



# 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 a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

**Air Operation Permit** – Use this form to apply for:

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

**Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)** – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions

#### Identification of Facility

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

#### Application Contact

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

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	<i>12/2/05</i>
2. Project Number(s):	<i>1210465-015-AC</i>
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

## APPLICATION INFORMATION

### Purpose of Application

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

#### **Air Construction Permit**

Air construction permit.

#### **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

**On Oct. 18, 2004, SAC received permit 1210465-008-AC (PSD-FL-259D) authorizing the installation of a system to introduce hydrated lime into the preheater of Kiln No. 1 for the control of SO<sub>2</sub> emissions.**

**SAC would like to evaluate the effectiveness and limitations of this system under various conditions as described in the transmittal letter for this application. To effectively evaluate the lime injection system without the risk of exceeding the permitted SO<sub>2</sub> emission limiting standard (0.20 pounds per ton of clinker and 24.0 pounds per hour, 3-hour rolling average), SAC requests a two month (60-day) SO<sub>2</sub> emission limiting standard of 0.20 lb/ton clinker and 24.0 lb/hr 30-day block average. At the end of the 60-day trial period, the SO<sub>2</sub> emission limiting standard will revert to the presently permitted limit.**

**APPLICATION 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 controlled by Baghouse	ACM1	\$50

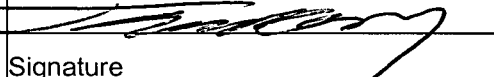
**Application Processing Fee**

Check one:  Attached - Amount: \$ 50.00  Not Applicable

**APPLICATION INFORMATION**


**Owner/Authorized Representative Statement**

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

1. Owner/Authorized Representative Name : <b>Tom Messer – Plant Manager</b>	
2. Owner/Authorized Representative Mailing Address... Organization/Firm: <b>Suwannee American Cement</b> Street Address: <b>Post Office Box 410</b> City: <b>Branford</b> State: <b>FL</b> Zip Code: <b>32008</b>	
3. Owner/Authorized Representative Telephone Numbers... Telephone: <b>(386)935-5000</b> ext. <b>2516</b> Fax: <b>(386)935-5080</b>	
4. Owner/Authorized Representative Email Address: <b><u>tomm@suwanneecement.com</u></b>	
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the facility 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 requirements identified in this application to which the facility 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.</i>	
 Signature	11-22-05 Date

**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: <b>John B. Koogler, Ph.D., P.E.</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Koogler and Associates, Inc.</b> Street Address: <b>4014 NW 13<sup>th</sup> Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 377 - 5822</b> ext. Fax: <b>(352) 377 - 7158</b>
4. Professional Engineer Email Address: <b>jkoogler@kooglerassociates.com</b>
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  (seal)   _____ Date <b>11/21/2005</b>

\* Attach any exception to certification statement.

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

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

#### Facility Contact

1. Facility Contact Name: <b>Joe B. Horton, Environmental Manager</b>
2. Facility Contact Mailing Address... Organization/Firm: <b>Suwannee American Cement</b> Street Address: <b>5117 US Hwy 27</b> City: <b>Branford</b> State: <b>FL</b> Zip Code: <b>32008</b>
3. Facility Contact Telephone Numbers: Telephone: <b>(386) 935 - 5039</b> ext.      Fax: <b>(386) 935 - 5080</b>
4. Facility Contact Email Address: <b>jborhton@suwanneecement.com</b>

#### 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: <b>N/A</b>
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: <b>N/A</b> Street Address: <b>N/A</b> City: <b>N/A</b> State: <b>N/A</b> Zip Code: <b>N/A</b>
3. Facility Primary Responsible Official Telephone Numbers... Telephone: <b>N/A</b> ext.      Fax: <b>N/A</b>
4. Facility Primary Responsible Official Email Address: <b>N/A</b>

**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><b>Item 3: TV Permit applied for.</b>  <b>Item 6: Presumed Major for HAPs by FDEP.</b></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
SO <sub>2</sub>	A	N
NO <sub>x</sub>	A	N
CO	A	N
VOC	B	N
DIOX	B	N
H114	B	N



