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BUREAU OF AIR REGULATION

UPS overnight

November 22, 2005

Mr. Jason W. Waters
Air Program Permitting Supervisor
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida. 33619

Subject: CEMEX Cement, Inc
Brooksville, Hernando County, Florida
Air Construction Permit Application Clay Shredder

0530010-020-AC
-021-AV

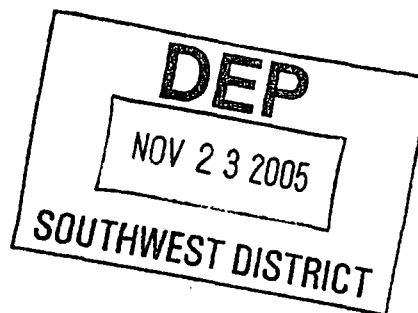
Dear Mr. Kissel:

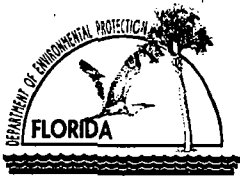
Enclosed, please find four (4) copies of the above referenced application. I am requesting that the application be considered with the current revisions to the Title V renewal.

If you have any questions, please feel free to call me at 352-799-2011.

Sincerely;

Charles Walz
Environmental Manager
CEMEX Brooksville Cement Plant
File





Department of Environmental Protection

Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

DARM-BAR
copy
DEP
NOV 23 2005
SOUTHWEST DISTRICT

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.

Identification of Facility

*0530010-020-AC
-021-AU*

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 DELEON BOULEVARD 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

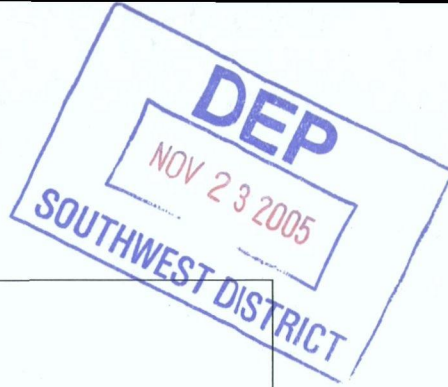
Application Contact

1. Application Contact Name: NEIL A. LOFGREN, P.E., PROJECT ENGINEER	
2. Application Contact Mailing Address... Organization/Firm: KOGLER & ASSOCIATES, INC. Street Address: 4014 NW 13TH STREET City: GAINESVILLE State: FL Zip Code: 32609	
3. Application Contact Telephone Numbers... Telephone: (352) 377-5822 ext. Fax: (352) 377-7158	
4. Application Contact Email Address: nlofgren@kooglerassociates.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Project Number(s):	
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 a non-PSD Air Construction Permit is for the installation of a rock Shredder for processing clay in the quarry. This construction project requires a revision to the current Title V for the newly constructed emission unit. Refer to Attachment A for description.

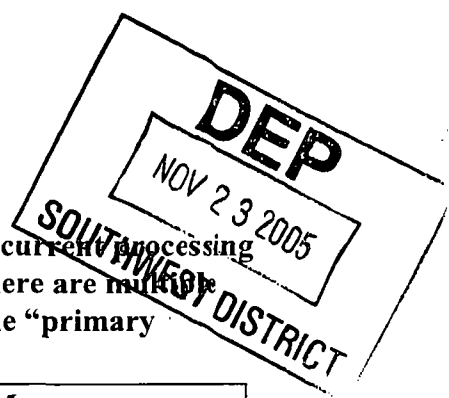
APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

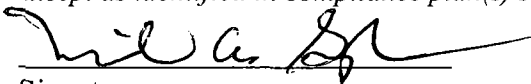
1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ext. Fax:
4. Owner/Authorized Representative Email Address:
5. Owner/Authorized 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 _____ Date

APPLICATION INFORMATION



Application Responsible Official Certification

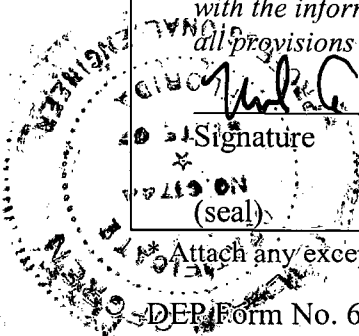
Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: Michael A. Gonzales – Plant Manager <i>a</i>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" 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: CEMEX Cement, Inc. Street Address: Post Office Box 6 City: Brooksville State: Florida Zip Code: 34605-0006
4. Application Responsible Official Telephone Numbers... Telephone: (352) 796-7241 ext. Fax: (352) 754-9836
5. Application Responsible Official Email Address: mgonzoles@cemexusa.com
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 <i>11/08/2005</i> Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Neil A. Lofgren, P.E. Registration Number: 61744
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: nlofgren@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 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 checked="" 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>Neil A. Lofgren</i></u> Date: <u><i>November 07, 2005</i></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 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
PM10	A	N
NOX	A	N
SO2	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 No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
<p>7. Facility-Wide or Multi-Unit Emissions Cap Comment: Not Applicable</p>					

