RTP ENVIRONMENTAL ASSOCIATES INC.®

AIR • WATER • SOLID WASTE CONSULTANTS

239 U.S. Highway 22 East
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Fax: (908) 968-9603

September 11, 1996

Mr. Clair Fancy
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Florida Crushed Stone Company - Application to Modify Air Construction Permit AC27-274892 to Construct a Second Cement Kiln at the Florida Crushed Stone Company Facility in Brooksville, Florida

Dear Mr. Fancy:

Enclosed for processing are the original and three (3) copies of Florida Crushed Stone Company's application to modify Air Construction Permit AC27-274892 to construct a second cement kiln at the site of an existing (Unit I) kiln and cogeneration facility located in Brooksville, Florida. At this time, Florida Crushed Stone Company does not seek to have the existing permit rescinded but rather requests permission to construct either cement kiln technology (i.e., either a Gepol preheater kiln or a preheater/precalciner kiln). As shown in the previous application and the analyses contained in this application, either technology can be implemented and comply with existing environmental limitations at the property boundary and the nearby Class I Area.

We will be in contact with Buck Oven this week to discuss any related matters concerning the Conditions of Certification. We will coordinate any changes with both of you.

If you have any questions or require additional information, please contact either Mr. Thomas Mountain of Florida Crushed Stone at (352) 799-7881 or myself at the above telephone number.

Sincerely,

RECEIVED
SEP 11 1996
BUREAU OF
AIR REGULATION

RTP ENVIRONMENTAL ASSOCIATES, INC.®

Donald F. Elias
Principal

MJH/mpj
cc: T. Mountain/C. Allen/L. Curtin/M. Hober/W. Corbin/M. Lewis/Proj. File: FCS3

PROPOSED MODIFICATIONS TO
AIR CONSTRUCTION PERMIT
AC27-274892
TO CONSTRUCT A SECOND
CEMENT KILN

At

The Florida Crushed Stone Facility
10311 Cement Plant Road
Hernando County
Brooksville, Florida 34601

By

RTP Environmental Associates, Inc.
239 U.S. Highway 22 East
Green Brook, New Jersey 08812
(908) 968-9600

September 6, 1996

PROPOSED MODIFICATIONS TO AIR CONSTRUCTION PERMIT AC27-274892 TO CONSTRUCT A SECOND CEMENT KILN

At

The Florida Crushed Stone Facility
10311 Cement Plant Road
Hernando County
Brooksville, Florida 34601

By

RTP Environmental Associates, Inc.
239 U.S. Highway 22 East
Green Brook, New Jersey 08812
(908) 968-9600

September 6, 1996

EXECUTIVE SUMMARY

Florida Crushed Stone (FCS) is applying for permit modifications to revise the kiln technology for the proposed second cement plant at the Brooksville facility from a gepol tower preheater kiln to a precalciner kiln. The following physical changes will result from the modification:

Revised Sources and Equipment:

- Un-fired gepol tower preheater replaced with indirect-fired precalciner fueled by coal, oil, and/or natural gas;
- Direct-fired kiln burner replaced with indirect-fired kiln burner fueled by coal, oil, and/or natural gas; and
- Miscellaneous changes to minor PM sources (stack height, flowrate, etc.).

New Sources and Equipment:

- Shaft dryer heater fired with oil;
- Bypass system exhausted through dedicated baghouse to main stack;
- Coal milling system added to supply indirect-fired sources;
- Additional cement discharge hopper with dust collector; and
- Clinker storage silo and clinker bin with dust collectors.

Deleted Sources and Equipment:

- Use of existing kiln equipment for certain raw material feeds, thereby deleting the flyash, lime, and filter dust silos (and filter dust silo and lime silo dust collectors) from design; and
- Removal of dust collectors from iron ore and coal storage bins, and coal feed conveyor.

These physical changes are described in Sections 1.0 and 3.0 of the application. Maximum production rates for the proposed precalciner kiln are 104.2 tons/hour of clinker (versus 83 tons/hour for gepol tower kiln) with similar increases in feed and cement production rates. Therefore, while the overall emission rates in lbs/ton proposed for the precalciner kiln remain the same or are less than the BACT limits for the permitted kiln (Sections 1.0 and 4.0), there will be increases in lb/hour and ton/year pollutant emissions for the new kiln technology due to the increase in production rates. Modeling analyses of the proposed kiln in Sections 6.0 and 7.0 demonstrate compliance with all ambient standards.

TABLE OF CONTENTS

TABLE OF CONTENTS
(Concluded)

LIST OF APPENDICES

LIST OF TABLES

1.0 INTRODUCTION

Florida Crushed Stone (FCS) is applying for permit modifications to change the kiln technology currently permitted for the second cement kiln at the Brooksville facility from a preheater kiln to a precalciner kiln. This report contains a description of the proposed changes to the permitted facility (Section 1.0); the applicable air quality regulations (Section 2.0); emission estimates (Section 3.0); Best Available Control Technology (Section 4.0); existing air quality (Section 5.0); modeling analyses (Section 6.0); and air quality related values (Section 7.0). Attached to this report are permit application forms in accordance with Florida Administrative Code (FAC) 62-210.900. Also attached are copies of the current construction permit with hand-written updates added to reflect the changes necessary for the proposed revisions.

1.1 PROPOSED REVISIONS TO PERMITTED EQUIPMENT

FCS received a construction permit (AC27-274892 and PSD-FL-227) in November 1995 to build a second cement plant at the Brooksville facility in Hernando County. The permitted facility includes a dry process kiln with a gepol preheater, clinker cooler, crushers, raw and finish mills, and associated material and fuel handling equipment, silos, and shipping facilities. For normal operations, the kiln is currently permitted to burn coal and natural gas in a single direct-fired burner (located at the kiln outlet) and supplement the fuel by utilizing tires and/or tire derived fuel (i.e., shredded tires), which are fed at the kiln inlet (i.e., at the base of the preheater). The current construction permit allows the use of natural gas, virgin fuel oil, and on-specification used oil from the Greg Mine and power plant for kiln startup.

This permit application provides the necessary information to revise the permitted project from a preheater kiln to a precalciner kiln. Associated changes in production rates are described below in Section 1.2. Equipment changes resulting from the change in kiln technology consist of the following:

- Replacement of the gepol tower preheater with a preheater/precalciner, which consists of a set of cascading cyclones with a separate indirect-fired burner.
- Replacement of the direct-fired kiln burner with an indirect fired kiln burner.
- Addition of a shaft dryer to the raw mill system, including a separate combustion source (i.e., air heater), which increases the number of cyclones and slightly changes the course of air flow and raw material feed through the raw mill system.
- Addition of a bypass system, which vents air from the base of the precalciner through a dedicated baghouse directly to the main kiln stack. This system is common in

precalciner systems and removes undesirable volatile constituents in the exhaust gases that might condense and cause scaling which can restrict process and gas flows.

- Since the kiln and precalciner burners are indirect fired, the coal handling system will require changes to reduce the air used to supply pulverized coal to the combustion system. This will require an additional coal storage silo (2S-20) and create two new minor particulate matter (PM) sources (2S-17 and 2S-21).

Both the preheater and proposed precalciner kilns are dry process systems and the dimensions of the kiln itself will not be appreciably affected by the change in technology. The proposed kiln will have the same general equipment and arrangement as the permitted kiln (raw mill and material handling system, kiln and clinker cooler, finish mill system, and coal and cement handling systems) and will have the same countercurrent flow of material and air. The same fuels (i.e., coal and natural gas supplemented with tires and/or tire derived fuel for normal operations and natural gas, fuel oil, and on-spec used oil for startup operations) are proposed for the kiln and precalciner (fuel oil used in shaft dryer). The cement manufacturing process is described in detail in the original permit application.

The major change involved in the change in kiln technology is the additional indirect-fired burner in the precalciner and the replacement of the direct-fired kiln burner with an indirect-fired burner. Thermal efficiencies will be improved in the precalciner kiln and the amount of fuel combusted per ton of clinker produced is expected to be reduced. The change to a precalciner kiln will lower the temperature of the exhaust gases used to dry the raw materials prior to the raw mill, so a shaft dryer incorporating an additional air heater is added to the design as noted above. Besides the changes to the coal handling system described above, other proposed revisions to the raw material and clinker handling systems are:

- Removal from the design of three dust collectors (2D-63, 2S-07, and 2S-04), one each for the iron ore storage bin (2D-61), coal storage bin (2S-10), and coal feed conveyor (2S-03). Based on the operation of the existing cement kiln, dust collectors are not necessary for these sources.
- Use of existing storage bins for the existing cement kiln I system for flyash, lime, and filter dust feed materials. This will eliminate three sources (i.e., silos) from the design (2D-64, 2F-21, and 2D-72) and two associated flyash silo dust collectors (2D-67 and 2F-30). The currently permitted filter dust silo dust collector (2D-72) will be retained for use in controlling PM emissions from the feed system used to convey filter dust from the existing silo to the new kiln.
- Addition of a clinker storage silo (2L-05) with an associated dust collector (2L-06) and clinker storage bin (2M-15) with an associated dust collector (2M-18).
- Change to the general arrangement of cement storage silos to utilize existing lime silos and dust collectors from the existing cement kiln for cement storage and loadout.

- Addition of one additional cement discharge hopper (2Q-38) with a related dust collector (2Q-17).
- Minor changes to the exit temperatures, flowrates, stack diameters, discharge heights, equipment numbers, and cloth areas for numerous sources as shown by underlines on Table 1-3.

These changes are reflected in the following section on emission changes and in the mechanical process flow sheets attached to the permit application forms.

1.2 PROPOSED REVISIONS TO PERMITTED EMISSIONS

The proposed change in technology from the permitted gepol tower kiln to a precalciner kiln will be accompanied by an increase in kiln feed and production rates. A comparison of the changes in feed and production rates are shown below:

	Permitted Maximum Rates			Proposed Maximum Rates		
	/Hour	/Day	/Year	/Hour	/Day	/Year
Tons Preheater Feed	138.0	-	-	173.2	-	-
Tons Kiln Feed	127.0	-	-	159.4	-	-
Tons Clinker	83.0	1,992	727,080	104.2	2,500	912,500
Tons Cement	-	-	800,000	-	-	1,004,000

The high temperature combustion process used to produce cement in a kiln results in the emission of air pollutants. Table 1-1 compares the air pollutant emission estimates from the permitted gepol tower kiln to those expected for the proposed precalciner kiln. The currently permitted gepol tower kiln was subject to Prevention of Significant Deterioration (PSD) requirements for total suspended particulates (TSP), particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and carbon monoxide (CO). Other pollutants permitted to be emitted, but at levels below the PSD significant emission rates, include volatile organic compounds (VOC), mercury (Hg), beryllium (Be), lead (Pb), and sulfuric acid mist (SAM or H_2SO_4).

Emission limits for nearly all pollutants are identical to the currently permitted limits when measured as lbs per ton of clinker produced or lbs per ton of kiln feed (lb/ton). Proposed lb/ton emission limits for three pollutants, SO_2, VOC, and Be, were decreased from the permitted levels. The increase in feed and production rates associated with the proposed change in kiln technology will result in an increase in potential emissions when measured as lbs per hour (lb/hr)

or tons per year (tons/yr or tpy). The new kiln will be subject to PSD requirements for the same pollutants as the permitted kiln, namely TSP, PM_{10}, SO_2, NO_2, and CO.

Minor PM sources currently permitted are shown on Table 1-2. The currently permitted minor PM sources have total TSP/PM_{10} emissions of 68 tpy. Proposed revisions to the minor PM sources, as described above in Section 1.1, are shown on Table 1-3 as underlined values. The proposed minor PM sources will have total TSP/PM_{10} emissions of 80 tpy, an increase of 12 tpy. Like the currently permitted minor PM sources, all of the proposed minor PM sources will be controlled by dust collectors equipped with pulse-jet polyester fabric filters designed for a minimum control efficiency of 99.9%. Permit conditions requested for the proposed minor PM sources are identical to the current permit conditions; namely, the same 0.01 grains per dry standard cubic foot (gr/dscf) emission limit and compliance to be determined by USEPA Method 9 visible emission tests demonstrating visible emissions less than 5% opacity (visible emissions equal to or greater than 5% opacity shall require stack tests demonstrating compliance with the 0.01 gr/dscf emission limit).

Emissions for the proposed revisions to the second FCS kiln are described in more detail in Section 3.0 of this permit application.

1.3 REFERENCES

Florida Department of Environmental Protection (FDEP), 1995. Permit for No. 2 Cement Kiln and Associated Equipment, AC27-274892 & PSD-FL-227. November 17, 1995.

RTP Environmental Associates, Inc. (RTP), 1995a. Application to Construct a Second 600,000 Ton Per Year Cement Kiln at the Florida Crushed Stone Company Facility in Brooksville, Florida. March, 1995.

RTP, 1995b. May 10, 1995 letter from Donald F. Elias to Hamilton S. Oven (Minor PM sources and design specifications).

RTP, 1995c. July 11, 1995 letter from Donald F. Elias to Clair H. Fancy (Process flow diagrams for Gepol tower kiln and minor PM sources).

RTP, 1995d. July 17, 1995 letter from Donald F. Elias to Clair H. Fancy (Proposed permit conditions for minor PM sources).

RTP, 1995e. August 22, 1995 letter from Donald F. Elias to Clair H. Fancy (Minor PM sources and design specifications).

TABLE 1-1
EMISSIONS COMPARISON FOR FLORIDA CRUSHED STONE

POLLUTANT	PSD Sig. Emissions (tons/yr)	PERMITTED PROJECT[a]				REVISED PROJECT[b]				NET CHANGE
		lb/ton[c]	lb/hr	tons/yr	PSD?	lb/ton[c]	lb/hr	tons/yr	PSD?	tons/yr
PM/PM_{10} (kiln)	25/15	0.2	25.400	111.250	Yes/ Yes	0.2	31.875	139.613	Yes/ Yes	28.363
PM/PM_{10} (cooler)		0.1	12.700	55.620		0.1	15.938	69.806		14.186
PM/PM_{10} (minor)		-	15.519	67.973		-	18.293	80.123		12.150
SO_2	40	0.27	22.410	98.156	Yes	0.23	23.958	104.938	Yes	6.782
NO_x	40	2.8	232.400	1017.912	Yes	2.8	291.667	1277.500	Yes	259.588
CO	100	2.0	166.000	727.080	Yes	2.0	208.333	912.500	Yes	185.420
VOC	40	0.1	8.300	36.354	No	0.085	8.854	38.781	No	2.427
H_2SO_4	7	0.014	1.162	5.090	No	0.014	1.458	6.388	No	1.298
Be	0.0004	9.9E-7	8.22E-5	3.60E-4	No	8.5E-7	8.85E-5	3.88E-4	No	2.80E-5
Hg	0.1	2.4E-5	1.99E-3	8.72E-3	No	2.4E-5	2.50E-3	1.10E-2	No	2.23E-3
Pb	0.6	5.2E-4	4.32E-2	1.89E-1	No	5.2E-4	5.42E-2	2.37E-1	No	4.83E-2

[a]Permitted lb/hr and tons/yr emission rates based on 83 tons/hour of clinker production (or 127 tons/hour of kiln feed for PM/PM_{10} emissions) and 8760 hours/year of operation.

[b]Revised lb/hr and tons/yr emission rates based on 104-1/6 tons/hour of clinker production (or 159-3/8 tons/hour of kiln feed for PM/PM_{10} emissions) and 8760 hours/year of operation.

[c]lb/ton emission rates are lbs/ton of kiln feed for PM/PM_{10} and lbs/ton of clinker production for other pollutants. Reductions in the lb/ton permitted emission rates for the revised kiln are underlined.