**FACILITY INFORMATION**

**B. EMISSIONS CAPS N/A**

**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 No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:  
NONE

## 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>(1)</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 checked="" type="checkbox"/> Attached, Document ID: <u>Transmittal Letter</u> <input type="checkbox"/> Previously Submitted, Date: _____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>(1)</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 or Modification: <input checked="" type="checkbox"/> Attached, Document ID: <u>Transmittal Letter</u>
3. Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: <u>(1)</u>
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): <input type="checkbox"/> Attached, Document ID: <u>(1)</u> <input type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): <input type="checkbox"/> Attached, Document ID: <u>(1)</u> _____ <input type="checkbox"/> Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), 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(5)(h)5., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. 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**

**Additional Requirements for FESOP Applications**

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
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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 (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought): <input type="checkbox"/> Attached, Document ID: _____ <input 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 On site but Not Required to be Individually Listed <input 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 type="checkbox"/> Not Applicable
6. Requested Changes to Current Title V Air Operation Permit: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**Additional Requirements Comment**

<b>(1) Submitted with original AC application</b>
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## EMISSIONS UNIT INFORMATION

Section [1] of [1]

### 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 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 for air permit. 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 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/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. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** 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 construction permitting and insignificant emissions units 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] [Kiln/Raw Mill – EU-004]

**A. GENERAL EMISSIONS UNIT INFORMATION**

**Title V Air Operation Permit Emissions Unit Classification**

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

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

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

**Emissions Unit Description and Status**

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

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

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

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

2. Description of Emissions Unit Addressed in this Section: **Kiln/Raw Mill; EU-004**

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code: <b>A</b>	5. Commence Construction Date: <b>NA</b>	6. Initial Startup Date: <b>2/03</b>	7. Emissions Unit Major Group SIC Code: <b>32</b>	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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9. Package Unit:  
Manufacturer: **NA** Model Number:

10. Generator Nameplate Rating: **MW NA**

11. Emissions Unit Comment: **This emission unit covers the pyroprocessing system from the raw mill (including auxillary air heater) to the point of clinker discharge from the kiln.**

**The only change to this section is to the SO<sub>2</sub> emission limiting standard. All other conditions are as in 1210465-011-AC (PSD-FL-259F)**

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

**Emissions Unit Control Equipment**

1. Control Equipment/Method(s) Description:  
**Fabric Filter – High Temperature Kiln/Raw Mill Baghouse.**  
**Selective Non-Catalytic Reduction (SNCR)**

2. Control Device or Method Code(s): **016, 032**

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate: <b>5040 ton/day feed</b>
2. Maximum Production Rate: <b>2880 ton/day clinker</b>
3. Maximum Heat Input Rate: <b>458 mmBTU/hr</b>
4. Maximum Incineration Rate: pounds/hr NA tons/day
5. Requested Maximum Operating Schedule: hours/day <b>24</b> days/week <b>7</b> weeks/year <b>52</b> hours/year <b>8760</b>
6. Operating Capacity/Schedule Comment: <b>Kiln/Raw Mill will operate up to 8760 hours/yr with annual limits of 1,684,578 tpy of preheater feed and 965,425 tpy of clinker.</b>

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

**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: <b>Attachment 002</b>		2. Emission Point Type Code: <b>1</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:  <b>Baghouse discharge for Kiln/Raw Mill – E-21 Stack</b>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>NA</b>			
5. Discharge Type Code: <b>V</b>	6. Stack Height: feet <b>315</b>	7. Exit Diameter: feet <b>9.42</b>	
8. Exit Temperature: °F <b>230/375</b>	9. Actual Volumetric Flow Rate: acfm <b>189,500/207,000</b>	10. Water Vapor: <b>% 15/11</b>	
11. Maximum Dry Standard Flow Rate: dscfm <b>123,250/116,500</b>		12. Nonstack Emission Point Height: feet <b>NA</b>	
13. Emission Point UTM Coordinates... <b>NA</b> Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... <b>NA</b> Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: <b>3. Existing Kiln/Raw Mill Baghouse</b> <b>8-11. Compound Operation (90+%/Direct Operation (10-%)</b>			



**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

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

**Segment Description and Rate: Segment 1 of 6**

1. Segment Description (Process/Fuel Type): <b>Mineral Products: Cement Mfg: Dry Process: Preheater/Precalciner Kiln</b>		
2. Source Classification Code (SCC): <b>3-05-006-23</b>	3. SCC Units: <b>Ton Feed</b>	
4. Maximum Rate: <b>5040 tpd</b>	5. Maximum Annual Rate: <b>1,684,578 tpy</b>	6. Estimated Annual Activity Factor: <b>0.92</b>
7. Maximum % Sulfur: <b>NA</b>	8. Maximum % Ash: <b>NA</b>	9. Million Btu per SCC Unit: <b>NA</b>
10. Segment Comment: <b>Preheater/Precalciner Feed at a nominal rate of 210 tph</b>		

