the kiln such that the temperature of the gas at the inlet to the kiln PMCD does not exceed the applicable temperature limit specified in paragraph **B.21.b**. The permittee 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.21.b** and established during the performance test when the raw mill was operating, is not exceeded, except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent.
   (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.21.b** and established during the performance test when the raw mill was not operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

b. The temperature limit for affected sources meeting the limits of paragraph **B.21.a** or paragraphs **B.21.a(1)** and **B.21.a(2)** is determined in accordance with Specific Condition **B.44.d**.

[40 CFR 63.1346(a) & (b)]

Monitoring of Operations

B.22. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(8)(c), F.A.C. [Rules 62-204.800 & 62-213.440(1)(b)1.2., F.A.C.; and, 40 CFR 64]

B.23. Operations and Emissions. The permittee shall continuously monitor the: kiln feed rate as a measure of clinker production rate and baghouse inlet temperature. [40 CFR 60, Subpart LLL; and, Permit Nos. 0250014-002-AC & 250014-063-AC]

B.24. Operations During Startup and Shutdown. During periods of startup and shutdown the permittee must meet the following requirements:

a. During startup the permittee must use any one or combination of the following clean fuels: natural gas, propane, distillate oil, and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1,200°F.
b. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1,200°F.
c. All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse or ESP reaches 300°F (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse or ESP every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.
d. The permittee must keep records as specified in 40 CFR 63.1355 during periods of startup or shutdown.

[40 CFR 63.1346(g)]

B.25. Continuous Compliance Monitoring Requirements. The permittee must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in 40 CFR 63.1350 and 40 CFR 63.8 for each affected source.

a. *General Requirements.*
   (1) The permittee must monitor and collect data according to 40 CFR 63.1350 and the site-specific monitoring plan required by Specific Condition **B.56**.
   (2) Except for periods of startup and shutdown, monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee must operate the monitoring system and collect data at all required intervals at all times the affected source is operating.
   (3) The permittee may not use data recorded during monitoring system startup, shutdown or malfunctions or repairs associated with monitoring system malfunctions in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.
   (4) *Clinker Production*. Since the permittee is subject to limitations on mercury emissions (lb/MM tons of clinker) under 40 CFR 63.1343(b), the permittee must determine the hourly production rate of clinker according to the requirements of Specific Condition **B.31**.
b. *PM Compliance*. Since the permittee is subject to limitations on PM emissions under 40 CFR 63.1343(b), the permittee must use the monitoring methods and procedures in Specific Conditions **B.28** and **B.31**.
c. *D/F Compliance*. Since the permittee is subject to limitations on D/F emissions under 40 CFR 63.1343(b), must demonstrate compliance using a continuous monitoring system (CMS) that is installed, operated and maintained to record the temperature of specified gas streams in accordance with the requirements of Specific Condition **B.29**.
d. *THC Compliance*.
   (1) Since the permittee subject to limitations on THC emissions under 40 CFR 63.1343(b), the permittee must demonstrate compliance using the monitoring methods and procedures in Specific Condition **B.37**.
   (2) THC must be measured either upstream of the coal mill or in the coal mill stack.
e. *Mercury Compliance.*
   (1) Since the permittee is subject to limitations on mercury emissions in 40 CFR 63.1343(b), the permittee must demonstrate compliance using the monitoring methods and procedures in Specific Condition **B.38**. If the permittee uses an integrated sorbent trap monitoring system to determine ongoing compliance, the permittee must use the procedures described in ~~40 CFR 63.1348(a)(5)~~ Specific Condition **B.47** to assign hourly mercury concentration values and to calculate rolling 30

operating day emissions rates. Since the permittee assigns the mercury concentration measured with the sorbent trap to each relevant hour respectively for each operating day of the integrated period, the permittee may schedule the sorbent trap change periods to any time of the day (i.e., the sorbent trap replacement need not be scheduled at 12:00 midnight nor must the sorbent trap replacements occur only at integral 24-hour intervals).

(2) Mercury must be measured either upstream of the coal mill or in the coal mill stack.

f. *HCl Compliance*. Since the permittee is subject to limitations on HCl emissions under 40 CFR 63.1343(b), the permittee must demonstrate compliance using the performance test methods and procedures in Specific Condition **B.50** ~~40 CFR 63.1349(b)(6)~~.

(1) For an affected source that is not equipped with a wet scrubber, tray tower or a dry sorbent injection system, the permittee must demonstrate compliance using the monitoring methods and procedures in Specific Condition **B.39.a**.

(2) For an affected source that is equipped with a wet scrubber, tray tower or a dry sorbent injection system, the permittee may demonstrate compliance using the monitoring methods and procedures in Specific Condition **B.39.c**.

(3) HCl may be measured either upstream of the coal mill or in the coal mill stack.

(4) As an alternative to paragraph **B.25.f(2)**, the permittee may use an SO_2 CEMS to establish an SO_2 operating level during initial and repeat HCl performance tests and monitor the SO_2 level using the procedures in Specific Condition **B.39.c**.

g. *Startup and Shutdown Compliance*. All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse reaches 300°F (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.

[40 CFR 63.1348(b)(1)-(2), (b)(4) & (b)(6)-(9)]

B.26. General Duty to Minimize Emissions. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1348(d)]

B.27. Monitoring Requirements.

a. The permittee must demonstrate compliance with 40 CFR 63 Subpart LLL on a continuous basis by meeting the requirements of 40 CFR 63.1350.

b. For each existing unit that is equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests.

c. Any instance where the permittee fails to comply with the continuous monitoring requirements of 40 CFR 63.1350 is a violation.

[40 CFR 63.1350(a)]

B.28. Particulate Matter Monitoring.

a. *PM Continuous Parameter Monitoring System (CPMS)*. The permittee will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. The permittee will conduct the performance test using Method 5 or Method 5I at appendix A-3 to 40 CFR Part 60. The permittee will use the PM CPMS to demonstrate continuous compliance with this operating limit. The permittee must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance

test using the procedures in 40 CFR 63.1349(b)(1) (i) through (vi) of 40 CFR 63 Subpart LLL. The permittee must also repeat the test if permittee changes the analytical range of the instrument, or if the permittee replaces the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration.

b. To determine continuous compliance, the permittee must use the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. The permittee must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day.

c. For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, the owner or operator must:
   (1) Within 48 hours of the exceedance, visually inspect the air pollution control device (APCD);
   (2) If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and
   (3) Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. The permittee s not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph.

d. PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of 40 CFR 63 Subpart LLL.

[40 CFR 63.1350(b)(1)]

B.29. Dioxin/Furans Emissions Monitoring. The permittee must comply with the monitoring requirements of paragraphs **B.29.a** through **B.29.e** and paragraphs (m)(1) through (m)(4) of 40 CFR 63.1350 (see Specific Conditions **B.30.a** through **B.30.d**) to demonstrate continuous compliance with the D/F emissions standard. The permittee must also develop an emissions monitoring plan in accordance with paragraphs **B.56.a** through **B.56.d**.

a. The permittee must install, calibrate, maintain, and continuously operate a CMS to record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the kiln PMCDs.
   (1) The temperature recorder response range must include zero and 1.5 times the average temperature established according to the requirements in Specific Condition **B.44.d**.
   (2) The calibration reference for the temperature measurement must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
   (3) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months.

b. The permittee must monitor and continuously record the temperature of the exhaust gases from the kiln at the inlet to the kiln PMCD.

c. The required minimum data collection frequency must be one minute.

d. Calculate the rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. See Specific Condition **B.44**.

e. 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.

[40 CFR 63.1350(g)]

B.30. Parameter Monitoring. If the permittee has an operating limit that requires the use of a CMS, the permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS)

according to the procedures in paragraphs **B.30.a** through **B.30.d** by the compliance date specified in 40 CFR 63.1351. The permittee must also meet the applicable specific parameter monitoring requirements in paragraphs **B.30.a** through **B.30.e**.

a. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. The owner or operator must have a minimum of four successive cycles of operation to have a valid hour of data.
b. The permittee must conduct all monitoring in continuous operation at all times that the unit is operating.
c. Determine the 1-hour block average of all recorded readings.
d. Record the results of each inspection, calibration, and validation check.
e. *Mass flow rate (for sorbent injection) monitoring requirements.* If the permittee has an operating limit that requires the use of equipment to monitor sorbent injection rate (*e.g.*, weigh belt, weigh hopper, or hopper flow measurement device), the permittee must meet the requirements in paragraphs **B.30.e(1)** through **B.30.e(3)**. These requirements also apply to the sorbent injection equipment of a dry scrubber.
   (1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.
   (2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.
   (3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

[40 CFR 63.1350(m)(1)-(4) & (9)

B.31. Clinker Production Monitoring: In order to determine clinker production, the permittee must:

a. Determine hourly clinker production by one of two methods:
   (1) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy, or
   (2) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate the hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, the permittee must use the new ratio going forward, but the permittee does not have to retroactively change clinker production rates previously estimated.
b. Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable) before initial use (for new sources). During each quarter of source operation, the permittee must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).
c. If the permittee measures clinker production directly, record the daily clinker production rates; if the permittee measures the kiln feed rates and calculate clinker production, record the hourly kiln feed and clinker production rates.
d. Develop an emissions monitoring plan in accordance with paragraphs **B.56.a** through **B.56.d**.

[40 CFR 63.1350(d)]

Continuous Emissions Monitoring Requirements

B.32. Continuous Emissions Monitoring System (CEMS) Requirements. All CEMS shall be operational, recording and continuously transmitting available data. The monitoring systems shall be certified in accordance with the appropriate Performance Specification in 40 CFR 60 Appendix B. The systems shall comply with the requirements for continuous monitoring systems found in the general provisions of 40 CFR 63, Subpart A including development of a quality control program. Data on monitoring equipment specifications, manufacturer, type calibration and maintenance requirements, and the proposed location of

each monitor shall be provided to RER for review at least 90 days prior to installation of a new CEMS and at least 45 days prior to replacement of any CEMS. [Permit No. 0250014-041-AC]

B.33. Carbon Monoxide (CO) Monitoring.

a. *Continuous Monitoring*. Continuous monitors shall be installed for CO or O_2 to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NOX, and SO2. [40 CFR 60, Appendix B; and, Permit Nos. 0250014-002-AC & 0250014-041-AC]

b. *Continuous Emission Monitoring System (CEMS) for CO*. The permittee shall install, calibrate, operate and maintain a CEMS to measure and record emissions of CO in the kiln system exhaust stack in a manner sufficient to demonstrate continuous compliance with the CO emissions standard. Compliance with the CO emission limit of 1,827 TPY shall be based on a 12-month rolling average. The CO CEMS shall express the results in units of tons per year. of CO emissions. The following requirements apply to the CEMS:

(1) *Certification of CO CEMS*. The CO CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required relative accuracy test audits (RATAs) shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards;

(2) *Valid Hourly Averages*. The CO CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour. Each 1-hour block average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel (or produced clinker) during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid.

(a) Hours during which there is no kiln feed and no fuel fired are not valid hours.

(b) Hours during which the plant is firing fuel but producing no clinker are valid, but these hours are excluded from the production-normalized emission rate computation (pounds per ton of clinker). These hours are included in any pollutant mass emission rate computation (pounds per hour).

c. *30-day Rolling Averages*. Each 30-day rolling average shall be the arithmetic average of all valid hourly averages collected during the last 30 operating days. A new 30-day rolling average shall be recomputed after every day of operation for the new day and the preceding 29 operating days. For purposes of computing these emission limits, an operating day is any day that the kiln produces clinker or fires fuel.

d. *Data Exclusion*. Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, the CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Malfunctions do not include process upsets that occur as normal part of cement production. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.

e. *Data Availability*. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the RER.

f. *Excess Emissions Notification and Reporting*. The permittee shall notify the RER within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period.

All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report.

[Rule 62-4.130, F.A.C.; and, Permit No. 0250014-047-AC & 0250014-063-AC]

*{Permitting Note: Failure to meet 95% CEMS availability in a single calendar quarter **does not** constitute a violation of this permit condition so long as the corrective actions stipulated by the condition, i.e., submittal of a plan identifying the problems and taking corrective action in the next calendar quarter, are implemented by the permittee. Different problem(s) arising in subsequent calendar quarters with regard to CEMS availability also does not necessarily constitute a violation of this permit condition so long as corrective actions have been taken addressing any previous problem(s) and the new problem(s) do not arise from lack of maintenance, training of personnel or other negligence by the permittee. Finally, continuing problems from calendar quarter to calendar quarter related to the same problem(s) that causes CEMS availability to not meet the 95% criteria could also constitute a violation of this permit condition.}*

B.34. Total Hydrocarbons (THC) Continuous Emission Monitoring System (CEMS). A CEMS shall be installed, calibrated, maintained and operated in the kiln/raw mill/cooler stack to measure and record the concentration of total hydrocarbons (THC) from the kiln/raw mill/cooler. Fuel used for the flame ionization process shall consist of a hydrogen/helium mix specified by the CEMS manufacturer. The CEMS shall be installed, certified, operated and maintained in accordance with 40 CFR 60, Appendix B, Performance Specification 8A. The CEMS data shall be quality assured using the procedures of Appendix F of 40 CFR 60.

a. *24-hour Averages*. Every day, the 24-hour average (daily average) THC concentration for the previous day shall be calculated and recorded. Concentration shall be calculated in units of ppmvd corrected to 7% oxygen (propane equivalence). Daily averages are to be calculated as the arithmetic mean of each monitored operating hour.

b. *30-day Rolling Averages*. Every day, the 30-day rolling average THC concentrations for the previous 30 operating days shall be calculated and recorded. Emissions shall be calculated in units of ppmvd corrected to 7% oxygen (propane equivalence). The 30-day rolling averages are to be calculated as the sum of the THC concentrations for all monitored operating hours divided by the number of monitored operating hours, both taken over the previous 30 operating days.

c. *Hourly Averages*. A monitored operating hour is each hour in which fuel is fired in the unit and at least two concentration measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated, shall be excluded from the averages. Data recorded during periods of shutdown, malfunction, load change, and continuous operating periods shall be included in the averages.

d. *Quarterly Monitor Downtime Reporting*. To the extent the monitoring system is available to record concentration data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation, and malfunction. Monitor downtimes shall be reported on a quarterly basis using the SUMMARY REPORT in 40 CFR 60.7. A listing of monitor downtime occurrences shall accompany the SUMMARY REPORT if the monitoring system downtime is 5% or greater of the total monitored operating hours.

e. *Excess Emissions Notification and Corrective Actions*. The permittee shall document the corrective actions taken (such as adjusting combustion parameters, feed rates, or raw material selection) and notify RER within 24 hours if (1) the 30-day rolling average THC concentration exceeds 24 ppmvd corrected to 7% oxygen (propane equivalence), or (2) ten consecutive daily average THC concentration exceeds 24 ppmvd corrected to 7% oxygen (propane equivalence).

{Permitting Note: This condition only applies to reasonable assurance monitoring for the VOC BACT limit and does not apply to compliance demonstration to the THC NESHAP LLL limit. The THC monitor results include methane and other non-VOC constituents. Therefore, the monitor provides reasonable assurance that the VOC standard is being met, and as such, it is the compliance method for the VOC

standard. However, when the FDEP or RER has good reason (including but not limited to the criteria specified in the above paragraph) to believe that the VOC emission standard is being violated, they have the authority under Rule 62-297.310(8)(c), F.A.C. to require the permittee to conduct compliance tests which identify the nature and quantity of VOC emissions from the kiln.}

f. *Quarterly Summary Reports*. The permittee shall report to RER no later than the 15th day following each calendar quarter a summary of the daily average and 30-day rolling average concentrations for each day of that calendar quarter. These results should be reported ppmvd corrected to 7% oxygen (propane equivalence).