TABLE 1-2
PERMITTED MINOR PARTICULATE SOURCES

Minor Particulate Source	Equip No.	Equip Process Rate (tons/hr)	Bag/ Vent No.	Air: Cloth Ratio	Total Cloth Area (ft^2)	-Stack Characteristics-				--Flowrates--		---Emissions---	
						Height (ft)	Diam (ft)	% Moist	Temp (°F)	ACFM	dSCFM	(lb/hr)	(tpy)
RAW MILL SYSTEM													
Iron Ore Bin	2D-61	2.0	2D-63	6:1	500	89	1.4	2-3%	100	3,000	2,772	0.238	1.04
Fly Ash Bin	2D-64	7.0	2D-67	6:1	567	124	1.7	2-3%	100	3,400	3,142	0.269	1.18
Filter Dust Bin	2D-72	25.0	2D-75	6:1	750	124	1.7	2-3%	200	4,500	3,528	0.302	1.32
Raw Meal Transport	2F-03/11	160.0	2F-14	6:1	167	30	1.1	2-3%	180	1,000	809	0.069	0.30
Lime Storage Silo	2F-21	300.0	2F-30	6:1	667	160	1.6	2-3%	200	4,000	3,136	0.269	1.18
Raw Mill Storage and Homog. Silos	2G-01	160.0	2G-12	6:1	2,833	219	3.3	2-3%	180	17,000	13,745	1.178	5.16
KILN OPERATIONS													
Kiln Feed System	2H-05/2E-66	130.0	2H-15	6:1	1,200	73	2.1	2-3%	180	7,200	5,821	0.499	2.19
FINISH MILL													
Gypsum Storage Bin	2L-14	150.0	2L-08	6:1	333	110	1.1	2-3%	70	2,000	1,953	0.167	0.73
Clinker Transport	2L-03	75.0	2L-16	6:1	333	32	1.1	2-3%	180	2,000	1,617	0.139	0.61
Belt Conveyor	2M-04	120.0	2M-08	6:1	750	40	1.7	2-3%	180	4,500	3,638	0.312	1.37
Discharge Vent	2N-02/12	15.0	2N-13	4:1	10,000	123	5.0	2-3%	200	40,000	31,360	2.688	11.77
Sepol Separator	2N-08	120.0	2N-20/23	4:1	28,750	123	8.6	2-3%	160	115,000	95,977	8.227	36.03

TABLE 1-2 (Concluded)
PERMITTED MINOR PARTICULATE SOURCES

Minor Particulate Source	Equip No.	Equip Process Rate (tons/hr)	Bag/ Vent No.	Air: Cloth Ratio	Total Cloth Area (ft^2)	-Stack Characteristics-				--Flowrates--		---Emissions---	
						Height (ft)	Diam (ft)	% Moist	Temp (°F)	ACFM	dSCFM	(lb/hr)	(tpy)
CEMENT HANDLING													
Cement Storage Silos A	2Q-01A/20	120.0	2Q-15A	6:1	770	203	1.7	2-3%	200	4,620	3,622	0.310	1.36
Cement Storage Silos B	2Q-01B/20	120.0	2Q-15B	6:1	770	203	1.7	2-3%	200	4,620	3,622	0.310	1.36
Silo Discharge Hopper	2Q-08	540.0	2Q-17	6:1	600	30	1.5	2-3%	180	3,000	2,426	0.208	0.91
COAL HANDLING													
Coal Transport Conveyor	2S-03	100.0	2S-04	4.5:1	444	5	1.1	2-3%	70	2,000	1,953	0.167	0.73
Coal Storage Bin	2S-10	100.0	2S-07	4.5:1	444	5	1.1	2-3%	70	2,000	1,953	0.167	0.74
											TOTALS:	15.519	67.973

TABLE 1-3
PROPOSED MINOR PARTICULATE SOURCES

Minor Particulate Source	Equip No.	Equip Process Rate (tons/hr)	Bag/ Vent No.	Air: Cloth Ratio	Total Cloth Area (ft^2)	-Stack Characteristics-				--Flowrates--		---Emissions---	
						Height (ft)	Diam (ft)	% Moist	Temp (°F)	ACFM	dSCFM	(lb/hr)	(tpy)
RAW MILL SYSTEM													
Iron Ore Bin	*---------- Dust Collector Deleted from Design ----------*												
Fly Ash Bin	*Proposed Kiln Feed Revised to Utilize Existing Kiln Systems - Dust Collector No Longer Required*												
Filter Dust Bin Transport	2E-67	24	2D-75	6:1	750	102	1.7	2-3%	200	4,500	3,528	0.302	1.32
Raw Meal Transport	2F-02/11	234	2F-14	6:1	500	30	1.4	2-3%	180	3,000	2,426	0.208	0.91
Lime Storage Silo	*---------- Source (silo) and Dust Collector Deleted from Design ----------*												
Raw Mill Storage and Homog. Silos	2G-01	170	2G-12	6:1	2,833	219	3.3	2-3%	180	17,000	13,745	1.178	5.16
KILN OPERATIONS													
Kiln Feed System	2H-05/2E-66	170	2H-15	6:1	1,200	73	2.1	2-3%	180	7,200	5,821	0.499	2.19
FINISH MILL													
Gypsum Storage Bin	2L-14	150	2L-08	6:1	667	110	1.6	2-3%	95	4,000	3,729	0.320	1.40
Clinker Transport	2L-03	100	2L-16	6:1	667	32	1.6	2-3%	240	4,000	2,957	0.253	1.11
Clinker Storage Silo (NEW)	2L-05	100	2L-06	6:1	667	203	1.6	2-3%	240	4,000	2,957	0.253	1.11
Clinker Bin (NEW)	2M-15	114	2M-18	6:1	1,500	110	2.4	2-3%	180	9,000	7,277	0.624	2.73
Belt Conveyor	2M-04	120	2M-09	6:1	1,167	15	2.1	2-3%	180	7,000	5,660	0.485	2.12
Discharge Vent	2N-02/08	195	2N-13	4:1	10,000	123	5.0	2-3%	212	40,000	30,800	2.640	11.56
Sepol Separator	2N-08	195	2N-20/23	4:1	28,750	123	8.6	2-3%	160	115,000	95,977	8.227	36.03

Proposed Revisions are underlined.

TABLE 1-3 (Concluded)
PROPOSED MINOR PARTICULATE SOURCES

Minor Particulate Source	Equip No.	Equip Process Rate (tons/hr)	Bag/ Vent No.	Air: Cloth Ratio	Total Cloth Area (ft²)	-Stack Characteristics-				--Flowrates--		---Emissions---	
						Height (ft)	Diam (ft)	% Moist	Temp (°F)	ACFM	dSCFM	(lb/hr)	(tpy)
CEMENT HANDLING													
Cement Storage Silos A	2Q-18	150	2Q-13	6:1	1,200	203	2.1	2-3%	180	7,200	5,821	0.499	2.19
Cement Storage Silos B	2Q-18	150	2Q-14	6:1	1,200	203	2.1	2-3%	180	7,200	5,821	0.499	2.19
Silo Discharge Hopper A	2Q-28	540	2Q-16	6:1	500	30	1.4	2-3%	180	3,000	2,426	0.208	0.91
Silo Discharge Hopper B (NEW)	2Q-38	540	2Q-17	6:1	500	30	1.4	2-3%	180	3,000	2,426	0.208	0.91
COAL HANDLING													
Coal Transport Conveyor	---------- *Dust Collector Deleted from Design* ----------												
Coal Storage Bin	---------- *Dust Collector Deleted from Design* ----------												
Coal Mill (NEW)	2S-15	18.0	2S-17/19	4.5:1	5,333	40	3.9	2-3%	150	24,000	20,358	1.745	7.64
Coal Dust Bin (NEW)	2S-20	16.5	2S-21	4.5:1	444	40	1.1	2-3%	150	2,000	1,697	0.145	0.64
											TOTALS:	18.293	80.12

Proposed Revisions are underlined.

2.0 AIR QUALITY REGULATIONS

This section will discuss revisions to Section 2.0 Air Quality Regulations contained in the original air permit application for the Unit II kiln.

2.1 SUMMARY OF APPLICABLE REGULATIONS

This proposed modification to the kiln has been reviewed for compliance with applicable regulations, as detailed in Section 2.1 of the original application for the Unit II kiln. The discussion in that document concerning applicability of Federal and State regulations to that project remains essentially unchanged for this modification, except as described in the following comments:

This proposed modification will result in emissions of total suspended particulate (TSP)/particulate matter less than 10 microns (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_x), and carbon monoxide (CO) at levels exceeding the Prevention of Significant Deterioration (PSD) significant emission rates. Proposed emissions of volatile organic compounds (VOC), sulfuric acid (H_2SO_4), beryllium (Be), mercury (Hg), and lead (Pb) will not exceed PSD significant emission rates. Table 1-1 compares the original permitted emission levels to the proposed kiln emission levels. The proposed kiln is subject to PSD requirements for the same pollutants as the original Unit II kiln permit.

References were made in the original permit application (Section 2.1.5) to facility applicability to the proposed Enhanced Monitoring Rule (40 CFR Part 64). The United States Environmental Protection Agency (USEPA) significantly modified this rule. The modification, known as the Compliance Assurance Monitoring rule, is currently in the proposal stage. Florida Crushed Stone will implement the applicable requirements of the final rule as necessary.

References were also made in the original permit application (Section 2.1.6) to the facility applicability to 62-296.310 Florida Administrative Code (F.A.C.), *General Particulate Emissions Limiting Standards*. This rule has been repealed and the requirements of the rule are now included in 62-296.320 F.A.C., *General Pollutant Emissions Limiting Standards*.

The Florida Department of Environmental Protection (FDEP) published a document titled "Title V Core List," on March 25, 1996. This is a list of rules and regulations to which all Title V

sources are presumptively subject. The following regulations from the Core List, were not referenced in the original permit application, would be applicable to this modification:

62-4 F.A.C.	Permits
62-103 F.A.C.	Rules of Administrative Procedure
62-204 F.A.C.	Air Pollution Control General Provisions
62-213 F.A.C.	Operation Permits for Major Sources of Air Pollution

2.2 EXISTING PERMITS

A list of equipment currently operating at the facility, and the associated operating or construction permit number, is provided in Table 2-1, updated from Table 2-2 in the original permit application.

2.3 CONCLUSIONS

The original permit application contained a detailed discussion of applicable regulations. Except for the clarifying comments in this section, the discussion in that original application remains unchanged. A list of applicable regulations is contained in the FDEP *Application For Air Permit - Long Form* appended to this document.

2.4 REFERENCES

Florida Department of Environmental Protection (FDEP), 1995. Permit for No. 2 Cement Kiln and Associated Equipment, AC27-274892 & PSD-FL-227. November 17, 1995.

RTP Environmental Associates, Inc. (RTP), 1995a. Application to Construct a Second 600,000 Ton Per Year Cement Kiln at the Florida Crushed Stone Company Facility in Brooksville, Florida. March, 1995.

RTP, 1995b. May 10, 1995 letter from Donald F. Elias to Hamilton S. Oven.

RTP, 1995c. July 11, 1995 letter from Donald F. Elias to Clair H. Fancy (permitting history summary).

RTP, 1995d. August 22, 1995 letter from Donald F. Elias to Clair H. Fancy.

TABLE 2-1
EXISTING FCS PERMITS

Operating or Construction Permit #	Equipment Description
AC27-274892	Cement Plant Kiln, (Unit II) and Associated Equipment
A027-231888A	Cement Plant Kiln, Clinker Cooler, Raw Mill and Limestone Dryer
PA 82-17*	Power Plant
AO27-162737	Fly Ash Bin (D-75)
AO27-162738	Fly Ash Bin (D-67)
AO27-162739	Raw Mill Transfer Bin (F-14)
AO27-162741	Blending Silo (G-12)
AO27-162742	Kiln Feed Surge Bin (H-15)
AO27-162744	Kiln Feed Surge Bin (D-63)
AO27-162746	Clinker Silo (L-06) & Finish Mill Silo (L-07)
AO27-162747	Gypsum and Limestone Bins (L-08)
AO27-162748	Silo Discharge (Q-15)
AO27-162749	Finish Mill (N-13)
AO27-162750	Cement Silo Discharge (Q-17)
AO27-162751	Two Cement Silos (Q-15)
AO27-186145	Lime Silo Discharge System (Z-17)
AO27-186146	Lime Storage Bins (Z-15)
AO27-189351	Clinker Receiving System
AO27-207331	Quick Lime Storage Silo and Truck Loadout System
AO27-208722	Finish Mill Feed Belt With Baghouse
AO27-199744	Conveyor Belt With Baghouse
AO27-228926	Cement Railcar Loadout System
AO27-231257	Fly Ash/Equilibrium Catalyst Storage Silo (D-67)
AO27-237401	Cement Railcar Loadout System
AO27-162740	Lime Rock Bin (D-38)
AO27-162743	Contaminated Fly Ash & Filter Dust Bin (D-31)
AO27-167363	Coal Handling and Storage
AO27-186140	Limestone Screening System (D-39)
AO27-186141	Limestone Fines Storage Bin (D-13)
AO27-186143	Limedust Storage Bin (Z-31)
AO27-186144	Limestone Dryer Discharge Transfer Point (D-46)
AC27-192927	Limestone Dryer Discharge Transfer Point (D-46)
AC27-189081	Quick Lime Storage Silo and Truck Loadout System
AC27-196812	Two Quicklime Drum Coolers
AO27-187370	Lime Bagging Operation
AO27-187371	Bulk Truck Loadout Operation
AO27-177928	Lime Hydrator

* Case number for power plant certification.

3.0 AIR POLLUTANT EMISSIONS ESTIMATES

This section provides emissions estimates and documentation for the proposed new kiln technology. The previous application provided substantial documentation that, in general, is not changing. The Unit II kiln flue gas flows will remain separate from the flue gas flows of the Unit I kiln and the FCS power plant. The component operations of the Unit II kiln will remain essentially the same with some small variations. These variations were discussed previously in Section 1.0. Since the recent submission of the previous application, no new data is available regarding emissions from preheater/precalciner kilns. Thus, information from the previous application will not be repeated here, but referenced where necessary. The previous application identified emissions from three areas:

- Kiln and clinker cooler;
- Raw feed and finished product processes (minor PM sources); and
- Automobile, truck, and rail traffic (secondary sources).

3.1 KILN AND CLINKER COOLER

3.1.1 Emissions Sources

FCS is proposing to revise the kiln technology from a preheater kiln to a preheater/precalciner kiln. Thermal efficiency and material productivity will be increased by adding a calciner vessel at the base of the preheater tower (i.e., the preheater/precalciner process). A substantial amount of fuel is used in the precalciner (up to 40% of the thermal energy required in the rotary kiln). This allows for better heat transfer and heat utilization and reduces the time necessary to form clinker in the rotary kiln. As an example of the improved heat efficiency, the kiln designer expects the heat consumption for the preheater/precalciner system to be approximately 3.12 MMBTU/per ton of clinker (MMBTU/ton) versus 3.65 MMBTU/ton for the previous preheater kiln design.

As a result of the improved thermal efficiency, less latent heating is available to dry the raw materials. Hence, an additional heat source is necessary to dry raw materials upstream of the precalciner/preheater. This "shaft dryer" is a cylindrical drum that utilizes no moving parts.

Raw materials are moved countercurrent to air heated by an external combustion source. Thus, hot gases enter the dryer at the bottom of the shaft and are drawn upwards and out of the top as moisture laden materials move in the opposite direction within the gas flow. The velocity of the hot gas stream is maintained at a rate which allows for partial air suspension of the material being dried. The oversized material exits through the bottom of the shaft dryer while the main portion exits through the top of the dryer with the hot gases. Separation of the entrained material is made by baghouses positioned downstream of the shaft dryer.

Thus, the revision in technology will add two primary emissions sources, the shaft dryer and the precalciner. Both of these new sources are combustion sources that are integral in the preparation of the raw material feed and the cement clinker production. The shaft dryer contains a 30 MMBTU/hour combustion source, to be fired on No. 2 light fuel oil. The combined gross heat input to the precalciner and the kiln is 325 MMBTU/hour, to be fired on coal, natural gas, and/or tires or tire-derived fuel (start-up with natural gas, fuel oil, and/or on-spec used oil). Flue gases and emissions from each of the combustion sources (shaft dryer, precalciner, and kiln) do not have separate emission points, but instead will be intermingled to dry raw material feed prior to exhausting through the Unit II baghouse to the stack. Also, the bypass system, which removes volatile constituents that might condense and cause scaling, removes up to 15% of the air from the base of the precalciner. This air is vented through a separate baghouse and then exhausted to the main Unit II stack. Thus, emissions from these three combustion sources, as well as the bypass system, will be dealt with as a combined single stack emission point in defining permit emission limits.

3.1.2 Emissions Controls

Emissions controls for the kiln will not change from that previously permitted for the Unit II kiln. As described in detail in the original permit application, control of cement kiln emissions is achieved by three means: the alkaline environment of the flue gases; the fabric filter baghouse; and the high temperature combustion operation of the cement kiln. Acid gases formed by the oxidation of precursors in the fuel and raw materials during the combustion process are

controlled by the alkaline nature of the cement kiln flue gases. Because of the basic reverse flow of kiln materials and combustion gases (combustion gases used to preheat the raw materials in the raw mill and preheater), most acid gases will be absorbed in the raw feed and retained by the final clinker product. Particulate matter (PM) will be controlled by the two reverse-air fiberglass fabric filter baghouses (main system and bypass system) which will be designed to achieve a minimum control efficiency (by weight) of 99.9%. Additional absorption of acid gases remaining in the flue gas at the baghouses may also occur on the unreacted alkaline by-products in the filter cake which coats the fabric filter bags. Also, other minor pollutants such as lead (Pb), mercury (Hg), and beryllium (Be) will be controlled to some degree by the fabric filter baghouses.

Nitrogen oxides (NO_x) are formed in the combustion process due to the high temperature oxidation of atmospheric nitrogen (thermal NO_x formation) and combustion of fuels containing nitrogen (fuel NO_x formation). The preheater/precalciner kiln design has shown the ability to produce low emissions of NO_x in comparison to other cement kiln designs. Emissions of other combustion-related pollutants, such as VOC and CO, result from incomplete combustion. Cement kilns typically do not have high emissions of VOC or CO due to the extremely high temperatures required to produce cement clinker (2500-3000°F). These high temperatures ensure the nearly complete combustion of VOC and CO.

3.1.3 Revised Kiln Emission Rates

Emission rates for the proposed change in kiln technology are based primarily on the emission limits recently determined by the Florida Department of Environmental Protection (FDEP) to represent Best Available Control Technology (BACT) for the permitted Unit II kiln. The BACT determinations are discussed in Section 4.0 of this application and the final permit issued by the FDEP. Emission estimates for existing sources at the Florida Crushed Stone facility (power plant and cement kiln Unit I) were contained in the original permit application. Table 1-1 contains revised emissions estimates for the Prevention of Significant Deterioration (PSD) pollutants. Table 3-1 contains revised emissions estimates for toxic air pollutants.