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

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: Attachment A
3. Rule Applicability Analysis: <input checked="" type="checkbox"/> Attached, Document ID: Attachment A
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

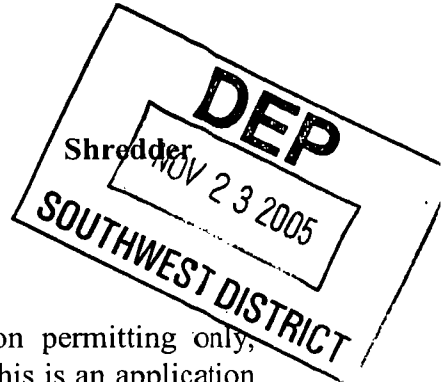
1. List of Insignificant Activities (Required for initial/renewal applications only):
 Attached, Document ID: _____ Not Applicable (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be 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 [1]



III. EMISSIONS UNIT INFORMATION

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

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

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

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

EMISSIONS UNIT INFORMATION

Section [1] of [1]

Shredder

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: **Electrically powered rock Shredder utilized to process clay.**

3. Emissions Unit Identification Number: **N/A**

4. Emissions Unit Status Code: C	5. Commence Construction Date: 11/2005	6. Initial Startup Date: 12/2005	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: **N/A** Model Number: **N/A**

10. Generator Nameplate Rating: **MW N/A**

11. Emissions Unit Comment: **This emissions unit consists of a fly ash silo (working tank), four fly ash storage tanks (pigs), a clay shredder and various connecting hoses featured in Diagram 1- Shredder and Associated Equipment. See Attachment A for complete description**

EMISSIONS UNIT INFORMATION

Section [1] of [1]

Shredder

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

The fly ash silo (working tank) has a dust house that controls the fly ash particulate emissions for the fly ash silo (working tank) and the four (4) fly ash storage tanks (pigs). See Attachment A for the dust house manufacture working parameters.

Fugitive emissions from the shredder equipment and various drop points are not controlled by the dust house.

2. Control Device or Method Code(s) : **018, Fabric filter, Low temperature (T<180F)**

EMISSIONS UNIT INFORMATION

Section [1] of [1]

Shredder

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

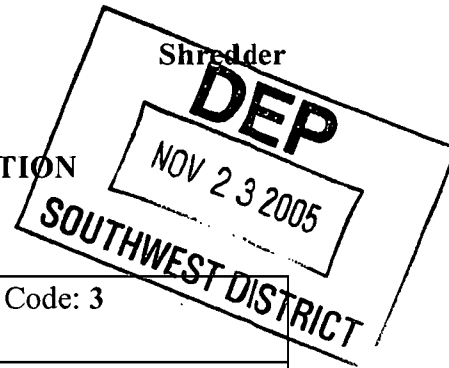
Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 200 TPH, 1,168,000 TPY
2. Maximum Production Rate:
3. Maximum Heat Input Rate: million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: 16 hours/day 7 days/week 52 weeks/year 5,840 hours/year
6. Operating Capacity/Schedule Comment: Tons per year (TPY) based on 16 hour per day and year-round operation.

EMISSIONS UNIT INFORMATION

Section [1] of [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: Shredder		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Working tank dust house, Shredder area and drop to conveyor, conveyor mixing chamber.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: H	6. Stack Height: feet	7. Exit Diameter: feet	
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: 0 feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Dust house vent behind side panel, fugitive emissions from other associated equipment.			