[Rule 62-297.310, F.A.C.; and, Permit Nos. 0250014-008-AC/PSD-FL-324, 0250014-041-AC & 0250014-063-AC]

B.35. NO_X CEMS.

a. *Installation and Quality Assurance*. A CEMS shall be installed, calibrated, maintained, operated, and used to determine compliance with the emissions limits for NO_X in Specific Condition **B.20**. CEMS shall be installed and certified, before the initial performance test, and operated in compliance with 40 CFR 60, Appendix F, Quality Assurance Procedures (1996 version) or other RER-approved QA plan; and with 40 CFR 60, Appendix B, Performance Specification 1, 2, and 3 (1996 version).

b. *Hourly Recording*. The CEMS shall calculate and record emission rates in units of pounds of NOx per hour. Clinker production rates shall be recorded daily. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%.

c. *Hourly and 24-Hour Averages*. Every day, the 24-hour average NO_X emission rate for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two emission measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated, shall be excluded from the daily average.

d. *Valid 24-Hour Averages*. For compliance with the NO_X emission limits, the daily average shall not include data from periods of startup when no clinker is being produced. However, emissions during startup periods shall not exceed the pound per hour limits. Data recorded during periods of shutdown, malfunction, load change, and continuous operating periods shall be included in the daily average.

e. *Excess Emissions and Monitor Downtime*. Monitor downtimes and excess emissions based on daily averages, which include startup emissions, shall be reported on a quarterly basis. A detailed report of the cause, duration, magnitude, and corrective action taken or preventative measures adopted for each excess emission occurrence, and a listing of monitor downtime occurrences shall also be sent to the RER when the total duration of excess emissions is 1% or greater or if the monitoring system downtime is 5% or greater of the total monitored operating hours.

f. *Flow Sensor*. The CEMS shall be used in conjunction with a flow sensor certified in accordance with 40 CFR 60, Appendix B, Performance Specification 6. The CEMS data shall be quality assured using the procedures of Appendix F of 40 CFR 60.

[Permit Nos. 0250014-008-AC/PSD-FL-324, 0250014-041- AC & 0250014-059-AC]

B.36. Continuous Flow Rate Monitoring System. The permittee must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs **B.36.a** through **B.36.i**, for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit and that is required to be monitored by a CEMS.

a. The permittee must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury CEMS,

taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.

b. The flow rate monitoring system must be designed to measure the exhaust flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust flow rate.
c. The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph **B.36.b**.
d. The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.
e. The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.
f. The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in appendix B to 40 CFR Part 60 for a discussion of CD).
   (1) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).
   (2) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.
g. The permittee must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of appendix B to 40 CFR Part 60 with the exceptions in paragraphs **B.36.g(1)** and **B.36.g(2)**.
   (1) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.
   (2) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.
h. The permittee must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph **B.36.g**.
i. The permittee must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

[40 CFR 63.1350(n)]

B.37. THC Emissions Monitoring. The permittee must comply with the monitoring requirements of paragraphs **B.37.a** and **B.37.b** and (m)(1) through (m)(4) of 40 CFR 63.1350 (see Specific Conditions **B.30.a** through **B.30.d**). The permittee must also develop an emissions monitoring plan in accordance with paragraphs **B.38.a** through **B.38.f**.

a. The permittee must install, operate, and maintain a THC CEMS in accordance with Performance Specification 8 or Performance Specification 8A of appendix B to 40 CFR Part 60 and comply with all of the requirements for CMS found in the general provisions, 40 CFR 63 subpart A. The permittee must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in 40 CFR Part 60 of. For THC CEMS certified under Performance Specification 8A, conduct the relative accuracy test audits (RATAs) required under Procedure 1 in accordance with Performance Specification 8, Sections 8 and 11 using Method 25A in appendix A to 40 CFR part 60 as the reference method; the relative accuracy must meet the criteria of Performance Specification 8, Section 13.2.
b. Performance tests coal mill stacks must be conducted using Method 25A in appendix A to 40 CFR part 60 and repeated every 30 months.

[40 CFR 63.1350(i)]

B.38. Mercury Monitoring. The permittee must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A (PS 12A) of appendix B to 40 CFR Part 60 or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of appendix B to 40 CFR Part 60. The permittee must monitor mercury continuously according to paragraphs **B.38.a** through **B.38.e**. The permittee must also develop an emissions monitoring plan in accordance with paragraphs **B.38.a** through **B.38.f**.

a. The permittee must use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to the nearest multiple of 5 $\mu g/m^3$ of total mercury or higher level if necessary to include Hg concentrations which may occur (excluding concentrations during in-line raw "mill off" operation). As specified in PS 12A, Section 6.1.1, the data recorder output range must include the full range of expected Hg concentration values which would include those expected during "mill off" conditions. Engineering judgments made and calculations used to determine the corresponding span concentration from the emission standard shall be documented in the site-specific monitoring plan and associated records.

b. In order to quality assure data measured above the span value, the permittee must use one of the three options in paragraphs **B.38.b(1)** through **B.38.b(3)**.

(1) Include a second span that encompasses the Hg emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of 5 $\mu g/m^3$ of total mercury. The requirements of PS 12A, shall be followed for this second span with the exception that a RATA with the mill off is not required.

(2) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph **B.38.a** using the following procedure. Conduct a weekly "above span linearity" calibration challenge of the monitoring system using a reference gas with a certified value greater than the highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The "above span" reference gas must meet the requirements of PS 12A, Section 7.1 and must be introduced to the measurement system at the probe. Record and report the results of this procedure as the owner or operator would for a daily calibration. The "above span linearity" challenge is successful if the value measured by the Hg CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the Hg CEMS during the above span linearity challenge exceeds ±10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new "above span linearity" challenge met before returning the Hg CEMS to service, or data above span from the Hg CEMS must be subject to the quality assurance procedures established in paragraph **B.38.b(3)**. In this manner all hourly average values exceeding the span value measured by the Hg CEMS during the week following the above span linearity challenge when the CEMS response exceeds ±20 percent of the certified value of the reference gas must be normalized using Equation 22.

$$\frac{Certified\ reference\ gas\ value}{Measured\ value\ of\ reference\ gas} \times Measured\ stack\ gas\ result = Normalized\ stack\ gas\ result \quad \text{(Eq. 22)}$$

(3) Quality assure any data above the span value established in paragraph **B.38.a** using the following procedure. Any time two consecutive one-hour average measured concentrations of Hg exceeds the span value the permittee must, within 24 hours before or after, introduce a higher, "above span" Hg reference gas standard to the Hg CEMS. The "above span" reference gas must meet the requirements of PS 12A, Section 7.1, must target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include "above span" calibrations done before or after the above span measurement period. Record and report the results of this procedure as the permittee

would for a daily calibration. The "above span" calibration is successful if the value measured by the Hg CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the Hg CEMS exceeds 20 percent of the certified value of the reference gas, then the owner or operator must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the "above span" calibration for reporting based on the Hg CEMS response to the reference gas as shown in equation 22 below. Only one "above span" calibration is needed per 24 hour period.

c. The permittee must operate and maintain each Hg CEMS or an integrated sorbent trap monitoring system according to the quality assurance requirements in Procedure 5 of appendix F to 40 CFR Part 60. During the RATA of integrated sorbent trap monitoring systems required under Procedure 5, the owner or operator may apply the appropriate exception for sorbent trap section 2 breakthrough in **B.38.c(1)** through **B.38.c(4)**:
   (1) For stack Hg concentrations >1 microgram per dry standard cubic meter (μg/dscm), ≤10% of section 1 mass;
   (2) For stack Hg concentrations ≤1 μg/dscm and >0.5 μg/dscm, ≤20% of section 1 mass;
   (3) For stack Hg concentrations ≤0.5 μg/dscm and >0.1 μg/dscm, ≤50% of section 1 mass; and
   (4) For stack Hg concentrations ≤0.1 μg/dscm, no breakthrough criterion assuming all other QA/QC specifications are met.

d. Relative accuracy testing of mercury monitoring systems under PS 12A, PS 12B, or Procedure 5 must be conducted at normal operating conditions. If a facility has an inline raw mill, the testing must occur with the raw mill on.

e. If the permittee uses a Hg CEMS or an integrated sorbent trap monitoring system, the permittee must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in Specific Condition **B.36**. If kiln gases are diverted to a coal mill and exhausted through separate stacks, the permittee must account for the mercury emitted from those stacks by following the procedures in **B.38.e(1)** through **B.38.e(4)**:
   (1) Develop a mercury hourly mass emissions rate by conducting performance tests annually, within 11 to 13 calendar months after the previous performance test, using Method 29, or Method 30B, to measure the concentration of mercury in the gases exhausted from the coal mill.
   (2) On a continuous basis, determine the mass emissions of mercury in lb/hr from the coal mill exhaust by using the mercury hourly emissions rate, the exhaust gas flow rate and hourly mercury emission rate to calculate hourly mercury emissions in lb/hr.
   (3) Sum the hourly mercury emissions from the kiln and coal mill to determine total mercury emissions. Using hourly clinker production, calculate the hourly emissions rate in pounds per ton of clinker to determine the 30 day rolling average.
   (4) If mercury emissions from the coal mill and alkali bypass are below the method detection limit for two consecutive annual performance tests, the permittee may reduce the frequency of the performance tests of coal mills to once every 30 months. If the measured mercury concentration exceeds the method detection limit, the permittee must revert to testing annually until two consecutive annual tests are below the method detection limit.

f. If the permittee operates an integrated sorbent trap monitoring system conforming to PS 12B, the permittee may use a monitoring period at least 24 hours but no longer than 168 hours in length. The permittee should use a monitoring period that is a multiple of 24 hours (except during relative accuracy testing as allowed in PS 12B).

[40 CFR 63.1350(k)]

{Permitting Note: The permittee currently complies with NESHAP Subpart LLL by Hg sorbent trap monitoring. Continuous compliance with the NESHAP LLL Hg limit of 55 lb/million tons of clinker and the clinker production limits of 4,050 tons per day and 1,300,000 tons of clinker per 12-months would result in maximum potential emissions of approximately 0.22 pounds per day and 0.036 TPY of Hg, thereby

demonstrating compliance with the biosolids combustion limit of 7.1 lb/24-hour period and the Hg PSD avoidance limit of 0.091 TPY.}

B.39. HCl Monitoring. The permittee must monitor HCl emissions continuously according to paragraph **B.39.a** or **B.39.c** and paragraphs **B.30.a** through **B.30.d** or, if the kiln is controlled using a dry scrubber the permittee alternatively may parametrically monitor SO_2 emissions continuously according to paragraph **B.39.c**. The owner or operator must also develop an emissions monitoring plan in accordance with paragraphs **B.56.a** through **B.56.d**.

a. If the permittee monitors compliance with the HCl emissions limit by operating an HCl CEMS, the permittee must do so in accordance with Performance Specification 15 (PS 15) of appendix B to 40 CFR Part 60, or, upon promulgation, in accordance with any other performance specification for HCl CEMS in appendix B to 40 CFR Part 60. The permittee must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of appendix F to 40 CFR Part 60 except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. When promulgated, if the permittee chooses to install and operate an HCl CEMS in accordance with PS 18 of appendix B to 40 CFR Part 60, the permittee must operate, maintain and quality assure the HCl CEMS using the associated Procedure 6 of appendix F to 40 CFR Part 60. For any performance specification that the owner or operator uses, the permittee must use Method 321 of 40 CFR 63 Appendix A as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs **B.39.a(1)** and **B.39.a(2)** apply to HCl CEMS other than those installed and certified under PS 15 or PS 18.
   (1) The permittee must use a measurement span value for any HCl CEMS of 0-10 ppmvw unless the monitor is installed on a kiln without an inline raw mill. Kilns without an inline raw mill may use a higher span value sufficient to quantify all expected emissions concentrations. The HCl CEMS data recorder output range must include the full range of expected HCl concentration values which would include those expected during "mill off" conditions. The corresponding data recorder range shall be documented in the site-specific monitoring plan and associated records.
   (2) In order to quality assure data measured above the span value, the permittee must use one of the three options in paragraphs **B.39.a(2)(a)** through **B.39.a(2)(c)**.
      (a) Include a second span that encompasses the HCl emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of 5 ppm of total HCl. The requirements of the appropriate HCl monitor performance specification shall be followed for this second span with the exception that a RATA with the mill off is not required.
      (b) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph **B.39.a(1)** using the following procedure. Conduct a weekly "above span linearity" calibration challenge of the monitoring system using a reference gas with a certified value greater than the highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The "above span" reference gas must meet the requirements of the applicable performance specification and must be introduced to the measurement system at the probe. Record and report the results of this procedure as the owner or operator would for a daily calibration. The "above span linearity" challenge is successful if the value measured by the HCl CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the HCl CEMS during the above span linearity challenge exceeds 10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new "above span linearity" challenge met before returning the HCl CEMS to service, or data above span from the HCl CEMS must be subject to the quality assurance procedures established in paragraph **B.39.a(2)(d)**. Any HCl CEMS above span linearity challenge response exceeding ±20 percent of the certified value of the reference gas requires that

all above span hourly averages during the week following the above span linearity challenge must be normalized using Equation 23.

(c) Quality assure any data above the span value established in paragraph **B.39.a(1)** using the following procedure. Any time two consecutive one-hour average measured concentration of HCl exceeds the span value the owner or operator must, within 24 hours before or after, introduce a higher, "above span" HCl reference gas standard to the HCl CEMS. The "above span" reference gas must meet the requirements of the applicable performance specification and target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include above span calibrations done before or after the above-span measurement period. Record and report the results of this procedure as the owner or operator would for a daily calibration. The "above span" calibration is successful if the value measured by the HCl CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the HCl CEMS is not within 20 percent of the certified value of the reference gas, then the permittee must normalize the stack gas values measured above span as described in paragraph **B.39.a(2)(d)**.

(d) In the event that the "above span" calibration is not successful (*i.e.*, the HCl CEMS measured value is not within 20 percent of the certified value of the reference gas), then the owner or operator must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the `above span' calibration for reporting based on the HCl CEMS response to the reference gas as shown in Equation 23:

$$\frac{Certified\ reference\ gas\ value}{Measured\ value\ of\ reference\ gas} \times Measured\ stack\ gas\ result = Normalized\ stack\ gas\ result \quad \text{(Eq. 23)}$$

Only one "above span" calibration is needed per 24-hour period.

b. Install, operate, and maintain a CMS to monitor dry scrubber as specified in paragraph **B.30.e**.

c. If the source is equipped with a dry scrubber, and the permittee chooses to monitor SO_2 emissions, monitor SO_2 emissions continuously according to the requirements of 40 CFR 60.63(e) and (f) of 40 CFR 60, Subpart F. If SO_2 levels increase above the 30-day rolling average SO_2 operating limit established during the performance test, the permittee must:

(1) As soon as possible but no later than 48 hours after the owner or operator exceeds the established SO_2 value conduct an inspection and take corrective action to return the SO_2 emissions to within the operating limit; and

(2) Within 60 days of the exceedance or at the time of the next compliance test, whichever comes first, conduct an HCl emissions compliance test to determine compliance with the HCl emissions limit and to verify or re-establish the SO_2 CEMS operating limit.

[40 CFR 63.1350(l)]

{Permitting Note: At the time of issuance of this Title V air operation permit, the permittee has elected to comply with HCl monitoring provisions in NESHAP Subpart LLL by monitoring SO_2 emissions.}

Test Methods and Procedures

B.40. Changes in Operations.

a. If the permittee plans to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under 40 CFR 63, Subpart LLL, the source must conduct a performance test as specified in 40 CFR 63.1349(b).

b. In preparation for and while conducting a performance test required in 40 CFR 63.1349(b), the permittee may operate under the planned operational change conditions for a period not to exceed 360 hours,

provided that the conditions in **B.40.b(1)** through **B.40.b(4)** are met. The permittee must submit temperature and other monitoring data that are recorded during the pretest operations.

(1) The permittee must provide the Department written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under 40 CFR 63, Subpart LLL for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must 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 **B.40.a**, including when the planned operational change period would begin.
(2) The performance test results must be documented in a test report according to 40 CFR 63.1349(a).
(3) A test plan must be made available to the Department prior to performance testing, if requested.
(4) The performance test must be completed within 360 hours after the planned operational change period begins.

