



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 521-05-11
December 9, 2005

RECEIVED

DEC 12 2005

BUREAU OF AIR REGULATION

Mr. Al Linero
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

**RE: Application for a Trial Burn of Petroleum Coke and Tires at CEMEX Cement, Inc.,
Brooksville Facility (ID No. 0530010)**

Dear Al,

Enclosed please find six (6) copies of an air permit application for a trial burn of petroleum coke and tires in Kilns 1 and 2 at CEMEX Cement, Inc., Brooksville facility (ID No. 0530010). This application is a follow-up to the PSD application submitted in October, 2005, and a telephone conversation with you on November 28, 2005.

Please feel free to contact me at (352) 377-5822 or FBergen@kooglerassociates.com, or Charles Walz, CEMEX Cement Inc., at (352) 799-2011, if you have any questions regarding this submittal.

Very truly yours,

KOGLER & ASSOCIATES

Fawn W. Bergen, P.E.
Project Engineer

FB

Enclosure: 6 copies-Air Permit Application



Department of Environmental Protection

RECEIVED

Division of Air Resource Management

DEC 12 2005

APPLICATION FOR AIR PERMIT - LONG FORM

DEPARTMENT OF AIR REGULATION

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: CEMEX Cement, Inc.	
2. Site Name: Brooksville Plant	
3. Facility Identification Number: 0530010	
4. Facility Location...: Street Address or Other Locator: 1630 Ponce de Leon Blvd. City: Brooksville County: Hernando Zip Code: 34601	
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: Fawn Bergen, PE, Project Engineer	
2. Application Contact Mailing Address... Organization/Firm: Koogler & Associates Street Address: 4014 N.W. 13th Street City: Gainesville State: Florida Zip Code: 32609	
3. Application Contact Telephone Numbers... Telephone: (352) 377-5822 ext. Fax: (352) 377-7158	
4. Application Contact Email Address: fbergen@kooglerassociates.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	<i>12-12-05</i>
2. Project Number(s):	<i>0530010-022-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

This application is for an Air Construction Permit to authorize the use of petroleum coke and TDF in the No. 2 Kiln System and petroleum coke in the No. 1 Kiln System for a 180-day trial period. CEMEX will conduct performance testing and continuous monitoring of NOx and CO on Kilns 1 and 2 while burning petroleum coke and tires during this trial period. Refer to Attachment A for a detailed description of the project.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
003	No. 1 Cement Kiln	AC1A	
014	No. 2 Cement Kiln	AC1A	

Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name : Michael A. Gonzoles, Plant Manager
2. Owner/Authorized Representative Mailing Address... Organization/Firm: CEMEX Cement, Inc. Street Address: Post Office Box 6 City: Brooksville State: Florida Zip Code: 34605-0006
3. Owner/Authorized Representative Telephone Numbers... Telephone: (352) 796-7241 ext. Fax: (352) 754-9836
4. Owner/Authorized Representative Email Address: mgonzoles@cemexusa.com
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 <u>12/07/2005</u> Date

APPLICATION INFORMATION


Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V 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.
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 Email 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

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Fawn Bergen, P.E. Registration Number: 61614
2. Professional Engineer Mailing Address... Organization/Firm: Koogler & Associates Street Address: 4014 N.W. 13th Street City: Gainesville State: Florida Zip Code: 32609
3. Professional Engineer Telephone Numbers... Telephone: (352) 377-5822 ext. Fax: (352) 377-7158
4. Professional Engineer Email Address: fbergen@kooglerassociates.com
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: <u><i>Fawn Bergen</i></u> Date: <u>12/8/05</u> (seal): 

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 East (km) 356.9 North (km) 3169.0		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 28/38/34 Longitude (DD/MM/SS) 82/28/25	
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: Charles E. Walz, Environmental Manager
2. Facility Contact Mailing Address... Organization/Firm: CEMEX Cement, Inc. Street Address: Post Office Box 6 City: Brooksville State: Florida Zip Code: 34605-0006
3. Facility Contact Telephone Numbers: Telephone: (352) 796-7241 ext. Fax: (352) 754-9836
4. Facility Contact Email Address: cwalz@cemexusa.com