EMISSIONS UNIT INFORMATION

Section [1] of [1]

Shredder

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Industrial Processes; Mineral Products, Clay Processing; Raw Material Crushing		
2. Source Classification Code (SCC): 30504615		3. SCC Units: Ton Clay Processed
4. Maximum Hourly Rate: 200	5. Maximum Annual Rate: 1,168,000	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 Description and Rate: Segment of

1. Segment Description (Process/Fuel Type): N/A		
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 [1]

Shredder

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

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:		

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 [1]

Shredder

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	018	N/A	EL
PM ₁₀	018	N/A	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:
3. Potential Emissions: 0.45 lb/hour 2.21 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.00026 lb/ton clay, 0.00447 lb/hr fly ash Reference: AP-42 11.19.2, Table 11.19.2-2& AP-42 11.12, Table 5.5	7. Emissions Method Code: 4
8. Calculation of Emissions: See Attachment A, Table 1. Potential PM/PM10 Emissions from Clay Shredder	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

**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 2

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 40.14 lb/hr	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method): Rule 62.296.320 (F.A.C), Process Weight Table	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: ESCPD	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour 24.9 tons/year
5. Method of Compliance: VE	
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]

POLLUTANT DETAIL INFORMATION
Page [1] of [2]

**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:
3. Potential Emissions: 0.21 lb/hour 0.94 tons/year	4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.0001 lb/ton clay, 0.00243 lb/ton fly ash Reference: AP-42 11.19.2, Table 11.19.2-2& AP-42 11.12, Table 5.5	7. Emissions Method Code: 4
8. Calculation of Emissions: See Attachment A, Table 1. Potential PM/PM10 Emissions from Clay Shredder	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

EMISSIONS UNIT INFORMATION

Section [1] of [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: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment: 40 CFE 63 Part LLL, §63.1348	

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 [1]

H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: N/A	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: N/A	

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 [1]

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

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

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:	

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 [1]

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 checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date: _____</p>
<p>2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: <u>N/A</u> _____ <input type="checkbox"/> Previously Submitted, Date _____</p>
<p>3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: <u>N/A</u> _____ <input type="checkbox"/> Previously Submitted, Date _____</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 type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable (construction application)</p>
<p>5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)</p> <p><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Compliance Demonstration Reports/Records</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p>Test Date(s)/Pollutant(s) Tested: _____</p> <p>_____</p> <p><input type="checkbox"/> Previously Submitted, Date: _____</p> <p>Test Date(s)/Pollutant(s) Tested: _____</p> <p>_____</p> <p><input type="checkbox"/> To be Submitted, Date (if known): _____</p> <p>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>

7. Other Information Required by Rule or Statute

Attached, Document ID: _____

Not Applicable

EMISSIONS UNIT INFORMATION

Section [1] of [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 type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

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

5. Acid Rain Part Application

- Certificate of Representation (EPA Form No. 7610-1)
 - Copy Attached, Document ID: _____
- Acid Rain Part (Form No. 62-210.900(1)(a))
 - Attached, Document ID: _____
 - Previously Submitted, Date: _____
- Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
 - Attached, Document ID: _____
 - Previously Submitted, Date: _____
- New Unit Exemption (Form No. 62-210.900(1)(a)2.)
 - Attached, Document ID: _____
 - Previously Submitted, Date: _____
- Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
 - Attached, Document ID: _____
 - Previously Submitted, Date: _____
- Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
 - Attached, Document ID: _____
 - Previously Submitted, Date: _____
- Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
 - Attached, Document ID: _____
 - Previously Submitted, Date: _____
- Not Applicable

Additional Requirements Comment

ATTACHMENT A

Contents	Page
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DEP

NOV 23 2005

SOUTHWEST DISTRICT

Table 1. Potential PM/PM₁₀ Emissions from Clay Shredder, CEMEX USA Inc., Quarry

Process: Clay Shredding

Pollutant	Production		Operating Hours (hr/day) (hr/yr)		Emission Factor (2) (lb/ton)	Potential Emissions	
	Rate (TPH)	Percent (1) (%)				Hourly (lb/hr)	Annual (tpy)
PM	200	85%	16	5,840	0.00026 ⁽⁶⁾	0.04	0.13
PM ₁₀	200	85%	16	5,840	0.00010 ⁽⁶⁾	0.02	0.05

Process: Fly Ash Addition

Pollutant	Production		Operating Hours (hr/day) (hr/yr)		Emission Factor (3) (lb/ton)	Potential Emissions	
	Rate (TPH)	Percent (1) (%)				Hourly (lb/hr)	Annual (tpy)
PM	200	15%	16	5,840	0.00447	0.13	0.39
PM ₁₀	200	15%	16	5,840	0.00243	0.07	0.21

Process: Fugitive Sources (4)