[40 CFR 63.1348(c)]

B.41. Significant Change: Dioxin/Furan, Hg and PM/PM_{10}. The permittee shall notify the RER prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for dioxin/furan, Hg or PM/PM_{10}. For purposes of this condition, significant means any of the following: a physical or chemical change in the feed or fuel; the use of a raw material not previously used; a change in the loss on ignition (LOI) of the coal ash; a change between non-beneficiated coal ash and beneficiated coal ash. Based on the information provided, the RER will promptly determine if performance testing pursuant to 40 CFR 63.1349 will be required for the new feed or fuel. A significant change shall not include switching to a feed/fuel mix for which the permittee already tested in compliance with the dioxin/furan and PM/PM_{10} emission limits. Categories of alternative solid fuels as defined in this Title V permit are not new types or changes of feed or fuel. Approved categories of alternative solid fuels equate to types of non-hazardous secondary materials. [40 CFR 63. 1348(c); and, Permit Nos. 0250014-016-AC/PSD-FL-324A, 0250014-041-AC & 0250014-059-AC]

B.42. NESHAP Subpart LLL Performance Test Frequency. Except as provided in Specific Condition **B.25**, performance tests are required at regular intervals for affected sources that are subject to a dioxin, organic HAP or HCl emissions limit. Performance tests required every 30 months must be completed no more than 31 calendar months after the previous performance test except where that specific pollutant is monitored using CEMS; performance tests required every 12 months must be completed no more than 13 calendar months after the previous performance test. [40 CFR 63.1349(c)]

{Permitting Note: Dioxin/furan and HCl performance tests are to be conducted on a 30 month basis.}

B.43. PM Emissions Tests. The permittee shall demonstrate initial compliance with the applicable PM emission limit in 40 CFR 63, Subpart LLL by conducting a performance test using Method 5 or Method 5I at 40 CFR 60, Appendix A-3. The permittee must also monitor continuous performance through use of a PM CPMS.

a. For the PM CPMS, a site-specific operating limit will be established in accordance with the provisions in 40 CFR 63.1349(b)(1)(i) (see Appendix NESHAP Subpart LLL).
b. The operating limit shall be determined in accordance with the provisions in 40 CFR 63.1349(b)(1)(ii) (see Appendix NESHAP Subpart LLL). The permittee must verify an existing or establish a new operating limit after each repeated performance test. The permittee must repeat the performance test at least annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.
c. Continuous operating compliance must be determined using PM CPMS output data in accordance with the provisions in 40 CFR 63.1349(b)(1)(v) (see Appendix NESHAP Subpart LLL).

d. Performance test runs must be conducted in accordance with the provisions of 40 CFR 63.1349(b)(1)(vi) (see Appendix NESHAP Subpart LLL).
e. For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp value or digital equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital equivalent signals corresponding to each PM compliance test run.
f. The separate coal mill stack and main kiln exhaust must be tested simultaneously in accordance with the provisions of 40 CFR 63.1349(b)(1)(vii) (see Specific Condition **F.11**).
g. In accordance with 40 CFR 63.1349(b)(1)(ix) (see Appendix NESHAP Subpart LLL), the permittee shall demonstrate initial compliance with PM emissions limitations by conducting separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating, and calculate the time weighted average emissions. The operating limit will then be determined using 40 CFR 63.1349(b)(1)(i).

[40 CFR 63.1349(b)(1)]

B.44. Dioxin/Furan Emissions Tests. The permittee must conduct a performance test using Method 23 of 40 CFR 60, Appendix A-7.
a. Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).
b. The temperature at the inlet to the kiln or in-line kiln/raw mill 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.
c. Average temperatures must be calculated for each run of the performance test.
d. 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 Specific Condition **B.21.b**.

[40 CFR 63.1349(b)(3)(i)-(iv)]

B.45. Initial THC Compliance Testing. The permittee must demonstrate compliance with the THC emissions standards by using the performance test methods and procedures in 40 CFR 63.1349(b)(4)(i). The permittee must use the average THC concentration obtained during the first 30 kiln operating days after the compliance date of this rule to determine initial compliance. The time weighted average THC concentration measured during the initial performance test specified by Specific Condition **B.46** must be used to determine the site-specific THC limit. Using the fraction of time the inline kiln/raw mill is on and the fraction of time that the inline kiln/raw mill is off, calculate this limit as a time weighted average of the THC levels measured during raw mill on and raw mill off testing using one of the two approaches in 40 CFR 63.1349(b)(7)(vii) or (viii) depending on the level of organic HAP measured during the compliance test. [40 CFR 63.1348(a)(4)(i) & (v)]

B.46. THC Emissions Test.
a. The permittee must operate a CEMS in accordance with the requirements in Specific Condition **B.37**. For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 to 60 ppmvw and the reference method (RM) is Method 25A of 40 CFR 60, Appendix A.
b. Use the THC CEMS to conduct the initial compliance test for the first 30 kiln operating days of kiln operation after the compliance date of the rule. See Specific Condition **B.45**.
c. If kiln gases are diverted to a coal mill and exhausted through a separate stack, the permittee must calculate a kiln-specific THC limit using Equation 9:

$$Cks = \frac{(MACT\ Limit + (Qcm + Qks)) - (Qcm\ x\ Ccm)}{Qks} \qquad \text{Eq. 9}$$

Where:
Cks = Kiln stack concentration (ppmvd).
Qcm = Coal mill flow rate (volume/hr).
Ccm = Coal mill concentration (ppmvd).
Qks = Kiln stack flow rate (volume/hr).

d. THC must be measured either upstream of the coal mill or the coal mill stack.
e. Instead of conducting the performance test specified in this specific condition, the permittee may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraph (b)(7) of 40 CFR 63.1349.

[40 CFR 63.1349(b)(4)]

B.47. Initial Mercury Compliance. The permittee must demonstrate compliance with the mercury standards by using the performance test methods and procedures in Specific Condition **B.48**. The permittee must demonstrate compliance by operating a mercury CEMS or a sorbent trap based CEMS. Compliance with the mercury emissions standard must be determined based on the first 30 operating days the permittee operates a mercury CEMS or sorbent trap monitoring system after the compliance date of this rule.

a. In calculating a 30 operating day emissions value using an integrating sorbent trap CEMS, assign the average Hg emissions concentration determined for an integrating period (e.g., 7 day sorbent trap monitoring system sample) to each relevant hour of the kiln operating days spanned by each integrated sample. Calculate the 30 kiln operating day emissions rate value using the assigned hourly Hg emissions concentrations and the respective flow and production rate values collected during the 30 kiln operating day performance test period. Depending on the duration of each integrated sampling period, the owner or operator may not be able to calculate the 30 kiln operating day emissions value until several days after the end of the 30 kiln operating day performance test period.
b. For example, a sorbent trap monitoring system producing an integrated 7-day sample will provide Hg concentration data for each hour of the first 28 kiln operating days (i.e., four values spanning 7 days each) of a 30 operating day period. The Hg concentration values for the hours of the last 2 days of the 30 operating day period will not be available for calculating the emissions for the performance test period until at least five days after the end of the subject period.

[40 CFR 63.1348(a)(5)]

B.48. Mercury Emissions Tests. The permittee must operate a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of Specific Condition **B.38**. The initial compliance test must be based on the first 30 kiln operating days in which the affected source operates using a mercury CEMS or a sorbent trap monitoring system after the compliance date of the rule. See Specific Condition **B.47**.

a. If the permittee is using a mercury CEMS or a sorbent trap monitoring system, the permittee must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in Specific Condition **B.38**.
b. Calculate the emission rate using Equation 10:

$$E_{30D} = k\frac{\sum_{i=1}^{n} C_i Q_i}{P} \qquad \text{Eq. 10}$$

Where:
E_{30D} = 30-day rolling emission rate of mercury, lb/MM tons clinker.
C_i = Concentration of mercury for operating hour i, µg/scm.
Q_i = Volumetric flow rate of effluent gas for operating hour i, where C_i and Q_i are on the same basis (either wet or dry), scm/hr.
k = Conversion factor, 1 lb/454,000,000 µg.

n = Number of kiln operating hours in the previous 30 kiln operating day period where both C and Qi qualified data are available.
P = Total runs from the previous 30 days of clinker production during the same time period as the mercury emissions measured, million tons.

[40 CFR 63.1349(b)(5)]

B.49. Initial HCl Compliance. The permittee must demonstrate initial compliance with the HCl standards by using the performance test methods and procedures in Specific Condition **B.50**.

a. For an affected source that is equipped with a wet scrubber, tray tower or dry scrubber, the permittee may demonstrate initial compliance by conducting a performance test as specified in Specific Condition **B.50.a**. The permittee must determine the HCl concentration for each run and calculate the arithmetic average of the concentrations measured for the three runs to determine compliance. The permittee must also establish appropriate site-specific operational parameter limits.

b. For an affected source that is not equipped with a wet scrubber, tray tower or dry scrubber, the permittee must demonstrate initial compliance by operating a CEMS as specified in Specific Condition **B.50.b**. The permittee must use the average of the hourly HCl values obtained during the first 30 kiln operating days that occur after the compliance date of this rule to determine initial compliance.

[40 CFR 63.1348(a)(6)]

B.50. HCl Emissions Tests. The permittee must conduct performance testing by one of the following methods:

a. *Wet Scrubber, Tray Tower or Dry Scrubber.*

(1) If the source is equipped with a wet scrubber, tray tower or dry scrubber, the permittee must conduct performance testing using Method 321 of appendix A to this part unless the owner or operator has installed a CEMS that meets the requirements in Specific Condition **B.39.a**. For kilns with inline raw mills, testing should be conducted for the raw mill on and raw mill off conditions.

(2) The permittee must establish site specific parameter limits by using the CPMS required in Specific Condition **B.39.b**. For a dry scrubber, measure and record the sorbent injection rate in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average sorbent injection rate and average sorbent injection rate for each sampling run in which the applicable emissions limit is met.

b. *Uncontrolled.*

(1) If the source is not controlled by a wet scrubber, tray tower or dry sorbent injection system, the permittee must operate a CEMS in accordance with the requirements of Specific Condition **B.39.a**. See 40 CFR 63.1348(a).

(2) The initial compliance test must be based on the 30 kiln operating days that occur after the compliance date of this rule in which the affected source operates using an HCl CEMS. Hourly HCl concentration data must be obtained according to Specific Condition **B.39.a**.

c. As an alternative to paragraph **B.50.b(2)**, the permittee may choose to monitor SO_2 emissions using a CEMS in accordance with the requirements of Specific Condition **B.39.c**. The permittee must establish an SO_2 operating limit equal to the average recorded during the HCl stack test where the HCl stack test run result demonstrates compliance with the emission limit. This operating limit will apply only for demonstrating HCl compliance.

d. If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, the owner or operator must calculate a kiln-specific HCl limit using Equation 11:

$$Cks = \frac{(MACT\ Limit\ x\ (Qcm+Qks))-(Qcm\ x\ Ccm)}{Qks} \qquad \text{Eq. 11}$$

Where:
Cks = Kiln stack concentration (ppmvd).
Qcm = Coal mill flow rate (volume/hr).
Ccm = Coal mill concentration (ppmvd).

Qks = Kiln stack flow rate (volume/hr).
[40 CFR 63.1349(b)(6)]

B.51. HCl Emissions Tests with SO_2 Monitoring.

a. If the permittee chooses to monitor SO_2 emissions using a CEMS to demonstrate HCl compliance, follow the procedures in (b)(8)(i) through (ix) of 40 CFR 63.1349 and in accordance with the requirements of Specific Condition **B.39.c**. The permittee must establish an SO_2 operating limit equal to the average recorded during the HCl stack test. This operating limit will apply only for demonstrating HCl compliance. [40 CFR 63.1349(b)(8)]

b. If the SO_2 level exceeds by 10 percent or more the site-specific SO_2 emissions limit, the permittee must:
   (1) As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the SO_2 CEMS measurements to within the established value;
   (2) Within 90 days of the exceedance or at the time of the periodic compliance test, whichever comes first, conduct another performance test to determine compliance with the HCl limit and to verify or re-establish your site-specific SO_2 emissions limit.

[40 CFR 63.1349(b)(8)]

B.52. Test Methods: When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
5I	Determination of Low Level Particulate Matter Emissions
6	Determination of Sulfur Dioxide Emissions from Stationary Sources
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)
7	Determination of Nitrogen Oxide Emissions from Stationary Sources
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)
9	Visual Determination of the Opacity of Emissions From Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares
23	Determination of Polychlorinated Dibenzo-P-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources
25	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
30A	Determination of Mercury from Coal-Fired Combustion Sources (Instrumental Analyzer Procedure)
30B	Determination of Mercury from Coal-Fired Combustion Sources Using Carbon Sorbent Traps
201	Determination of PM_{10} Emissions (exhaust gas recycle procedure)
321	Gaseous HCl Emissions from Portland Cement Kilns by FTIR

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62- 204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

B.53. Compliance Stack Tests. The permittee shall continue to conduct stack tests in accordance with the methods and requirements in the current Title V air operation permit to demonstrate compliance with the emissions standards. The required stack tests for PM and dioxin/furans shall be conducted while firing an AF that has completed the AF assessment period. [Rule 62-297.310(8)(a)1., F.A.C.; and, Permit No. 0250014-045-AC]

B.54. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.55. Annual Compliance Tests Required and Tests Required Prior to Renewal. During each calendar year (January 1st to December 31st) and prior to Title V air operation permit renewal, this emissions unit shall be tested to demonstrate compliance with the emissions standards for particulate matter. The permittee may satisfy the requirement to conduct compliance testing prior to permit renewal by submitting the most recent compliance test, as specified in Rule 62-297.310(10), F.A.C., provided such test occurred within the term of the current Title V air operation permit. [Rule 62-297.310(8), F.A.C.]

{Permitting Note: PM performance tests conducted in accordance with 40 CFR 63.1349 would satisfy annual PM testing requirements for a given calendar year, provided the test is conducted within that calendar year.}

Recordkeeping and Reporting Requirements

B.56. Development and Submittal (upon request) of Monitoring Plans. If the permittee demonstrates compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs **B.56.a** through **B.56.d**. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under paragraph (o) of 40 CFR 63.1350 and 40 CFR 63.8(f).

a. For each CMS required in 40 CFR 63.1350, the permittee must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs **B.56.a(1)** through **B.56.a(3)**. The permittee must submit this site-specific monitoring plan, if requested, at least 30 days before the initial performance evaluation of the CMS.
   (1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
   (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
   (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In the site-specific monitoring plan developed by the permittee, the permittee must also address paragraphs **B.56.b(1)** through **B.56.b(3)**.
   (1) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);
   (2) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and
   (3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[40 CFR 63.1350(p)(1)-(4)]

B.57. NESHAP Subpart LLL Notification Requirements.

a. The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to the permittee are listed in Table 1 of 40 CFR 63, Subpart LLL. If the Department requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the permittee may send the Administrator a copy of the notice sent to the Department to satisfy the requirements of 40 CFR 63.1353 for that notification.

b. The permittee shall comply with the notification requirements in 40 CFR 63.9 as follows:

(1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63 Subpart LLL, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 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 40 CFR 63.7 and 40 CFR 63.9(e).

(3) Notification of opacity and visible emission observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 40 CFR 63.9(f).

(4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.

(5) Notification of compliance status, as required by 40 CFR 63.9(h).

(6) Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of 40 CFR 63.7(b) and 40 CFR 63.9(e) do not apply to retesting required for exceedances under 40 CFR 63, Subpart LLL.

[40 CFR 63.1353]

B.58. Performance Test Reports. The permittee must document performance test results in complete test reports that contain the information required by paragraphs **B.58.a** through **B.58.j**, as well as all other relevant information. As described in 40 CFR 63.7(c)(2)(i), the permittee must make available to the Department prior to testing, if requested, the site-specific test plan to be followed during performance testing. For purposes of determining exhaust gas flow rate to the atmosphere from a coal mill stack, the permittee must either install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate according to the requirements in Specific Condition **B.36** or use the maximum design exhaust gas flow rate. For purposes of determining the combined emissions from kilns that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS on coal mill stack, the permittee may use the results of the initial and subsequent performance test to demonstrate compliance with the relevant emissions limit.

a. A brief description of the process and the air pollution control system;
b. Sampling location description(s);
c. A description of sampling and analytical procedures and any modifications to standard procedures;
d. Test results;
e. Quality assurance procedures and results;
f. Records of operating conditions during the performance test, preparation of standards, and calibration procedures;
g. Raw data sheets for field sampling and field and laboratory analyses;
h. Documentation of calculations;
i. All data recorded and used to establish parameters for monitoring; and
j. Any other information required by the performance test method.

[40 CFR 63.1349(a)]

B.59. NESHAP Subpart LLL Reporting Requirements.

a. The reporting provisions of 40 CFR 63, Subpart A that apply and those that do not apply to the permittee are listed in Table 1 of 40 CFR 63. If the Department requires a report that contains all of the information required in a report listed in 40 CFR 63.1354, the permittee may send the Administrator a copy of the report sent to the Department to satisfy the requirements of 40 CFR 63.1354 for that report.

b. The permittee shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR 63, Subpart A as follows:

(1) As required by 40 CFR 63.10(d)(2), the permittee shall report the results of performance tests as part of the notification of compliance status.

(2) As required by 40 CFR 63.10(d)(3), the permittee shall report the opacity results from tests required by 40 CFR 63.1349.

