



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

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

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

Air Operation Permit – Use this form to apply for:

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

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Suwannee American Cement, LLC	
2. Site Name: Branford Cement Plant	
3. Facility Identification Number: 1210465	
4. Facility Location... Street Address or Other Locator: 5117 US Highway 27 City: Branford County: Suwannee Zip Code: 32008-2463	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: John B. Koogler, Ph.D, P.E.	
2. Application Contact Mailing Address... Organization/Firm: Koogler and Associates, Inc Street Address: 4014 NW 13th Street City: Gainesville State: Florida Zip Code: 32609	
3. Application Contact Telephone Numbers... Telephone: (352) 377 - 5822 ext. 13 Fax: (352) 377 - 7158	
4. Application Contact E-mail Address: jkoogler@kooglerassociates.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):

Purpose of Application

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

Air Construction Permit

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

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

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

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

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

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

Application Comment

Application for an air construction permit to rehabilitate and make adjustments to the existing natural gas feeding systems in order to achieve the existing permitted capacity.

FACILITY INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
004	In-line kiln/raw mill	NA	NA

Application Processing Fee

Check one: Attached - Amount: \$ _____ Not Applicable

FACILITY INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name : Mr. Tom Messer, Plant Manager
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Suwannee American Cement, LLC Street Address: 5117 US Hwy 27 City: Branford State: Florida Zip Code: 32008
3. Owner/Authorized Representative Telephone Numbers... Telephone: (386) 935 -5000 Fax: (386) 935 -5080
4. Owner/Authorized Representative E-mail Address: tomm@suwanneecement.com
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature 5.3.2012 Date

FACILITY INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: ext. Fax:
5. Application Responsible Official E-mail Address:
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i> _____ Signature _____ Date

FACILITY INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: John B. Koogler, Ph.D. P.E. Registration Number: 12925
2. Professional Engineer Mailing Address... Organization/Firm: Koogler and Associates, Inc. Street Address: 4014 NW 13th Street City: Gainesville State: Florida Zip Code: 32609
3. Professional Engineer Telephone Numbers... Telephone: (352) 377-5822 ext.13 Fax: (352) 377-7158
4. Professional Engineer E-mail Address: <u>jkoogler@kooglerassociates.com</u>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> _____ Signature Date (seal)

FACILITY INFORMATION

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 321.4 East (km) 3315.9 North (km)		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 29°57'45" Longitude (DD/MM/SS) 82°51'03"	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 32	6. Facility SIC(s): 3241
7. Facility Comment : None			

Facility Contact

1. Facility Contact Name: Krishna C. Cole - Environmental Engineer
2. Facility Contact Mailing Address... Organization/Firm: Suwannee American Cement, LLC Street Address: 5117 US HWY 27 City: Branford State: Florida Zip Code: 32008
3. Facility Contact Telephone Numbers: Telephone: 386-935-5023 Fax: 386-935-5080
4. Facility Contact E-mail Address: krishnac@suwanneecement.com

Facility Primary Responsible Official

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

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

FACILITY INFORMATION

Facility Regulatory Classifications

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

1. <input type="checkbox"/> Small Business Stationary Source	<input checked="" type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	
<p>Facility is subject to applicable portions of: 40 CFR 51, 52, 70, 71 – GHG Tailoring Rule 40 CFR 63 Subpart LLL 40 CFR 60 Subpart F (superseded by NESHAP Subpart LLL) 40 CFR 60 Subpart Y 40 CFR 60 Subpart OOO 40 CFR 241 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII as applicable. Rules 62-4 through 62-297, F.A.C. ; specifically 62-297.407, F.A.C. for cement plants</p> <p><u>NOTE</u> : The facility is also subject to the federal requirements of the Greenhouse Gas Reporting Program codified at 40 CFR 98. These requirements are not requirements of the State of Florida.</p>	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	A	N
PM₁₀	A	N
SO₂	A	N
NO_x	A	N
CO	A	N
HAPS	A	N
VOC	B	N
DIOX	B	N
H114	B	N