Facility Primary Responsible Official

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

1. Facility Primary Responsible Official Name: N/A
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 Email 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:	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	A	N
PM ₁₀	A	N
NO _x	A	N
SO ₂	A	N
CO	A	N
VOC	A	N
HCl	A	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 Nos. 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:
Not Applicable

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>10/05</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>10/05</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>10/05</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>Attachment A</u>
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment A</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: _____ <input checked="" 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: _____ <input checked="" 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.):
 Attached, Document ID: _____ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

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

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

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

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

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

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

Additional Requirements Comment

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EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 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 [2]

Cement Kiln No. 1

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

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

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

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

Emissions Unit Description and Status

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

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

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

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

2. Description of Emissions Unit Addressed in this Section: **Cement Kiln No. 1**

3. Emissions Unit Identification Number: **003**

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

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

016 – Baghouse – High Temperature (Fuller Draco Custom ID No. E-55)

205 – Low NO_x burners

032 – Ammonia injection (SNCR)

2. Control Device or Method Code(s): **016, 205, 032**

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 165 TPH; 1,300,000 TPY preheater feed (12-consecutive month period)
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 300 million Btu/hr (30-day average)
4. Maximum Incineration Rate: pounds/hr tons/day N/A
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment:

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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: No. 1 Kiln Stack		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: 150 feet	7. Exit Diameter: 13.0 feet	
8. Exit Temperature: 285°F	9. Actual Volumetric Flow Rate: 315,00 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: 195,785 dscfm		12. Nonstack Emission Point Height: N/A feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 356.250 North (km): 3168.370		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln		
2. Source Classification Code (SCC): 3-05-006-22	3. SCC Units: Tons Processed	
4. Maximum Hourly Rate: 165	5. Maximum Annual Rate: 1,300,000	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment: Segment represents preheater feed rate. Annual rate based on 150 TPH and 8,760 hr/yr and an operating factor of 99%.		

Segment Description and Rate: Segment 2 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln		
2. Source Classification Code (SCC): 3-05-006-22	3. SCC Units: Tons Clinker Produced	
4. Maximum Hourly Rate: 99.0	5. Maximum Annual Rate: 780,000	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment: The maximum rates are based on the maximum preheater rates times 0.60: Maximum hourly rate = 165 TPH x 0.60 = 99.0 TPH Maximum annual rate = 1,300,000 TPY x 0.60 = 780,000 TPY		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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

Segment Description and Rate: Segment 3 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 2); Cement Kiln		
2. Source Classification Code (SCC): 3-90-005-02		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate: 2.116	5. Maximum Annual Rate: 18,536.2	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 141.3
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

Segment Description and Rate: Segment 4 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 4); Cement Kiln		
2. Source Classification Code (SCC): 3-90-005-02		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate: 2.06	5. Maximum Annual Rate: 18,045.6	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 145.6
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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

Segment Description and Rate: Segment 5 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Residual Oil (No. 5); Cement Kiln		
2. Source Classification Code (SCC): 3-90-004-02	3. SCC Units: 1,000 Gallons Burned	
4. Maximum Hourly Rate: 2.016	5. Maximum Annual Rate: 17,660.16	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 148.8
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

Segment Description and Rate: Segment 6 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Residual Oil (No. 6); Cement Kiln		
2. Source Classification Code (SCC): 3-90-004-02	3. SCC Units: 1,000 Gallons Burned	
4. Maximum Hourly Rate: 1.982	5. Maximum Annual Rate: 17,362.32	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 151.3
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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

Segment Description and Rate: Segment 9 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Solid Waste; Tires [Whole Tire-Derived Fuel (WTDF)]		
2. Source Classification Code (SCC): 3-90-012-99		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 2.14	5. Maximum Annual Rate: 18,746.4	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 28
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr. The maximum utilization/firing rate of WTDF shall not exceed 20% of the total Btu heat input, or 2.14 TPH (daily average).		