The emission factors (in pounds per ton clinker or pounds per ton kiln feed) presented in Table 1-1 for TSP, PM_{10}, NO_x, CO, H_2SO_4, Hg, and Pb are those established by the FDEP in the final permit for the Unit II kiln, dated November 17, 1995. Kiln emissions, in pounds per hour (lbs/hr) and tons per year (tons/yr), were revised for the increase in production rates due to the new kiln technology. Based on the change in technology and review of available data, FCS is able to modify the emission factors for three pollutants, SO_2, VOC, and Be. All were adjusted downward to maintain uniformity with the conclusions presented in the previous application.

Sulfur Dioxide

The SO_2 emission limit of 0.27 pounds per ton (lbs/ton) of clinker was determined by FDEP to represent BACT in the final air construction permit for the permitted FCS Unit II kiln. This determination was based on letter correspondence from Sholtes and Koogler regarding the expected performance of the FCS Unit I kiln. FCS is proposing to reduce the SO_2 emission level to 0.23 lbs/ton clinker. FCS anticipates better SO_2 control with the preheater/precalciner design over the previous preheater design. In addition, test data from similar facilities have shown SO_2 emission values consistently attainable at this level. Thus, FCS proposes a lower SO_2 emission level (0.23 lbs/ton clinker) than that previously specified by FDEP as BACT.

Volatile Organic Compounds

The VOC emission limit of 0.1 lbs/ton of clinker was established by FDEP in the final air construction permit and BACT determination for the permitted FCS Unit II kiln. FCS is proposing to reduce this value to 0.085 lbs/ton of clinker so that the proposed increase in plant throughput will result in VOC emissions less that the PSD significant threshold value. A recent review of the BACT/LAER Clearinghouse and other USEPA databases did not present any new data that would require changing the previous emission factor determinations. FCS does not anticipate difficulty in achieving the lower emission value due to the VOC control inherent in the high temperature operation of the cement kiln. Thus, FCS proposes to reduce the VOC emission factor to 0.085 lbs/ton of clinker.

Beryllium

The beryllium emission limit of 9.9 x 10^{-7} lbs/ton of clinker produced was established by the FDEP in the final air construction permit and BACT determination for the permitted FCS Unit II kiln based on the PSD significant emission rate. FCS is proposing to reduce this value to 8.5 x 10^{-7} lbs/ton of clinker produced. This value is being reduced to ensure that the proposed increase in plant throughput will result in Be emissions less than the PSD significant emission rate. A review of the updated BACT/LAER Clearinghouse and other USEPA databases did not present any new data that would require changing the previous emission factor determinations. FCS does not anticipate difficulty in achieving the lower emission value due to the high control efficiency expected with the plant baghouse. Thus, FCS proposes to reduce the Be emission factor to 8.5 x 10^{-7} lbs/ton of clinker produced.

3.2 MINOR PM SOURCES

Some changes have been made in the minor PM sources and emission rates as dictated by the design change from a preheater kiln to a preheater/precalciner kiln as described in Section 1.0. Like the currently permitted minor PM sources, all of the proposed minor PM sources will be controlled by dust collectors equipped with pulse-jet polyester fabric filters designed for a minimum control efficiency of 99.9%. Permit conditions requested for the proposed minor PM sources are identical to the current permit conditions; namely, the same 0.01 grains per dry standard cubic foot (gr/dscf) emission limit and compliance to be determined by USEPA Method 9 visible emission tests demonstrating visible emissions less than 5% opacity (visible emissions equal to or greater than 5% opacity shall require stack tests demonstrating compliance with the 0.01 gr/dscf emission limit).

3.3 SECONDARY SOURCES

Automobile, truck, and rail traffic will increase with the increase in plant capacity proposed with this modification. The previous application provided estimates of automobile, truck, and rail

traffic, based on information included in the Power Plant Siting Act (PPSA) application. Previously, it was assumed that the addition of the Unit II kiln, originally proposed as identical to the existing Unit I kiln, would effectively double the automobile, truck, and rail traffic assumed in the PPSA. The proposed modification to construct a preheater/precalciner kiln will result in an increase in throughput of roughly 25% over that previously proposed for a preheater kiln identical to the existing Unit I. Thus, it would be reasonable to estimate that emissions from automobile, truck, and rail traffic would increase roughly 25% over that determined for the previous kiln design. Total emissions from these mobile sources for activities associated with both kilns would then increase to:

- Particulate Matter - 2.7 tpy
- Carbon Monoxide - 15.1 tpy
- Volatile Organic Compounds - 3.8 tpy
- Nitrogen Oxides - 10.4 tpy
- Sulfur Dioxide - 1.6 tpy

As stated previously, these emissions are minor relative to facility stack emissions.

3.4 EMISSIONS SUMMARY

As stated initially, the proposed modification will increase total facility emissions due to an increase in production. However, FCS is proposing the same or lower emission factors for pollutants specified in the previous permit application and final permit. Estimated emissions of PSD significant pollutants are provided in Table 1-1 and emissions estimates of toxic pollutants are listed in Table 3-1.

3.5 REFERENCES

Florida Department of Environmental Protection (FDEP), 1995. Permit for No. 2 Cement Kiln and Associated Equipment, AC27-274892 & PSD-FL-227. November 17, 1995.

RTP Environmental Associates, Inc. (RTP), 1995a. Application to Construct a Second 600,000 Ton Per Year Cement Kiln at the Florida Crushed Stone Facility in Brooksville, Florida. March, 1995.

RTP, 1995b. May 10, 1995 letter from Donald F. Elias to Hamilton S. Oven (HAP emissions).

RTP, 1995c. July 11, 1995 letter from Donald F. Elias to Clair H. Fancy (secondary emissions).

RTP, 1995d. August 22, 1995 letter from Donald F. Elias to Clair H. Fancy (revised HAP emissions, secondary emissions).

United States Environmental Protection Agency (USEPA), 1996. August 8, 1996 search of RACT/BACT/LAER Clearinghouse (main and transient databases) on the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) Bulletin Board System.

USEPA, 1995. Compilation of Air Pollutant Emission Factors, Fifth Edition. January, 1995

USEPA, 1994. Emission Factor Documentation for AP-42 Section 11.6, Portland Cement Manufacturing, Final Report. May, 1994.

TABLE 3-1
AIR TOXIC EMISSION FACTORS
For Volatile Organic Compounds

NO.	COMPOUND	EMISSION FACTOR[a] (lbs/ton Clinker)	EMISSION FACTOR[a] (lbs/hr)	ANNUAL EMISSIONS[a] (tons/year)	SOURCE[b]
1.	Benzene	1.9×10^{-2}	1.98	8.67	(1)
2.	Biphenyl	7.8×10^{-6}	8.1×10^{-4}	0.0036	(1)
3.	Carbon disulfide	2.5×10^{-3}	0.26	1.14	(2)
4.	Chlorobenzene	3.9×10^{-4}	0.04	0.18	(2)
5.	Chrysene	2.0×10^{-7}	2.1×10^{-5}	9.1×10^{-5}	(1)
6.	Ethylbenzene	1.8×10^{-4}	0.02	0.082	(2)
7.	2-Ethyl hexyl phthalate	2.1×10^{-4}	0.02	0.096	(1)
8.	Formaldehyde	5.4×10^{-4}	0.06	0.25	(1)
9.	Hexane	5.7×10^{-5}	0.006	0.026	(3)
10	Hydrogen chloride[c]	1.0×10^{-2}	1.04	4.56	(3)
11.	Methyl chloride	3.6×10^{-4}	0.04	0.16	(2)
12	Methylene chloride	7.8×10^{-4}	0.08	0.36	(1)
13	Methyl ethyl ketone	3.0×10^{-5}	0.003	0.014	(1)
14.	Naphthalene	3.9×10^{-3}	0.41	1.78	(1)
15.	Phenol	1.1×10^{-4}	0.01	0.05	(1)
16.	Styrene	5.2×10^{-4}	0.054	0.24	(2)
17.	2,3,7,8-TCDD[d]	6.5×10^{-10}	6.8×10^{-8}	3.0×10^{-7}	(2)
18.	Toluene	2.4×10^{-3}	0.25	1.095	(2)
19.	Trichloroethene	4.3×10^{-6}	4.5×10^{-4}	2.0×10^{-3}	(1)
20.	1,1,1-Trichloroethane	2.4×10^{-5}	2.5×10^{-2}	0.11	(2)
21.	Xylenes	6.9×10^{-4}	0.07	0.31	(2)
TOTAL				**14.47**	

[a] Values revised to reflect increase in clinker production to 104.17 tons per hour.

[b] (1) Emission data from the USEPA *Emission Factor Documentation for AP-42, Section 11.6 - Portland Cement Manufacturing*. May, 1994.
(2) Emission test data of FCS Unit I kiln, power plant, and lime plant operating simultaneously.
(3) Emission test data of cement plant similar to FCS Unit I.

[c] HCl is not a Volatile Organic Compound.

[d] Total penta through octa dioxin and furan emissions as 2,3,7,8-TCDD equivalents.

TABLE 3-1 (Concluded)
AIR TOXIC EMISSION FACTORS
For Metals

NO.	COMPOUND	EMISSION FACTOR[a] (lbs/ton Clinker)	EMISSION FACTOR (lbs/hr)	ANNUAL EMISSIONS[a] (tons/year)	SOURCE[b]
1.	Arsenic	4.8×10^{-5}	0.005	0.022	(1)
2.	Beryllium	8.5×10^{-7}	8.85×10^{-5}	3.88×10^{-4}	(2)
3.	Cadmium	6.0×10^{-5}	6.25×10^{-3}	0.027	(1)
4.	Chromium	2.5×10^{-4}	0.026	0.114	(2)
5.	Cobalt	6.0×10^{-5}	6.25×10^{-3}	0.027	(1)
6.	Lead	5.2×10^{-4}	0.054	0.24	(1)
7.	Manganese	1.1×10^{-3}	0.114	0.50	(2)
8.	Mercury	2.4×10^{-5}	2.5×10^{-3}	0.011	(1)
9.	Nickel	2.4×10^{-4}	0.025	0.11	(1)
10	Selenium	2.6×10^{-4}	0.027	0.12	(2)
TOTAL (VOCs and METALS)				**1.17**	

[a] Values revised to reflect increase in clinker production to 104.17 tons per hour.

[b] (1) Emission test data of FCS Unit I kiln, power plant, and lime plant operating simultaneously.

(2) Emission data from the USEPA *Emission Factor Documentation for AP-42, Section 11.6 - Portland Cement Manufacturing*, May, 1994.

4.0 BEST AVAILABLE CONTROL TECHNOLOGY

The previous application and subsequent submittals provide extensive analyses supporting the determinations of Best Available Control Technology (BACT) for the originally proposed Florida Crushed Stone (FCS) Unit II cement kiln. The Florida Department of Environmental Protection (FDEP) compiled this and other available data in establishing the BACT pollutant emission levels presented in the final air permit to construct the Unit II kiln. Thus, the information previously presented is included by reference.

The kiln design modification proposed herein will have little effect on the previous BACT determination for the kiln. In addition, the BACT/Lowest Achievable Emission Rate (LAER) Clearinghouse and other United States Environmental Protection Agency (USEPA) databases were reviewed for more recent data than that available at the time of the permitting. Review of this data did not indicate that any significant changes in the proposed emission values or proposed control technologies for the FCS facility were warranted.

The proposed increase in throughput resulting from the design change will result in increased facility emissions. However, the pollutants exceeding Prevention of Significant Deterioration (PSD) significant emission rates will not change from the previous application. The facility will have PSD significant emissions for sulfur dioxide (SO_2), total suspended particulates (TSP), particulate matter less than 10 microns (PM_{10}), carbon monoxide (CO), and nitrogen oxides (NO_x). The facility will not have PSD significant emissions for volatile organic compounds (VOC), lead (Pb), mercury (Hg), or sulfuric acid (H_2SO_4). Thus, no new analysis for PSD significant pollutants will be necessary for the modification. Table 1-1 lists the PSD pollutants compared to the PSD significant emission rates.

4.1 RECENT BACT DETERMINATIONS

Two facilities appear to have been updated in the USEPA Technology Transfer Network (TTN) BACT/LAER database. Table 4-1 presents the facilities and recent determinations. These are the National Cement Company of California and the Great Star Cement Corporation of Nevada. As can be seen, it appears that no change has occurred to what is considered BACT since FDEP approval of the original permit application for cement kiln Unit II.

4.2 PROPOSED BACT

The proposed BACT for the new kiln design will not change from that proposed in the previous application. BACT control was defined for groups of air pollutants with similar formation mechanisms:

- Combustion Products (e.g., SO_2, NO_x, and PM). Controlled generally by good combustion of clean fuels, reactions with clinker and raw materials, and removal in the baghouse flue gas control equipment.
- Products of Incomplete Combustion (e.g., CO and VOC). Control is largely achieved by proper combustion techniques and the high temperatures necessary for cement production.
- Emissions from materials handling, conveyance, and storage (primarily PM). Controlled by fabric filters and good operating practices.

In addition, the control of "non-regulated" air pollutants is considered by establishing a more stringent BACT limit on a "regulated" pollutant (i.e., PM, SO_2, etc.) that would be controlled in the same manner.

4.3 PROPOSED BACT EMISSION LEVELS

Table 4-2 provides the proposed BACT emission levels for the PSD significant pollutants as excerpted from Table II of the existing permit and updated as described in Section 3.0. FCS considers the proposed NO_x BACT emission limit of 2.8 pounds per ton (lbs/ton) clinker to be an extremely aggressive NO_x standard that very few plants have demonstrated the ability to meet. Furthermore, existing data of facilities emitting NO_x at these levels has been shown to be of questionable quality. FCS has proposed to change the kiln technology to a type that typically exhibits lower NO_x emissions, but there is still risk associated with this type of kiln and the feed materials used at FCS. Thus, FCS considers it imperative to have at least eighteen (18) months after initiating commercial operation to optimize facility operations in order to meet the specified NO_x permit limit.

4.4 REFERENCES

Florida Department of Environmental Protection (FDEP), 1995. Permit for No. 2 Cement Kiln and Associated Equipment, AC27-274892 & PSD-FL-227. November 17, 1995.

RTP Environmental Associates, Inc. (RTP), 1995a. Application to Construct a Second 600,000 Ton Per Year Cement Kiln at the Florida Crushed Stone Facility in Brooksville, Florida. March, 1995.

RTP, 1995b. May 10, 1995 letter from Donald F. Elias to Hamilton S. Oven..

RTP, 1995c. July 11, 1995 letter from Donald F. Elias to Clair H. Fancy.

RTP, 1995d. August 22, 1995 letter from Donald F. Elias to Clair H. Fancy.

United States Environmental Protection Agency (USEPA), 1996. August 8, 1996 search of RACT/BACT/LAER Clearinghouse (main and transient databases) on the Office of Air Quality Planning and Standards (OAQPS) Technology Transfer Network (TTN) Bulletin Board System.

USEPA, 1995. Compilation of Air Pollutant Emission Factors, Fifth Edition. January, 1995.

USEPA, 1994. Emission Factor Documentation for AP-42 Section 11.6, Portland Cement Manufacturing, Final Report. May, 1994.

TABLE 4-1
USEPA BACT/LAER INFORMATION DATABASE SEARCH

FACILITY	STATE	PERMIT DATE	PROCESS	THRUPUT	UNITS	POLLUTANT	EMISSIONS	UNITS	EQUIPMENT	PROCESS MODIFICATION
National Cement Co.	CA	09/05/95[a]	Kiln	340	MMBTU/hr	SO_x	3.4	lbs/ton clinker	N/A	Precalciner Addition
Great Star Cement	NV	10/24/95[b]	Kiln Calcining	1.6	Million Tons kiln feed/yr	PM_{10}	23.7	lbs/hr	Baghouse @ 0.015 gr/dscf efficiency	
Great Star Cement	NV	10/24/95[b]	Kiln/Clinker Cooler	1.6	Million Tons kiln feed/yr	NO_x	3.1	lbs/ton clinker	SNCR @ 50% efficiency	
Great Star Cement.	NV	10/24/95[b]	Kiln/Clinker Cooler	1.6	Million Tons kiln feed/yr	SO_2	0.416	lbs/ton clinker	Coal - 1% sulfur @ 90% efficiency	
Great Star Cement	NV	10/24/95[b]	Kiln/Clinker Cooler	1.6	Million Tons kiln feed/yr	CO	5.67	lbs/ton clinker	Good Combustion	
Great Star Cement	NV	10/24/95[b]	Clinker Cooler	1.6	Million Tons kiln feed/yr	PM_{10}	21	lbs/hr	Baghouse @ 0.015 gr/dscf efficiency	

NOTE: SO_2 = Sulfur Dioxide; NO_x = Nitrogen Oxides; SO_x = Sulfur Oxides; PM_{10} = Particulate matter with a mean aerodynamic diameter less than 10 microns; CO = Carbon Monoxide; lb/hr = pounds per hour; lbs/ton = pounds per ton; MMBTU = Million British Thermal Units

[a]Last Update March 25, 1996.
[b]Last Update February 27, 1996.

SOURCE: USEPA BACT/LAER Information System (BLIS) Database

TABLE 4-2

PROPOSED BACT EMISSION LEVELS
MAIN STACK

POLLUTANT	BACT EMISSION LIMIT	
	lbs/ton clinker	lbs/ton dry feed
PM/PM_{10} (kiln)	0.306	0.200
PM/PM_{10} (cooler)	0.153	0.100
SO_2	0.230	0.150
NO_x*	2.800	1.830
CO	2.000	1.307
VOC	0.085	0.056
H_2SO_4	0.014	0.009
Beryllium	8.50E-07	5.56E-07
Mercury	2.40E-05	1.57E-05
Lead	5.20E-04	3.40E-04

Note: * FCS proposes to have up to 18 months after start-up of commercial operation to achieve this standard.