FACILITY INFORMATION

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

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

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>TV renewal</u>
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>TV renewal</u>
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>TV renewal</u>

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
3. Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
4. List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
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Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan: (Required for all initial/revision/renewal applications) <input type="checkbox"/> Attached, Document ID: _____ Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
6. Requested Changes to Current Title V Air Operation Permit: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

FACILITY INFORMATION

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable (not an Acid Rain source)

Phase II NO_x Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [1] of [2]

In-Line Kiln/Raw Mill

III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section: **In-Line Kiln/Raw Mill**

3. Emissions Unit Identification Number: **004**

4. Emissions Unit Status Code: A	5. Commence Construction Date: 6/1/00	6. Initial Startup Date: 2/17/03	7. Emissions Unit Major Group SIC Code: 32
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8. Federal Program Applicability: (Check all that apply)

Acid Rain Unit

CAIR Unit

Hg Budget Unit

9. Package Unit:
Manufacturer: _____ Model Number: _____

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment: **SAC intends to to rehabilitate and make adjustments to the existing natural gas feed systems to be able to achieve 100% coal replacement with natural gas as permitted by 1210465-019-AV (limited to 458 mmBTU per hour).**

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

Emissions Unit Control Equipment/Method: Control 1 of 4

1. Control Equipment/Method Description:

Baghouse – High Temperature

2. Control Device or Method Code: **016**

Emissions Unit Control Equipment/Method: Control 2 of 4

1. Control Equipment/Method Description:

SNCR

2. Control Device or Method Code: **107**

Emissions Unit Control Equipment/Method: Control 3 of 4

1. Control Equipment/Method Description:

Hydrated Lime Injection (injected at kiln feed with Poldos)

2. Control Device or Method Code: **041**

Emissions Unit Control Equipment/Method: Control 4 of 4

1. Control Equipment/Method Description:

Multistaged Combustion

2. Control Device or Method Code: **025**

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 210 TPH; 1,684,578 TPY dry preheater feed and fly ash (consecutive 12-month period, fed directly to the calciner)		
97 lb/consecutive 12 month period of Mercury (by mass, as Hg) introduced into pyroprocessing system		
2. Maximum Production Rate: 120 TPH; 965,425 TPY clinker (consecutive 12-month period)		
3. Maximum Heat Input Rate: 458 million Btu/hr (kiln and calciner) 32 million Btu/hr (air heater)		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:		
24 hours/day		7 days/week
52 weeks/year		8,760 hours/year
6. Operating Capacity/Schedule Comment: Based on Permit No. 1210465-019-AV, Specific Conditions C.1 – C.2, C.4 – C.6.		

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: Kiln/Raw Mill		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 250 feet	7. Exit Diameter: 9.42 feet	
8. Exit Temperature: 205°F	9. Actual Volumetric Flow Rate: 194,000 acfm	10. Water Vapor: 6.5%	
11. Maximum Dry Standard Flow Rate: 144,000 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 6

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Natural Gas; Cement Kiln/Dryer		
2. Source Classification Code (SCC): 3-90-006-02		3. SCC Units: Million Cubic Feet Burned
4. Maximum Hourly Rate: 0.44	5. Maximum Annual Rate: 3,854	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,050
10. Segment Comment: Based on 458 MMBtu/hr (Permit No. 1210465-019-AV, Specific Condition C.2): 458 MMBtu/hr x MMcf/1,050 MMBtu = 0.44 MMcf/hr 0.44 MMcf x 8,760 hr/yr = 3,854 MMcf/yr		

Segment Description and Rate: Segment 2 of 6

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Bituminous Coal; Cement Kiln/Dryer (Coal)		
2. Source Classification Code (SCC): 3-90-002-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 18.3	5. Maximum Annual Rate: 160,300	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1.5	8. Maximum % Ash: 10	9. Million Btu per SCC Unit: 25
10. Segment Comment: Based on 458 MMBtu/hr (Permit No. 1210465-019-AV, Specific Condition C.2): 458 MMBtu/hr x tons/25 MMBtu = 18.32 tons/hr 18.3 tons/hr x 8,760 hr/yr = approximately 160,300 tons/yr		