Segment Description and Rate: Segment 10 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Petroleum Coke		
2. Source Classification Code (SCC): 3-90-008-89		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 11.28	5. Maximum Annual Rate: 98,813	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 26.6
10. Segment Comment: Maximum rates are based on the heat input rate of 300 MMBtu/hr and a heating value of 13,300 Btu/lb.		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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

Segment Description and Rate: Segment 11 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Liquid Waste – On-site Generate Non-Hazardous Waste Used Oil and Grease		
2. Source Classification Code (SCC): 3-90-013-89		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 5.0 (rolling-monthly basis)	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit:
10. Segment Comment: Maximum rate based on Permit No. 0530010-002-AV.		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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	None	EL
PM ₁₀	016	None	EL
SO ₂	None	None	EL
NO _x	205/032	None	EL
CO	None	None	EL
VOC	None	None	EL
DIOX	None	None	EL

**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: PM	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 29.7 lb/hour 118.3 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.18 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 29.7 lb/hr (1-hr average) Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.18 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 29.7 lb/hour 118.3 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 5 or 201/201A.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: PM₁₀	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 29.7 lb/hour 118.3 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.18 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 29.7 lb/hr (1-hr average) Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.18 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 29.7 lb/hour 27.0 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 5 or 201/201A.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.	

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: SO₂		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 16.5 lb/hour 65.7 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year			
6. Emission Factor: 0.10 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV		7. Emissions Method Code: 0	
8. Calculation of Emissions: Hourly: 16.5 lb/hr (1-hr average) Annual: 15.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 65.7 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.			

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.10 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 16.5 lb/hour 65.7 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 6C.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: NO _x	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 301 lb/hour 1,204.5 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 1.83 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 301 lb/hr (1-hr average) Annual: 275 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 1,204.5 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NO_x, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 1.83 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 301 lb/hour 1,204.5 tons/year
5. Method of Compliance: Annual compliance test using EPA Method 7E.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 1.20 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 198.0 lb/hour 788.4 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. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: VOC	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 14.9 lb/hour 59.6 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.09 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 14.9 lb/hr (1-hr average) Annual: 13.6 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 59.57 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NO_x, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.09 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 14.9 lb/hour 59.6 tons/year
5. Method of Compliance: Compliance test using EPA Method 25A; when required.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: DIOX	2. Total Percent Efficiency of Control: N/A
2. Potential Emissions: 2.7 E-07 lb/hour (max) 7.1 E-07 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: – 0.4 ng/dscm at 7% O₂ - R.M. operating 0.2 ng/dscm at 7% O₂ – R.M. not operating Reference: Permit No. 40 CFR 63, Subpart LLL	7. Emissions Method Code: 0
8. Calculation of Emissions: Assume Raw Mill (R.M.) operates 90% of the time. R.M. Operating: 0.4 ng/dscm x 3230 dscm/min @ 7% O₂ x 60 min/hr x f (1) = 1.7 E-07 lb/hr (max hrly) R.M. Not Operating: 0.2 ng/dscm x 3230 dscm/min @ 7% O₂ x 60 min/hr x f (1) = 0.85 E-07 lb/hr Annual: [(1.7 x 0.9) + (0.85 x 0.1)] x E-07 x 8,760 hr/yr x 1/2,000 lb/ton = 7.1 E-07 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: (1) f = conversion from ng to lb (2) No changes in actual or potential emissions are expected or requested as a result of this project.	

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 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.4 ng/dscm at 7% O ₂ (T<400°F) 0.2 ng/dscm at 7% O ₂ (T>400°F)	4. Equivalent Allowable Emissions: 1.7 E-07 lb/hour 71. E-07 tons/year
5. Method of Compliance: Compliance testing using EPA Method 23.	
6. Allowable Emissions Comment (Description of Operating Method): No changes in actual or potential emissions are expected or requested as a result of this project.	

Allowable Emissions Allowable Emissions 1 of 1

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

Allowable Emissions Allowable Emissions ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20% Exceptional Conditions: 20% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: COM & EPA Method 9	
5. Visible Emissions Comment: Based on Permit No. 0530010-002-AV and 40 CFR 63.1343(b)(2).	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 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 5