**Segment Description and Rate: Segment 2 of 6**

1. Segment Description (Process/Fuel Type): <b>Mineral Products: Cement Mfg: Dry Process: Preheater/Precalciner Kiln</b>		
2. Source Classification Code (SCC): <b>3-05-006-23</b>	3. SCC Units: <b>Ton clinker</b>	
4. Maximum Rate: <b>2880 tpd</b>	5. Maximum Annual Rate: <b>965,425</b>	6. Estimated Annual Activity Factor: <b>0.92</b>
7. Maximum % Sulfur: <b>NA</b>	8. Maximum % Ash: <b>NA</b>	9. Million Btu per SCC Unit: <b>3.82</b>
10. Segment Comment: <b>Clinker Production</b>		

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

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

**Segment Description and Rate: Segment 3 of 6**

1. Segment Description (Process/Fuel Type): <b>In-Process Fuel Use: Bituminous Coal: Cement Kiln</b>		
2. Source Classification Code (SCC): <b>3-90-002-01</b>		3. SCC Units: <b>Tons Burned</b>
4. Maximum Hourly Rate: <b>18.3 tph</b>	5. Maximum Annual Rate: <b>160,483 tpy</b>	6. Estimated Annual Activity Factor: <b>0.92</b>
7. Maximum % Sulfur: <b>1.5%</b>	8. Maximum % Ash: <b>10.0%</b>	9. Million Btu per SCC Unit: <b>25 mmBTU/ton</b>
10. Segment Comment: <b>Coal as primary fuel at 12,520 BTU/lb</b>		

**Segment Description and Rate: Segment 4 of 6**

1. Segment Description (Process/Fuel Type): <b>In-Process Fuel Use: Coke: Cement Kiln</b>		
2. Source Classification Code (SCC): <b>3-90-008-99</b>		3. SCC Units: <b>Tons Burned</b>
4. Maximum Hourly Rate: <b>16.4 tph</b>	5. Maximum Annual Rate: <b>143,664 tpy</b>	6. Estimated Annual Activity Factor: <b>0.92</b>
7. Maximum % Sulfur: <b>5%</b>	8. Maximum % Ash: <b>&lt;1%</b>	9. Million Btu per SCC Unit: <b>28 mmBTU/ton</b>
10. Segment Comment: <b>Petcoke at 14,000 BTU/lb</b>		

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

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

**Segment Description and Rate:** Segment **5** of **6**

1. Segment Description (Process/Fuel Type): <b>In-Process Fuel Use: Natural Gas: Cement Kiln</b>		
2. Source Classification Code (SCC): <b>3-90-006-02</b>	3. SCC Units: <b>Million Cubic Feet Burned</b>	
4. Maximum Hourly Rate: <b>0.44 mm/hr</b>	5. Maximum Annual Rate: <b>3821 mm/yr</b>	6. Estimated Annual Activity Factor: <b>0.92</b>
7. Maximum % Sulfur: <b>Nil</b>	8. Maximum % Ash: <b>Nil</b>	9. Million Btu per SCC Unit: <b>1050</b>
10. Segment Comment: <b>Natural Gas at 1050 mmBTU/cu. ft.</b>		

**Segment Description and Rate:** Segment **6** of **6**

1. Segment Description (Process/Fuel Type): <b>In-Process Fuel Use: Solid Waste: General</b>		
2. Source Classification Code (SCC): <b>3-90-012-99</b>	3. SCC Units: <b>Tons Burned</b>	
4. Maximum Hourly Rate: <b>1.9 tph</b>	5. Maximum Annual Rate: <b>16,717 tpy</b>	6. Estimated Annual Activity Factor: <b>0.092</b>
7. Maximum % Sulfur: <b>1.5%</b>	8. Maximum % Ash: <b>20%</b>	9. Million Btu per SCC Unit: <b>24 mmBTU/ton</b>
10. Segment Comment: <b>Whole Tire Derived Fuel (WTDF) at 12,000 BTU/lb and 10% (45.8 mmBTU/hr) of system heat input.</b>		