5.0 EXISTING AIR QUALITY

5.1 AMBIENT AIR QUALITY STANDARDS

Ambient air quality standards (AAQS) have been established for six criteria pollutants: sulfur dioxide (SO_2); nitrogen dioxide (NO_2); carbon monoxide (CO); particulate matter less than 10 microns in aerodynamic diameter (PM_{10}); lead (Pb); and ozone (O_3). The PM_{10} AAQS recently replaced AAQS for total suspended particulates (TSP), so both pollutants are considered. The AAQS are discussed and presented in the original air permit application. There have been no changes to the AAQS presented in the original permit application.

5.2 AMBIENT MONITORING SITES/MEASUREMENTS

Existing air quality can be evaluated by comparing ambient pollutant measurements to the AAQS. Existing air quality in the original permit application was generally based on 1991 through 1993 ambient pollutant measurements. Two complete years (1994 and 1995) of air quality data have become available since the original permit application was submitted. Also, PM_{10} concentration measurements at four locations in Hernando County were initiated in early (January or February) 1995. Table 5-1 shows the three new PM_{10} monitoring sites in Hernando County (the fourth PM_{10} monitor is located at the existing SO_2 monitoring site -- all previously existing monitoring sites in the project region were summarized in the original permit application). Table 5-2 shows the most recent three years of monitoring data (1993-1995) for the monitoring sites considered to be representative of the project location. These monitoring sites provide representative SO_2, TSP, and PM_{10} baseline data based on Hernando County measurements and O_3 baseline data based on Pasco County measurements.

Monitoring data for 1993 through 1995 are not available from nearby monitoring sites for NO_2, CO, and lead. In the original permit application, representative baseline concentrations for these pollutants were based on maximum ambient concentrations measured at a monitoring site in extreme northern Pinellas County (Tarpon Springs, 4380-002) during 1989-1991 (monitoring for these pollutants was discontinued in May or June 1992). These historic NO_2, CO, and lead data are considered by the Department to be adequate for purposes of this application (personal communication, Cleve Holladay, Bureau of Air Regulation, July 22, 1996). Monitoring data for each individual year of 1989-1992 at this monitoring site were shown in the original permit application.

Representative monitoring data for the project site are shown on Table 5-3. As can be seen, maximum representative ambient concentrations are less than all the applicable AAQS. Existing air quality, based on maximum Pasco County air quality measurements, are 79% of the O_3 AAQS. This is a conservative estimate of baseline O_3 air quality for the project site since maximum O_3 concentrations would be expected to be less in Hernando County. Maximum ambient TSP concentrations measured anywhere in Hernando County during 1995 are about one-half of the TSP AAQS. For all other pollutants, maximum ambient concentrations representative of the project site are less than 40% of the applicable AAQS.

5.3 ATTAINMENT STATUS

Hernando County is designated as attainment or unclassifiable (presumed to be in attainment) for all criteria pollutants. All of Florida is considered to be in attainment with the national AAQS for TSP, PM_{10}, SO_2, CO, and NO_2. Since the original permit application was submitted, the Tampa metropolitan region (Pinellas and Hillsborough Counties) has been redesignated from a marginal nonattainment area to a maintenance (i.e., attainment) area for O_3. Also since the original permit application was submitted, an area considered by the Department (but not USEPA) to be nonattainment for lead in Hillsborough County has been redesignated a maintenance (i.e., attainment) area. The entire state of Florida is now considered to attain the O_3 and lead AAQS. There is also a TSP maintenance area in Hillsborough County. The nearest boundaries of these O_3, Pb, and TSP maintenance areas are 45, 64, and 58 kilometers, respectively. A more complete description of attainment designations is contained in the original air permit application.

5.4 REFERENCES

Code of Federal Regulations, Title 40, Parts 50 and 81.

Florida Administrative Code, Chapter 62-204.

Florida Department of Environmental Protection (FDEP). ALLSUM Computer Report for 1993. Printed 02/29/96.[a]

FDEP. ALLSUM Computer Report for 1994. Printed 02/29/96.[a]

FDEP. ALLSUM Computer Report for 1995. Printed 03/11/96.

[a]1993 and 1994 ALLSUM computer summaries obtained from the Bureau of Air Monitoring and Mobile Sources Internet homepage (http://www.dep.state.fl.us/air/) on July 22-23, 1996.

TABLE 5-1
NEW AMBIENT AIR MONITORING SITES

Site ID	Pollutants Measured	UTM Coors (km)[a] East, North	Dist(km) & Dir[b] from Facility
1740-007	PM_{10}	354.982,3167.129	6.9, NW
1740-008	PM_{10}	380.921,3153.908	22.6, ESE
4210-002	PM_{10}	358.000,3157.000	5.8, SSW

[a]UTM coordinates obtained from Department (personal communication, Brian Kerckhoff, Bureau of Air Monitoring and Mobile Sources, July 22, 1996). All coordinates are for UTM zone 17.

[b]Distances and directions from the facility are based on facility UTM coordinates of 360.008 km East and 3162.398 km North.

TABLE 5-2
RECENT (1993-1995) AMBIENT AIR QUALITY MONITORING DATA

Pollutant/	Hernando County						Pasco Co
Avg.Time/Year	1740-004	1740-005	1740-006	1740-007	1740-008	4210-002	1815-001
SO_2/3-hour Second-Highest Concentration (ug/m³)							
1993	--	--	77	--	--	--	--
1994	--	--	86	--	--	--	--
1995	--	--	70	--	--	--	--
SO_2/24-hour Second-Highest Concentration (ug/m³)							
1993	--	--	21	--	--	--	--
1994	--	--	23	--	--	--	--
1995	--	--	17	--	--	--	--
SO_2/Annual Arithmetic Mean Concentration (ug/m³)							
1993	--	--	4	--	--	--	--
1994	--	--	5	--	--	--	--
1995	--	--	4	--	--	--	--
PM_{10}/24-hour Second-Highest Concentration (ug/m³)							
1995	--	--	25	36	36	39	--
PM_{10}/Annual Arithmetic Mean Concentration (ug/m³)							
1995	--	--	16	19	17	18	--
TSP/24-hour Second-Highest Concentration (ug/m³)							
1993	81	54	--	--	--	--	--
1994	65	66	--	--	--	--	--
1995	70	61	--	--	--	--	--
TSP/Annual Geometric Mean Concentration (ug/m³)							
1993	29	28	--	--	--	--	--
1994	30	29	--	--	--	--	--
1995	33	33	--	--	--	--	--
O_3/1-hour Maximum Concentration, Second-Highest Day (ppm)							
1993	--	--	--	--	--	--	0.094
1994	--	--	--	--	--	--	0.085
1995	--	--	--	--	--	--	0.092

TABLE 5-3
COMPARISON OF BASELINE CONCENTRATIONS
TO AMBIENT AIR QUALITY STANDARDS

Pollutant/Avg.Time		Baseline Conc (ug/m³)[a] and Year/Location	AAQS[b] (ug/m³)	Baseline % of AAQS
SO_2	3-hour	86 (94/1740-006)	1300	7%
	24-hour	23 (94/1740-006)	260	9%
	Annual	5 (94/1740-006)	60	8%
NO_2	Annual	17 (90/4380-002)[c]	100	17%
CO	1-hour	6900 (89/4380-002)[c]	40000	17%
	8-hour	2300 (91/4380-002)[c]	10000	23%
PM_{10}	24-hour	39 (95/4210-002)	150	26%
	Annual	19 (95/1740-007)	50	38%
TSP	24-hour	81 (93/1740-004)	150	54%
	Annual	33 (95/1740-004)	60	55%
Lead	Quarter	0.0 (91/4380-002)[c]	1.5	0%
O_3	1-hour	185 (93/1815-001)	235	79%

[a]Maximum second-highest short-term and maximum annual/quarter concentrations for the last three available years of data for representative monitoring sites are shown.
[b]AAQS shows are the Florida AAQS, which are more restrictive than the National AAQS.
[c]Representative baseline concentrations for NO_2, CO, and lead in the original permit application were based on data measured at a monitoring site in extreme northern Pinellas County (Tarpon Springs, 4380-002) during 1989-1991 (monitoring for these pollutants was discontinued in May or June 1992). These data are considered by the Department to be adequate for purposes of this application (personal communication, Cleve Holladay, Bureau of Air Regulation, July 22, 1996).

6.0 AIR QUALITY MODELING ANALYSES

Modeling analyses were performed for the proposed cement plant at the Florida Crushed Stone (FCS) facility for comparison to significant impact levels (SILs). For those criteria pollutants with impacts greater than the SILs, additional modeling analyses are normally required to demonstrate compliance with Prevention of Significant Determination (PSD) increments and ambient air quality standards (AAQS) as appropriate. In addition, modeling analyses were performed for minor particulate sources (Section 6.5) and for noncriteria pollutants to demonstrate compliance with Florida's Ambient Reference Concentrations (Section 6.6). Additional analyses for air quality related values (AQRVs) are contained in Section 7.0.

6.1 MODEL SELECTION

Model selection depends on the types of pollutants to be modeled, the characteristics of the project vicinity, and the source characteristics. For the modeling analyses in this section, all pollutants will be considered to be inert (no analysis of ozone impacts was performed since volatile organic compound emissions from the proposed cement kiln are less than the PSD significant emission rate). All nitrogen oxides (NO_x) emissions will conservatively be assumed to be emitted as nitrogen dioxide (NO_2) for purposes of estimating ambient NO_2 impacts. Similarly, particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) will conservatively be assumed to be equal to the total suspended particulate (TSP) emission rate.

The terrain around the project is flat to gently rolling, so no terrain will be considered in the modeling analysis. Since no complex terrain (areas with elevation above stack release height) occurs in the project vicinity, only simple terrain models are required in the modeling analysis. The facility is located in an overwhelmingly rural area based on the Auer land use methodology. Therefore, rural dispersion curves are required in all modeling analyses.

Emissions from the second cement kiln will be vented through a separate 14 foot diameter vent attached to the exterior of the main facility stack. Emissions heights for both the kiln vent and main facility stack are identical. Since the stack height of 320 feet, as shown in the original Power Plant Siting Act (PPSA) application, represents a GEP stack for regulatory purposes, building-induced downwash and cavity wake effects do not need to be considered in the model selection or analyses for the main facility stack or kiln vent.

Based the characteristics of the source, source vicinity, and pollutants, SCREEN3 and ISCST3 were selected for the modeling analyses. SCREEN3 (version 96043) was used to analyze the window of potential operating conditions for the proposed kiln for determining a worst-case source configuration. ISCST3 (version 96113) was then used to determine potential increases in facility impacts due to the proposed kiln.

6.2 SOURCE CHARACTERISTICS AND SCREENING ANALYSES

Emissions from the second cement kiln will be vented through a separate vent attached to the exterior of the main facility stack, which vents emissions from both the power plant and the existing cement kiln. Since the separation between the proposed and existing stacks is less than either stack diameter, modeling must account for the effective stack diameter and volumetric flows of both stacks for the sources in operation. Since the cement kiln now proposed is not identical to the existing cement kiln, the modeling analyses must now consider increases in facility impacts for the following five facility configurations:

Conf.	Proposed Facility Configuration		Existing Facility Configuration
1	Proposed Kiln	vs.	Existing Kiln
2	Proposed and Existing Kilns	vs.	Existing Kiln
3	Proposed Kiln and Power Plant	vs.	Power Plant
4	Proposed Kiln and Power Plant	vs.	Existing Kiln and Power Plant
5	Both Kilns and Power Plant	vs.	Existing Kiln and Power Plant

Stack and emission characteristics for existing FCS sources vented through the main facility stack are shown on Table 6-1. These characteristics cover the three types of existing facility conditions required to be analyzed. Worst-case source configurations (temperature and flow rates) for the existing cement kiln and for the power plant and existing cement kiln operating simultaneously were determined previously by screening analyses presented in the original permit application (RTP, 1995a). For the power plant only condition, temperature and flowrate were determined as the difference between the other two existing facility configurations as shown on Table 6-1.

Stack and emission characteristics for the proposed cement kiln are shown on Table 6-2. There is only one emission point to be modeled for the proposed cement kiln since all three combustion sources (i.e., shaft dryer heater, precalciner burner, and kiln burner) as well as the bypass system exhaust to the main vent (minor PM sources for the proposed cement plant are addressed later in Section 6.5). However, the proposed cement kiln has a predicted range of volumetric

flows and exit temperatures depending on the operating conditions of the kiln components (i.e., shaft dryer heater on or off, bypass system on or off, and clinker cooler in upset or normal conditions). Therefore, worst-case characteristics for the proposed cement kiln were determined with the SCREEN3 model using the same assumptions as in the original permit application: namely, regulatory defaults for anemometer and mixing heights; full set of hypothetical meteorological conditions; rural dispersion; default ambient temperature (293K); no terrain; and the automated distance receptor array from the nearest property boundary (1000 meters) to 10,000 meters.

Maximum SCREEN3 impacts for the proposed cement kiln alone for a 1 gram/second emission rate for each source condition are shown on Table 6-3. As might be expected, the worst-case condition for the proposed cement kiln (dryer on, bypass off, and normal cooler conditions) has the lowest temperature and volumetric flow. Screening results for the proposed kiln only for each pollutant are compared on Table 6-3 to the USEPA PSD Class II significance levels. Impacts for averaging times other than the 1-hour screening concentrations are calculated by multiplying the maximum SCREEN3 impact by the USEPA averaging time ratios of 0.9, 0.7, 0.4, and 0.08 for 3-hour, 8-hour, 24-hour, and annual averaging times, respectively (USEPA, 1992, p. 4-16). Screening impacts for the proposed cement kiln alone are less than the USEPA PSD Class II SILs for all pollutants other than NO_2 for all proposed cement kiln conditions. Therefore, further analyses of criteria pollutants other than NO_2 in the source vicinity are not required.

Since the proposed cement kiln vent is attached to the main facility stack, source characteristics need to be determined for the proposed facility configurations listed above. The equivalent stack diameter of the existing stack and proposed cement kiln flue was calculated and is shown on Table 6-2. Also, the worst-case proposed cement kiln only stack characteristics (dryer on, bypass off, and normal cooler conditions) were combined with the existing source characteristics shown on Table 6-1 to determine the flowrate and temperature for the three proposed facility configurations to be analyzed in the refined ISCST3 analyses (proposed and existing kiln, proposed kiln and power plant, and proposed and existing kilns and power plant). These combined stack characteristics are included on Table 6-2. Combined emission rates can be determined by adding the emission rates for the proposed kiln on Table 6-2 to the emission rates on Table 6-1 for the appropriate existing facility configuration.

6.3 REFINED CLASS II ANALYSES

As noted above, refined analyses with ISCST3 of the site vicinity are required to determine the maximum increase in facility impacts due to the proposed kiln for NO_x emissions. Increases in facility annual NO_2 impacts were determined for the five facility configurations listed above. As described in detail in the original permit application, these increases in facility impacts are determined by modeling the proposed facility configuration with positive emissions together with the associated existing facility configuration with negative emissions. The refined ISCST3 analyses were performed identical to the original permit application: namely, regulatory default settings: rural dispersion; no pollutant decay; and flat terrain. Five years of meteorological data (1982 through 1986 in keeping with periods analyzed by other applicants using MESOPUFF) from the Tampa International Airport (anemometer height of 22 feet) were analyzed with two receptor grids (a discrete cartesian grid with 100 meter spacing along the property fenceline and a polar grid from the property fenceline to 10000 meters from the stack).

Maximum increases in annual facility NO_2 impacts are shown on Table 6-4 for both receptor grids and for all five facility configurations described above. Annual NO_2 impacts for the proposed kiln are the same or less than spacially coincident impacts for the existing kiln, which is shown on Table 6-4 as negative ("< 0.0") or near-zero increases in facility impacts for facility configuration 1 (proposed kiln vs. existing kiln). Maximum increases in facility impacts are predicted for facility configurations where the proposed kiln is operating in conjuction with a single existing source, either the existing kiln (configuration 2) or the power plant (configuration 3).

The maximum increases in annual NO_2 facility impacts due to the proposed kiln are predicted to occur with the 1986 meteorological data and 4 to 5 km east of the stack in the offsite polar receptor grid. Since the receptor spacing in this area is about 1 kilometer, facility configurations 2 and 3 were remodeled with the 1986 meteorological data and a fine receptor grid with 100 meter spacing. The fine receptor grid extended from the property fenceline to 5900 meters east of the stack along the east-west direction and 1000 meters north and south of the 90° radial. Results of these two ISCST3 runs are included on Table 6-4. The maximum increase in annual facility NO_2 impacts based on the fine receptor grid analysis is 0.188 ug/m^3 for facility configuration 2 (proposed and existing kiln vs. existing kiln). This increase is only 19% of the annual NO_2 SIL of 1 ug/m^3 for Class II areas.

Taken together with the above screening analyses, increases in facility impacts due to the proposed kiln have been shown to be insignificant for all criteria pollutants and therefore indistinguishable from background concentrations. Therefore, further refined analyses (such as multisource modeling analyses) of criteria pollutant impacts in the project vicinity are not required to demonstrate compliance with AAQS and PSD Class II increments. Increases in facility impacts due to a second cement kiln, as well as overall facility impacts for the kilns and power plant, were shown to be much less than the de mimimis monitoring levels in the original permit application. Since no appreciable changes to the modeled concentrations would be expected for the change in kiln technology, the applicant is requesting an exemption from pre- or post-construction PSD monitoring for this modification as allowed under FAC 62-212.400(3)(e). As noted in the original permit application, the applicant already maintains two TSP monitoring sites and one SO_2 monitoring site in the project vicinity, which are the two pollutants with the largest predicted increases in facility impacts when calculated as a percentage of the de minimis monitoring levels.