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Existing Model Number: Serial Number:	
5. Installation Date: Unknown	6. Performance Specification Test Date: Unknown
7. Continuous Monitor Comment: Continuous Opacity Monitor (COM). Based on Permit No. 0530010-002-AV and 40 CFR 63.1350(c)(1).	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: EM	2. Pollutant(s): CO and/or O₂
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Existing Model Number: Serial Number:	
5. Installation Date: Unknown	6. Performance Specification Test Date: Unknown
7. Continuous Monitor Comment: Process monitors, not for compliance. Based on Permit No. 0530010-002-AV.	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: TEMP	2. Pollutant(s): Temperature
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Existing Model Number: _____ Serial Number: _____	
5. Installation Date: Unknown	6. Performance Specification Test Date: Unknown
7. Continuous Monitor Comment: Based on 40 CFR 63.1350(f)(1).	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Servomex Model Number: 4900 Continuous Emissions Analyzer Serial Number: _____	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: CO and NOx CEMS will be certified during trial period.	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Servomex Model Number: 4900 Continuous Emissions Analyzer Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input 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:	

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

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 Unknown
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 10/05
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 10/05
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 Unknown <input type="checkbox"/> Not Applicable
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.
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 [2]

Cement Kiln No. 1

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 checked="" type="checkbox"/> Attached, Document ID: 10/05 PSD Application <input 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 checked="" type="checkbox"/> Attached, Document ID: 10/05 PSD Application <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input checked="" type="checkbox"/> Attached, Document ID: 10/05 PSD Application <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

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

EMISSIONS UNIT INFORMATION

Section [1] of [2]

Cement Kiln No. 1

Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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 [2] of [2]

Cement Kiln No. 2

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)
- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)
- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **Cement Kiln No. 2**

3. Emissions Unit Identification Number: **014**

4. Emissions Unit Status Code: A	5. Commence Construction Date: N/A	6. Initial Startup Date: N/A	7. Emissions Unit Major Group SIC Code: 32	8. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--	--	--	--

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

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment: **The application is for the use of WTDF and petroleum coke as supplemental fuels in the No. 2 Cement Kiln (EU 014). The requested tire usage rate is the same as for the No. 1 Kiln, previously permitted to burn tires. Continuous utilization/firing of whole tires as supplemental fuel to coal is requested. The maximum utilization/firing rate is 20.0% of the total BTU heat input; about 2.15 tons per hour, or 60 mmBTU/hr.**

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

Emissions Unit Control Equipment

3. Control Equipment/Method(s) Description:

016 – Baghouse – High Temperature (Fuller Draco Custom ID No. E-55)

205 – Low NO_x burners

032 – Ammonia injection (SNCR)

2. Control Device or Method Code(s): **016, 205, 032**

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 165 TPH, 1,300,000 TPY preheater feed (12-consecutive 12-month period)
2. Maximum Production Rate:
3. Maximum Heat Input Rate: 300 million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day N/A
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment:

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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: No. 2 Kiln Stack		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: 105 feet	7. Exit Diameter: 14.0 feet	
8. Exit Temperature: 250°F	9. Actual Volumetric Flow Rate: 315,000 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: N/A feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 356.300 North (km): 3168.380		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln		
2. Source Classification Code (SCC): 3-05-006-22	3. SCC Units: Tons Processed	
4. Maximum Hourly Rate: 165	5. Maximum Annual Rate: 1,300,000	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment: Segment represents preheater feed rate. Annual rate based on 150 TPH and 8,760 hr/yr and an operating factor of 99%.		

Segment Description and Rate: Segment 2 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln		
2. Source Classification Code (SCC): 3-05-006-22	3. SCC Units: Tons Clinker Produced	
4. Maximum Hourly Rate: 99.0	5. Maximum Annual Rate: 780,000	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment: The maximum rates are based on the maximum preheater rates times 0.60: Maximum hourly rate = 165 TPH x 0.60 = 99.0 TPH Maximum annual rate = 1,300,000 TPY x 0.60 = 780,000 TPY		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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

Segment Description and Rate: Segment 3 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 2); Cement Kiln		
2. Source Classification Code (SCC): 3-90-005-02		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate: 2.116	5. Maximum Annual Rate: 18,536.2	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 141.3
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

Segment Description and Rate: Segment 4 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 4); Cement Kiln		
2. Source Classification Code (SCC): 3-90-005-02		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate: 2.06	5. Maximum Annual Rate: 18,045.6	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 145.6
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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

Segment Description and Rate: Segment 5 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Residual Oil (No. 5); Cement Kiln		
2. Source Classification Code (SCC): 3-90-004-02		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate: 2.016	5. Maximum Annual Rate: 17,660.16	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 148.8
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