(3) As required by 40 CFR 63.10(d)(4), the permittee who is required to submit progress reports as a condition of receiving an extension of compliance under 40 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by 40 CFR 63.10(e)(2), the permittee shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 CFR 63.8(e). The permittee shall submit the report simultaneously with the results of the performance test.

(5) As required by 40 CFR 63.10(e)(2), the permittee using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 CFR 63.8(e).

(6) As required by 40 CFR 63.10(e)(3), the permittee 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.

(7) The permittee shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:

(a) All exceedances of maximum control device inlet gas temperature limits specified in Specific Condition **B.21**;

(b) Notification of any failure to calibrate thermocouples and other temperature sensors as required under Specific Condition **B.29.a(3)**; and

(c) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1347(a)(3).

(d) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a).

(e) For each PM CPMS, HCl, Hg, and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, the permittee must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems.

(f) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

(8) If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the permittee shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

(9)

(a) The permittee must submit the information specified in paragraphs **B.59.b(9)(a)*(1)*** and **B.59.b(9)(a)*(2)*** of this section no later than 60 days following the initial performance test. All reports must be signed by a responsible official.

(1) The initial performance test data as recorded under Specific Condition **B.58**.

(2) The values for the site-specific operating limits or parameters established pursuant to 40 CFR 63.1349(b)(1), (3), (6), and (8) (see Specific Conditions **B.43**, **B.44**, **B.50** and **B.51**, respectively), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.

(3) As of December 31, 2011, and within 60 days after the date of completing each performance evaluation or test, as defined in 40 CFR 63.2, conducted to demonstrate compliance with any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically via CEDRI and by using the Electronic Reporting Tool (ERT) (see https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert). For any performance evaluations with no corresponding RATA pollutants listed on the ERT website, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in 40 CFR 63.13.

(b) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

(10) All reports required by this subpart not subject to the requirements in paragraphs **B.59.b(7)** introductory text and **B.59.b(9)** must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (*e.g.*, by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs **B.59.b(7)** introductory text and **B.59.b(9)** in paper format.

[40 CFR 63.1354]

B.60. NESHAP Subpart LLL Recordkeeping Requirements.

a. The permittee 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 40 CFR 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 permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3) of this part; and
   (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9;
   (2) All records of applicability determination, including supporting analyses; and
   (3) If the permittee has been granted a waiver under 40 CFR 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 40 CFR 63.1355, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by 40 CFR 63.10(c).

d. The permittee must keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.

e.
   (1) The permittee must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.
   (2) The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

f. For each exceedance from an emissions standard or established operating parameter limit, the owner or operator must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.

[40 CFR 63.1355]

B.61. Records of Fuels and Heat Input. The permittee shall maintain records of the quantity and representative analysis of fuels purchased, and such records shall include the parameters listed in Specific Condition **B.12.d**. [Permit Nos. 0250014-045-AC and 0250014-063-AC]

B.62. Shakedown of Equipment and AF Assessments. The permittee shall comply with the emissions standards and terms of all valid air permits during shakedown of the equipment allowed under Specific Condition **B.1** and AF assessments.

a. *Equipment Shakedown*. After completing the construction of each system listed in Specific Condition **B.1**, the permittee is authorized 90 operational days irrespective of fuel fired to ensure proper installation as well as develop good operating practices for the AF resulting in steady operation of the kiln system.

b. *AF Assessments*. For each category of AF, the permittee is authorized 60 operational days to introduce new AF into either the main kiln burner system or the precalciner/calciner to develop good operating practices for normal kiln system operation.

The Division of Air Resource Management may approve a written request by the permittee for an additional shakedown and assessment periods due to specific extenuating circumstances. [Permit No. 0250014-045-AC]

B.63. AF Category – Biosolids: NESHAP 40 CFR 61 Requirements – Subpart A. When combusting biosolids the permittee shall comply with all applicable requirements of 40 CFR 61, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(10)(d), F.A.C., except for 40 CFR 61.08 and

except that the Secretary is not the Administrator for the purposes of 40 CFR 61.04, 40 CFR 61.11, and 40 CFR 61.18. In lieu of the process set forth in 40 CFR 61.08, the Department will follow the permit processing procedures of Rule 62-4.055, F.A.C. When combusting biosolids the permittee shall comply with all applicable provisions of Appendix C. 40 CFR 61 Subpart A – General Provisions included with this permit. [Permit No. 0250014-045-AC]

B.64. Shakedown Notifications. Within fifteen days of completing construction, the permittee shall notify the Compliance Authority and provide a schedule for shakedown and the initial AF assessment. The Compliance Authority may waive this deadline. [Permit No. 0250014-045-AC]

B.65. AF Assessment Notifications. At least five days prior to firing each new type of AF material listed in Specific Condition **B.11**, the permittee shall notify the RER with a proposed schedule. The RER may waive this deadline. [Permit No. 0250014-045-AC]

B.66. Reports for Shakedown and AF Assessments. During periods of authorized shakedowns and AF assessments, the permittee shall document the shakedown and/or AF assessment period. These periods may end early when the operator is confident that good operating practices have been defined for the AF that result in steady kiln system operation. Within 45 days of completing a shakedown and/or assessment of each AF material listed in Specific Condition **B.11**, the permittee shall provide a written report summarizing the following information collected from the shakedown and/or AF assessment period.

a. For a 24-hour period representing good operating practices and steady kiln operation, report: the representative analysis of the AF fired; hourly AF and fossil fuel firing rates; hourly clinker production; hourly CO (process monitor), NO_X, and THC emissions data from the CEMS; and the inlet temperature to main kiln baghouse (3-hour average). Identify the good operating practices resulting in steady kiln operation.
b. The AF assessments may occur over several years. Emissions from the initial AF assessment of a new fuel may be excluded from the report requiring a comparison of actual-to-baseline emissions (Rules 62-212.300(1)(e) and 62-210.370, F.A.C.) since operators are still establishing good operating practices and the AF will not have been available for the full calendar year. To exclude emissions data collected during an authorized shakedown and/or AF assessment period from this report, the permittee shall submit the following information for: total clinker production; fossil fuel fired; AF fired; total CO, NO_X, and THC emissions (tons). Excluded data shall be replaced with data estimated from: the actual clinker production rate; and an emissions factor based on the average emission rates from the rest of the year (i.e., all periods except the shakedown and/or AF assessment periods).

[Permit Nos. 0250014-045-AC & 0250014-059-AC, and Rule 62-212.300, F.A.C.]

B.67. Whole Tire Burning. In order to document compliance with whole tire fuel usage limits, the following records shall be established and maintained:

a. A log indicating the whole tire utilization rate in tons per hour.
b. A log that includes the date of all whole tire deliveries to the facility, and the quantity of whole tires received (in tons) in each delivery.

[Permit Nos. 0250014-002-AC, 0250014-041-AC & 0250014-063-AC]

B.68. Coal and Petroleum Coke Usage. In order to document compliance with the Coal and Petroleum Coke maximum usage rates**,** a fuel usage control system shall be established to assure that the coal and petroleum coke usage rates does not exceed 18.7 and 16.3 tons per hour (TPH, 24-hour average) respectively. [Permit Nos. 0250014-002-AC & 0250014-041-AC]

B.69. Used Oil Fuel Usage. In order to document compliance with the Used Oil Fuel Usage restrictions of this permit, the following requirements shall be adhered to as a minimum:

a. Recordkeeping when burning used oil shall be in accordance with applicable provisions of 40 CFR Part 279, Subpart B and Subpart G (July 1, 1996 version), Standards For The Management of Used Oil and Chapter 62.710, F.A.C.
b. The following shall be recorded on the delivery receipt:
   (1) the use of tamper proof seals on the delivery receipt
   (2) the volume of fuel delivery
   (3) a cross reference to the analysis which establishes that the used oil meets EPA used oil fuel specifications
   (4) results of the screening analysis
   (5) the name of the person performing the test
   (6) the specific test kit used
   (7) the amount of oil sampled
   (8) the amount and name of the solution used to dilute the oil
c. The following procedures shall be implemented for used oil:
   (1) Used oil fuel that is delivered without a delivery receipt containing all the above information, or which is not properly sealed, or for which the delivery receipt does not contain all the necessary information, is not to be accepted and RER is to be notified by phone immediately (with written confirmation to follow), if such a delivery is attempted.
   (2) Verification by signature on the delivery receipt shall be provided by plant personnel that the delivery truck arrived on site with all seals intact. As delivered samples of all used oil fuel received shall be accumulated through each quarter for each supplier.
   (3) The results of each sample analysis (on the laboratory's letterhead) shall be submitted to RER within 30 days after a sample is taken and analyzed.
   (4) The dates and quantities of both on and off-spec purchased fuel oil transferred to the facility storage tank shall be reported quarterly (i.e., Jan-Mar, April-June, July-Sept, and Oct-Dec). The report is due in the month following the ending quarter.
   (5) The unused portion of the fuel oil sample shall be retained for six months following the submittal of the analyses in case further testing is required.

   [Permit Nos. 0250014-002-AC & 0250014-041-AC]

B.70. Malfunction Reports. The owner or operator shall submit semiannual reports of the malfunction information required by 40 CFR 60.7(b). These reports shall include the frequency, duration, and cause of any incident resulting in de-energization of any device controlling kiln emissions or in the venting of emissions directly to the atmosphere. The permittee shall also comply with the Periodic and Immediate malfunction reporting requirements of 40 CFR 63.10(d). [40 CFR 60.65(c), 40 CFR 63.10(d)(5); and, Permit Nos. 0250014-002-AC & 0250014-041-AC]

B.71. Excess Emissions Reports. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the RER in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report. [Rules 62-210.700(5) & 62-4.070(3), F.A.C.; and, Permit No. 0250014-041-AC]

B.72. PSD Pollutant Emissions Monitoring, Reporting and Recordkeeping. The permittee shall monitor the emissions of any PSD pollutant that the RER identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations if the change increases the design capacity of that emissions unit or its potential to emit that PSD pollutant. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C. [Rule 62-212.300(1)(e)1, F.A.C., Permit No. 0250014-041-AC]

B.73. Test Reports. The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix TR – Facility-wide Testing Requirements. The permittee shall use the most accurate of the approaches below to compute the emissions of a pollutant.

a. If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the permittee shall use the CEMS to compute the emissions of the pollutant.
b. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be calculated using the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the permittee shall use that methodology, unless the permittee demonstrates to the Department that an alternative approach is more accurate.
c. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the permittee shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the permittee demonstrates to the Department that an alternative approach is more accurate.

[Rules 62-210.370 & 62-297.310(8), F.A.C.; and, Permit No. 0250014-045-AC]

Other Requirements

B.74. Commercial and Industrial Solid Waste Incinerator Unit (CISWI). CEMEX reserves the option of making this emissions unit subject to the requirements of the Commercial and Industrial Solid Waste Incineration (CISWI) rule. If CEMEX chooses this option, they shall apply to have their Title V Air Operation Permit revised to reflect all of the applicable requirements and conditions specified in Rule 62-204.800(9)(f), F.A.C. (which implements the requirements of 40 CFR 60 Subpart DDDD – Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units). In addition, if CEMEX chooses to subject this emissions unit to the CISWI rule, the unit must be in compliance with all applicable requirements, including emission limits within six months of the unit subject to CISWI. [Permit No. 0250014-059-AC]

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Subsection C. The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
019	Clinker Handling and Storage System

This emissions unit consists of clinker handling operations downstream of the clinker cooler. Clinker produced by the kiln system enters a grate cooler where it is cooled and discharged onto a pan conveyor. The pan conveyor carries the cooled clinker to a clinker storage silo but may also discharge into a ~~n adjacent 450 ton~~ reject clinker bin for off-specification clinker.

The Clinker Handling and Storage System is controlled by the following baghouses:

Emission Point	Description of Emission Point
491-BF1	Clinker Cooler Discharge Pan Conveyor *
491-BF2	Clinker Silo *
491-BF3	Reject Clinker Bin *
510-BF1	Clinker Silo Discharge and Transfer *
510-BF2	Clinker Silo Discharge and Transfer (Vents Indoors) *
510-BF3	Clinker Feed Bin (Vents Indoors) *
510-BF4	Clinker Additional Transfer (Vents Indoors) *
596-BF2	Mill Return Conveyor (Vents Indoors) *
422-VE1 421-VE3	Dust Conveying System * Fan No. 1 controls emissions from dust bin 421-B11 Fan No. 2 controls emissions from dust bin 010-211-B11 (Vents Indoors)
491-BF1	Clinker Cooler Discharge Pan Conveyor *
491-BF2	Clinker Silo *

*{Permitting Note: This emissions unit is regulated under 40 CFR 60, Subpart A – General Provisions and Subpart F – Standards of Performance for Portland Cement Plants, adopted by reference in Rules 62-204.800(8)(c), F.A.C. and 62-204.800(8)(b)9., F.A.C., respectively; and 40 CFR 63, Subpart A – General Provisions and Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry, adopted by reference in Rules 62-204.800(11)(d)1., F.AC. and (11)(b)48., F.A.C., respectively. Emission points marked with an asterisk (*) vent inside of a building and are, therefore, subject to the VE testing requirements in 40 CFR 63.1350(f)(1)(vi) and (vii) (see Specific Condition **C.5.f** and **C.5.g**).}*

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE); and, Permit No. 0250014-002-AC]

Emission Limitations and Standards

C.2. Visible Emissions (VE). The owner or operator of each new or existing clinker storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of 10%. [40 CFR 63.1345]

C.3. Particulate Emissions Limits. The maximum permitted particulate emissions rates from this emissions unit (from each of these emissions points) is 0.01gr/dscf. Pursuant to Rule 62-297.620(4), in lieu of particulate stack testing, the permittee shall demonstrate compliance by adhering to an opacity limit of 5%. If the RER has reason to believe that the particulate matter standard set forth is not being met, RER shall

require that compliance be demonstrated by the test method specified in the applicable rule. [Permit No. 0250014-002-AC]

{Permitting Note: Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition but not necessarily an exceedance of the opacity limitations given in 40 CFR 63 Subpart LLL.}

Monitoring of Operations

C.4. NESHAP Subpart LLL General Monitoring Requirements.

a. The permittee must demonstrate compliance with 40 CFR 63, Subpart LLL on a continuous basis by meeting the requirements of 40 CFR 63.1350 (see Specific Conditions **C.5** and **C.6**).
b. Any instance where the permittee fails to comply with the continuous monitoring requirements of 40 CFR 63.1350 is a violation.

[40 CFR 63.1350(a)]

C.5. NESHAP Subpart LLL Opacity Monitoring Requirements. The permittee must conduct required emissions monitoring in accordance with the provisions of paragraphs **C.5.a** through **C.5.g**, and in accordance with the monitoring plan developed under 40 CFR 63.1350(p). The permittee must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (4), if applicable, of 40 CFR 63.1350.

a. The permittee must conduct a monthly 10-minute VE test of each affected source in accordance with Method 22 of 40 CFR 60, Appendix A-7. The performance test must be conducted while the affected source is in operation.
b. If no VE are observed in six consecutive monthly tests for any affected source, permittee may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If VE are observed during any semi-annual test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
c. If no VE are observed during the semi-annual test for any affected source, the permittee may decrease the frequency of performance testing from semi-annually to annually for that affected source. If VE are observed during any annual performance test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
d. If VE are observed during any Method 22 performance test, 40 CFR 60, Appendix A-7, the permittee must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of 40 CFR 60, Appendix A-4. The Method 9 performance test, of 40 CFR 60, Appendix A-4, must begin within 1 hour of any observation of VE.
e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 VE monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permittee must conduct a Method 22 performance test, of 40 CFR 60, Appendix A-7, according to the requirements of paragraphs **C.5.a** through **C.5.d** for each such conveying system transfer point located within the building, or for the building itself, according to paragraph **C.5.g**.
g. If VE from a building are monitored, the requirements of paragraphs **C.5.a** through **C.5.d** apply to the monitoring of the building, and the permittee must also test VE from each side, roof, and vent of the building for at least 10 minutes.

[40 CFR 63.1350(f)(1)]

C.6. NESHAP Subpart LLL Opacity Corrective Actions. If visible emissions are observed during any Method 22 visible emissions test conducted under Specific Condition **C.5**, the permittee must initiate, within one-

hour, the corrective actions specified in the operation and maintenance plan as required in 40 CFR 63.1347. [40 CFR 63.1350(f)]

C.7. General Duty to Minimize Emissions. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1348(d)]

Test Methods and Procedures

C.8. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions From Stationary Sources
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62- 204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

C.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you are a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

C.10. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this emissions unit shall be tested to demonstrate compliance with the VE standard in Specific Condition **C.2**. [Rule 62-297.310(8)(a)3., F.A.C.]