6.4 REFINED CLASS I ANALYSES

Refined analyses with ISCST3 of the nearest Class I area, Chassahowitzka National Wildlife Refuge (CNWR), is required to determine the maximum increase in facility impacts due to the proposed kiln for criteria pollutant emissions with PSD increments (SO_2, NO_2, and PM_{10}). The analyses were performed identical to the original permit application. Modeling procedures, model settings, and meteorological data are described above. The Class I receptor grid is the traditional set of thirteen discrete receptors placed along the nearest Class I boundary and was analyzed with all five years of meteorological data for all five facility configurations.

Maximum increases in facility impacts for each facility configuration are shown on Table 6-5. Like the refined Class II analyses for NO_2 described above, proposed kiln impacts are about the same or less than spacially and temporally coincident existing kiln impacts, which is shown on Table 6-5 as negative ("< 0.0") or very small increases in facility impacts for facility configuration 1 (proposed kiln vs. existing kiln). Maximum increases in facility impacts are predicted for facility configurations 2 (proposed kiln and existing kiln vs. existing kiln) and 4 (proposed kiln and power plant vs. existing kiln and power plant).

The maximum increase in facility impacts for any facility configuration are compared on Table 6-6 with the National Park Service (NPS) SILs. As can be seen, increases in facility impacts

are less than the NPS SILs for all pollutants other than NO_2. Therefore, further analyses of Class I PSD increments for SO_2 and PM_{10} are not required. For NO_2, a multisource modeling analysis was performed using the inventory of major NO_x facilities within 130 km of CNWR as shown on Table 6-7 and the procedures described above and in the original permit application (RTP, 1995d). Since the existing FCS facility does not consume PSD increment for NO_2, the increase in facility impacts is of concern. Therefore, the multisource inventory was modeled with the facility configuration which gave the largest increases in facility impacts (configuration 2). Results of the multisource NO_2 analysis are shown on Table 6-8. The maximum annual multisource NO_2 impact is 40% of the Class I PSD increment of 2.5 ug/m^3. Therefore, the modeling analyses demonstrate compliance with the Class I PSD increments. Further analyses of air quality related values are contained in Section 7.0.

6.5 MINOR PM SOURCE IMPACTS

In the original permit application (RTP, 1995c), screening and refined modeling analyses were performed for the three largest minor PM sources, which accounted for the majority of minor source PM emissions. The analyses showed that PM impacts due to the minor PM sources associated with the permitted kiln would be small. A very small area of significant PM impacts was predicted to occur for 24-hour averaging times just outside the eastern property fenceline (all annual PM impacts were less than the SILs). Since FCS maintains a TSP monitoring site (1740-005) very close to the area of significant impacts, the Department determined that performing a multisource modeling analysis with other existing FCS particulate sources would serve no useful purpose (i.e., monitoring data includes PM impacts due to existing FCS sources and modeling would be double-counting emissions). Therefore, compliance with the PM (TSP and PM_{10}) AAQS was demonstrated by adding the maximum modeled minor source PM concentrations to the maximum measured TSP background for this monitoring site.

Emissions and stack characteristics for these three large minor PM sources have not been changed appreciably due to the change in kiln technology. Therefore, the results of the modeling analyses for the minor PM sources contained in the original permit application are still valid (maximum second-highest 24-hour and maximum annual PM impacts of 6.69 and 0.67 ug/m^3, respectively). Adding the maximum measured TSP background concentrations shown on Table 5-2 for this monitoring site to the above PM impacts gives maximum ambient concentrations which are 48% and 67% of the 24-hour and annual PM_{10} AAQS, which demonstrates compliance with the PM_{10} and TSP AAQS.

6.6 AIR TOXICS

Hazardous Air Pollutant (HAP) emissions were estimated as part of the original permit application in response to Department requests (RTP, 1995c and 1995e) and are described in more detail in Section 3.0 of this application. HAP impacts were calculated for comparison to the Ambient Reference Concentrations (ARCs) contained in version 4.0 of the Department's updated air toxics working list. Impacts for the proposed kiln were calculated based on the SCREEN3 screening analysis results contained in Section 6.2 above. Since HAP emissions given in Section 3.0 include emission factors for lb of pollutant per ton of clinker, HAP impacts for appropriate averaging times were calculated as follows:

$$\frac{X\ ug/m^3}{1\ gram/sec} \times \frac{Q\ lb\ HAP}{ton\ clinker} \times \frac{104\text{-}1/6\ ton\ clinker}{hour} \times \frac{0.126\ gram/sec}{lb/hour} = X\ ug/m^3$$

HAP impacts were also calculated for both kilns (existing and proposed kilns) operating simultaneously. A SCREEN3 analysis for both kilns was performed for 1 gram/second using the exact same SCREEN3 procedures used for the proposed kiln and as described in Section 6.2 together with the combined source characteristics for both kilns as shown on Table 6-2. The SCREEN3 analysis showed a maximum 1-hour impact for both operating kilns of 1.207 ug/m^3 for 1 gram/second emissions at 1109 meters from the stack during A stability and a 1.5 meter/second wind speed. This impact gives maximum unitized (1 gram/second) impacts of 0.845, 0.483, and 0.097 ug/m^3 for averaging times of 8-hours, 24-hours, and annual periods respectively. Facility pollutant impacts for both kilns operating simultaneously can be calculated from these unitized impacts using the equation above based on 187-1/6 tons of clinker per hour (83 tons/hour for existing kiln and 104-1/6 tons/hour for proposed kiln).

Results of the screening analyses for air toxics are shown on Table 6-9. Although not a HAP pollutant, sulfuric acid mist is included on Table 6-9 since it is a PSD pollutant with applicable ARCs. The vast majority of HAP pollutants are less than 0.5% of the ARCs. The largest impacts as a percentage of the ARCs are for benzene, arsenic, cadmium, hexavalent chromium, and nickel. All other pollutants are less than 10% of the ARCs. Maximum proposed kiln and facility (both kilns) impacts are less than the ARCs for all pollutants and all averaging times. Again, these HAP impacts are based on screening analyses and refined impact analyses with ISCST3 and actual meteorological data would likely show much smaller impacts.

6.7 REFERENCES

RTP Environmental Associates, Inc. (RTP), 1995a. Application to Construct a Second 600,000 Ton Per Year Cement Kiln at the Florida Crushed Stone Company Facility in Brooksville, Florida. March, 1995.

RTP, 1995b. April 12, 1995 letter from William E. Corbin to Cleve Holladay (shows receptor grids and property fenceline).

RTP, 1995c. May 10, 1995 letter from Donald F. Elias to Hamilton S. Oven (HAP emissions and impacts compared to No Threat Levels, and minor PM source impact analyses for original permit application).

RTP, 1995d. July 11, 1995 letter from Donald F. Elias to Clair H. Fancy (NO_x multisource Class I PSD increment modeling analysis for original permit application).

RTP, 1995e. August 22, 1995 letter from Donald F. Elias to Clair H. Fancy (revised HAP emissions).

United States Environmental Protection Agency (USEPA), 1992. Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised. EPA-454/R-92-019, October 1992.

USEPA, 1995a. SCREEN3 Model User's Guide. EPA-454/B-95-004, September 1995.

USEPA, 1995b. User's Guide for the Industrial Source Complex (ISC3) Dispersion Models. Volume I - User Instructions EPA-454/B-95-003a and Volume II - Description of Model Algorithms EPA-454/B-95-003b, September 1995.

TABLE 6-1
EXISTING SOURCE CHARACTERISTICS

Source Parameter	English Units	Metric Units
Stack Height	320 feet	97.54 meters
Stack Location (UTM Zone 17)		360.0 km East
		3162.5 km North
Existing Cement Kiln Only[a]		
SO_2 Permit Emissions:	50 lb/hr	6.30 g/s
NO_x Permit Emissions:	359 lb/hr	45.23 g/s
PM Permit Emissions:	49.5 lb/hr	6.24 g/s
CO Maximum Emissions:	127 lb/hr	16.00 g/s
Existing Stack Diameter	16.0 feet	4.88 meters
Worst-case Flow and	264,000 ACFM	6.67 m/s
Temperature[b]	234°F	385.4 Kelvins
Existing Cement Kiln and Power Plant[c]		
SO_2 Permit Emissions:	781 lb/hr	98.41 g/s
NO_x Permit Emissions:	1205 lb/hr	151.83 g/s
PM Permit Emissions:	86.52 lb/hr	10.90 g/s
CO Maximum Emissions:	1252 lb/hr	157.75 g/s
Existing Stack Diameter	16.0 feet	4.88 meters
Worst-case Flow and	850,000 ACFM	21.48 m/s
Temperature[b]	352°F	450.9 Kelvins
Power Plant Only		
SO_2 Permit Emissions:	770 lb/hr	97.02 g/s
NO_x Permit Emissions:	846 lb/hr	106.60 g/s
PM Permit Emissions:	37.02 lb/hr	4.66 g/s
CO Maximum Emissions:	1125 lb/hr	141.75 g/s
Existing Stack Diameter	16.0 feet	4.88 meters
Worst-case Flow and	585,760 ACFM	14.80 m/s
Temperature[d]	419°F	488.2 Kelvins

[a]Based on design data.
[b]Worst-case flow and temperature from original permit application screening analyses.
[c]Based on historical stack test data.
[d]Calculated as difference, weighting for SCFM flows and based on absolute temperatures, between (Power Plant and Existing Cement Kiln) and (Power Plant Only) cases above:
$SCFM_{PP} = SCFM_{PP+CP} - SCFM_{CP}$
$T_{PP} = [T_{PP+CP}SCFM_{PP+CP} - T_{CP}SCFM_{CP}] / [SCFM_{PP+CP} - SCFM_{CP}]$

TABLE 6-2
PROPOSED SOURCE CHARACTERISTICS

Source Parameter	English Units	Metric Units
Proposed Cement Kiln Only		
SO_2 Permit Emissions:	23.958 lb/hr	3.02 g/s
NO_x Permit Emissions:	291.667 lb/hr	36.75 g/s
PM Permit Emissions:	47.813 lb/hr	6.02 g/s
CO Maximum Emissions:	208.333 lb/hr	26.25 g/s
Proposed Vent Diameter	14.0 feet	4.27 meters
Proposed Cement Kiln Only Flowrates/Temperatures by Source Condition		
Dryer off, Bypass off, and	415,313 ACFM	13.71 m/s
Normal Cooler Conditions	421°F	489.3 Kelvins
Dryer on, Bypass off, and	312,523 ACFM	10.31 m/s
Normal Cooler Conditions	258°F	398.7 Kelvins
Dryer off, Bypass on, and	456,562 ACFM	15.07 m/s
Normal Cooler Conditions	482°F	523.2 Kelvins
Dryer on, Bypass on, and	405,381 ACFM	13.38 m/s
Normal Cooler Conditions	305°F	424.8 Kelvins
Dryer off, Bypass on, and	460,204 ACFM	15.19 m/s
Upset Cooler Conditions	482°F	523.2 Kelvins
Dryer on, Bypass on, and	415,188 ACFM	13.70 m/s
Upset Cooler Conditions	323°F	434.8 Kelvins
Proposed and Existing Cement Kilns[a]		
Equivalent Stack Diameter	21.26 feet	6.48 meters
Volumetric Flowrate	576,680 ACFM	8.25 m/s
Temperature	247°F	392.6 Kelvins
Proposed Cement Kiln and Power Plant[a]		
Equivalent Stack Diameter	21.26 feet	6.48 meters
Volumetric Flowrate	897,855 ACFM	12.85 m/s
Temperature	355°F	452.6 Kelvins
Proposed and Existing Cement Kilns and Power Plant[a]		
Equivalent Stack Diameter	21.26 feet	6.48 meters
Volumetric Flowrate	1,161,940 ACFM	16.63 m/s
Temperature	324°F	435.4 Kelvins

[a]Calculated as the sum, weighting for SCFM flows and based on absolute temperatures, of the worst-case Proposed Cement Kiln condition above and the appropriate existing facility configuration in Table 6-1:

$SCFM_{1+2} = SCFM_1 + SCFM_2 \qquad T_{1+2} = [T_1SCFM_1 + T_2SCFM_2] / [SCFM_1 + SCFM_2]$

TABLE 6-3
SCREEN3 RESULTS FOR PROPOSED KILN ONLY

Pollutant/ Avg.Time	--Max Kiln Impact (ug/m³) for Each Case-- Case1	Case2	Case3	Case4	Case5	Case6	SIL (ug/m³)	Max % of SIL
SCREEN3 Results at 1 gram/second								
1-hour	1.079	1.900	0.964	1.368	0.963	1.287	-	-
3-hour	0.971	1.710	0.868	1.231	0.867	1.158	-	-
8-hour	0.755	1.330	0.675	0.958	0.674	0.901	-	-
24-hour	0.432	0.760	0.386	0.547	0.385	0.515	-	-
Annual	0.086	0.152	0.077	0.109	0.077	0.103	-	-
Max dist (m)	1147	1000	1076	1068	1076	1075		
Windspeed (m/s)[a]	1.5	1.5	2.0	1.5	2.0	1.5		
PG Stability	A	A	A	A	A	A		
SO_2								
3-hour	2.932	5.164	2.621	3.718	2.618	3.497	25	21%
24-hour	1.305	2.295	1.166	1.652	1.163	1.555	5	46%
Annual	0.260	0.459	0.233	0.329	0.233	0.311	1	46%
NO_x								
Annual	3.161	5.586	2.830	4.006	2.830	3.785	1	559%
TSP/PM_{10}								
24-hour	2.601	4.575	2.324	3.293	2.318	3.100	5	92%
Annual	0.518	0.915	0.464	0.656	0.464	0.620	1	92%
CO								
1-hour	28.32	49.88	25.31	35.91	25.28	33.78	2000	2%
8-hour	19.82	34.91	17.72	25.15	17.69	23.65	500	7%

Notes: The proposed cement kiln cases analyzed are: 1 = Dryer off, Bypass off, and Normal Cooler Conditions; 2 = Dryer on, Bypass off, and Normal Cooler Conditions; 3 = Dryer off, Bypass on, and Normal Cooler Conditions; 4 = Dryer on, Bypass on, and Normal Cooler Conditions; 5 = Dryer off, Bypass on, and Upset Cooler Conditions; and 6 = Dryer on, Bypass on, and Upset Cooler Conditions.

[a]Windspeeds at reference anemometer height of 10 meters.

TABLE 6-4
MAXIMUM INCREASES IN ANNUAL FACILITY NO_2 IMPACTS IN PROJECT VICINITY (CLASS II AREA)

PROPERTY FENCELINE RECEPTOR GRID RESULTS

	-Configuration 1-		-Configuration 2-		-Configuration 3-		-Configuration 4-		-Configuration 5-	
Year/Avg.Time	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)
1982/Annual	< 0.0	-	0.05847	-3102, 2564	0.04223	-6235, -628	< 0.0	-	0.02492	-6235, -628
1983/Annual	< 0.0	-	0.05876	-3124, 2290	0.04329	-6235, -969	< 0.0	-	0.02723	-5029, -208
1984/Annual	< 0.0	-	0.06722	-3185, 2481	0.04753	-2622, 3284	< 0.0	-	0.02575	-2609, 3586
1985/Annual	< 0.0	-	0.06882	1680, 2795	0.04293	-5536,-1458	< 0.0	-	0.02359	-6500,-1464
1986/Annual	< 0.0	-	0.07160	-4245,-1516	0.05110	-5029, -208	< 0.0	-	0.02350	-5136,-1459

OFFSITE POLAR RECEPTOR GRID RESULTS

	-Configuration 1-		-Configuration 2-		-Configuration 3-		-Configuration 4-		-Configuration 5-	
Year/Avg.Time	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)
1982/Annual	< 0.0	-	0.11077	3759, 1368	0.05989	4698, 1710	< 0.0	-	0.05128	5638, 2052
1983/Annual	< 0.0	-	0.09130	3759, 1368	0.05460	6000, 0	< 0.0	-	0.03669	5909, 1042
1984/Annual	< 0.0	-	0.10147	3464, 2000	0.06487	4698, 1710	< 0.0	-	0.04294	5638, 2052
1985/Annual	< 0.0	-	0.15111	3759, 1368	0.07576	4698, 1710	< 0.0	-	0.05908	5638, 2052
1986/Annual	< 0.0	-	0.18488	4000, 0	0.09387	5000, 0	< 0.0	-	0.07248	5638, 2052

FINE GRID RESULTS AT OFFSITE POLAR GRID MAXIMA

	-Configuration 1-		-Configuration 2-		-Configuration 3-		-Configuration 4-		-Configuration 5-	
Year/Avg.Time	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)	Concen	X,Y(m)
1986/Annual	-	-	0.18776	3900, 200	0.09611	5300, 200	-	-	-	-

Notes: Concentrations in ug/m³ and X,Y locations relative to source location at 360000, 3162500 m in UTM zone 17. The facility configurations analyzed are as follows: 1 = Proposed Kiln vs. Existing Kiln; 2 = Proposed Kiln + Existing Kiln vs. Existing Kiln; 3 = Proposed Kiln + Power Plant vs. Power Plant; 4 = Proposed Kiln + Power Plant vs. Existing Kiln + Power Plant; and 5 = Proposed Kiln + Existing Kiln + Power Plant vs. Existing Kiln + Power Plant.