Segment Description and Rate: Segment 6 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Residual Oil (No. 6); Cement Kiln		
2. Source Classification Code (SCC): 3-90-004-02		3. SCC Units: 1,000 Gallons Burned
4. Maximum Hourly Rate: 1.982	5. Maximum Annual Rate: 17,362.32	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 151.3
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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

Segment Description and Rate: Segment 7 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Natural Gas; Cement Kiln		
2. Source Classification Code (SCC): 3-90-006-02		3. SCC Units: Million Cubic Feet Burned
4. Maximum Hourly Rate: 0.293	5. Maximum Annual Rate: 2,563.9	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 1,025
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

Segment Description and Rate: Segment 8 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Bituminous Coal; Cement Kiln		
2. Source Classification Code (SCC): 3-90-002-01		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 12.0	5. Maximum Annual Rate: 10,512.0	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 25
10. Segment Comment: Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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

Segment Description and Rate: Segment 9 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Solid Waste; Tires [Whole Tire-Derived Fuel (WTDF)]		
2. Source Classification Code (SCC): 3-90-012-99		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 2.14	5. Maximum Annual Rate: 18,746.4	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 28
10. Segment Comment: Rates based on the current permitted rates (Permit No. 0530010-002-AV) for the Cement Kiln No. 1. The maximum utilization/firing rate of WTDF shall not exceed 20% of the total Btu heat input, or 2.14 TPH (daily average).		

Segment Description and Rate: Segment 10 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Petroleum Coke		
2. Source Classification Code (SCC): 3-90-008-89		3. SCC Units: Tons Burned
4. Maximum Hourly Rate: 11.28	5. Maximum Annual Rate: 98,813	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 26.6
10. Segment Comment: Maximum rates are based on the heat input rate of 300 MMBtu/hr and a heating value of 13,300 Btu/lb.		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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

Segment Description and Rate: Segment 11 of 11

1. Segment Description (Process/Fuel Type): Industrial Processes; In-Process Fuel Use; Liquid Waste – On-site Generate Non-Hazardous Waste Used Oil and Grease		
2. Source Classification Code (SCC): 3-90-013-89	3. SCC Units: 1,000 Gallons Burned	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 5.0 (rolling-monthly basis)	6. Estimated Annual Activity Factor: N/A
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit:
10. Segment Comment: Maximum rate based on Permit No. 0530010-002-AV.		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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	None	EL
PM ₁₀	016	None	EL
SO ₂	None	None	EL
NO _x	205/032	None	EL
CO	None	None	EL
VOC	None	None	EL
DIOX	None	None	EL

**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: PM	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 29.7 lb/hour 118.3 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.18 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 29.7 lb/hr (1-hr average) Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.18 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 29.7 lb/hour 118.3 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 5 or 201/201A.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.	

Allowable Emissions Allowable Emissions _____ of _____

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

Allowable Emissions Allowable Emissions _____ of _____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: PM₁₀	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 29.7 lb/hour 118.3 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.18 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 29.7 lb/hr (1-hr average) Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.18 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 29.7 lb/hour 27.0 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 5 or 201/201A.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: SO₂	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 16.5 lb/hour 65.7 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.10 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 16.5 lb/hr (1-hr average) Annual: 15.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 65.7 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Cement Kiln No. 2

Sulfur Dioxide

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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.10 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 16.5 lb/hour 65.7 tons/year
5. Method of Compliance: Annual compliance testing using EPA Method 6C.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

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Cement Kiln No. 2

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Nitrogen Oxides

**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: NO_x	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 283.8 lb/hour 1,130.0 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 1.72 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 283.8 lb/hr (1-hr average) Annual: 258.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 1,130.04 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 1.72 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 283.8 lb/hour 1,130.0 tons/year
5. Method of Compliance: Annual compliance test using EPA Method 7E.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: CO		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 198.0 lb/hour 788.4 tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year			
6. Emission Factor: 1.20 lb/ton dry kiln feed		7. Emissions Method Code:	
Reference: Permit No. 0530010-002-AV		0	
8. Calculation of Emissions: Hourly: 198.0 lb/hr (1-hr average) Annual: 198.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 788.4 TPY			
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.			