C.11. Compliance Tests Prior To Renewal. For the purpose of renewal of this air operation permit, the permittee may satisfy the requirements of Rule 62-297.310(8)(b)1., F.A.C. (see Condition **TR7b.(1)** in Appendix TR) for this emissions unit by submitting the most recent VE test, as specified in Rule 62-297.310(10), F.A.C. (see Condition **TR9** in Appendix TR), provided such test occurred within the term of the current operating permit. [Rule 62-297.310(8)(b)2., F.A.C.]

Recordkeeping and Reporting Requirements

C.12. NESHAP Subpart LLL Reporting Requirements. The permittee shall comply with the reporting requirements specified in 40 CFR 63.10 (see Appendix NESHAP Subpart A) of the general provisions of 40 CFR 63, Subpart A as follows:

a. As required by 40 CFR 63.10(d)(2), the permittee shall report the results of performance tests as part of the notification of compliance status.

b. The permittee shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
(1) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a).
(2) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

[40 CFR 63.10(d)(2) and 63.1354(b)(1), (b)(2), (b)(9)(v) & (b)(9)(vii)]

C.13. NESHAP Subpart LLL Notification and Recordkeeping Requirements. This emissions unit shall meet the applicable notification and recordkeeping requirements in 40 CFR 63.1353 and 40 CFR 63.1355. The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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 in electronic format. [40 CFR 63.1353 & 1355]

C.14. NSPS Subpart F Requirements. The permittee shall meet the applicable recordkeeping and reporting requirements in 40 CFR 60.65. [40 CFR 60.65]

C.15. Other Reporting Requirements: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
001	Finish Mill No. 1
002	Finish Mill No. 2
003	Finish Mill No. 3
012	Finish Mill No. 4
013	Finish Mill No. 5
028	Finish Mill No. 6

Each finish mill is a horizontal cylindrical mill containing grinding media. Clinker and additives such as gypsum are fed into the finish mills which rotate, causing the grinding medial to crush the clinker and additives into powdered cement. Finish Mill Nos. 1-3 each have a design capacity of 27 tons per hour (TPH). Exhaust from Finish Mill Nos. 1-3 vent through a single shared baghouse to the atmosphere 48 ft above ground. Finish Mill Nos. 4 and 5 have design capacities of 25 and 27 TPH, respectively. Finish Mill No. 6 has a design capacity of 100 TPY and can receive dust shuttled from the kiln. This finish mill uses an air separator to entrain smaller particles while larger particles are recovered and further ground to meet a specific fineness.

The following table summarizes emissions points for Finish Mill Nos. 1-6 and associated baghouse characteristics:

Baghouse ID	Emission Point Description	Manufacturer	Model No.	Exhaust Flow Rate (acfm)
Finish Mill No. 1				
10-10	Finish Mill No. 1	Northern Blower Co.	N/A	20,000
10-25	Finish Mill No. 2	Northern Blower Co.	N/A	20,000
10-40	Finish Mill No. 3	Northern Blower Co.	N/A	20,000
Finish Mill No. 4				
10-110	Finish Mill No. 4 Feed	BHA	N/A	10,000
10-99	Finish Mill No. 4 Exhaust	BHA	N/A	10,000
Finish Mill No. 5				
10-188	Finish Mill No. 5 Feed	Mikro Pul Corp.	144S8-20	7,600
10-165	Finish Mill No. 5 Exhaust	Mikro Pul Corp.	144S8-20	6,000
Finish Mill No. 6				
536-BF1	Finish Mill No. 6 Feed	Fuller Bulk Handling	144C10	12,000
536-BF2	Finish Mill No. 6 Clinker/Gypsum Transfer	Torit	DFT 3-18	5,000
566-BF1	Finish Mill No. 6 Air Separator	Fuller Bulk Handling	2D624S12	83,500

{Permitting Note: These emission units are regulated under 40 CFR 60, Subpart A – General Provisions and Subpart F – Standards of Performance for Portland Cement Plants, adopted by reference in Rules 62-204.800(8)(c), F.A.C. and 62-204.800(8)(b)9., F.A.C., respectively; and 40 CFR 63, Subpart A – General Provisions and Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry, adopted by reference in Rules 62-204.800(11)(d)1., F.AC. and (11)(b)48., F.A.C., respectively.}

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. These emissions units are allowed to operate 8,760 hours per year. [Rule 62-210.200(PTE), and Permit No. 0250014-010-AC]

D.2. Finish Mill Process Rates. The individual finish mill process rates are 27 TPH each for Finish Mills 1, 2, 3 and 5; 25 TPH for Finish Mill 4. The process rates for Finish Mill 6 are 100 TPH for the Feed Transfer & Air Separator, and 250 TPH for the Clinker/Gypsum Transfer. [Permit Nos. 0250014-010-AC & 0250014-027-AC]

Emission Limitations and Standards

D.3. Visible Emissions. The owner or operator of each new or existing finish mill must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent. [40 CFR 63.1345]

D.4. Particulate Emissions Limits. The maximum permitted particulate emissions rate from these emissions units (from each of these emissions points) is 0.01gr/dscf. Pursuant to Rule 62-297.620(4), in lieu of particulate matter stack testing, the permittee shall demonstrate compliance by adhering to an opacity limit of 5%. If the RER has reason to believe that the particulate matter standard set forth is not being met, RER shall require that compliance be demonstrated by the test method specified in the applicable rule. [Permit Nos. 0250014-002-AC & 0250014-027-AC]

{Permitting Note: Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition but not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}

Monitoring of Operations

D.5. Monitoring Requirements.

a. The permittee must demonstrate compliance with 40 CFR 63 Subpart LLL on a continuous basis by meeting the requirements of 40 CFR 63.1350 (see Specific Conditions **D.6** and **D.7**).
b. Any instance where the permittee fails to comply with the continuous monitoring requirements of 40 CFR 63.1350 is a violation.

[40 CFR 63.1350(a)]

D.6. NESHAP Subpart LLL Opacity Monitoring Requirements. The permittee must conduct required emissions monitoring in accordance with the provisions of paragraphs **D.6.a** through **D.6.d**, and in accordance with the monitoring plan developed under 40 CFR 63.1350(p). The permittee must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (4), if applicable, of 40 CFR 63.1350.

a. The permittee must conduct a monthly 10-minute VE test of each affected source in accordance with Method 22 of 40 CFR 60, Appendix A-7. The performance test must be conducted while the affected source is in operation.
b. If no VE are observed in six consecutive monthly tests for any affected source, permittee may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If VE are observed during any semi-annual test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
c. If no VE are observed during the semi-annual test for any affected source, the permittee may decrease the frequency of performance testing from semi-annually to annually for that affected source. If VE are observed during any annual performance test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
d. If VE are observed during any Method 22 performance test, 40 CFR 60, Appendix A-7, the permittee must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with

Method 9 of 40 CFR 60, Appendix A-4. The Method 9 performance test, of 40 CFR 60, Appendix A-4, must begin within 1 hour of any observation of VE.

e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 VE monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permittee must conduct a Method 22 performance test, of 40 CFR 60, Appendix A-7, according to the requirements of paragraphs **D.6.a** through **D.6.d** for each such conveying system transfer point located within the building, or for the building itself, according to paragraph **D.6.g**.

g. If VE from a building are monitored, the requirements of paragraphs **D.6.a** through **D.6.d** apply to the monitoring of the building, and the permittee must also test VE from each side, roof, and vent of the building for at least 10 minutes.

[40 CFR 63.1350(f)(1)]

D.7. Finish Mill Monitoring (Baghouse ID 566-BF1).

a. For a finish mill, the permittee must monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A-7 to part 40 CFR 60. The duration of the Method 22 performance test must be 6 minutes.

b. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permittee must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

c. If visible emissions are observed during the follow-up Method 22 performance test required by paragraph **D.7.b** from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph **D.7.a**, the permittee must then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A-4 to part 40 CFR 60. The duration of the Method 9 test must be 30 minutes.

[40 CFR 63.1350(f)(2)]

D.8. NESHAP Subpart LLL Opacity Corrective Actions. If visible emissions are observed during any Method 22 visible emissions test conducted under Specific Conditions **D.6** or **D.7**, the permittee must initiate, within one-hour, the corrective actions specified in the operation and maintenance plan as required in 40 CFR 63.1347. [40 CFR 63.1350(f)]

D.9. General Duty to Minimize Emissions. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1348(d)]

Test Methods and Procedures

D.10. Test Methods: When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions From Stationary Sources

Method	Description of Method and Comments
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62- 204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

D.11. Common Testing Requirements: Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you are a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

D.12. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this emissions unit shall be tested to demonstrate compliance with the VE standard in Specific Condition **D.4**. [Rule 62-297.310(8)(a)3., F.A.C.]

*{Permitting Note: EPA Method 9 tests conducted in accordance with the 40 CFR 63, Subpart LLL requirements in Specific Condition **D.7.c** may be used to demonstrate compliance with annual VE testing requirements in Rule 62-297.310, F.A.C.}*

D.13. Compliance Tests Prior To Renewal. For the purpose of renewal of this air operation permit, the permittee may satisfy the requirements of Rule 62-297.310(8)(b)1., F.A.C. (see Condition **TR7b.(1)** in Appendix TR) for this emissions unit by submitting the most recent VE test, as specified in Rule 62-297.310(10), F.A.C. (see Condition **TR9** in Appendix TR), provided such test occurred within the term of the current operating permit. [Rule 62-297.310(8)(b)2., F.A.C.]

Recordkeeping and Reporting Requirements

D.14. NESHAP Subpart LLL Reporting Requirements. The permittee shall comply with the reporting requirements specified in 40 CFR 63.10 (see Appendix NESHAP Subpart A) of the general provisions of 40 CFR 63, Subpart A as follows:

a. As required by 40 CFR 63.10(d)(2), the permittee shall report the results of performance tests as part of the notification of compliance status.

b. The permittee shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:

(1) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a).
(2) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

[40 CFR 63.10(d)(2) and 63.1354(b)(1), (b)(2), (b)(9)(v) & (b)(9)(vii)]

D.15. NESHAP Subpart LLL Notification and Recordkeeping Requirements. This emissions unit shall meet the applicable notification, recordkeeping and reporting requirements in 40 CFR 63.1353 and 40 CFR 63.1355. The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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 in electronic format. [40 CFR 63.1353 & 1355]

D.16. Recordkeeping Requirements. The permittee shall record all hourly process rates, and maintain records for a minimum of 5 years. [Permit No. 0250014-059-AC]

D.17. NSPS Subpart F Requirements. The permittee shall meet the applicable recordkeeping and reporting requirements in 40 CFR 60.65. [40 CFR 60.65]

D.18. Other Reporting Requirements: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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Subsection E. Emissions Units 004-006 and 015, Cement Plant Product Storage and Packhouse/Loadout

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
004	32 Bulk Cement Storage Silos
005	Mortar Packhouse
006	Cement Packhouse
015	Cement Truck Loading

The Bulk Cement Storage System (EU No. 004), consists of thirty (30) 2,800 ton and two (2) 7,500 ton bulk cement storage silos, all interconnected by a pneumatic transfer system, with a maximum process rate of 205 TPH. Cement is withdrawn from these silos for distribution via trucks, railroad cars and bags. Control equipment consists of a total of five (5) low temperature baghouses – two (2) Northern Blower Co. No.156AMS baghouses discharging 45 feet above ground level for control of truck loadout; one (1) 590-BFI baghouse on Silo No. 11 (flow rate 9,000 acfm; for the East Bank of 15 silos); one (1) 590-BF2 baghouse on Silo No. 46 (flow rate 8,500 acfm; for the West Bank of 15 silos); one (1) 596-BF1 baghouse for the two 7,500-ton silos (flow rate 8,000 acfm). This emissions unit also includes the two-truck loadout and two FK pump baghouses listed in the table above.

The Mortar Packhouse (EU No. 005), is a packing plant with a maximum process rate of 8.1 TPH and two (2) low temperature baghouses for control of particulate emissions – one (1) Northern Blower Model No. 156A Dust Arrestor Alleviator discharging 53 feet above the ground level (storage area stack); one (1) Northern Blower Model No. 312A baghouse discharging 55 feet above ground level (packaging operation stack).

The Cement Packhouse (EU No. 006), is a packing plant with a maximum process rate of 8.1 TPH and two (2) low temperature baghouses for control of particulate emissions – one (1) Northern Blower Model No.156A Dust Arrestor Alleviator discharging 53 feet above the ground level (storage area stack); one (1) Northern Blower Model No.312A baghouse discharging 55 feet above ground level (packaging operation stack).

Cement Truck Loading Operations (EU No. 015) have a maximum process rate of 450 TPH and a total of seven (7) baghouses as control equipment. Each of the EU-015 baghouses vent indoors.

The emission points and baghouses that make up these emission units are summarized as follows:

EU No.	Emission Point No.	Emission Point Description
004	590-BF1	Cement Silo – NE Corner
	590-BF2	Cement Silo – SW Corner
	10-129	Cement Silo – SE Corner
	10-119	Cement Silo – NW Corner
	596-BF1	Cement Silos 351/352
	BH-A	Truck Loadout (North)
	BH-B	Truck Loadout (South)
	00000	FK Pump (North)
	00000	FK Pump (South)
005	16-092	Mortar Packhouse Packer
	16-058	Mortar Packhouse Alleviator
006	16-089	Cement Packhouse Packer (West)
	16-027	Cement Packhouse Alleviator (West)
015	16-137	Truck Loading Bay #3 (Vents Indoors)

	16-138	Truck Loading Bay #4 (Vents Indoors)
	611-BF1	Truck Loading Spout (Vents Indoors)
	612-BF1	Truck Loading Spout (Vents Indoors)
	613-BF1	Truck Loading Spout (Vents Indoors)
	616-BF1	Truck Loading Airslides (Vents Indoors)
	616-BF2	Truck Loading Airslides (Vents Indoors)

{Permitting Note: These emission units regulated under 40 CFR 60, Subpart A – General Provisions and Subpart F – Standards of Performance for Portland Cement Plants, adopted by reference in Rules 62-204.800(8)(c), F.A.C. and 62-204.800(8)(b)9., F.A.C., respectively; and 40 CFR 63, Subpart A – General Provisions and Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry, adopted by reference in Rules 62-204.800(11)(d)1., F.AC. and (11)(b)48., F.A.C., respectively.}

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation. These emissions units are allowed to operate 8,760 hours per year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

E.2. Cement Storage Silo/Packhouse/Loadout Process. The maximum throughput rate of the bulk cement storage silo system is 204 TPH, of the mortar and cement packhouse systems is 8.1 TPH each, and of the cement truck loadout is 450 TPH. [Rule 62-210.200(PTE), F.A.C.; and, Permit No. 0250014-010-AC]

Emission Limitations and Standards

E.3. Visible Emissions. The owner or operator of each new or existing finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system at a facility which is a major source subject to the provisions of 40 CFR 63 Subpart LLL must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent. [40 CFR 63.1345]

Monitoring of Operations

E.4. NESHAP Subpart LLL General Monitoring Requirements.

a. The permittee must demonstrate compliance with 40 CFR 63, Subpart LLL on a continuous basis by meeting the requirements of 40 CFR 63.1350
b. Any instance where the permittee fails to comply with the continuous monitoring requirements of 40 CFR 63.1350 is a violation.