Pollutant	Production		Operating Hours (hr/day) (hr/yr)		Emission Factor (5) (lb/ton)	Potential Emissions (6)	
	Rate (TPH)	Percent (1) (%)				Hourly (lb/hr)	Annual (tpy)
PM	200	100%	16	5,840	0.00026 ⁽⁶⁾	0.16	1.37
PM ₁₀	200	100%	16	5,840	0.00010 ⁽⁶⁾	0.06	0.50
PM						0.33	1.89
PM ₁₀						0.15	0.77

Notes:

- (1) Base on Shredder capacity of 200 tph, 85% clay & 15% fly ash.
- (2) Clay emission factors based on AP-42, 11.19.2 Crushed stone Processing and Pulverized Mineral Processing emission factors for crushed stone processing operations, Table 11.19.2-2.
- (3) Fly ash emission factors based on AP-42 Section 11.12 Concrete Batching background documentation, Table 5.5 - Cement Supplement Silo Filling Emission Factors.
- (4) Fugitive sources include three points: clay loading hopper, drop point from shredder to conveyor and the mixer at the end of the conveyor.
- (5) Fugitive emission factors based on AP-42, 11.19.2 Crushed stone Processing and Pulverized Mineral Processing emission factors for crushed stone processing operations, Table 11.19.2-2 for conveyor transfer points.
- (6) Emission factors reduced by 91% to allow for increase moisture content difference of rock (1.3%) and wet clay (15%).

Table 2. Potential PM/PM₁₀ Emissions from Fly Ash Handling, CEMEX USA Inc., Quarry

Process: Fly Ash Handling

Pollutant	Delivery		Operating Hours (hr/day) (hr/yr)	Emission Factor (2) (lb/ton)	Potential Emissions	
	Rate (1) (TPH)				Hourly (lb/hr)	Annual (tpy)
PM	25	16	5,840	0.00447	0.11	0.33
PM ₁₀	25	16	5,840	0.00243	0.06	0.18

Notes:

(1) Base on delivery truck capacity of 25 ton per load and 1 hour loading time.

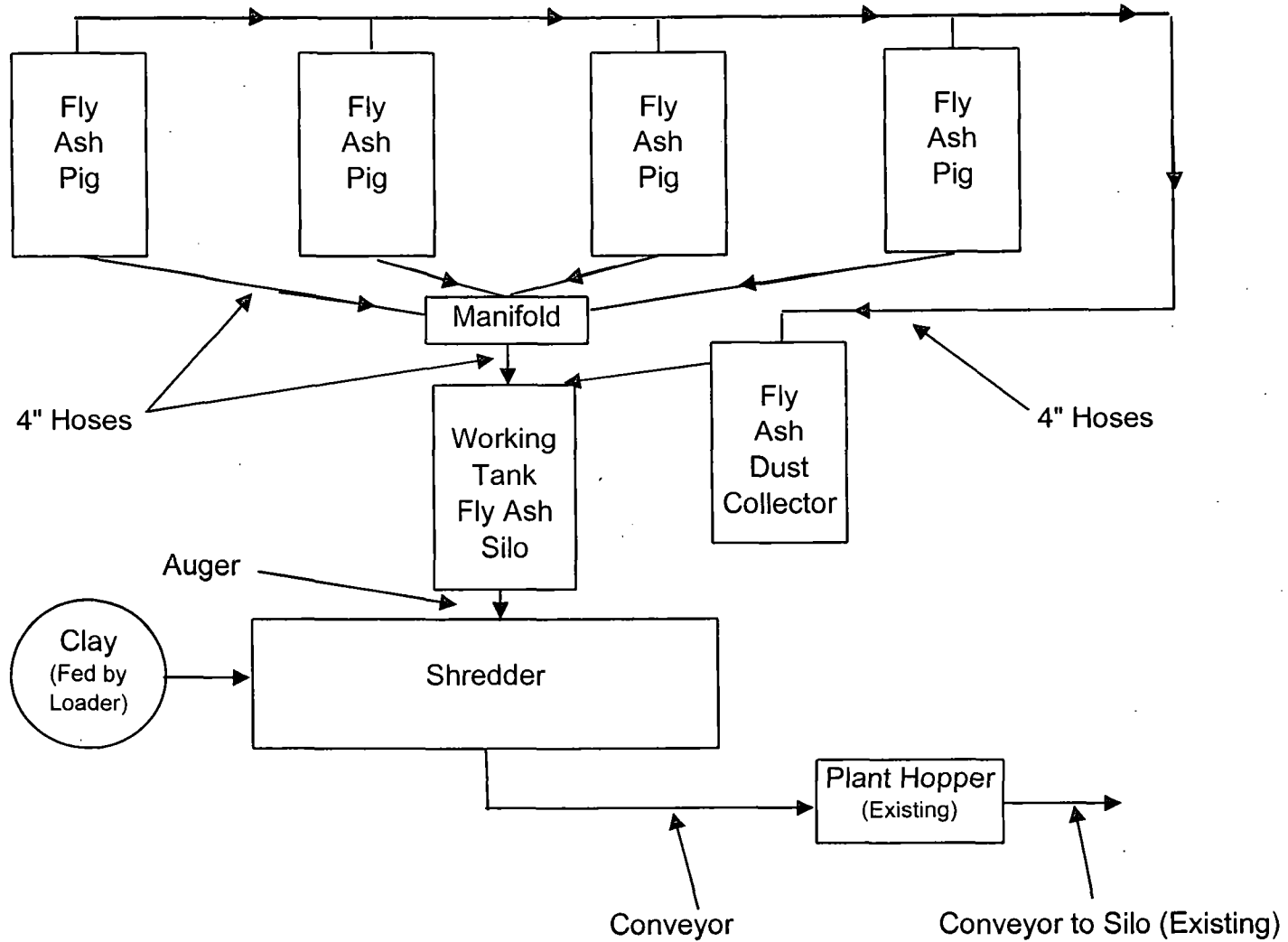
(2) Fly ash emission factors based on AP-42 Section 11.12 Concrete Batching background documentation, Table 5.5 - Cement Supplement Silo Filling Emission Factors.