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

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

Segment Description and Rate: Segment 3 of 6

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Coke; General: Coke		
2. Source Classification Code (SCC): 3-90-008-99		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 16.4	5. Maximum Annual Rate: 143,664	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 28
10. Segment Comment: Based on 458 MMBtu/hr (Permit No. 1210465-019-AV, Specific Condition C.2): 458 MMBtu/hr x tons/28 MMBtu = 16.4 tons/hr 16.4 tons/hr x 8,760 hr/yr = 143,664 tons/yr		

Segment Description and Rate: Segment 4 of 6

1. Segment Description (Process/Fuel Type): Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater/Precalciner Kiln		
2. Source Classification Code (SCC): 3-05-006-23		3. SCC Units: Tons Clinker Produced
4. Maximum Hourly Rate: 120	5. Maximum Annual Rate: 965,425	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Based on Permit No. 1210465-019-AV, Specific Condition C.4. The Kiln is limited to 210 TPH and 1,684,578 tons/consecutive 12-mos. of dry flyash or dry preheater feed. Clinker production is calculated by: Clinker production = [(Feed)(Kiln feed LOI factor) + (Fly Ash Injection) + (Fly Ash LOI Factor)] Where, -Kiln feed is determined by the Poldos control system -Flyash is determined from the rotary feed system or equivalent -LOI for the kiln feed and flyash is based on a 30 operating-day block average of daily measurements. (For purposes of this requirement, an operating day is any day that the kiln produces clinker or fires fuel.)		

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

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

Segment Description and Rate: Segment 5 of 6

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Natural Gas; General (Air Heater)		
2. Source Classification Code (SCC): 3-90-006-89		3. SCC Units: Million Cubic Feet Burned
4. Maximum Hourly Rate: 0.03	5. Maximum Annual Rate: 262.8	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,050
10. Segment Comment: Segment represents natural gas usage for the raw mill air heater. Based on 32 MMBtu/hr (Permit No. 1210465-019-AV, Specific Condition C.5): 32 MMBtu/hr x MMcf/1,050 MMBtu = 0.03 MMcf/hr 0.03 MMcf x 8,760 hr/yr = 262.8 MMcf/yr		

Segment Description and Rate: Segment 6 of 6

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Alternative Fuels – Kiln and Precalciner		
2. Source Classification Code (SCC): 3-90-012-89		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 15 tons/hr	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: Fuels include: Engineered Fuel, Tire-Derived Fuel, Roofing Materials, Plastics, Agricultural Biogenic Materials, Cellulosic Biomass (Untreated/Treated), Carpet-Derived Fuel, Biosolids and an Alternative Fuel Mix.		

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	016		EL
PM ₁₀	016		EL
SO ₂	041		EL
NO _x	107		EL
CO			EL
VOC			EL
D/F			EL
THC			EL
H114 (Hg)			EL

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
 POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**
 (Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 23.1 lb/hour 92.7 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.11 lb/ton dry preheater feed (3-hr. avg.) Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Annual: 0.11 lb/ton x 1,684,578 TPY dry preheater feed / 2,000 lb/ton = 92.7 TPY			
11. Potential, Fugitive, and Actual Emissions Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [1]
 In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [1] of [9]
 Particulate Matter - PM

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.11 lb/ton dry preheater feed (3-hr. avg.)	4. Equivalent Allowable Emissions: 23.1 lb/hour 92.7 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 5.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.9.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [2] of [9]
Particulate Matter – PM₁₀