[40 CFR 63.1350(a)]

E.5. NESHAP Subpart LLL Opacity Monitoring Requirements. The permittee must conduct required emissions monitoring in accordance with the provisions of paragraphs, and in accordance with the monitoring plan developed under 40 CFR 63.1350(p). The permittee must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (4), if applicable, of 40 CFR 63.1350.

a. The permittee must conduct a monthly 10-minute VE test of each affected source in accordance with Method 22 of 40 CFR 60, Appendix A-7. The performance test must be conducted while the affected source is in operation.
b. If no VE are observed in six consecutive monthly tests for any affected source, permittee may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If VE are observed during any semi-annual test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.
c. If no VE are observed during the semi-annual test for any affected source, the permittee may decrease the

frequency of performance testing from semi-annually to annually for that affected source. If VE are observed during any annual performance test, the permittee must resume performance testing of that affected source on a monthly basis and maintain that schedule until no VE are observed in six consecutive monthly tests.

d. If VE are observed during any Method 22 performance test, 40 CFR 60, Appendix A-7, the permittee must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of 40 CFR 60, Appendix A-4. The Method 9 performance test, of 40 CFR 60, Appendix A-4, must begin within 1 hour of any observation of VE.
e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 VE monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permittee must conduct a Method 22 performance test, of 40 CFR 60, Appendix A-7, according to the requirements of paragraphs **E.5.a** through **E.5.d** for each such conveying system transfer point located within the building, or for the building itself, according to paragraph **E.5.g**.
g. If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of 40 CFR 63.1350 apply to the monitoring of the building, and the permittee must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

[40 CFR 63.1350(f)(1)]

E.6. Opacity Corrective Actions. If visible emissions are observed during any Method 22 visible emissions test conducted under Specific Condition **E.5**, the permittee must initiate, within one-hour, the corrective actions specified in the operation and maintenance plan as required in 40 CFR 63.1347. [40 CFR 63.1350(f)]

E.7. General Duty to Minimize Emissions. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.1348(d)]

Test Methods and Procedures

E.8. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions From Stationary Sources
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62- 204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

E.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's

Business Portal. To access this online process, go to http://www.fldepportal.com/go/home and sign in (or register if you are a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}

Recordkeeping and Reporting Requirements

E.10. NESHAP Subpart LLL Reporting Requirements. The permittee shall comply with the reporting requirements specified in 40 CFR 63.10 (see Appendix NESHAP Subpart A) of the general provisions of 40 CFR 63, Subpart A as follows:

a. As required by 40 CFR 63.10(d)(2), the permittee shall report the results of performance tests as part of the notification of compliance status.

b. The permittee shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
   (1) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a).
   (2) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

[40 CFR 63.10(d)(2) and 63.1354(b)(1), (b)(2), (b)(9)(v) & (b)(9)(vii)]

E.11. NESHAP Subpart LLL Notification and Recordkeeping Requirements. This emissions unit shall meet the applicable notification, recordkeeping and reporting requirements in 40 CFR 63.1353 and 40 CFR 63.1355. The permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 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 in electronic format. [40 CFR 63.1353 & 63.1355]

E.12. Recordkeeping Requirements. The permittee shall maintain records of the maximum throughput rate of the bulk cement storage silo system, mortar and cement packhouse system, and the cement truck loadout (see Specific Condition **E.2**), and maintain records for a minimum of 5 years. [Permit No. 0250014-059-AC]

E.13. NSPS Subpart F Requirements. The permittee shall meet the applicable recordkeeping and reporting requirements in 40 CFR 60.65. [40 CFR 60.65]

Other Requirements

E.14. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Subsection F. Emission Unit 020, Cement Plant Coal and Petroleum Coke Handling System

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
020	Cement Plant Coal and Petroleum Coke Handling System

The Coal Mill System is used for unloading and processing of coal (fuel). Coal and petroleum coke are received by rail or trucks and dumped into the rail car unloading hopper and then conveyed by covered belt conveyors to the material storage gallery. The coal is recovered from the storage gallery by a clamshell bucket, an elevator and belt conveyors to the coal storage silo. From the silos, it is transferred via covered belt conveyors to the coal mill for grinding, drying and temporary storage in the pulverized coal bin. From the bin, coal is weighed and pneumatically transported to the kiln and calciner burners. PM control equipment consists of two (2) low temperature baghouses. The coal mill (venting to L61-BF1) receives kiln exhaust gas for efficient use of heat.

The cement plant coal & petroleum coke handling system is controlled by the following baghouses:

Emission Point No.	Descriptions of Emissions Points
L61-BF1	Coal/Coke Mill (Primary exhaust stack)
L91-BF1	Coal/Coke Bin (Ancillary de-dusting)

{Permitting Note: This emissions unit is regulated under 40 CFR 60, Subpart A – General Provisions and Subpart Y – Standards of Performance for Coal Preparation and Processing Plants, adopted by reference in Rules 62-204.800(8)(c), F.A.C. and 62-204.800(8)(b)33., F.A.C., respectively. Because the pyroprocessing system (EU No. 018) is subject to 40 CFR 63, Subpart LLL, and part of the kiln exhaust vents through the coal mill, emission point L61-BF1 is subject to Subpart LLL.}

Essential Potential to Emit (PTE) Parameters

F.1. Hours of Operation. This emissions unit system is allowed to operate 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C.; and, Permit No. 0250014-002-AC]

F.2. Coal/Petroleum Coke Usage. The design coal usage rate in the kiln is 18.7 TPH based on a 24-hour average. The design petroleum coke usage rate in the kiln is16.3 TPH based on a 24-hour average). [Permit No. 0250014-063-AC]

Emission Limitations and Standards

F.3. Visible Emissions Limits (L91-BF1 Only). Visible emissions are limited to 5 percent opacity from each of the above listed baghouses. Compliance shall be demonstrated annually using EPA Reference Method 9 and the procedures specified in 40 CFR 60.11. [Permit No. 0250014-002-AC]

F.4. Particulate Emissions Limits. The maximum permitted particulate emissions rates from this emissions unit (from each of these emissions points) is 0.01gr/dscf. Pursuant to Rule 62-297.620(4), in lieu of particulate matter stack testing, the permittee shall demonstrate compliance by adhering to an opacity limit of 5%. If the RER has reason to believe that the particulate matter standard set forth is not being met, RER shall require that compliance be demonstrated by the test method specified in the applicable rule. [Permit No. 0250014-002-AC]

F.5. Minimizing Particulate Emissions. Particulate emissions from coal handling facilities shall be minimized by following the procedures listed below:

a. All conveyers and transfer points shall be enclosed to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
b. Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
c. Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc., during dry periods and as necessary to all facilities to maintain an opacity of less than

5 percent, except when adding, moving or removing coal from the coal pile, during which the opacity shall be no more than 20%.

[Permit No. 0250014-002-AC]

F.6. Open Storage Pile Work Practices. The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs **F.6.a** through **F.6.f**.

a. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.

b. For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph **F.6.f** are met), use of a wind barrier, compaction, or use of a vegetative cover. The permittee must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

c. Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph **F.6.b** as specified in paragraphs **F.6.c(1)** through **F.6.c(4)**.

(1) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph **F.6.c(2)**.

(2) The permittee must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph **F.6.b**.

(3) While the petition is pending, the permittee must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph **F.6.b** while the petition is pending.

(4) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending 40 CFR 60 Subpart Y, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

d. The permittee must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs **F.6.d(1)** and **F.6.d(2)**.

(1) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.

(2) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph **F.6.e**.

e. The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs **F.6.e(1)** and **F.6.e(2)**.
   (1) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs **F.6.a** and **F.6.b**.
   (2) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The permittee must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph **F.6.e**, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs **F.6.a** and **F.6.b**.

f. Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

[40 CFR 60.254(c)]

Continuous Monitoring Requirements

F.7. Thermal Dryer Exit Temperature. The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7°C (±3°F). All monitoring devices under paragraph (a) of 40 CFR 60.256 are to be recalibrated annually in accordance with procedures under 40 CFR 60.13(b). [40 CFR 60.256(a)]

Test Methods and Procedures

F.8. Test Methods: When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
5I	Determination of Low Level Particulate Matter Emissions
9	Visual Determination of the Opacity of Emissions From Stationary Sources
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization – Instrumental)
321	Measurement of Gaseous Hydrogen Chloride Emissions At Portland Cement Kilns by Fourier Transform Infrared (FTIR) Spectroscopy

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62- 204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

F.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

F.10. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this emissions unit shall be tested to demonstrate compliance with the emissions standards for visible emissions. (L91-BF1 only). [Rule 62-297.310(8), F.A.C.]

F.11. Annual PM Compliance Tests Required. When there is an inline coal mill with a separate stack (emission point L61-BF1) associated with a kiln, the main exhaust and/or inline coal mill must be tested simultaneously and the combined emission rate of PM from the kiln and alkali bypass and/or inline coal mill must be computed for each run of the performance test required by 40 CFR 63.1349(b) (see Specific Condition **B.43**) using Equation 8 of 40 CFR 63.1349 below:

$$E_C = \frac{E_K + E_C}{P} \qquad \text{(Eq. 8)}$$

Where:
E_{Cm} = Combined hourly emission rate of PM from the kiln and bypass stack and/or inline coal mill, lb/ton of kiln clinker production.
E_K = Hourly emissions of PM emissions from the kiln, lb.
E_C = Hourly PM emissions from the inline coal mill stack, lb.
P = Hourly clinker production, tons.

The permittee shall demonstrate initial compliance with PM limitations by conducting separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating, and calculate the time weighted average emissions. The operating limit will then be determined using 40 CFR 63.1349(b)(1)(i). [40 CFR 63.1349(b)(1)(vii) & (ix)]

F.12. Total Hydrocarbon (THC) Emissions.

a. The permittee must operate a CEMS in accordance with the requirements in 40 CFR 63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvw and the reference method (RM) is Method 25A of 40 CFR 60, Appendix A.
b. Use the THC CEMS to conduct the initial compliance test for the first 30 kiln operating days of kiln operation after the compliance date of the rule. See 40 CFR 63.1348(a).
c. If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, the permittee must calculate a kiln-specific THC limit using Equation 9:

$$Cks = \frac{(MACT\,Limit + (Qcm + Qks)) - (Qcm \times Ccm)}{Qks} \quad \text{Eq. 9}$$

Where:
Cks = Kiln stack concentration (ppmvd).
Qcm = Coal mill flow rate (volume/hr).
Ccm = Coal mill concentration (ppmvd).
Qks = Kiln stack flow rate (volume/hr).

d. THC must be measured either upstream of the coal mill or the coal mill stack.

[40 CFR 63.1349(b)(4)(i)-(iv)]

*{Permitting Note: In accordance with 40 CFR 63.1350(i)(2), performance testing of the coal mill stack must be repeated every 30 months (see Specific Condition **B.37.b**).}*

F.13. Mercury Emissions. The permittee must operate a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of 40 CFR 63.1350(k). The initial compliance test must be based on

the first 30 kiln operating days in which the affected source operates using a mercury CEMS or a sorbent trap monitoring system after the compliance date of the rule. See 40 CFR 63.1348(a).

a. If the permittee is using a mercury CEMS or a sorbent trap monitoring system, the owner or operator must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in 40 CFR 63.1350(k)(5) (see Specific Conditions **B.38.e(1)** through **B.38.e(4)**).

b. Calculate the emission rate using Equation 10 of 40 CFR 63.1349:

$$E_{30D} = k\frac{\sum_{i=1}^{n} C_i Q_i}{P} \qquad \text{(Eq. 10)}$$

Where:

E_{30D} = 30-day rolling emission rate of mercury, lb/MM tons clinker.

C_i = Concentration of mercury for operating hour i, µg/scm.

Q_i = Volumetric flow rate of effluent gas for operating hour i, where C_i and Q_i are on the same basis (either wet or dry), scm/hr.

k = Conversion factor, 1 lb/454,000,000 µg.

n = Number of kiln operating hours in the previous 30 kiln operating day period where both C and Qi qualified data are available.

P = Total runs from the previous 30 days of clinker production during the same time period as the mercury emissions measured, million tons.

[40 CFR 63.1349(b)(5)]

*{Permitting Note: In accordance with 40 CFR 63.1350(k)(5), performance testing of the coal mill is conducted on either a 12-month or 30-month frequency (see Specific Conditions **B.38.e(1)** through **B.38.e(4)**).}*

F.14. HCl Emissions Tests. The permittee must conduct performance testing by one of the following methods:

a. *Wet Scrubber, Tray Tower or Dry Scrubber.*

(1) If the source is equipped with a wet scrubber, tray tower or dry scrubber, the permittee must conduct performance testing using Method 321 of appendix A to this part unless the owner or operator has installed a CEMS that meets the requirements in Specific Condition **B.39.a**. For kilns with inline raw mills, testing should be conducted for the raw mill on and raw mill off conditions.

(2) The permittee must establish site specific parameter limits by using the CPMS required in Specific Condition **B.39.b**. For a dry scrubber, measure and record the sorbent injection rate in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average sorbent injection rate and average sorbent injection rate for each sampling run in which the applicable emissions limit is met.

b. *Uncontrolled.*

(1) If the source is not controlled by a wet scrubber, tray tower or dry sorbent injection system, the permittee must operate a CEMS in accordance with the requirements of Specific Condition **B.39.a**. See 40 CFR 63.1348(a).

(2) The initial compliance test must be based on the 30 kiln operating days that occur after the compliance date of this rule in which the affected source operates using an HCl CEMS. Hourly HCl concentration data must be obtained according to Specific Condition **B.39.a**.

c. As an alternative to paragraph **B.50.b(2)**, the permittee may choose to monitor SO_2 emissions using a CEMS in accordance with the requirements of Specific Condition **B.39.c**. The permittee must establish an SO_2 operating limit equal to the average recorded during the HCl stack test where the HCl stack test run result demonstrates compliance with the emission limit. This operating limit will apply only for demonstrating HCl compliance.

d. If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, the owner or operator must calculate a kiln-specific HCl limit using Equation 11:

$$Cks = \frac{(MACT\ Limit\ x\ (Qcm+Qks))-(Qcm\ x\ Ccm)}{Qks} \quad \text{Eq. 11}$$

Where:
Cks = Kiln stack concentration (ppmvd).
Qcm = Coal mill flow rate (volume/hr).
Ccm = Coal mill concentration (ppmvd).
Qks = Kiln stack flow rate (volume/hr).
[40 CFR 63.1349(b)(6)]

{Permitting Note: HCl performance tests are to be conducted on a 30-month basis.}

Recordkeeping and Reporting Requirements

F.15. NSPS Subpart Y Requirements. This emissions unit shall meet the applicable notification, recordkeeping and reporting requirements in 40 CFR 60.258. [NSPS Subpart Y]

F.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
016	Facility-wide Fugitive Emissions

This emissions unit consists of facility-wide fugitive emissions from emission units and activities including uncontrolled raw material and clinker storage and handling operations; vehicle traffic on paved and unpaved roads; wind erosion from stockpiles; mining activities such as land clearing, drilling and blasting; maintenance activities including maintenance painting, parts cleaning and welding; diesel engines; sand and medial blasting for maintenance painting; railcar traffic; miscellaneous fugitive emissions from other emission units; and fugitive VOC and HAP emissions from contaminated soil storage and handling and fuel tanks containing the following:

Tank ID	Fuel Stored	Capacity (gal)
B	Waste Oil	600,000
C	Waste Oil	600,000
D1	Oily Water	25,000
D2	Oily Water	25,000
D3	Oily Water	25,000
D4	Oily Water	25,000
E5	Oily Water	25,000
E6	Oily Water	25,000
F (kiln day tank)	Waste Oil	30,000
I	ULSD diesel*	12,000
H	Diesel Fuel (3 tanks)	3 x 20,000

* Ultra low sulfur diesel (ULSD) required fuel pursuant to 40 CFR 63.1346(g).

{Permitting Note: This emission unit is regulated under Rule 62-296.320, F.A.C. – General Pollutant Emission Limiting Standards. Open clinker storage piles are regulated under 40 CFR 63, Subpart A – General Provisions and Subpart LLL – NESHAP From the Portland Cement Manufacturing Industry, adopted by reference in Rules 62-204.800(11)(d)1., F.AC. and (11)(b)48., F.A.C., respectively.}

G.1. Additional Reasonable Precautions of Emissions of Unconfined Particulate Matter. The provisions of Rule 62-296.320(4)(c) shall apply to all sources of unconfined particulate emissions, including but not limited to vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or related activities such as loading, storing and handling. The permittee shall follow the protocol below for unconfined particulate matter (UPM, Fugitive Emissions):

a. Material handling activities at the plant covered by this protocol include loading and unloading, storage, and conveying of:
   (1) Limestone and overburden
   (2) Iron oxide source (coal ash, iron ore, or other)
   (3) Gypsum
   (4) Coal

b. The following reasonable precautions shall be implemented at the facility:
   (1) The plant area shall be paved to limit the generation of UPM from truck and equipment traffic.
   (2) A sweeper truck shall be maintained and operated at the plant to limit dust buildup on paved surfaces.
   (3) All materials are to be received and used with excess surface moisture.
   (4) Water supply lines, hoses and sprinklers shall be located near all material stockpiles.
   (5) All plant equipment operators shall be trained in basic environmental compliance, and will perform visual inspections of materials before handling. If the visual inspections indicate a lack of excess

surface moisture, the materials shall be wetted with the sprinklers. Such wetting shall continue until the materials can be handled without generating UPM.

c. The permittee shall "immediately collect" any spilled cement kiln dust (CKD) to prevent fugitive emissions.

[Permit No. 0250014-002-AC; Rule 62-296.320(4)(c)2, F.A.C.]