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2] of [2]
Cement Kiln No. 2

Page [5] of [7]
Carbon Monoxide

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 1.20 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 198.0 lb/hour 788.4 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. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/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: VOC	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 14.9 lb/hour 59.6 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: 0.09 lb/ton dry kiln feed Reference: Permit No. 0530010-002-AV	7. Emissions Method Code: 0
8. Calculation of Emissions: Hourly: 14.9 lb/hr (1-hr average) Annual: 13.6 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 59.57 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.	

**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 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.09 lb/ton dry kiln feed	4. Equivalent Allowable Emissions: 14.9 lb/hour 59.6 tons/year
5. Method of Compliance: Compliance test using EPA Method 25A; when required.	
6. Allowable Emissions Comment (Description of Operating Method): Based on Permit No. 0530010-002-AV.	

Allowable Emissions Allowable Emissions ____ of ____

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

Allowable Emissions Allowable Emissions ____ of ____

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

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –
POTENTIAL/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: DIOX	2. Total Percent Efficiency of Control: N/A
4. Potential Emissions: 4.7 E-07 lb/hour (max) 7.2 E-07 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): Not Applicable to tons/year	
6. Emission Factor: – 0.4 ng/dscm at 7% O₂ - R.M. operating 0.2 ng/dscm at 7% O₂ – R.M. not operating Reference: Permit No. 40 CFR 63, Subpart LLL	7. Emissions Method Code: 0
8. Calculation of Emissions: Assume Raw Mill (R.M.) operates 90% of the time. R.M. Operating: 0.4 ng/dscm x 3230 dscm/min @ 7% O ₂ x 60 min/hr x f (1) = 1.7 E-07 lb/hr (max hrly) R.M. Not Operating: 0.2 ng/dscm x 3230 dscm/min @ 7% O ₂ x 60 min/hr x f (1) = 0.85 E-07 lb/hr Annual: [(1.7 x 0.9) + (0.85 x 0.1)] x E-07 x 8,760 hr/yr x 1/2,000 lb/ton = 7.1 E-07 TPY	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: (3) f = conversion from ng to lb (4) No changes in actual or potential emissions are expected or requested as a result of this project.	

EMISSIONS UNIT INFORMATION

POLLUTANT DETAIL INFORMATION

Section [2] of [2]
Cement Kiln No. 2

Page [7] of [7]
Dioxins/Furans

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 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: N/A
3. Allowable Emissions and Units: 0.4 ng/dscm at 7% O ₂ (T<400°F) 0.2 ng/dscm at 7% O ₂ (T>400°F)	4. Equivalent Allowable Emissions: 1.7 E-07 lb/hour 71. E-07 tons/year
5. Method of Compliance: Compliance testing using EPA Method 23.	
6. Allowable Emissions Comment (Description of Operating Method): No changes in actual or potential emissions are expected or requested as a result of this project.	

Allowable Emissions Allowable Emissions 1 of 1

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

Allowable Emissions Allowable Emissions ____ of ____

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

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20% Exceptional Conditions: 20% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: COM & EPA Method 9	
5. Visible Emissions Comment: Based on Permit No. 0530010-002-AV and 40 CFR 63.1343(b)(2).	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: _____ % Exceptional Conditions: _____ % Maximum Period of Excess Opacity Allowed: _____ min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 5

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Existing Model Number: Serial Number:	
5. Installation Date: Unknown	6. Performance Specification Test Date: Unknown
7. Continuous Monitor Comment: Continuous Opacity Monitor (COM). Based on Permit No. 0530010-002-AV and 40 CFR 63.1350(c)(1).	

Continuous Monitoring System: Continuous Monitor 2 of 5

1. Parameter Code: EM	2. Pollutant(s): CO and/or O₂
3. CMS Requirement:	<input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
4. Monitor Information... Manufacturer: Existing Model Number: Serial Number:	
5. Installation Date: Unknown	6. Performance Specification Test Date: Unknown
7. Continuous Monitor Comment: Process monitors, not for compliance. Based on Permit No. 0530010-002-AV.	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 3 of 5

1. Parameter Code: TEMP	2. Pollutant(s): Temperature
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Existing Model Number: _____ Serial Number: _____	
5. Installation Date: Unknown	6. Performance Specification Test Date: Unknown
7. Continuous Monitor Comment: Based on 40 CFR 63.1350(f)(1).	