MAXIMUM INCREASES IN FACILITY IMPACTS IN CHASSAHOWITZKA NWR (CLASS I AREA)

Pollutant/Year/ Avg.Time	-Configuration 1- Concen	X,Y(km)	-Configuration 2- Concen	X,Y(km)	-Configuration 3- Concen	X,Y(km)	-Configuration 4- Concen	X,Y(km)	-Configuration 5- Concen	X,Y(km)
SO_2										
1982/Annual	< 0.0	-	0.00290	-28.5,20.9	< 0.0	-	0.00046	-19.3, 9.4	< 0.0	-
3-hr MAX	< 0.0	-	0.28451	-17.0,13.7	0.15351	-17.0,13.7	0.35034	-17.0,13.7	0.11641	-19.7, 7.3
3-hr H2H	< 0.0	-	0.24516	-19.7, 3.2	0.13813	-16.3,15.8	0.27839	-19.7, 7.3	0.09737	-18.0,11.5
24-hr MAX	< 0.0	-	0.06102	-18.0,11.5	0.02915	-18.0,11.5	0.06238	-19.7, 7.3	0.02913	-18.0,11.5
24-hr H2H	< 0.0	-	0.04209	-17.0,13.7	0.01726	-16.3,15.8	0.05621	-19.7, 7.3	0.01526	-19.7, 5.2
1983/Annual	< 0.0	-	0.00236	-18.0,11.5	< 0.0	-	< 0.0	-	< 0.0	-
3-hr MAX	< 0.0	-	0.22334	-18.0,11.5	0.19681	-19.7, 3.2	0.24403	-18.0,11.5	0.18353	-18.0,11.5
3-hr H2H	< 0.0	-	0.20647	-18.0,11.5	0.18000	-18.0,11.5	0.21316	-17.0,13.7	0.15272	-18.0,11.5
24-hr MAX	< 0.0	-	0.06355	-17.0,13.7	0.02766	-18.0,11.5	0.05082	-18.0,11.5	0.02761	-18.0,11.5
24-hr H2H	< 0.0	-	0.04006	-17.0,13.7	0.02205	-18.0,11.5	0.04528	-18.0,11.5	0.02206	-18.0,11.5
1984/Annual	< 0.0	-	0.00242	-19.7, 3.2	< 0.0	-	0.00074	-18.9,20.9	< 0.0	-
3-hr MAX	< 0.0	-	0.22246	-18.9,20.9	0.16329	-19.7, 5.2	0.33007	-17.0,13.7	0.16330	-19.7, 5.2
3-hr H2H	< 0.0	-	0.17993	-18.9,20.9	0.12240	-16.3,15.8	0.27510	-17.0,13.7	0.12212	-16.3,15.8
24-hr MAX	< 0.0	-	0.04710	-16.3,15.8	0.03083	-16.3,15.8	0.06191	-19.7, 7.3	0.03079	-16.3,15.8
24-hr H2H	< 0.0	-	0.03935	-19.7, 3.2	0.02116	-19.7, 7.3	0.05307	-19.7, 3.2	0.01913	-17.0,13.7
1985/Annual	< 0.0	-	0.00230	-28.5,20.9	< 0.0	-	0.00075	-21.0,20.9	< 0.0	-
3-hr MAX	< 0.0	-	0.23177	-19.7, 3.2	0.14125	-19.3, 9.4	0.41016	-19.7, 3.2	0.14109	-19.3, 9.4
3-hr H2H	< 0.0	-	0.21470	-17.0,13.7	0.12140	-18.0,11.5	0.32185	-19.7, 3.2	0.11617	-18.0,11.5
24-hr MAX	< 0.0	-	0.06445	-17.0,13.7	0.02501	-19.7, 7.3	0.06940	-19.7, 5.2	0.02216	-17.0,13.7
24-hr H2H	< 0.0	-	0.03459	-19.7, 3.2	0.01961	-17.0,13.7	0.04352	-19.7, 3.2	0.01857	-17.0,13.7
1986/Annual	< 0.0	-	0.00210	-26.0,20.9	< 0.0	-	< 0.0	-	< 0.0	-
3-hr MAX	< 0.0	-	0.23231	-17.0,13.7	0.16572	-19.3, 9.4	0.35000	-16.3,15.8	0.16552	-19.3, 9.4
3-hr H2H	< 0.0	-	0.19134	-19.3, 9.4	0.15487	-18.0,11.5	0.22618	-18.0,11.5	0.15469	-18.0,11.5
24-hr MAX	< 0.0	-	0.04872	-19.3, 9.4	0.03375	-19.3, 9.4	0.05272	-19.7, 3.2	0.03375	-19.3, 9.4
24-hr H2H	< 0.0	-	0.04705	-17.0,13.7	0.02688	-16.3,15.8	0.04355	-18.0,11.5	0.02685	-16.3,15.8

Notes: Concentrations in ug/m³ and X,Y locations relative to source location at 360.0, 3162.5 km in UTM zone 17. The facility configurations analyzed are as follows: 1 = Proposed Kiln vs. Existing Kiln; 2 = Proposed Kiln + Existing Kiln vs. Existing Kiln; 3 = Proposed Kiln + Power Plant vs. Power Plant; 4 = Proposed Kiln + Power Plant vs. Existing Kiln + Power Plant; and 5 = Proposed Kiln + Existing Kiln + Power Plant vs. Existing Kiln + Power Plant. Maximum increases in facility impacts for each facility configuration are underlined.

TABLE 6-5 (Concluded)
MAXIMUM INCREASES IN FACILITY IMPACTS IN CHASSAHOWITZKA NWR (CLASS I AREA)

Pollutant/Year/ Avg.Time	-Configuration 1- Concen	X,Y(km)	-Configuration 2- Concen	X,Y(km)	-Configuration 3- Concen	X,Y(km)	-Configuration 4- Concen	X,Y(km)	-Configuration 5- Concen	X,Y(km)
NO_2										
1982/Annual	< 0.0	-	0.05879	-18.0,11.5	0.02955	-19.7, 3.2	< 0.0	-	0.01962	-19.7, 7.3
1983/Annual	< 0.0	-	0.05306	-18.0,11.5	0.02754	-18.0,11.5	< 0.0	-	0.01935	-18.0,11.5
1984/Annual	< 0.0	-	0.05622	-19.7, 3.2	0.02847	-19.7, 3.2	< 0.0	-	0.01805	-17.0,13.7
1985/Annual	< 0.0	-	0.04953	-19.7, 3.2	0.02528	-17.0,13.7	< 0.0	-	0.02162	-19.7, 3.2
1986/Annual	< 0.0	-	0.04877	-17.0,13.7	0.02984	-17.0,13.7	< 0.0	-	0.01845	-19.3, 9.4
PM										
1982/Annual	< 0.0	-	0.01066	-18.0,11.5	0.00871	-19.7, 3.2	< 0.0	-	0.00618	-19.7, 3.2
24-hr MAX	< 0.0	-	0.16014	-18.0,11.5	0.09819	-19.7, 7.3	0.00401	-19.7, 7.3	0.08355	-18.0,11.5
24-hr H2H	< 0.0	-	0.10857	-19.7, 3.2	0.08291	-16.3,15.8	0.00213	-19.7, 7.3	0.06349	-16.3,15.8
1983/Annual	< 0.0	-	0.00960	-18.0,11.5	0.00794	-18.0,11.5	< 0.0	-	0.00598	-18.0,11.5
24-hr MAX	< 0.0	-	0.17154	-17.0,13.7	0.13541	-17.0,13.7	0.00354	-18.0,11.5	0.09889	-17.0,13.7
24-hr H2H	< 0.0	-	0.11493	-19.3, 9.4	0.08825	-19.3, 9.4	0.00198	-17.0,13.7	0.06179	-19.3, 9.4
1984/Annual	< 0.0	-	0.01020	-19.7, 3.2	0.00833	-19.7, 3.2	< 0.0	-	0.00597	-19.7, 3.2
24-hr MAX	< 0.0	-	0.11785	-16.3,15.8	0.10292	-19.7, 3.2	0.00351	-19.7, 7.3	0.08872	-19.7, 3.2
24-hr H2H	< 0.0	-	0.10460	-19.7, 3.2	0.09048	-19.7, 3.2	0.00290	-19.7, 3.2	0.07692	-19.7, 3.2
1985/Annual	< 0.0	-	0.00894	-19.7, 3.2	0.00707	-19.7, 3.2	< 0.0	-	0.00572	-19.7, 3.2
24-hr MAX	0.00000	-19.7, 3.2	0.19187	-17.0,13.7	0.13454	-17.0,13.7	0.00302	-19.7, 5.2	0.09800	-17.0,13.7
24-hr H2H	< 0.0	-	0.09643	-19.7, 3.2	0.07942	-19.7, 3.2	0.00201	-19.7, 7.3	0.06176	-19.7, 3.2
1986/Annual	< 0.0	-	0.00905	-17.0,13.7	0.00824	-17.0,13.7	< 0.0	-	0.00592	-19.3, 9.4
24-hr MAX	< 0.0	-	0.12169	-17.0,13.7	0.10406	-17.0,13.7	0.00319	-19.7, 3.2	0.07031	-17.0,13.7
24-hr H2H	< 0.0	-	0.11202	-17.0,13.7	0.09444	-17.0,13.7	0.00266	-18.0,11.5	0.06626	-19.3, 9.4

Notes: Concentrations in ug/m³ and X,Y locations relative to source location at 360.0, 3162.5 km in UTM zone 17. The facility configurations analyzed are as follows: 1 = Proposed Kiln vs. Existing Kiln; 2 = Proposed Kiln + Existing Kiln vs. Existing Kiln; 3 = Proposed Kiln + Power Plant vs. Power Plant; 4 = Proposed Kiln + Power Plant vs. Existing Kiln + Power Plant; and 5 = Proposed Kiln + Existing Kiln + Power Plant vs. Existing Kiln + Power Plant. Maximum increases in facility impacts for each facility configuration are underlined.

TABLE 6-6
COMPARISON OF MAXIMUM INCREASES IN FACILITY IMPACTS
TO NPS SIGNIFICANT IMPACT LEVELS

Pollutant/ Avg. Time	Maximum Facility[a] Increase (ug/m^3)	NPS Class I SIL (ug/m^3)	% of SIL
SO_2/Annual	0.00290	0.03	10%
3-hour	0.41016	0.48	85%
24-hour	0.06940	0.07	99%
NO_2/Annual	0.05879	0.03	196%
PM_{10}/Annual	0.01066	0.08	13%
24-hour	0.19187	0.27	71%

[a]Impacts are maximum short-term and maximum annual increases in facility impacts due to the proposed cement kiln.

TABLE 6-7
MULTISOURCE INVENTORY OF MAJOR NO_x SOURCES FOR CHASSAHOWITZKA NWR

ISCST NO.	Facility/Source	UTM Coor(km) East	UTM Coor(km) North	Max NOx Emissions (g/s)	Stack Height (m)	Stack Diameter (m)	Exit Temp (K)	Exit Velocity (m/s)	CLASS I Minimum Distance (km)
101	Auburndale	420.8	3103.3	21.17	48.80	5.50	411.0	14.30	101.9
102	Enron Silver Springs	418.8	3240.9	1.33	13.72	0.49	641.0	36.51	96.7
103	Farmland Green Bay	409.5	3080.1	1.25	45.72	2.44	355.4	11.58	110.1
104	FL Mining & Mtls	355.9	3169.9	11.56	32.00	4.27	394.3	9.90	14.4
105	FPC Debary	467.5	3197.2	137.60	15.24	4.21	819.8	56.21	125.2
106	FPC Int City 7EA	446.3	3126.0	84.20	15.24	4.21	819.8	56.21	113.2
107	FPC Int City 7FA	446.3	3126.0	91.80	15.24	7.04	880.8	32.07	113.2
108	FPC Polk	414.4	3073.9	160.40	34.40	4.10	400.0	40.50	118.0
109	IMC Agrico New Wales	396.7	3079.4	5.49	61.00	2.59	350.0	15.33	103.1
110	IMC Agrico S Pierce	407.9	3071.9	-2.93	45.73	1.60	350.0	26.40	115.6
111	IMC Agrico S Pierce	407.9	3071.9	3.98	45.73	1.55	349.8	39.05	115.6
112	Kissimmee Utilities	447.7	3127.9	27.72	12.20	3.00	654.0	29.10	113.9
113	Lakeland Utilities	409.2	3102.8	21.04	30.48	5.79	783.2	28.22	93.3
114	OMS Lake Co RRF	413.1	3179.3	20.79	38.10	1.83	422.0	23.36	69.4
115	OUC Stanton 2	483.5	3150.6	91.80	167.60	5.80	324.2	23.50	142.5
116	Pasco Co RRF	347.0	3139.0	40.57	83.82	3.05	394.3	15.70	27.5
117	Lake Cogen	434.0	3198.8	11.64	30.48	3.35	384.3	17.13	92.6
118	Pasco Cogen	385.6	3139.0	11.64	30.48	3.35	384.3	17.13	52.6
119	Ridge Cogen	416.7	3100.4	8.73	99.10	3.00	350.0	14.50	100.5
120	Stauffer Shutdown	325.6	3116.7	0.80	49.00	1.20	293.0	3.60	51.2
121	Seminole Hardee 3	405.0	3057.7	32.78	22.90	7.01	851.5	32.67	125.9
122	TPS Hardee	404.8	3057.4	241.83	22.90	4.88	389.0	23.90	126.1
123	TECO Polk Aux.Blr	402.5	3067.4	1.00	6.10	0.90	533.0	13.10	116.3
124	TECO Polk IGCC	402.5	3067.4	23.69	45.70	5.80	400.0	16.80	116.3
125	Tropicana	346.8	3040.9	3.96	24.40	2.13	555.4	7.55	125.0
126	Tropicana Turbine	346.8	3040.9	9.20	24.40	3.66	404.3	16.55	125.0
127	Pend Kathleen	398.7	3105.5	5.42	45.73	5.34	416.0	13.86	83.9
128	FPL Manatee	367.3	3054.1	612.40	144.80	7.99	339.8	23.70	114.8
129	FL Rock Newberry	346.8	3287.0	33.80	76.20	2.87	369.3	14.15	103.8
FLORIDA CRUSHED STONE FACILITY CONFIGURATION 2 - TWO OPERATING KILNS									
1	Baseline	360.0	3162.5	-45.23	97.54	4.88	385.4	6.67	20.0
2	Baseline + Proposed	360.0	3162.5	81.98	97.54	6.48	392.6	8.25	20.0

TABLE 6-8
MAXIMUM ANNUAL MULTISOURCE NO_2 IMPACTS
FOR CHASSAHOWITZKA NWR

Year	Max.Conc (ug/m^3)	Max.Location UTM x,y(km)	Class I Increment (ug/m^3)	Percent of Increment
1982	0.99142	340.3,3165.7	2.5	40%
1983	0.84293	340.3,3165.7	2.5	38%
1984	0.80042	340.3,3165.7	2.5	32%
1985	0.91894	340.3,3165.7	2.5	37%
1986	0.91693	340.3,3165.7	2.5	37%

TABLE 6-9
HAP IMPACTS (ug/m³) COMPARED TO ARCs (ug/m³)