G.2. Open Clinker Storage Pile. The owner or operator of an open clinker storage pile must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in their operation and maintenance plan (see 40 CFR 63.1347 of Subpart LLL), that is appropriate for the site conditions as specified in paragraphs **G.2.a** through **G.2.c**. The operation and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles.

a. The operation and maintenance plan must identify and describe the location of each current or future open clinker storage pile and the fugitive dust emissions control measures the owner or operator will use to minimize fugitive dust emissions from each open clinker storage pile.

b. For open clinker storage piles, the operations and maintenance plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from open clinker storage piles: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents, use of a wind barrier, compaction, use of tarpaulin or other equally effective cover or use of a vegetative cover. The permittee must select, for inclusion in the operations and maintenance plan, the fugitive dust control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.

c. Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days.

[40 CFR 63.1343(c)]

Test Methods and Procedures

G.3. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

G.4. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
022	Aggregate Plant Crushers
023	Other Affected Screening Operations/Belt Conveyors
025	Cement Truck Loading

Limestone quarry operations consist of nonmetallic mineral processing activities such as crushing, screening, and conveying. Mobile equipment (e.g., front end loaders) are used to deposit loads of limestone into a primary crusher before passing through a scalping screen and secondary crusher. After processing, the limestone is fed into a hopper which deposits onto a conveyor belt (Conveyor Belt BC-6) which extends from the quarry to the cement plant. The conveyor system also splits off to feed a radial stacker which may be used to deposit excess limestone in storage piles for temporary storage or fill trucks for transportation to the raw mill in the event that Conveyor Belt BC-6 is unavailable.

Quarry operations and emission points are summarized in the following table.

EU No.	Emission Point ID	Emission Point Description	Manufacturer	Size/Capacity	Saturated Material
022	110-CR1	Primary Crusher CR-1	Cedar Rapids	300 hp	No
	110-CR2	Secondary Crusher CR-2	Stedman GrandSlam	600 hp	No
023	110-VF1	Grizzly Feeder VGF-1	Deister	75 hp	No
	110-BC1	Conveyor Belt BC-1	--	48" x 235'	No
	110-BI1	Surge Bin BI-1	--	150 tons	No
	110-VF2	Vibrating Feeder VPF-2	Syntron	10 hp	No
	110-BC2	Conveyor Belt BC-2	--	48" x 230'	No
	110-VS1	Scalping Screen VS-1	Deister	100 hp	No
	110-BC3	Conveyor Belt BC-3	--	48" x 138'	No
	110-BC5	Conveyor Belt BC-5	--	30" x 171'	No
	110-VF5	Feeder VF5	--	--	No
	110-VF4	Feeder VPF-4	Kinergy	20 hp	No
	110-BC4	Radial Stacker Conveyor BC-4	--	48" x 144'	No
	110-FY1	Feed Bin	--	250 tons	No
	110-VF3	Feeder VPF-3	Syntron	10 hp	No
	110-BC6	Conveyor Belt BC-6	--	42" x 4118'	No
	110-BC15	Radial Stacker Conveyor BC-15	--	24" x 125'	Yes
025	110-HP1	Hopper	--	85 tons	No
	110-HP2	Hopper	--	30 tons	No

{Permitting Note: EU Nos. 022 and 023 are regulated under 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants, adopted by reference in Rules 62-204.800(8)(c) and 62-204.800(8)(b)69., F.A.C., respectively. EU Nos. 022 and 023 meet the definition of wet material processing operations, as defined in 40 CFR 60.671. Material upstream of the primary crusher meets the definition of saturated material, as defined in 40 CFR 60.671. If the permittee

receives an alternative sampling procedure (ASP) per Rule 297-620, F.A.C., they may follow the requirements of the ASP in lieu of the VE testing requirements in Rule 297-310(8)(a)3, F.A.C. Consequently, VE testing past and including the first crusher with regard to screening operations, bucket elevators and belt conveyors, etc. would only have to meet whatever requirements are in the ASP.}

Essential Potential to Emit (PTE) Parameters

H.1. Hours of Operation. The referenced emissions unit(s) may operate continuously (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C., and Permit No. 0250014-015-AC]

Emission Limitation and Standards

H.2. Visible Emissions Limits for Emissions Unit Nos. 022 and 023.

a. *Crusher Visible Emissions*. Affected facilities must meet the fugitive emissions limits and compliance requirements in Table 3 of 40 CFR 60 Subpart OOO. The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used.

Affected facilities (as defined in 40 CFR 60.670 and 40 CFR 60.671) that commenced construction, modification, or reconstruction on after August 31, 1983 but before April 22, 2008	15 percent opacity
Affected facilities (as defined in 40 CFR 60.670 and 40 CFR 60.671) that commenced construction, modification, or reconstruction on or after April 22, 2008	12 percent opacity

[40 CFR 60.672(b); Permit No. 0250014-059-AC]

b. *Conveyor/Screen Visible Emissions before First Crusher*. The convey/screen operations to include grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, etc. up to the first crusher are exempt from the requirements of Subpart OOO. However, these operations are still subject to the general 20% visible emissions requirement of Rule 62-296.320(4)(b), F.A.C.

{Permitting Note: For the 20% visible emissions requirements for conveyor/screen operations, the Compliance Authority, with good cause, can require testing of these emission points.}

c. *Conveyor/Screen Visible Emissions after First Crusher*. Screening operations, bucket elevators and belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in 40 CFR 60.670 and 40 CFR 60.671) in the production line after the first crusher, grinding mill or storage bin must meet the following fugitive emissions limits.

Affected facilities (as defined in 40 CFR 60.670 and 40 CFR 60.671) that commenced construction, modification, or reconstruction on after August 31, 1983 but before April 22, 2008	10 percent opacity
Affected facilities (as defined in 40 CFR 60.670 and 40 CFR 60.671) that commenced construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity

[40 CFR 60.672(b); and, Permit No. 0250014-059-AC]

H.3. Nonmetallic Mineral Truck Dumping Exemption. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 CFR 60.672. [40 CFR 60.672(d)]

Test Methods and Procedures

H.4. Visible Emissions Test Required. Within 180 days prior to this permit's renewal application due date, the permittee shall determine compliance with all visible emissions limits for all crushers and nonmetallic mineral processing equipment after and including the first crusher, excluding storage piles associated with

Emissions Unit Nos. 022 and 023. The permittee shall use EPA Method 9 and the procedures in 40 CFR 60.11, with the following additions:

a. The minimum distance between the observer and the emissions unit shall be 4.57 meters (15 feet).
b. The observer shall, when possible, select a position that minimizes interference from other fugitive emissions units (e.g., road dust). The required observer position relative to the sun (EPA Method 9, Section 2.1) must be followed.
c. For affected emissions units using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

[40 CFR 60.675(c); and, Permit Nos. 0250014-015-AC & 0250014-059-AC]

H.5. Visible Emissions Test Duration. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in 40 CFR 60.672(b) must be based on the average of the five 6-minute averages. [40 CFR 60.675(c)(3)]

H.6. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

H.7. Test Methods: When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions From Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department and EPA. [Rule 62-204.800, F.A.C.]

H.8. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this emissions unit shall be tested to demonstrate compliance with the emissions standards for visible emissions. [Rule 62-297.310(8), F.A.C.]

H.9. Compliance Tests Prior To Renewal. For the purpose of renewal of this air operation permit, the permittee may satisfy the requirements of Rule 62-297.310(8)(b)1., F.A.C. (see Condition **TR7b.(1)** in Appendix TR) for this emissions unit by submitting the most recent compliance test, as specified in Rule 62-297.310(10), F.A.C. (see Condition **TR9** in Appendix TR), provided such test occurred within the term of the current operating permit. [Rule 62-297.310(8)(b)2., F.A.C.]

H.10. Alternative VE Test Method. The permittee may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60 Subpart OOO:

a. For the method and procedure as specified in Specific Condition **H.4**, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read either of the following procedures may be used:
   (1) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
   (2) Separate the emissions so that the opacity of emissions from each affected facility can be read.
b. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:
   (1) No more than three emission points may be read concurrently.

(2) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
(3) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

[40 CFR 60.675(e)(1) & (2)]

Recordkeeping and Reporting Requirements

H.11. Change of Processing Material (Saturated vs. Unsaturated) for EU Nos. 022 and 023. The owner or operator of any wet material operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11. [40 CFR 60.676(g)]

H.12. Replacement Exemption for EU Nos. 022 and 023.

a. When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675 except as provided for in paragraph **H.12.c**.
b. An owner or operator complying with paragraph **H.12.a** shall submit the information required in 40 CFR 60.676(a).
c. An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph **H.12.a** and must comply with the provisions of 40 CFR 60.672, 40 CFR 60.674 and 40 CFR 60.675.

[40 CFR 60.670(d)]

H.13. Replacement Not Exempted. An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in Specific Condition **H.12.a** and must comply with the provisions of 40 CFR 60.672, 40 CFR 60.674 and 40 CFR 60.675. [40 CFR 60.670(d)(3)]

H.14. Exemption Requirements for EU Nos. 022 and 023. When seeking exemption, the permittee shall submit the following information to the RER, Air Quality Management, postmarked sixty (60) days or as soon as practicable before the change is commenced and shall include the expected completion date of the change(s), as well as the following information. The required information shall be submitted for both the existing facility that was replaced, and the replacement equipment.

When Replacing	Required Information	Rule Reference
a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station	Rated capacity in megagrams or tons per hour of the existing facility being replaced and the rated capacity in tons per hour of the replacement equipment	40 CFR 60.676(a)(1)
a screening operation	The total surface area of the top screen of the existing screening operation being replaced and the total surface area of the top screen of the replacement screening operation	40 CFR 60.676(a)(2)
a conveyer belt	The width of the existing belt being replaced and the width of the replacement conveyor belt	40 CFR 60.676(a)(3)
a storage bin	The rated capacity in megagrams or tons of the existing storage bin being replaced and	40 CFR 60.676(a)(4)

	the rated capacity in megagrams or tons of replacement storage bins	

[40 CFR 60.7 & 40 CFR 60.676(a); and, Permit No. 0250014-015-AC]

H.15. Replacement Prohibition for EU Nos. 022 and 023. The permittee shall not replace any facility covered under this permit with a piece of equipment of larger size or different function without applying for, and receiving, a modification of this permit to allow such replacement, unless this requirement is specifically waived in writing by the RER, Air Facilities Section. [40 CFR 60.670, and Permit No. 0250014-015-AC]

H.16. Initial Notification. The permittee shall submit a notification of the actual date of initial startup of each affected facility to the RER.

a. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the RER. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.
b. For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

[40 CFR 60.676(i)]

H.17. NSPS Subpart OOO Requirements. These emission units shall meet the applicable, recordkeeping and reporting requirements in 40 CFR 60.676. [40 CFR 60, Subpart OOO]

H.18. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
021	Sweetwater Concrete Batch Plant and Concrete Block Plant

The Sweetwater Ready Mix Concrete Batch Facility and Concrete Block Plant, with a 94 TPH process rate, is adjacent to the facility, and are of the same SIC Major Group. EU No. 021 consists of 2 twin-compartment cement silos, an aggregate handling system, a loadout system and a concrete block plant.

The aggregate handling system consists of a hopper that feeds into a batching tower that feeds into a loading chute. The aggregate materials used in the production of ready-mix concrete and concrete blocks include various sizes of gravel, natural sand, and screenings. Most of the gravel used is based on lime rock, but granite or other crushed stone materials are used. A front-end loader dumps the aggregate into a hopper that feeds a 30-inch wide belt conveyor that moves the aggregate materials to various open-topped steel bins on top of the batching tower. The aggregate materials drop from the bins into an aggregate weigh hopper inside of the batching tower. The materials are then dropped into mixing trucks or a mixing machine via the loading chute.

The twin-compartment cement silos transfer cement to a cement weigh hopper using twin screw conveyors or twin air slides. Cement in the weigh hopper is weighed and transferred to either mixing trucks or a mixing machine. The cement silos, air slides, screw conveyors and weigh hopper are all sealed. Dust collectors are attached to the silos and weigh hopper. These dust collectors filter PM from the air that is displaced and exhausted to the atmosphere when the silos or hopper are filled, which acts as both a PM control device and material recovery device.

The cement silos and aggregate handling system discharge into a common loadout, which utilizes a dust collector to control PM emissions. Various mixtures of aggregates, cement, water, and liquid admixtures are used to produce either ready-mix concrete or concrete blocks. Ready-mix concrete is loaded into trucks, where it is mixed in transit to a job site. Concrete used to make blocks is loaded into a mixer machine, which then feeds into block molds. The blocks are cured in unheated kilns before being transported to a paved yard for long-term storage. Fugitive PM from the concrete block plant is also controlled with a dust collector.

PM emissions are controlled by six (6) dust collectors; five (5) for the ready-mix operation and one (1) for the concrete block plant as described below.

Emission Point Description	Manufacturer	Model No.	Flow Rate (acfm)	Cloth Area (ft^2)	Air to Cloth Ratio
Bin Dust Collector (Concrete	BHA	Pulse-Pleat	750	150	5.1 to 1.0
Block Plant)	C&W	CP-900-1278	5,000	912	5.5 to 1.0
Truck Loadout Mixer Central	C&W	CP-305-839	1,600	304	5.3 to 1.0
Dust Collector (Ready Mix Plant)	C&W	CP-305-839	1,600	356	5.3 to 1.0
Cement Materials Weigh Hopper	C&W	CP70	432	90	4.98

{Permitting Note: This emissions unit is regulated under Rule 62-296.414, F.A.C., Concrete Batching Plants.}

Essential Potential to Emit (PTE) Parameters

I.1. Hours of Operation. This emissions unit system is allowed to operate 8,760 hours per year. [Rule 62-210.200 (PTE), F.A.C.; and, Permit Nos. 0250014-026-AC & 0250014-038-AC]

Control Technology

I.2. Dust Collector Operation. The permittee shall operate the dust collection system in accordance with the manufacturer's specifications and recommended operating guidelines. [Permit No. 0250014-069-AC]

Emission Limitations and Standards

I.3. Visible Emissions (VE) Limits. Stack emissions from silos, weigh hoppers (batchers), and other enclosed storage and conveying equipment shall be controlled to the extent necessary to limit visible emissions to 5% opacity. [Rule 62-296.414(1), F.A.C.; and, Permit Nos. 0250014-026-AC & 0250014-038-AC]

Test Methods and Procedures

I.4. Test Procedures. All emissions tests performed on the Sweetwater Concrete Block and Ready-Mix Plant shall comply with the following requirements.

a. The reference test method for visible emissions shall be EPA Method 9, as described at 40 CFR, Part 60, Appendix A, adopted and incorporated by reference at Rule 62-204.800, F.A.C.
b. Test procedures shall conform to the procedures specified in Rule 62-297.310, F.A.C. All test results shall be reported to the RER in accordance with the provisions of Rule 62-297.310, F.A.C.
c. Visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice. If emissions from the weigh hopper (batcher) operation are also controlled by the silo dust collector, then the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing.
d. If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing.

[Rule 62-296.414(3), F.A.C.; and, Permit Nos. 0250014-026-AC & 0250014-038-AC]

I.5. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions From Stationary Sources
22	Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

I.6. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

I.7. Frequency of Testing. The owner or operator of any concrete batching plant operating under the authority of an air construction permit or air operation permit shall have a performance test conducted for visible emissions for each dust collector exhaust point prior to submitting the application for an air operation permit, and annually thereafter. [Rule 62-296.414(4)(b), F.A.C.; and, Permit Nos. 0250014-026-AC & 0250014-038-AC]

{Permitting Note: Pursuant to Rule 62-297.310(8)(b)2., F.A.C., the permittee may satisfy testing requirements prior to permit renewal by submitting the most recent emissions test, provided such test occurred within the term of the current Title V air operation permit.}

Other Requirements

I.8. Concrete Batching and Ready-Mix Plant Reasonable Precautions. The owner or operator shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, roads, parking areas, stock piles, and yards as required by paragraph 62-296.320(4)(c), F.A.C. The following shall constitute additional reasonable precautions to control Unconfined Emissions of Particulate Matter for this emissions unit:

a. Management of roads, parking areas, stock piles, and yards, which shall include one or more of the following:
   (1) Paving and maintenance of roads, parking areas, and yards.
   (2) Application of water or environmentally safe dust-suppressant chemicals when necessary to control emissions.
   (3) Removal of particulate matter from roads and other paved areas under control of the owner or operator to mitigate reentrainment, and from building or work areas to reduce airborne particulate matter.
   (4) Reduction of stock pile height or installation of wind breaks to mitigate wind entrainment of particulate matter from stock piles.

b. Use of spray bar, chute, or partial enclosure to mitigate emissions at the drop point to the truck.