Continuous Monitoring System: Continuous Monitor 4 of 5

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Servomex Model Number: 4900 Continuous Emissions Analyzer Serial Number: _____	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: CO and NOx CEMS will be certified during trial period.	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Servomex Model Number: 4900 Continuous Emissions Analyzer Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input 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:	

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date Unknown</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)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 10/05</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)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date 10/05</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)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date Unknown</p> <p><input 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)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date Unknown</p> <p><input type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records</p> <p><input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____</p> <p><input type="checkbox"/> _____ Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____</p> <p><input type="checkbox"/> _____ To be Submitted, Date (if known): _____ Test Date(s)/Pollutant(s) Tested: _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p> <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>
<p>7. Other Information Required by Rule or Statute</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

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 checked="" type="checkbox"/> Attached, Document ID: <u>10/05 PSD Application</u> <input 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 checked="" type="checkbox"/> Attached, Document ID: <u>10/05 PSD Application</u> <input type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input checked="" type="checkbox"/> Attached, Document ID: <u>10/05 PSD Application</u> <input type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

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

EMISSIONS UNIT INFORMATION

Section [2] of [2]

Cement Kiln No. 2

Additional Requirements Comment

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ATTACHMENT A
DESCRIPTION OF PROPOSED PROJECT

CEMEX Cement, Inc. (CEMEX) is proposing to modify its existing Brooksville Cement Plant. CEMEX produces Portland cement at its Brooksville facility. This facility consists of two cement kilns and associated material handling, grinding, storage, packaging, and shipping facilities.

Cement Kiln No. 1 is currently permitted to burn whole tire-derived fuel (WTDF), coal, Nos. 2, 4, 5, and 6 fuel oils, natural gas, and on-site generated non-hazardous waste used oil and grease. The maximum process preheater feed rate is 165 tons per hour (TPH), 1-hour maximum, and 150 TPH, rolling 30-calendar day average. The maximum heat input rate is 300 million British thermal units per hour (MMBtu/hr), daily average.

Cement Kiln No. 2 is currently permitted to burn coal, Nos. 2, 4, 5, and 6 fuel oils, natural gas, and on-site generated non-hazardous waste used oil and grease. The maximum process preheater feed rate is 165 tons per hour (TPH), 1-hour maximum, and 150 TPH, rolling 30-calendar day average. The maximum heat input rate is 300 million British thermal units per hour (MMBtu/hr), daily average.

CEMEX is proposing to burn petroleum coke in both kilns as well as to burn WTDF in Kiln No. 2. The requested maximum process preheater feed rate of each kiln will remain at 165 TPH and the annual feed rate will remain at 1,300,000 TPY. The No. 2 Cement Kiln's maximum utilization/firing rate of WTDF shall not exceed 20-percent of the total Btu heat input, or 2.14 TPH (daily average basis), which is the current permitted maximum rate of the No. 1 Cement Kiln. It is request that petroleum coke firing be permitted in each kiln at a rate of up to 300 MMBtu/hr; or 100-percent of the total heat input (each).

CEMEX may be limited in the ability to burn 100-percent petroleum coke based on the sulfur/alkali ratio and/or other factors. The company requests however, the opportunity to fire up to 100-percent petroleum coke should conditions allow.

CEMEX is requesting an air permit application for a trial burn of petroleum coke and tires in Kilns 1 and 2 to establish emissions limits, particularly for CO and NOx. Additionally, CEMEX will certify the NOx and CO CEMS recently installed during the trial period to produce certified NOx and CO emission data on a continuous basis. CEMEX will perform emissions testing on Kilns 1 and 2 while burning petroleum coke alone and petroleum coke and tires at various amounts of feed to determine the emissions limits and to determine the affect of sulfur (from petroleum coke) on the chemistry of the kilns and on SO₂ emissions. CEMEX is requesting an air construction permit for a 180-day period to complete the various emissions testing for the different kiln operating scenarios.

In order to reach the new emission levels based on this project, CEMEX may also modify the firing system to an indirect-firing system. This could help CEMEX achieve lower emission levels.

Upon completion of the trial period, CEMEX will submit a test report to FDEP along with the proposed emission limits for approval. Note that both SNCR and low-NOx burners were recently installed on Kilns 1 and 2 (refer to October 2005 PSD Application).

CEMEX is also requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO₂. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.