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 19.6 lb/hour 78.3 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.093 lb/ton dry preheater feed (3-hr. avg.) Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Annual: 0.093 lb/ton x 1,684,578 tons/year dry preheater feed / 2,000 lb/ton = 78.3 TPY			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.093 lb/ton dry preheater feed (3-hr avg.)	4. Equivalent Allowable Emissions: 19.6 lb/hour 78.3 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 5 (assuming all PM measured is PM₁₀).	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.9.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [3] of [9]
Sulfur Dioxide

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 24.0 lb/hour 96.5 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.20 lb/ton clinker (3-hour rolling average) Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Annual: 0.20 lb/ton clinker x 965,425 TPY clinker / 2,000 lb/ton = 96.5 TPY			
11. Potential, Fugitive, and Actual Emissions Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

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Sulfur Dioxide

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS****Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.****Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.20 lb/ton clinker (3 hour rolling average)	4. Equivalent Allowable Emissions: 24.0 lb/hour 96.5 tons/year
5. Method of Compliance: Continuous emissions monitor and annual RATA.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.12.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [4] of [9]
Nitrogen Oxides

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NO_x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 348 lb/hour 1,159 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 2.9 lb/ton clinker (24 hour average) 2.4 lb/ton clinker (30-day average) Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Hourly: 2.9 lb/ton clinker x 120 TPH clinker = 348 lb/hr Annual: 2.4 lb/ton clinker x 965,425 TPY clinker x 1 ton/2,000 lb = 1,158.51 TPY			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
 ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.9 lb/ton clinker (24-hour average)	4. Equivalent Allowable Emissions: 304.5 lb/hour tons/year
5. Method of Compliance: Continuous emissions monitor and annual RATA.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Condition C.7 and C.12. Emissions are based on 24-hour average.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 2.4 lb/ton clinker (30-day average)	4. Equivalent Allowable Emissions: 288 lb/hour 1,159 tons/year
5. Method of Compliance: Continuous emissions monitor and annual RATA.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.12. Emissions are based on 30-operating day block average.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 600 lb/hr	4. Equivalent Allowable Emissions: 600 lb/hour tons/year
5. Method of Compliance: No compliance demonstration required.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Condition C.7. Emission limit applies to start-up only (no material in the kiln) and for up to one hour duration per startup.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [5] of [9]
Carbon Monoxide

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 400.3 lb/hour 1,612 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 3.34 lb/ton clinker (3-hour average) Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Annual: 3.34 lb/ton clinker x 965,425 TPY clinker x 1 ton/2,000 lb = 1,612.3 TPY			
11. Potential, Fugitive, and Actual Emissions Comment:			

EMISSIONS UNIT INFORMATION

**Section [1] of [1]
In-Line Kiln/Raw Mill**

POLLUTANT DETAIL INFORMATION

**Page [5] of [9]
Carbon Monoxide**

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 3.34 lb/ton clinker (3-hour average)	4. Equivalent Allowable Emissions: 400.3 lb/hour 1,612 tons/year
5. Method of Compliance: Annual compliance test using EPA Method 10.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.9.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
 In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [6] of [9]
 Volatile Organic Compounds

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 14.4 lb/hour 57.9 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.12 lb/ton clinker (30-operating day block average)		7. Emissions Method Code: 0	
Reference: Permit No. 1210465-019-AV, Specific Condition C.7			
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: Annual: 0.12 lb/ton clinker x 965,425 TPY clinker x 1 ton/2,000 lb = 57.93 TPY			
11. Potential, Fugitive, and Actual Emissions Comment:			

EMISSIONS UNIT INFORMATIONSection **[1]** of **[1]**

In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATIONPage **[6]** of **[9]**

Volatile Organic Compounds

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS****Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.****Allowable Emissions** Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.12 lb/ton clinker (30-operating day block average)	4. Equivalent Allowable Emissions: 14.4 lb/hour 57.9 tons/year
5. Method of Compliance: Continuous emissions monitor and annual RATA.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.12.	