[Rule 62-296.414(2), F.A.C.; and, Permit Nos. 0250014-026-AC & 0250014-038-AC]

Recordkeeping and Reporting Requirements

I.9. Manufacturer Records. The permittee shall retain onsite the manufacturer's specifications and documentation necessary for the proper operation and maintenance of the dust collection system. These records shall be made available to the Department upon request. [Permit No. 0250014-069-AC]

I.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
014	Stone Dryer and Soil Treatment Facility

The Stone Dryer and Soil Thermal Treatment Facility thermally treats petroleum contaminated soil. The major components of this emissions unit are the rotary dryer, a raw material gallery, material handling system (screens, inclined belt feeders, bucket elevator, crusher, and stacker), fuel systems, a bypass stack and associated equipment, as described in the table below. As of June 1, 2014, no contaminated soil has been stored onsite at this emissions unit, and this emissions unit is currently not operational.

Gencor Ultraflame	Low excess air oil burners for the existing 7 feet diameter by 80 feet long rotary dryer
Joy-Western Multicyclone	85% efficiency
Micropul baghouse	99.9% efficient with 3,366 square feet of cloth area
IT/McGIll afterburner	Natural gas, on-specification used oil, or propane fired.
Two (2) heat exchangers for energy recovery	99.5% efficiency
Raw material gallery controlled with a Micropul Baghouse	Discharges approximately 500 acfm at 400°F through a 1.0 feet square stack that is 45 feet high, collects from material handling equipment (screen, inclined belt feeders, bucket elevator, crusher, and stacker).
Fuel systems	Used petroleum oil meeting the provisions of 40 CFR 266, Subpart E, propane, natural gas, and No. 2 fuel oil for the dryer, and on-specification used oil per 40 CFR 279.11, natural gas and propane for the afterburner.
By-pass stack	To be used only when the kiln is drying stone, and associated equipment.
Dryer	Discharges approximately 43,500 acfm, 8,900 dscfm of 1,330°F flue gases through a 3.75 feet diameter by 80 feet high stack.

The Stone Dryer and Soil Thermal Treatment Facility Operations are controlled by the following:

Emission Point ID	Description of Emission Points
020-06	Dryer
020-16	Raw Material Gallery (Micropul) Baghouse

{Permitting Note: This emissions unit is regulated under Rule 62-296.415, F.A.C. – Soil Thermal Treatment Facilities.}

Essential Potential to Emit (PTE) Parameters

J.1. Hours of Operation. This emissions unit system is allowed to operate 8,760 hours per year. [Permit No. AC 13-187599A; and, Rule 62-210.200 (PTE), F.A.C.]

J.2. Stone Dryer and Soil Thermal Treatment Facility Maximum Process Rates. The Stone Dryer System process rate shall not exceed 25 tons per hour (TPH, 24-hour average) and the Soil Thermal Treatment System process rate shall not exceed 40 tons per hour (TPH, 24-hour average). Soil containing more than 1.4 percent petroleum (daily average) products shall not be treated in this facility unless it is processed at a rate less than 40 TPH. [Permit Nos. 0250014-004-AC & AC 13-187599A]

J.3. Dryer Fuels. The dryer is authorized to burn up to 27.4 MMBtu/hr of waste oil (193 GPH) containing a maximum of 0.4 percent sulfur and 100 ppm lead, No. 2 distillate oil (193 GPH) containing a maximum of 0.5 percent sulfur, and propane (180 GPH) or natural gas (460 CFM). The maximum fuel oil consumption shall

not exceed 769,459 gallons in any 12-month period. [40 CFR 279.11; and, Permit No. AC 13-187599A]

J.4. Fume Incinerator (Afterburner) Fuels. The fume incinerator (afterburner) is authorized to burn up to 15.0 MMBtu/hr of on-specification used oil (106 GPH) containing no more than 0.4% sulfur, natural gas (250 CFM) or propane (100 CFM). The used oil fuel shall meet the EPA requirements for on-specification used oil fuel and the requirements of Appendix B of this permit. The fume incinerator shall be in service any time the Stone Dryer is being used to process material containing contaminated soil. The bypass stack must be closed when the unit is processing contaminated soil. [Permit Nos. 0250014-005-AC & AC 13-187599A]

J.5. Afterburner Temperature. The permittee shall install, operate, and maintain an afterburner designed to expose the organic vapors driven off from the soil in the drum dryer during thermal treatment to at least 1,600°F for a minimum retention time of 0.5 seconds. If the permittee can document that the retention time of the flue gases in the afterburner is 1.0 second or more, the afterburner temperature may be reduced to 1,500°F. The owner or operator shall demonstrate that the temperature and retention time requirements will continue to be met before any changes are made to the afterburner, induced draft fan, or any other equipment which may affect the temperature and retention time requirement. [Rule 62-296.415(1)(a) F.A.C.; and, Permit No. 0250014-005-AC]

J.6. Contaminated Coal Tar Daily Average. The input of coal tar in the soil into the facility shall not exceed 1,120 pounds per hour (daily average). [Permit 0250014-004-AC]

Control Technology

J.7. Dryer Baghouse. The permittee shall install, operate and maintain a high temperature, high efficiency baghouse to control emissions or particulate matter from the drum dryer during thermal treatment of soils. [Permit No. 0250014-005-AC]

J.8. Unconfined Emissions. A soil thermal treatment facility is subject to Rule 62-296.320, F.A.C., Unconfined Emissions of Particulate Matter. As a minimum, before and after thermal soil treatment is accomplished, unconfined emissions of particulate matter from the soil shall be controlled by application of water or containment. [Rule 62-296.415(4), F.A.C.]

Emissions Limitations and Standards

J.9. Stone Dryer and Soil Thermal Treatment Facility Maximum Allowable Emissions.

a. *Carbon Monoxide.* The average CO emissions shall not exceed 100 parts per million (ppm) by volume, dry basis, during all 60-consecutive-minute periods of plant operation. The average CO emissions is the arithmetic mean of all CO concentration measurements during any consecutive 60 minutes of plant operation that were recorded by the continuous emissions monitor required pursuant to Specific Condition **J.13**. [Rule 62-296.415(1)(b), F.A.C.; and, Permit No. 0250014-005-AC]

b. *PM Emissions*.

(1) *Particulate Matter (Dryer)*. The average particulate matter emissions shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf) of exhaust gas nor 3.3 pounds per hour, as determined by EPA Method 5. Compliance with this limit shall be demonstrated at least annually with the testing required by this permit. This limit applies during all periods of soil thermal treatment. [Rule 62-296.415(3), F.A.C.; and, Permit No. 0250014-005-AC]

(2) *Particulate Matter (Fugitives Baghouse)*. Emissions of particulate matter from the fugitive dust baghouse shall not exceed 0.02 grains/dscf, nor 0.5 lbs/hr. Pursuant to Rule 62-297.620(4), in lieu of particulate stack testing, the permittee shall demonstrate compliance by adhering to an opacity limit of 5%. If the RER has reason to believe that the particulate matter standard set forth is not being met, RER shall require that compliance be demonstrated by the test method specified in the applicable rule. [Rule 62-297.620(4), F.A.C.; and, Permit Nos. 0250014-005-AC & AC 13-187599A]

c. *VOC*. Potential emissions of VOCs from this facility shall not exceed 22.8 lb/hr. [Permit Nos. 0250014-

005-AC & AC 13-187599A]

d. *Sulfur Dioxide*. SO_2 emissions shall be limited to 1.1 lb/MMBtu heat input. [Miami-Dade County Environmental Protection Ordinance 24-41.3(2)(b)(i)]
e. *Lead*. Emissions of lead from the dryer shall not exceed 0.13 lb/hr. [Permit Nos. 0250014-005-AC & AC 13-187599A]
f. *PCB*. Emissions of PCB's from the stack shall not exceed 154 pounds in any consecutive 12-month period. [Permit No. 0250014-005-AC & AC 13-187599A]
g. *Visible Emissions*. Visible emissions from a stack shall not exceed 5% opacity as determined by the test method specified in subsection 62-296-415(5), F.A.C., when thermally treating soil. [Rule 62-296.415(2), F.A.C.]

Monitoring of Operations

J.9. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(b), F.A.C. [40 CFR 64; Rules 62-204.800 & 62-213.440(1)(b)1.2., F.A.C.]

J.10. Monitoring Requirements. The permittee shall continually monitor the temperature and carbon monoxide content of the flue gases leaving the high temperature zone pursuant to the applicable continuous emissions monitoring requirements of subsection 62-296.415(6), F.A.C (see Specific Conditions **J.11** and **J.13**). Temperature and carbon monoxide monitors shall be co-located unless otherwise approved by the Department. [Rule 62-296.415(1)(c), F.A.C.]

J.11. Temperature Monitoring. The permittee shall install, calibrate, operate and maintain instruments to continuously monitor and record the temperature of the flue gases leaving the high temperature zone, but before any dilution air is mixed with the flue gases. The temperature monitor shall be certified by the manufacturer to be accurate to within 1% of the temperature being measured. The temperature monitoring system shall be calibrated at least annually by the procedure recommended by the manufacturer. The calibration shall be at a minimum of three temperatures and over a range from 10% below to 10% above the designed flue gas hot zone temperature of the soil thermal treatment facility. [Rule 62-296.415(6), F.A.C.]

J.12. Work Practices. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Permit No. 0250014-002-AC]

Continuous Emissions Monitoring Requirements

J.13. Carbon Monoxide Monitoring. The permittee shall install, calibrate, operate, and maintain instruments to continuously monitor and record the carbon monoxide concentration of the flue gases leaving the high temperature zone, but before any dilution air is mixed with the flue gases. The carbon monoxide monitor shall be certified by the manufacturer to be accurate to within 10% of the carbon monoxide concentration by volume, mean value, or 5% of the applicable standard of 100 ppm, whichever is greater, as determined by EPA Test Method 10, as described at 40 C.F.R. Part 60, Appendix A-4, adopted and incorporated by reference in Rule 62-204.800, F.A.C. The carbon monoxide continuous emission monitoring device shall be certified, calibrated, and operated according to Performance Specification 4 of 40 C.F.R. Part 60, Appendix B, adopted and incorporated by reference in Rule 62-204.800, F.A.C., excluding Section 5.2, Calibration Drift Test Period, of Performance Specification 2. [Rule 62-296.415(6), F.A.C.]

Test Methods and Monitoring Procedures

J.14. Test Methods. When required, tests shall be performed in accordance with the following reference

methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
6	Determination of Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
29	Determination of Metals Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.]

J.15. Particulate Matter. The test method for particulate shall be EPA Method 5, as described at 40 CFR Part 60, Appendix A-3, adopted and incorporated by reference at Rule 62-204.800, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. [Rules 62-296.415(5)(b)]

J.16. Visible Emissions. The test method for visible emissions shall be EPA Method 9, as described at 40 C.F.R. Part 60, Appendix A-4, adopted and incorporated by reference at Rule 62-204.800, F.A.C. [Rules 62-296.415(5)(a)]

J.17. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, as described at 40 C.F.R. Part 60, Appendix A-4, adopted and incorporated by reference at Rule 62-204.800, F.A.C. [Rule 62-296.415(5)(c), F.A.C.]

J.18. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), this emissions unit shall be tested to demonstrate compliance with the emissions standards for VE in Specific Conditions **J.8.b(2)** and **J.9.g**, PM in Specific Condition **J.8.b(1)** and VOC in Specific Condition **J.9.c**. [Rule 62-297.310(8), F.A.C.]

J.19. Compliance Tests Prior to Renewal. Except as provided in subparagraph 62-297.310(8)(b)3., F.A.C. (see condition **TR7.**b.(3) in Appendix TR – Facility-wide Testing Requirements), in addition to the annual compliance tests specified above, compliance tests shall also be performed for SO_2 and Pb prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Conditions **J.9.d** and **J.9.e**. [Rules 62-210.300(2)(a) & 62-297.310(8)(b), F.A.C.]

J.20. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

J.21. PCB Log. The permittee shall maintain a log that shows the PCB content of any soil containing used oil, hydraulic oil, and/or mineral oil; the source of the PCB contaminated soil; the tons of PCB contaminated soil treated; the PCB content of the oil that contaminated the soil; the quantity of PCBs in each batch of soil treated; and the total amount of PCBs treated during the preceding 12-month period. The cumulative weight of emissions shall be calculated using either of the following methods:

a. The weight of PCBs entering the kiln shall be assumed to be the weight emitted.
b. The weight of emissions shall be calculated using the weight entering the kiln with adjustment for documented destruction in the facility by a test program conducted by the permittee that is approved by the FDEP.

The Method specified in (a) of this condition shall be used until a destruction rate has been established on this system by stack test. Test protocol and methods to be used in determining destruction efficiency shall be submitted to the FDEP for approval. [Permit No. AC 13-187599A]

J.22. Continuous Monitor Log. A complete file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; and all other information required, shall be recorded in a permanent legible form available for inspection. All continuous monitoring records shall be retained for at least three years following the date of such measurements, maintenance, reports and records. [Rule 62-296.415(6), F.A.C.; and, Permit No. 0250014-005-AC]

J.23. Belt Weigh Scale. The permittee shall install, calibrate, operate and maintain a belt weigh scale or equivalent device which continuously indicates the soil processing rate in tons per hour. After each hour of thermal treatment, the operator shall record the soil processing rate in the Operation Log. [Permit No. 0250014-004-AC]

J.24. Baghouse Pressure Differential Indicator: The permittee shall install, calibrate, operate and maintain a device which continuously indicates the pressure differential across the baghouse. After each hour of thermal treatment, the operator shall record the average pressure differential across the baghouse in the Operation Log. [Permit No. 0250014-004-AC]

Recordkeeping and Reporting Requirements

J.25. Other Reporting Requirements: See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
030	Portable Crushing System

This emissions unit consists of a portable crusher powered by a 600 HP diesel engine. The crusher is used to crush returned materials from the cement plant or excavated limestone and is permitted to be maintained at the facility no more than 6 months in any consecutive 12-month period.

{Permitting Note: The crusher system must have an Air General Permit and show compliance with all Federal and State requirements specific to that equipment (in addition to rules applicable to the entire facility, e.g., Title V and PSD rules) through the Air General Permit.}

Equipment

K.1. Portable Crusher. The permittee is authorized to operate a portable crushing system with a maximum capacity of 800 TPH, and a maximum engine power of 600 HP. [Permit No. 0250014-057-AC]

Performance Restrictions

K.2. Air Permit Requirement. The permittee is authorized to bring on-site, and operate a portable crushing system as allowed by a current and valid Air General Permit. Under the authority of this air general permit, a relocatable nonmetallic mineral processing plant may perform a non-routine task, such as crushing concrete for a demolition project, at a facility with authorization by individual air construction or non-Title V air operation permit, without revision to the facility's individual air permit. Any such nonmetallic mineral processing plant shall not be deployed at a single site for more than six (6) months in any consecutive twelve (12) months. The owner or operator of such nonmetallic mineral processing plant shall keep records to indicate how long the plant has been at the permitted facility. [Rule 62-210.310(5)(e)5, F.A.C., and Permit No. 0250014-057-AC]

K.3. Application for Title V Permit. If the portable crushing system is to remain on-site for more than six (6) months, the permittee shall notify the RER prior to the completion of the six (6) months. The notification shall include a statement from the permittee that the facility will apply for a Title V air operation permit within 60 days of completion of the six (6) months. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and any supporting documentation as the Department may by law require. The application shall be submitted to the RER. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C., and Permit No. 0250014-057-AC]

K.4. Facility Relocation. The owner or operator of any relocatable nonmetallic mineral processing plant proposing to change location shall notify the Department and RER by telephone, e-mail, fax, or written communication at least one (1) business day prior to changing location and transmit (by e-mail, fax, post, or courier) a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department and RER no later than five (5) business days following relocation. [Rule 62-210.310(5)(e)3.f , F.A.C., and Permit No. 0250014-057-AC]

Testing Requirements

K.5. Visible Emissions (V.E.). The permittee shall maintain on-site documentation of the most recent annual V.E. test that complies with the portable crushing system's Air General (AG) permit requirements prior to the relocation to this site or shall (if needed to demonstrate compliance with the AG permit) test on-site prior to commencement of crushing operations. [Permit No. 0250014-057-AC]

Notification, Recordkeeping and Reporting Requirements

K.6. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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