Pollutant	-----Proposed Kiln Only---- 8-hour	24-hour	Annual	----Both Kilns Operating--- 8-hour	24-hour	Annual	Ambient Reference Concs 8-hour	24-hour	Annual	Max % of ARCs Prop	Both
Benzene	3.32E-1	1.90E-1	3.79E-2	3.79E-1	2.16E-1	4.35E-2	30	7	1.2E-1	32%	36%
Biphenyl	1.36E-4	7.78E-5	1.56E-5	1.55E-4	8.88E-5	1.78E-5	10	2.4		0%	0%
Carbon disulfide	4.36E-2	2.49E-2	4.99E-3	4.98E-2	2.85E-2	5.72E-3	310	74	2.0E+2	0%	0%
Chlorobenzene	6.81E-3	3.89E-3	7.78E-4	7.77E-3	4.44E-3	8.92E-4	460	110		0%	0%
Chrysene	3.49E-6	2.00E-6	3.99E-7	3.99E-6	2.28E-6	4.58E-7	2	0.5		0%	0%
Ethylbenzene	3.14E-3	1.80E-3	3.59E-4	3.59E-3	2.05E-3	4.12E-4	4340	1033	1.0E+3	0%	0%
Dioctyl phthalate	3.67E-3	2.09E-3	4.19E-4	4.18E-3	2.39E-3	4.80E-4	50	12	4.2	0%	0%
Formaldehyde	9.43E-3	5.39E-3	1.08E-3	1.08E-2	6.15E-3	1.24E-3	3.7	0.9	7.7E-2	1%	2%
Hexane	9.95E-4	5.69E-4	1.14E-4	1.14E-3	6.49E-4	1.30E-4	1760	419	2.0E+2	0%	0%
Hydrogen chloride	1.75E-1	9.98E-2	1.99E-2	1.99E-1	1.14E-1	2.29E-2	70	17	7.0	1%	1%
Methyl chloride	6.28E-3	3.59E-3	7.18E-4	7.17E-3	4.10E-3	8.24E-4	1030	245	2.8E-1	0%	0%
Methylene chloride	1.36E-2	7.78E-3	1.56E-3	1.55E-2	8.88E-3	1.78E-3	1740	414	2.0	0%	0%
Methyl ethyl ketone	5.24E-4	2.99E-4	5.98E-5	5.98E-4	3.42E-4	6.86E-5	5900	1405	1.0E+3	0%	0%
Napthalene	6.81E-2	3.89E-2	7.78E-3	7.77E-2	4.44E-2	8.92E-3	500	119		0%	0%
Phenol	1.92E-3	1.10E-3	2.19E-4	2.19E-3	1.25E-3	2.52E-4	190	45	3.0E+1	0%	0%
Styrene	9.08E-3	5.19E-3	1.04E-3	1.04E-2	5.92E-3	1.19E-3	2130	507	1.0E+3	0%	0%
2,3,7,8-TCDD	1.13E-8	6.48E-9	1.30E-9	1.30E-8	7.40E-9	1.49E-9			2.2E-8	6%	7%
Toluene	4.19E-2	2.39E-2	4.79E-3	4.78E-2	2.73E-2	5.49E-3	1880	448	4.0E+2	0%	0%
1,1,1-Trichloroethane	4.19E-4	2.39E-4	4.79E-5	4.78E-4	2.73E-4	5.49E-5	19000	4524		0%	0%
Trichloroethylene	7.51E-5	4.29E-5	8.58E-6	8.57E-5	4.90E-5	9.84E-6	2690	640	7.7E-1	0%	0%
Xylenes	1.20E-2	6.88E-3	1.38E-3	1.38E-2	7.86E-3	1.58E-3	4340	1033	8.0E+1	0%	0%
Arsenic	8.38E-4	4.79E-4	9.58E-5	9.57E-4	5.47E-4	1.10E-4	0.1	0.02	2.3E-4	42%	48%
Beryllium	1.48E-5	8.48E-6	1.70E-6	1.69E-5	9.68E-6	1.94E-6	0.02	0.005	4.2E-4	0%	0%
Cadmium	1.05E-3	5.99E-4	1.20E-4	1.20E-3	6.83E-4	1.37E-4	0.02	0.005	5.6E-4	21%	25%
Chromium-III[a]	3.93E-3	2.24E-3	4.49E-4	4.48E-3	2.56E-3	5.15E-4	5	1.2	1.0E+3	0%	0%
Chromium-IV[a]	4.36E-4	2.49E-4	4.99E-5	4.98E-4	2.85E-4	5.72E-5	0.5	0.1	8.3E-5	60%	69%
Cobalt	1.05E-3	5.99E-4	1.20E-4	1.20E-3	6.83E-4	1.37E-4	0.5	0.1		1%	1%
Lead	9.08E-3	5.19E-3	1.04E-3	1.04E-2	5.92E-3	1.19E-3	0.5	0.1	9.0E-2	5%	6%
Manganese	1.92E-2	1.10E-2	2.19E-3	2.19E-2	1.25E-2	2.52E-3	50	12	5.0E-2	4%	5%
Mercury	4.19E-4	2.39E-4	4.79E-5	4.78E-4	2.73E-4	5.49E-5	0.1	0.02	3.0E-1	1%	1%
Nickel	4.19E-3	2.39E-3	4.79E-4	4.78E-3	2.73E-3	5.49E-4	1	0.2	4.2E-3	11%	13%
Selenium	4.54E-3	2.59E-3	5.19E-4	5.18E-3	2.96E-3	5.95E-4	2	0.5		1%	1%
Sulfuric Acid	2.44E-1	1.40E-1	2.79E-2	2.79E-1	1.59E-1	3.20E-2	10	2.4		6%	7%

[a]Conservatively assuming 10% of kiln emissions are hexavalent (Cr^{IV}) and the remaining 90% are trivalent (Cr^{III}).

7.0 AIR QUALITY RELATED VALUES

Air quality modeling analyses in Section 6.0 demonstrate compliance with Prevention of Significant Deterioration (PSD) increments and ambient air quality standards (AAQS). This section describes additional air quality analyses performed as required by PSD regulations..

7.1 VISIBILITY

Types of visibility impairment were described in the original permit application. As concluded in the original permit application, visibility impacts would be expected to be greatest due to emissions from the main facility stack.

7.1.1 Visibility Impairment in Project Vicinity

As described in the original permit application, the main facility stack has the potential to be visible up to three miles based on the stack height of 320 feet and depending on vegetation and other obstructions to vision in the immediate project vicinity. Based on past experience with the existing cement kiln, a visible plume (except for condensed water vapor) due to emissions from the main stack does not occur under normal operating conditions. A plume is sometimes visible for short periods of time when a bag failure occurs in the baghouse, but these conditions are limited in both duration and frequency. Therefore, no significant change in either plume perceptibility or frequency of a visible plume would be expected in the project vicinity due to the second cement kiln.

7.1.2 Visibility Impairment in Class I Areas

The nearest Class I area is the Chassahowitzka National Wildlife Refuge (CNWR), which is located in Hernando and Citrus Counties along the Florida Gulf of Mexico coast. The nearest boundary is the CNWR southeast corner, 20 km from the facility. As required by the National Park Service (NPS), visibility analyses were performed for the proposed cement kiln only rather than for the increase in facility visibility impacts due to the proposed modification. Based on the conservative assumptions in level-1 and level-2 visibility analyses, the potential for a visible plume due to emissions from the proposed cement kiln exists during stable, low wind speed conditions as shown in the original permit application based on VISCREEN analyses. Therefore, a level-3 visibility analysis was performed with the PLUVUE-II model for the worst-

case wind speed and stability conditions identified in the level-2 analysis (1.5 meters/second and F stability) with a wind direction of 110.5°, placing the southeastern Class I receptor on the south edge of the 22½° sector centered on the plume. Views perpendicular through the plume centerline for the observer location were analyzed. The analyses performed for the original permit application are described in the modeling protocol dated September 19, 1995 (RTP, 1995b) and the visibility modeling report dated September 20, 1995 (RTP, 1995c).

A level-3 analysis was performed for this project very similar to the analyses performed for the original permit application. The analysis for this project was based on the worst-case meteorological condition (F stability and low wind speed) using the latest version of PLUVUE-II (version 96170). Revisions made to the analyses in the original permit application for this project based on the NPS's technical review of the visibility analyses submitted as part of the original permit application (and cited above), which included an additional visibility analysis scenario, are as follows:

- anemometer height wind speed was set to 1.0 m/s;
- an additional scenario was modeled with a wind direction of 126.6°, which places the northeastern Class I receptor on the northern edge of the 22½° sector centered on plume centerline;
- only sky backgrounds were considered since there is no significant terrain in the study area (i.e., views of the plume with terrain in the background would not occur; so white, gray, or black backgrounds were not considered); and
- visibility analyses for an observer on the opposite side of the 22½° sector from the traditional Class I receptor (also on the eastern boundary of CNWR) were also performed (i.e., north of the plume for the 110.5° wind direction analysis and south of the plume for the 126.6° wind direction analysis).

PLUVUE-II inputs were generally set equal to the model defaults or recommended values and are shown on Table 7-1. Like the original visibility analysis, analyses were performed for spring, summer, and winter seasons. These dates are included on Table 7-1. Appropriate temperatures and relative humidities were selected based on Tampa International Airport data as shown on Table 7-1. Time periods modeled were for the half-hour immediately after sunrise (0700, 0600, and 0730 for spring, summer, and winter, respectively) and then proceeding for two more hours in 30 minute increments. Results of the PLUVUE-II analysis are shown on Table 7-2 and compared below to visibility critical values:

Visibility Impact	Critical Values	Kiln Impact
Delta-E	≥ 2.0	1.705
Plume Contrast	≤ 0.9 or ≥ 1.1	0.958
Blue-Red Ratio	≥ ±0.02	-0.010

Worst-case kiln impacts generally occurred during the winter just after sunrise for an observer at the southeast corner of the CNWR. Since the worst-case impacts are less than the critical values, it can be concluded that there is little potential for a visible plume as viewed from the CNWR due to kiln emissions.

7.2 MINOR SOURCE GROWTH

As discussed in detail in the original permit application, the addition of 15 to 20 new jobs for the proposed kiln would result in an increase in the current Hernando County population of only 0.02% assuming all new hires relocate to Hernando County. In reality, most of the new workers will likely be hired from the surrounding community. Therefore, there is expected to be little significant impact on general commerce, transportation, or public services (police, fire, medical, sewage, educational, and utility services) due to employees for the proposed kiln. In addition, the proposed kiln will not require a significant expansion of the facility or mining activities or expansion of industry in the surrounding areas for support services.

The proposed kiln is projected to increase truck traffic as shown in Section 3.0; however, this increase is not significant given the existing level of trucking in the area from FCS's current operations. With minimal increases in residential, commercial, public service, industrial, and transportation growth, no significant increase in atmospheric emissions would be expected as a result of minor source growth for the proposed kiln.

7.3 SOILS AND VEGETATION

As described in detail in the original permit application, approximately 20% of Hernando County is devoted to agricultural usages for crops (primarily hay, horticultural specialties, fruits, and nuts), pasture for livestock, and woodland. The major agricultural activity in Hernando County is animal production (livestock or poultry). Other land uses of commercial and recreational value in Hernando County include the growth of ornamental and turf grass and parkland and other open areas, which contain significant amounts of open vegetation and exposed soil.

The pollutants emitted in significant quantities by the proposed cement plant are nitrogen oxides (NO_x), sulfur dioxide (SO_2), particulate matter (PM), and carbon monoxide (CO). Historically, the majority of vegetative impacts have resulted from elevated concentrations of SO_2. As shown in the screening analyses in Section 6.0, the maximum increase in 3-hour facility SO_2 impacts

is about 5 ug/m³, which is well below the level at which plant damage has been observed. As referenced in the original permit application, NO_x and CO concentrations are not injurious to plants except at very high concentrations (19,000 ug/m³ for NO_x and over 100,000 ug/m³ for CO). Since increases in facility impacts due to the proposed kiln are only 0.2 ug/m³ (annual NO_2) and 50 ug/m³ (1-hour CO), no impacts to vegetation are predicted for the proposed kiln.

Potential negative impacts to exposed soils (e.g., rainfall pH changes due to sulfuric and nitric acid and inhibition of nitrogen fixation by soil microorganisms due to elevated CO concentrations) have only been observed to occur at levels very much greater than increases in facility impacts due to the proposed kiln. Therefore, no significant impact on soils is expected for the proposed kiln. In addition, analyses in Section 6.0 have demonstrated that the proposed kiln will not interfere with the maintenance of AAQS, which were developed in part to prevent significant adverse impacts to soils and vegetation. Therefore, facility compliance with the AAQS also indicates that no significant adverse impact on soils and vegetation will occur.

7.4 REFERENCES

National Park Service (NPS), 1995. Technical Review of the PLUVUE 2 Visibility Analysis Submitted September 27, 1995, for Florida Crushed Stone's Proposed New Cement Kiln, Hernando County, Florida. Air Quality Branch, Fish and Wildlife Service.

RTP Environmental Associate, Inc. (RTP), 1995a. Application to Construct a Second 600,000 Ton Per Year Cement Kiln at the Florida Crushed Stone Company Facility in Brooksville, Florida. March, 1995.

RTP, 1995b. PLUVUE-II Modeling Analysis Protocol for Proposed Cement Kiln at Florida Crushed Stone. Revised September 19, 1995.

RTP, 1995c. PLUVUE-II Modeling Analysis for the Proposed Cement Kiln at Florida Crushed Stone. September 20, 1995.

United States Environmental Protection Agency (USEPA), 1988. Workbook for Plume Visual Impact Screening and Analysis. EPA-450/4-88-015, September 1988 with October 1992 revisions from OAQPS BBS system.

USEPA, 1992. User's Manual for the Plume Visibility Model (PLUVUE II) (Revised). EPA-454/B-92-008, September 1992.

TABLE 7-1
PLUVUE-II INPUTS

Emissions/Miscellaneous Data	
Site elevation (feet msl)	0
Number of units	1
Stack height (feet)	320
Flue gas flowrate (ACFM)	312,523[a]
Flue gas exit velocity (m/s)	10.31[a]
Flue gas temperature (°F)	258[a]
Flue gas oxygen (mole %)	3[b]
SO_2 emission rate (tons/day)	0.2875
NO_x emission rate (tons/day)	3.5000
PM emission rate (tons/day)	0.5738
Source UTM Coor (km)	360.0,3162.5
UTM Zone	17
Time Zone (relative to GMT)	5

Model Options	
Dispersion index for PG-Turner	0
Flags for optics calculations	1,0,1,0
Starting/ending index for scattering angles	1,7[b]
Altitude index for centerline	1
Number of downwind points for optical size calculations	0,0,0[b]
Number of points for vertical scans	0,0[b]
Vertical scan stepping interval	0[b]
Channel plot option	0[b]
Mie library	Default file
Sulfate conversion index	0[b]
Sulfate conversion constant	0.0[b]
Indices for observer based calcs	2,2

Meteorological/Air Quality Data	
Wind speed (mph)	2.24
Wind meas.ht index for 10 m	1
Pasquill-Gifford stability	F
Lapse rate (°F/1000 ft)	13.83
Mixing depth (m)	10,000
Ambient pressure (atm)	1.0
Background NO_x conc (ppm)	0.000[b]
Background NO_2 conc (ppm)	0.000[b]
Background O_3 conc (ppm)	0.040[b]
Background SO_2 conc (ppm)	0.000[b]
Background coarse conc (ug/m³)	35.0[c]
Background visual range (km)	65.0[d]
SO_2 deposition velocity (cm/s)	1.0[b]
NO_x deposition velocity (cm/s)	1.0[b]
Coarse PM dep. velocity (cm/s)	0.10[b]
Fine PM dep. velocity (cm/s)	0.10[b]

Seasonal Dependant Inputs	
Spring Date	March 20, 1988
Hours	700,730,800,830,900
Ambient Temp (°F)	56.1[e]
Relative Humidity (%)	86[f]
Summer Date	June 21, 1988
Hours	600,630,700,730,800
Ambient Temp (°F)	72.3[e]
Relative Humidity (%)	87[f]
Winter Date	December 21, 1988
Hours	730,800,830,900,930
Ambient Temp (°F)	50.9[e]
Relative Humidity (%)	87[f]

Ambient Particulate Aerosol Model inputs	Accum. Mode	Coarse Mode	Plume Sec'ndy	Plume Primary	Carbon. Aerosol
Mass median radius (um)	0.15[b]	3.0[b]	0.10[b]	1.0[b]	0.05[b]
Geo. standard dev. (um)	2.0[b]	2.2[b]	2.0[b]	2.0[b]	2.0[b]
Particle density (g/cm³)	1.5[b]	2.5[b]	1.5[b]	2.5[b]	2.0[b]
Fraction of plume primary	-	-	-	-	0.0[b]
Background (ug/m³)	-	-	-	-	0.0[b]
Refraction index-Real part	1.5[b]	1.5[b]	-	1.5[b]	2.0[b]
-Imaginary part	0.0[b]	0.0[b]	-	0.0[b]	1.0[b]

TABLE 7-1 (Concluded)
PLUVUE-II INPUTS

Observer Data for Wind Direction of 110.5°		Observer Data for Wind Direction of 126.6°	
Observer south of plume:		Observer south of plume:	
Observer UTM (km)	340.3,3165.7	Observer UTM (km)	340.655,3171.665
Observer elevation (ft-msl)	0	Observer elevation (ft-msl)	0
Critical Plume Distance (km)	19.6[g]	Critical Plume Distance (km)	21.0[g]
Observer north of plume:		Observer north of plume:	
N Observer UTM (km)	341.84,3173.74	N Observer UTM (km)	341.1,3173.74
Observer elevation (ft-msl)	0	Observer elevation (ft-msl)	0
Critical Plume Distance (km)	21.0[g]	Critical Plume Distance (km)	27.6[h]

[a]Worst-case flowrate and temperature (smallest plume rise) from Section 6.0 screening analyses for second cement kiln only. Since the stack is a point source, initial plume dimension inputs for an area source were set to 0 meters.
[b]PLUVUE-II recommended/default value.
[c]Maximum annual TSP concentration in original permit application.
[d]Background sulfate and nitrate concentration not used when background visual range specified.
[e]Mean average monthly daily minimum temperatures for March, June, and December from the Tampa International Airport Local Climatological Data (LCD) summary.
[f]Mean average monthly relative humidities for hour 0700 for March, June, and December from the Tampa International Airport LCD summary.
[g]Downwind plume centerline distances of 1.0, 2.0, 5.0, 10.0, and 15.0 km also modeled. Elevation of terrain at all selected points along the plume centerline set equal to 0 feet-msl.
[h]Downwind plume centerline distances of 1.0, 2.0, 5.0, 10.0, 15.0, 20.0, and 25.0 km also modeled. Elevation of terrain at all selected points along the plume centerline set equal to 0 feet-msl.