EMISSIONS UNIT INFORMATION

**Section [1] of [1]
In-Line Kiln/Raw Mill**

POLLUTANT DETAIL INFORMATION

**Page [7] of [9]
Dioxin/Furans**

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS
(Optional for unregulated emissions units.)**

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: D/F		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 0.20 ng/dscm @ 7% O₂ 0.40 ng/dscm @ 7% O₂ when PM control device inlet temperature is ≤ 204°C Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.20 ng/dscm @ 7% O₂	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Compliance test using EPA Method 23 every 30 months.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Condition C.7 and 40 CFR 63 Subpart LLL. Limit applies when the inlet temperature of the PM control device is > 204°C.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.40 ng/dscm @ 7% O₂	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Compliance test using EPA Method 23 every 30 months.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Condition C.7 and 40 CFR 63 Subpart LLL. Limit applies when the inlet temperature of the PM control device is ≤ 204°C.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]
In-Line Kiln/Raw Mill

POLLUTANT DETAIL INFORMATION

Page [8] of [9]
THC

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

(Optional for unregulated emissions units.)

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

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: THC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor: 50 ppmvd as propane @ 7% O₂ Reference: Permit No. 1210465-019-AV, Specific Condition C.7		7. Emissions Method Code: 0	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment:			

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 50 ppmvd as propane @ 7% O₂	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Continuous THC emissions monitor. For compliance purposes, monitor results (THC as propane) are considered to be VOC (VOC as propane).	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.7 and C.12 and 40 CFR 63.1343(c)(4).	

EMISSIONS UNIT INFORMATION

**Section [1] of [1]
In-Line Kiln/Raw Mill**

POLLUTANT DETAIL INFORMATION

**Page [9] of [9]
Mercury (H114)**

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -
ALLOWABLE EMISSIONS**

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

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 97 lb/consecutive 12-months in raw feed and fuels	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Material balance by sampling and analysis of raw materials and fuels.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 1210465-019-AV, Specific Conditions C.6 and C.17.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Continuous Opacity Monitor; 6-minutes	
5. Visible Emissions Comment: Based on Permit No. 1210465-019-AV, Specific Condition C.7 and 40 CFR 63.1350.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 7

1. Parameter Code: EM	2. Pollutant(s): NO_x
3. CMS Requirement: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Sick Maihak Model Number: GM31 Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Based on Permit No. 1210465-019-AV.	

Continuous Monitoring System: Continuous Monitor 2 of 7

1. Parameter Code: EM	2. Pollutant(s): SO₂
3. CMS Requirement: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Sick Maihak Model Number: GM31 Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Based on Permit No. 1210465-019-AV.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3 of 7

1. Parameter Code: EM	2. Pollutant(s): THC
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: EUROFID Model Number: _____ Serial Number: _____	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Based on Permit No. 1210465-019-AV, 40 CFR 63.1349, and 40 CFR 63.1350. Results (THC as propane) are considered to be VOC (VOC as propane). If methane is measured concurrently with THC, then "THC as propane, minus methane" can be considered VOC (VOC as propane) for compliance purposes.	

Continuous Monitoring System: Continuous Monitor 4 of 7

1. Parameter Code: TEMP	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: _____ Serial Number: _____	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Continuous temperature monitor at the inlet to the in-line kiln/raw mill baghouse. Based on Permit No. 1210465-019-AV and 40 CFR 63.1349 and 40 CFR 63.1350.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 5 of 7

1. Parameter Code: Opacity	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Sick Maihak Model Number: OMD41 Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Continuous opacity monitor. Based on Permit No. 1210465-019-AV and Rule 40 CFR 63.1350.	

Continuous Monitoring System: Continuous Monitor 6 of 7

1. Parameter Code: CO	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Process monitor. Based on Permit No. 1210465-019-AV.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 7 of 7

1. Parameter Code: Ammonia	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Continuously monitors ammonia injection rate to the SNCR system. Based on Permit No. 1210465-019-AV.	

