CEMEX Construction Materials Florida, LLC
CEMEX Brooksville South Cement Plant

Facility ID No. 0530021

Hernando County

Title V Air Operation Permit Renewal

Permit No. 0530021-073-AV

(Renewal of Title V Air Operation Permit No. 0530021-047-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:

State of Florida
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Compliance Assurance Program, Southwest District
13051 North Telecom Parkway, Suite 101
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Title V Air Operation Permit Renewal

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Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

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

Permit No. 0530021-073-AV
CEMEX Brooksville South Cement Plant
Facility ID No. 0530021
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 CEMEX Brooksville South Cement Plant is located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. UTM Coordinates are: Zone 17, 360.0 km East, and 3162.5 km North. Latitude is: 28° 35' 00" North; and, Longitude is: 82° 25' 53" 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.

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

David Lyle Read, P.E.

David Lyle Read, P.E.
2018.02.26 11:58:59 -05'00'

For:
Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/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
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 & BV64-100-144A421*H1SZ	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
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 September 21, 2017, 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

Regulation	EU No(s).
Federal Rule Citations	
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, 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.

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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. [Rules 62-296.320(2) & 62-210.200(Definitions), F.A.C.; and, AC27-199744]

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. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. 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: http://www.dep.state.fl.us/air/emission/tvfee.htm. [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 the permittee complete the facility's AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If the permittee has questions or needs 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 Monitoring Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by 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.]

{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.}

Excess Emissions

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 units:

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	Cement Storage Silos #1 & #2 with Baghouse
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	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	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 Silos #1 & #2 - 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	125 TPH each & 876,000 TPY each
019	Finish Mill Feed Belt - is an activity of transferring clinker,	29/2.0	Low	85	9,000 8,820	120 TPH

EU ID No.	Description	Stack [1]	BH [2]	Temp [3]	Flow [4]	Throughput
	gypsum or limestone to the finish mill					
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 #3 - is an activity of cement being pneumatically transferred to a silo from the finish mill	200/2.0	Low	180	5,300 ---	125 TPH; 876,000 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]

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)]

Test Methods and Procedures

A.11. 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.12. 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.13. 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. [Rule 62-297.310(8), F.A.C.]

A.14. 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.15. 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.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

A.17. 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.18. 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.19. 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.20. 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 B. Brooksville Portland Cement Line 1 – Clinker Receiving/Handling System

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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Subsection C. Brooksville Portland Cement Line 1 – In-Line Cement Kiln 1, In-Line Kiln/Raw Mill, Coal Mill and Clinker Cooler 1

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. The FPD power plant now operates independently of CEMEX operations under 0530380-007-AV, exhausting through a separate ESP and stack.

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. 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: The water spray/injection system, through the use of micro-droplet water sprays, provides sufficient cooling to rapidly quench/cool the temperature of the gas leaving the preheater below the D/F formation temperature zone of 750 – 450ºF, thereby minimizing the formation of D/F. The installed Turbosonic system currently consists of 3 spray lances, each equipped with micro-droplet spray nozzles. (Based on operation of the system, additional spray nozzles may need to be added to enhance the performance of the system to adequately cool the gases).}

{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 (including the Kiln 1 Water Injection/Spray system) 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. Kiln 1 Water Injection/Spray Tower Operation Requirements.

a. *Required Periods of Operation*. The Kiln 1 Water Injection/Spray Tower shall be in service at all times that Kiln 1 is operating (including startup defined as a minimum kiln feed rate of 80 TPH) with the raw mill down (i.e., not operating) (RMD).

b. *Maximum Downcomer Exit/Fan Inlet Gas Temperature*. The Kiln 1 Downcomer Water Spray/Injection System shall be operated such that the maximum gas temperature at the downcomer exit/kiln fan inlet thermocouple (at the K13 thermocouple - ID T1207A) shall not exceed 395º F on a 60-minute rolling average basis (as soon as feasible, but no later than within 2 hours of commencing water injection) unless otherwise established by D/F compliance testing and approved by the Department in writing.

c. *Maintenance of Proper Operation*. CEMEX shall maintain proper operation of the water spray/injection system by removal, as needed, of any solids buildup in the downcomer resulting from the water sprays. If necessary, the buildup removal shall be accomplished by kiln shutdown, installation of a drop-out chamber or other suitable method.

[Rule 62-210.650, F.A.C.; Permit No. 0530021-043-AC/PSD-FL-091K]

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. Kiln No. 1 Downcomer Water Spray/Injection System Operational Data. The owner or operator shall keep continuous records of the following Kiln No. 1 Downcomer Water Spray/Injection System operational data during all periods of operation of Kiln No. 1 in the RMD mode:

a. *Gas Temperature*. The gas temperature (ºF) at the downcomer exit/fan inlet (at the K13 thermocouple – Thermocouple ID T1207A) (the monitoring system shall also determine and show rolling 60-minute rolling average temperatures); and

b. *Water Flow Rate*. The Kiln No. 1 Downcomer Water Spray/Injection System water flow rate (gallons/minute) (the monitoring system shall also determine and record rolling 60-minute rolling average gallon/minute flow rate).