Table 3. Potential PM/PM10 Emissions from Clay Shredding and Fly Ash Handling, CEMEX USA Inc., Quarry

Combined Total Emissions:

Pollutant	Potential Emissions	
	Hourly (lb/hr)	Annual (tpy)
<u>Process: Table 1. Clay Shredder</u>		
PM	0.33	1.89
PM ₁₀	0.15	0.77
<u>Process: Table 2. Fly Ash Handling</u>		
PM	0.11	0.33
PM ₁₀	0.06	0.18
<u>Combined Totals</u>		
PM	0.45	2.21
PM ₁₀	0.21	0.94

Figure 1- Process Flow Diagram - Shredder and Associated Equipment.



Description of Proposed Construction

CEMEX is proposing to construct a clay shredder at the CEMEX cement facility in Brooksville, Florida. Clay is an additive in the cement making process.

Clay is mined on CEMEX Brooksville property at 10 to 22% moisture content. Wet clay can cause equipment plugging in the process and therefore can not be utilized. The clay supply is mixed onsite to lower the moisture content to approximately 15% prior to processing in the shredder.

The shredder installation will consist of four fly ash storage tanks (pigs), a fly ash storage silo (working tank) with a dust house, a shredder, a conveyor and connecting hoses. The shredder is to be utilized in processing clay as an additive in the cement making process.

Wet clay will be loaded into the shredder hopper and shredded to reduce the clay clumps size to 1" to 3". While shredding the clay, fly ash is added to coat the clay and reduce the moisture level of the mix. Fly ash is also an additive in the cement making process. The mixture, required to reduce the clay to the desired moisture content will vary from approximately 85% clay and 15% fly ash.

Fly ash is to be delivered to CEMEX and loaded into one of the four "pigs", which store 125 tons of fly ash each. The pig transfer fly ash to the 25 ton storage capacity "working tank" that will meter the fly ash at the required volume to the shredder through a variable speed auger. Potential particulate emissions from fly ash transfers to the pigs and working tank will be controlled by a dust house located atop the working tank.

The combined product is then transferred by belt conveyor to the cement facility and utilized as an additive in the cement making process.

Rule Applicability Analysis

40 CFE 63 Part LLL— Subpart LLL--National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry

§63.1348 Standards for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills.

§62-296.320, F.A.C., General Pollutant Emission Limiting Standards.

1514
2223

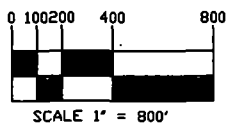
1413
2324

Shredder
Location

Hernando County
Tax Parcel Key No. 328620
181.0 acres

2223
2726

2324
2625



CEMEX Cement, Inc.
Brooksville Plant

Figure 2. GENERAL SITE PLAN
Section 23
Township 21s, Range 18e

Koogler & Associates
Drawn By: SCC
Date: 7/2001
Date Revised: 10/2005