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

<p>1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Appendix 1 <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: Appendix 1 <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date On file with DEP</p>
<p>4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date On file with DEP <input type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ _____ <input checked="" type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.</p>
<p>7. Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

EMISSIONS UNIT INFORMATION

Section [1] of [1]

In-Line Kiln/Raw Mill

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

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

Additional Requirements for Title V Air Operation Permit Applications

<p>1. Identification of Applicable Requirements:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p>
<p>2. Compliance Assurance Monitoring:</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>3. Alternative Methods of Operation:</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>4. Alternative Modes of Operation (Emissions Trading):</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

Additional Requirements Comment

ATTACHMENT 1

SUWANNEE AMERICAN CEMENT, LLC

FACILITY ID: 1210465

APPLICATION FOR AIR CONSTRUCTION PERMIT AUTHORIZING REHABILITATION AND ADJUSTMENTS TO EXISTING EQUIPMENT NECESSARY TO INCREASE CAPACITY OF NATURAL GAS FEED SYSTEMS

FACILITY DESCRIPTION

Suwannee American Cement, LLC (SAC) owns and operates a cement plant located in Branford, Florida, designated as the Branford Cement Plant. The existing facility consists of a Portland cement manufacturing plant, the associated quarry, and raw material and cement handling operations. The plant combines raw materials and utilizes a preheater/calcliner kiln system with in-line mill to produce cement clinker. The kiln is permitted to fire coal, natural gas, and pet coke. The existing plant has a capacity of 210 tons per hour of dry preheater feed materials, 120 tons per hour of clinker production, and 150 tons per hour of Portland cement production. Annual production is limited to the following 12-month rolling totals: 1,648,578 tons per year of dry preheater feed materials; 965,425 tons per year of clinker production; and 1,191,360 tons per year of Portland cement production. Certified continuous emissions monitoring systems (CEMS) measure and record emissions of nitrogen oxides (NO_x), sulfur dioxide (SO₂) and total hydrocarbons (THC as a surrogate for volatile organic compounds (VOC)). A certified continuous opacity monitoring system (COMS) measures and records the stack opacity as a surrogate for particulate matter (PM). Process monitors measure and record emissions of carbon monoxide (CO). Control technologies employed at SAC include a Selective Non-Catalytic Reduction (SNCR) System for control of NO_x emissions, a hydrated lime injection system for control of SO₂, and an electrostatic precipitator and bag houses for control of PM.

DESCRIPTION OF WORK

NOTE: This application does not and will not result in an increase in either production or operation limits. Additionally, this application does not request and will not result in an increase in emissions. To

demonstrate that there will be no increase in emissions, Suwannee American Cement will track emissions for up to five years in accordance with Rule 62-212.300(1)(e), F.A.C..

SAC intends to rehabilitate and make adjustments to the existing natural gas feed systems to be able to achieve 100% coal replacement with natural gas as permitted by 1210465-019-AV (limited to 458 mmBTU per hour). Assuming natural gas has a heating capacity of 1,050 mmBtu/million cubic feet, the maximum amount of natural gas that can be burned on site is 0.436 mmcf/hr (3821 mmcf/year).

BACKGROUND

SAC originally installed the existing natural gas feed system for purposes of raw material drying, kiln warm ups, and as part of an overall fuel management strategy. Title V Operating Permit 1210465-019-AV does not restrict consumption of natural gas, except for the overall fuel limit of 458 mmBtu per hour. Until recently the cost of natural gas was prohibitive for consideration as a replacement for coal. Therefore, its use was restricted to an as need basis. Some parts of the existing natural gas feed systems were disconnected and isolated for safety reasons. However, prices of natural gas are now in line with or lower than the price of coal. Therefore, SAC is planning to re-habilitate and reconnect the blanked off parts of the existing natural gas feed system and to make some minor adjustments to allow for greater natural gas usage. Natural gas is a cleaner burning fuel than coal and is likely to result in net emissions decreases of sulfur dioxide (SO₂), carbon monoxide (CO), carbon dioxide (CO₂), particulate matter (PM), & volatile organic compounds (VOC).