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

C.13. Maintenance of Proper Operation.

a. *Manufacturer Specifications.* The permittee shall maintain the Downcomer Water Spray System nozzles, valves, piping and other associated equipment in accordance with the manufacturer's specification and recommendations; and,

b. *Solid Removal.* The permittee shall maintain proper operation of the water spray/injection system by removal, as needed, of any solids buildup in the downcomer resulting from the water sprays. If necessary, the buildup removal will be accomplished by kiln shutdown, installation of a drop-out chamber or other suitable method.

[Rule 62-210.650, F.A.C.; Permit No. 0530021-043-AC/PSD-FL-091K]

C.14. 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.15. 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), that includes the Kiln 1 Downcomer Water Spray/Injection System. The plan shall be available upon request for inspection and copying by the Department. [Rule 62-204.800, F.A.C.; Permit No. 0530021-043-AC/PSD-FL-091K; and, 40 CFR 63.1347(a)]

Continuous Monitoring Requirements

C.16. 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.17. 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.18. 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.19. 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.20. 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)]

C.21. 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)]

C.22. Downcomer and Water Spray/Injection System Monitoring Requirements. The owner or operator shall continuously monitor temperature at the downcomer exit/K13 ID kiln fan inlet area (at the new K13 thermocouple – Thermocouple ID T1207A), during all periods of operation of Kiln No. 1 during the RMD mode of operation. The monitoring system shall also determine and show rolling 60-minute average temperature. The owner or operator shall continuously monitor the rate of water flow through the Kiln No. 1 spray system nozzles (gallons/minute or gallons/hour) during all periods of operation of Kiln No. 1 during the RMD mode of operation. [Permit No. 0530021-043-AC/PSD-FL-091K]

Test Methods and Procedures

C.23. 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. *
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.24. 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.25. 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.26. 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 testing is at 30-month interval and HCl is at 12-month interval. CMS annual auditing interval is calendar year and not every 13 months.}

C.27. 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.23** 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.28. 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, and the Department consent order (OGC File No. 09-0690) in effect for this emission unit. [Rule 62-204.800(11)(b), F.A.C.; Permit No. 0530021-043-AC/PSD-FL-091K; and, 40 CFR 63.1349].

Recordkeeping and Reporting Requirements

C.29. 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.31., C.38., C.39.**
Used Oil Analysis	Quarterly.	**C.34.**

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

C.30. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

C.31. 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.32. 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.33. 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.34. 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.35. 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. For all periods of Kiln No. 1 operation in the RMD mode, the records shall show the operating status of the Kiln No. 1 Downcomer Water Spray/Injection System (in or out of service). [Permit No. 0530021-043-AC/PSD-FL-091K]

C.36. Additional Test Report Requirements Reports. In addition to other applicable test report requirements, the owner or operator shall include the following Kiln No. 1 Downcomer Water Spray/Injection System operation information with all test reports for testing conducted during operation of Kiln No. 1 in the RMD mode:

a. *Operating Status*. Operating status of the Kiln No. 1 Downcomer Water Spray/Injection System (see **Specific Conditions C.5 and C.22**).

b. *Water Flow Rate Average*. Average Kiln No. 1 Downcomer Water Spray/Injection System water flow rate (hourly average gallons/minute) for each run of the test (see **Specific Condition C.36.b**); and

c. *Inlet Gas Temperature Average*. Average downcomer exit/ID fan inlet gas temperature as measured by Thermocouple ID T1207A for each run of the test (see **Specific Condition C.36.a**).

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

C.37. 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.38. Reporting Requirements. he 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.39. 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.10c.** (Roofing Materials) and if included in item **D.10.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.11.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.
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 & BV64-100-144A421*H1SZ	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. 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. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE); and Permit No. 0530021-044-AC/PSD-FL-351E]

Air Heater Performance

E.3. 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.4. - E.6.** are based on the specified averaging time of the applicable test method.

E.4. Emissions Limits. Particulate matter emissions from each of the emissions units in this subsection (except EU-052 and EU-65, see **Specific Conditions E.5. and E.6.** 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	2.64/1.84	3 hours	5

	351.BF410			
Process: Clinker Handling and Storage				
048	471.BF110 & BV64-100-144A421*H1 SZ	0.22/0.15	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 and 0530021-068-AC]

E.5. 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.6. 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)]

E.7. Visible Emissions for the DSI System that is Part of EU-047. Visible emissions from the DSI system shall not equal or exceed 20% opacity. [Rules 62-296.320(4)(b), F.A.C.]

Monitoring of Operations

E.8. 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.9. 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.10. 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.11. 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.12. 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.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.]

E.14. 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. Emissions unit 052 shall also be tested once

every five years for CO, PM/PM_{10} and NO_X. [Rule 62-297.310(8), F.A.C.; and, 0530021-044-AC/PSD-FL-351E]

E.15. 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.5.**, 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.16. 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.18.**

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

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

E.18. 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.19. 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.]

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