**EMISSIONS UNIT INFORMATION**

Section [2] of [3] [Kiln/Raw Mill – EU-004]

**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
<b>PM</b>	<b>016</b>	<b>None</b>	<b>EL</b>
<b>PM10</b>	<b>016</b>	<b>None</b>	<b>EL</b>
<b>SO<sub>2</sub></b>			<b>EL</b>
<b>NO<sub>x</sub></b>	<b>032</b>	<b>None</b>	<b>EL</b>
<b>CO</b>			<b>EL</b>
<b>VOC</b>			<b>EL</b>
<b>DIOX</b>			<b>EL</b>
<b>H106</b>			<b>NS</b>
<b>HAPS</b>			<b>NS</b>

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL/ESTIMATED FUGITIVE EMISSIONS**

(Optional for unregulated emissions units.)

**Potential/Estimated Fugitive Emissions**

**Complete 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 permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

1. Pollutant Emitted: <b>SO<sub>2</sub></b>	2. Total Percent Efficiency of Control: <b>99+%</b>
3. Potential Emissions: <b>24.0 lb/hour                      96.5 tons/year</b>	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): <b>NA</b> to tons/year	
6. Emission Factor: <b>0.20 lb/ton Clinker</b>  Reference: <b>BACT (proposed)</b>	7. Emissions Method Code: <b>0</b>
8. Calculation of Emissions:  <b>120 tph clinker x 0.20 lb/ton = 24.0 lb/hr; 30-day block average</b>  <b>965,425 tpy clinker x 0.20 lb/ton/2000 = 96.5 tpy</b>	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: <b>(1) SO<sub>2</sub> emission limit is unchanged, only the averaging time changes (for a 60-day test period) from a 3-hr rolling average to a 30-day block average.</b> <b>(2) Emission rate and averaging times for other pollutants are unchanged.</b>	

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

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

**Allowable Emissions Allowable Emissions 1 of 7; SO2**

1. Basis for Allowable Emissions Code: <b>BACT</b>	2. Future Effective Date of Allowable Emissions: <b>NA</b>
3. Allowable Emissions and Units: <b>0.20 lb/ton Clinker</b>	4. Equivalent Allowable Emissions: <b>24.0 lb/hour      96.5 tons/year</b>
5. Method of Compliance: <b>SO<sub>2</sub> CEMS</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>30-day block averaging time for compliance for a 60-day test period.</b>	

**Allowable Emissions Allowable Emissions N/A of N/A**

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

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004] Page [1] of [1]

**H. CONTINUOUS MONITOR INFORMATION**

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

**Continuous Monitoring System:** Continuous Monitor 1 of 1; **SO<sub>2</sub>**

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO<sub>2</sub></b>
3. CMS Requirement:	<input checked="" type="checkbox"/> rule-BACT <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: <b>SICK</b> Model Number: <b>GM31</b> Serial Number: <b>8040-8003</b>	
5. Installation Date: <b>2/03</b>	6. Performance Specification Test Date: <b>7/03</b>
7. Continuous Monitor Comment: <b>SO<sub>2</sub>/NO/NO<sub>2</sub> Gas Analyzer</b>	

**EMISSIONS UNIT INFORMATION**

Section [1] of [1] [Kiln/Raw Mill – EU-004]

**I. EMISSIONS UNIT ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>unknown</u>
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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date <u>Unknown</u>
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 <u>Unknown</u>
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)
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 <u>Unknown</u> <input type="checkbox"/> Not Applicable
6. Compliance Demonstration Reports/Records <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>11/1/2004</u> Test Date(s)/Pollutant(s) Tested: <u>9/22-30/2004</u> <input type="checkbox"/> To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Not Applicable <p>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>
7. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable



**EMISSIONS UNIT INFORMATION**

**Section [1] of [1] [Kiln/Raw Mill – EU-004]**

**Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Requirements for Title V Air Operation Permit Applications NA**

1. Identification of Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____
2. Compliance Assurance Monitoring <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
3. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
4. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
5. Acid Rain Part Application <b>NA, Continued</b> <input type="checkbox"/> Certificate of Representation (EPA Form No. 7610-1) <input type="checkbox"/> Copy Attached, Document ID: _____ <input type="checkbox"/> Acid Rain Part (Form No. 62-210.900(1)(a)) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____ <input type="checkbox"/> Not Applicable

**Additional Requirements Comment**

None