TABLE 7-2
PLUVUE-II RESULTS

Wind Direction = 110.5° and Observer South of Plume

Spring				Summer				Winter			
Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red
0700	1.544	-.008	0.962	0600	1.640	-.009	0.960	0730	1.705	-.009	0.958
0730	1.407	-.010	0.964	0630	1.526	-.009	0.963	0800	1.537	-.010	0.963
0800	1.274	-.009	0.964	0700	1.410	-.009	0.965	0830	1.361	-.010	0.964
0830	1.222	-.009	0.967	0730	1.337	-.009	0.966	0900	1.268	-.010	0.965
0900	1.186	-.009	0.967	0800	1.279	-.009	0.967	0930	1.234	-.009	0.966

Wind Direction = 110.5° and Observer North of Plume

Spring				Summer				Winter			
Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red
0700	1.485	-.009	0.963	0600	1.554	-.009	0.961	0730	1.661	-.009	0.960
0730	1.327	-.010	0.966	0630	1.378	-.010	0.964	0800	1.513	-.009	0.964
0800	1.212	-.009	0.967	0700	1.262	-.009	0.966	0830	1.359	-.009	0.965
0830	1.171	-.009	0.968	0730	1.210	-.009	0.967	0900	1.284	-.009	0.966
0900	1.147	-.009	0.968	0800	1.172	-.009	0.968	0930	1.249	-.008	0.967

Wind Direction = 126.6° and Observer South of Plume

Spring				Summer				Winter			
Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red
0700	1.509	-.008	0.963	0600	1.667	-.008	0.960	0730	1.661	-.009	0.960
0730	1.429	-.009	0.965	0630	1.629	-.008	0.963	0800	1.503	-.009	0.964
0800	1.287	-.009	0.967	0700	1.508	-.008	0.965	0830	1.332	-.009	0.965
0830	1.220	-.009	0.968	0730	1.408	-.008	0.966	0900	1.236	-.009	0.966
0900	1.177	-.008	0.969	0800	1.323	-.008	0.968	0930	1.196	-.009	0.967

Wind Direction = 126.6° and Observer North of Plume

Spring				Summer				Winter			
Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red	Time	DeltE	Cntrst	Bl-Red
0700	1.346	-.008	0.968	0600	1.405	-.009	0.968	0730	1.499	-.008	0.965
0730	1.202	-.009	0.970	0630	1.240	-.009	0.969	0800	1.379	-.009	0.968
0800	1.095	-.009	0.971	0700	1.132	-.009	0.970	0830	1.255	-.009	0.970
0830	1.060	-.008	0.972	0730	1.085	-.009	0.971	0900	1.194	-.009	0.971
0900	1.039	-.008	0.973	0800	1.047	-.009	0.972	0930	1.159	-.008	0.973

APPENDIX A

HAND-WRITTEN CHANGES TO
AIR CONSTRUCTION AND PPSA PERMITS
FOR PROPOSED REVISIONS

PROPOSED REVISIONS TO AIR CONSTRUCTION PERMIT

State of Florida
Department of Environmental Protection
Notice of Permit

In the matter of an
Application for Permit by:

DEP File No. AC 27-274892
PSD-FL-227
Hernando County

Mr. Joseph T. Piermatteo, Sr. Vice President
Florida Crushed Stone Company
10311 Cement Plant Road
Brooksville, Florida 34601

Enclosed is Permit Number AC 27-274892 (PSD-FL-227) to construct a second ~~ton~~ 104.2 ton per hour cement plant. The project includes a dry process kiln with a preheater, clinker cooler, crushers, raw mill, finish mill, material and fuel handling equipment, silos, and shipping facilities. The facility is located approximately 3.5 miles northwest of Brooksville, Hernando County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed by certified mail before the close of business on 11-17-95 to the listed persons.

Clerk Stamp
FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk 11-17-95
Date

Copies furnished to:

cc: Jewell Harper, EPA
John Bunyak, NPS
Buck Oven, DEP
Bill Thomas, SWD
Doug Beason, DEP
Lawrence Jennings, Hernando County
Don Elias, RTP Env. Assoc.
Lawrence Curtin, H&K
Tom Mountain, FCS

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

PERMITTEE:
Florida Crushed Stone Company
10311 Cement Plant Road
Brooksville, FL 34601

Permit Number: AC 27-274892
PSD-FL-227
Expiration Date: 11/30/98
Project: No. 2 Cement Kiln and Associated Equipment

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-210 through 297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of a second portland cement kiln shaft dryer/heater, 104.2 at a maximum clinker production capacity of ~~83~~ tons per hour (TPH) and associated equipment consisting of a clinker cooler, ~~Gepol a~~ preheater, raw mill, finish mill, conveyers, transport systems, feed systems, and raw material and product silos, bins and hoppers. The cement kiln will be preheated with fuel oil and/or natural gas, fired with coal as the main fuel, and burn whole tires as supplemental fuel. precalciner and precalciner The shaft dryer heater will be fired with fuel oil. , tire derived fuel, and/or natural gas

The Florida Crushed Stone (FCS) facility is located approximately 3.5 miles northwest of Brooksville, Hernando County, Florida. The UTM coordinates of this facility are Zone 17, 360.0 km East and 3162.5 km North.

The project shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received March 13, 1995.
2. Department's letters dated April 21, memo dated June 16, letter dated August 3, August 10, and October 11, 1995.
3. RTP Environmental Associates letters dated March 21, May 10, May 19, July 11, July 17, August 11, August 22, September 5, September 7, September 12, September 14, and October 24, 1995.
4. EPA's letters dated June 15, and November 2, 1995.
5. Hernando County Planning Department's letter dated April 28, June 5, and August 11, 1995.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance,

GENERAL CONDITIONS:

provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT) - **Attached and made a condition of this permit**
(x) Determination of Prevention of Significant Deterioration (PSD)
(x) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;

GENERAL CONDITIONS:

- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. The construction and operation of the No. 2 kiln and associated equipment shall comply with all applicable provisions of Chapter 403, F.S., Chapters 62-4, 62-210 through 297, F.A.C., and 40 CFR 60 (1994 version).

2. Unless otherwise indicated, the construction and operation of the No. 2 cement kiln and associated equipment shall be in accordance with the capacities and specifications stated in the application. The facility shall comply with all applicable requirements of 40 CFR 60, Subpart A, Appendix A and Appendix B (1994 version); Subpart F - Standards of Performance for Portland Cement Plants which are adopted by reference in Rule 62-296.800(2)(a), F.A.C.

3. The No. 2 kiln clinker production rate shall not exceed ~~83.0~~ 104.2 tons per hour (TPH), ~~1992~~ 2500 tons per day (TPD) and ~~727,080~~ 912,500 tons per year (TPY) based upon 8,760 hours of operation per year. The permitted maximum preheater feed is ~~138.0~~ 159.4 TPH, which is equivalent to a maximum kiln feed rate of ~~127.0~~ 173.2 TPH. [Rule 62-212.200(58), F.A.C.]

4. Fuels fired in No. 2 kiln and precalciner shall not exceed a total heat input rate of ~~303~~ 325 MMBtu/hr and shall consist only of:

a. Coal and whole tires, tire derived fuel (shredded tires), and natural gas for normal operation.

b. Natural gas, all grades ~~(meeting~~ 1.5% sulfur limit) of virgin fuel oil, and/or ~~and~~ blends (meeting 1.5% sulfur limit) of virgin fuel oil ~~and~~ on-spec used oils for startup.

5. The coal usage rate shall not exceed ~~10.3~~ 13.8 TPH or ~~90,228~~ 120,888 TPY based on continuous operation.

6. Whole tires and tire derived fuel may be fed continuously at the kiln inlet at the base of the ~~preheater~~ precalciner at a rate not to exceed ~~45~~ 48.75 MMBtu/hr (15% of total kiln fuel input) or ~~1.33~~ 1.44 TPH and ~~11,039~~ 11,952 tons per year based on 8300 hours per year. and precalciner

Fuels fired in the shaft dryer heater shall not exceed a total heat input of 30 MMBTU/hr and shall consist only of all grades of virgin fuel oil (meeting 1.5% sulfur limit) for startup and normal operation.

7. Before initiating tire firing, the gases exiting the kiln ~~ahead of the preheater~~ shall reach a minimum temperature of 1400 degrees F for one hour and the oxygen level in the kiln, as measured at the cement plant induced draft fan, shall reach at least 3 percent (1-hour average). Upon reaching steady state conditions, and within 6 hours, gases exiting the kiln shall be maintained at an outlet temperature of at least 1750 degrees F.

8. The sulfur content of the fuel oil blend shall not exceed 1.5% by weight. The constituents and properties of the on-spec used oil shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 266.40 (July 1, 1992 version), which is adopted by reference in Rule 62-730.181, Florida Administrative Code (F.A.C.):

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 F minimum
Polychlorinated Byphenyls (PCBs)	Less than 2 ppm

9. On-spec used oil to be blended and burned at this facility shall not be a hazardous waste as defined by Rule 62-730.030, F.A.C., or 40 CFR Part 261 (July 1, 1992 version). It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. The on-spec used oil shall be burned in compliance with Section 403.769(3), Florida Statutes.

10. The on-spec used oil to be blended with the unused fuel oil in the cement kiln fuel storage tank shall be obtained only from the used oil storage tanks located at the FCS Greg Mine and CPL Plant. The used oil sample from Specific Condition(S) No. ~~12~~ 8 and 31 shall be analyzed for the following constituent/property, associated unit, and using the test methods indicated:

Constituent/Property	Unit	Test Method
Cadmium	ppm	EPA SW-846(6010)
Arsenic	ppm	EPA SW-846(6010)
Chromium	ppm	EPA SW-846(6010)
Lead	ppm	EPA SW-846(6010)
Total Halogens	ppm	EPA SW-846(9252)
Sulfur	percent	ASTM D129 or ASTM D1552

Flash Point	Degree F	EPA SW-846(~~6010~~ 1010)
Heat of Combustion	Btu/gal	~~EPA SW-846(1010)~~
Density	lbs/gal	ASTM D240
Polychlorinated Byphenyls (PCB's)	ppm	

NOTE: Other test methods may be used only after receiving written prior approval from the Department.

11. The maximum on-specification used oil concentration in the final storage tank blend of on-specification used oil and purchased unused oil shall not exceed 15 percent by volume.

12. The maximum allowable emission rates for the No. 2 kiln, shaft dryer heater, clinker cooler, raw mill and preheater, precalciner shall not exceed the limits listed in Table II.

13. The permittee shall not cause or allow to be discharged into the atmosphere visible emissions which exceed the limits listed in

Table I. In accordance with Rule 62-297.620(4), minor particulate sources equipped with baghouses with visible emissions which are greater than or equal to 5 percent opacity shall require the permittee to perform a stack test in accordance with approved methods to verify compliance with the 0.01 gr/dscf emission limit contained in Table I.

14. Compliance with the allowable emission limiting standards listed in Tables I and II shall be determined within 60 days after achieving the maximum production rate at which this plant will be operated, but not later than 180 days of initial operation, and annually (where specified) thereafter, by using the following reference methods as described in 40 CFR 60, Appendix A (1994 version) and 40 CFR 61 Appendix B 1994 version) adopted by reference in Chapter 62-297, F.A.C.

Method 5 Determination of Particulate Matter Emissions from Stationary Sources (I) and (A).
Method 8 Determination of Sulfuric Acid Mist from Stationary Sources (I).
Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I) and (A).
Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I) and (A).
Method 22 Visual Determination of Fugitive Emissions from Material Sources (I) and (A).
Method 25 Determination of Volatile Organic Compound Emissions from Stationary Sources (I).

Method 29 Determination of Lead, Cadmium, and Mercury from Stationary Sources (proposed) (I).
Method 104 Determination of Beryllium Emissions from Stationary Sources (I).

15. Emission testing shall be performed at the No. 2 kiln/cooler stack during a period when the No. 2 kiln, cooler, raw Mill and preheater are operating simultaneously and under normal operating conditions. The measured emission rates will be the combined rates from the kiln and clinker cooler determined at the stack. The Initial (I) compliance test shall be performed within 180 days of start up. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C.

16. EPA-reference methods for sampling pollutants shall consist of 3 consecutive test runs, each of one hour duration, shall be performed on the common kiln/cooler stack for each pollutant specified in Tables I and II.

17. Stack sampling facilities shall be installed in accordance with Rule 62-297.345, F.A.C.

18. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission limit is being violated.

19. The Department's Southwest District office shall be notified 30 days prior to any compliance test to allow witnessing. Results of the tests shall be submitted to the Department's Southwest Florida District office within 45 days after testing.

20. Testing of emissions shall be conducted with the emission unit operating at capacity (85% coal and 15% tires). Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the unit may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit.

21. Continous monitoring equipment shall be installed, operated, and used to determine compliance for NOx and SO2. Continuous emission monitors must be installed and certified, before the

initial performance test, and operated in compliance with 40 CFR 60, Appendix F, Quality Assurance Procedures (1994 version) or other Department approved QA plan; 40 CFR 60 Appendix B, Performance Specification 1, 2, and 3 (1994 version).

22. Continuous opacity monitors shall be installed, operated, and maintained at the common kiln/cooler stack pursuant to 40 CFR 60.63.

23. Continuous monitors shall be installed for CO or O_2 to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NO_X, and SO_2.

24. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, and regrassing or watering areas of disturbed soils, will be taken by the permittee. These provisions are applicable to any source, including but not limited to vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. At all times, unconfined particulate matter emissions shall be minimized by dust suppressing techniques, such as covering and/or application of water or chemicals to the affected areas pursuant to Rule 62-296.310(3), F.A.C.- Unconfined Emissions of Particulate Matter.

25. Particulate emissions from coal handling facilities related to the No. 2 kiln shall be minimized by following the procedures listed below: [Rule 62-296.310(3)]

a. All conveyers and transfer points shall be enclosed to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).

b. Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.

c. Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc, during dry periods and as necessary to all facilities to maintain an opacity of less than 5 percent, except when adding, moving or removing coal from the coal pile, during which the opacity shall be no more than 20%.

26. The part of the fly ash handling system related to the No. 2 kiln (including transfer equipment, flyash bin, and pneumatic system exhaust) will be totally enclosed and vented through fabric filters.

27. In order to document compliance with Specific Condition No. 6:

a. A log shall be established and maintained for the hours of operation using tires as supplemental fuels. The log shall include the daily tire usage (hours) as supplemental fuel at the facility, a monthly running total of the tire usage (hours), and a cumulative 12 month running total (hours), to ensure that the annual limit is not exceeded. The log shall be maintained on file for at least five (5) years and shall be made available to the Department upon request.

b. A log that includes the date of all tire deliveries to the facility, and the total quantity (nearest 0.1 tons) of tires received.

c. A tire usage-control system shall be installed to assure that the tire usage as supplemental fuel at the facility does not exceed the maximum 15% of the total Btu heat input to the No. 2 kiln or ~~1.33~~ 1.44 tons per hour. The control system shall include a verification method and a log that insures and documents that the tires usage and heat input limits are not exceeded.

d. A log for the utilization rate (tons per hour) of tires. The utilization rate of tires as supplemental fuel shall be determined by a continuous weighing method and shall be recorded.

e. The logs shall be maintained on file for at least five (5) years and shall be made available to the Department upon request.

28. FCS shall record, as a minimum, the daily dry feed rate into the No. 2 kiln (TPH), and the clinker production rate. The above records shall be retained for a period of five (5) years and made available to the Department upon request.

29. In order to document compliance with Specific Condition No. 5, a coal usage control system shall be established to assure that the coal usage does not exceed a maximum of ~~10.3~~ 13.8 TPH.

30. In order to document compliance with Specific Conditions No. 8 through 11, the following used oil control system shall be used, as a minimum:

a. Record the transfer of used oil and unused oil to the blend tanks (dates and gallons).

b. Record the final blend quantities of on-spec used oil and unused oil (gallons)

c. Calculate and record the final percentage of on-spec used oil in the tank blend of on-spec used oil and unused oil, and verify that the percentage does not exceed 15.0 percent, by volume.

These records shall be maintained on file for at least five (5) years and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C. and FCS letter on Used Oil Sampling].

31. Recordkeeping requirement when burning on-spec used oil shall be in accordance with 40 CFR 266.43 (b) and (6) (July 1, 1992 version). The results of each sample analysis shall be submitted to the Department Southwest District office and the Hernando County Planning offices within 30-days after a sample is taken. The dates and quantities of both on-spec purchased fuel oil transferred to the facility storage tank shall be reported quarterly (i.e., Jan-Mar, April-June, July-Sept, and Oct-Dec). The report is due in the month following the ending quarter. All records shall be kept for a minimum of five (5) years period for public and regulatory agency inspection.

32. All measurements, records, and other data required to be maintained by the permittee shall be reported to the Southwest District office on a quarterly basis with the start of commercial operation in accordance with 40 CFR 60.7. All measurements, records and other data required to be maintained by the permittee shall be retained for at least 5 years following the date on which such measurements, records, or data are recorded. The data shall be available to Department staff as requested. [40 CFR 60.7]

33. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (Rule 62-210.300(1), F.A.C.).

34 ~~33~~. Objectionable odors associated with air emissions from this facility shall be prohibited. [Rule 62-296.320]

35 ~~34~~. Pursuant to Rule 62-210.370(2), F.A.C., Annual Operating Reports, the permittee is required to submit annual reports to the Southwest District office by March 1 of each calendar year, on the actual operating rates and emissions from this facility. These reports shall include at a minimum the following:

a. the input process rate

b. total quantity (by weight) of tire used as supplemental fuel.

c. total coal, natural gas, and oil usage, and

d. regulated pollutant emission rates.

36 ~~37~~. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the Southwest District office of any delays in completion of the project which would affect the startup date by more than 90 days. [Rule 62-4.090, F.A.C.].

37 ~~38~~. An application for an operation permit must be submitted to the DEP's Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (Rules 62-4.055 and 62-4.220, F.A.C.).

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes

Howard L. Rhodes, Director
Division of Air Resources Management

Table I

Allowable Opacity Limits

Clinker Bin | Baghouse | 2H-15 | 0.01 | 5

Description	Control	Emission Unit Equipment	Grain Loading (gr/dscf)	OPACITY
Emission Unit: Raw Material Processed Process Rate				
Material Processing (Fugitive)				10
Handling and Storage (Fugitive)				10
Emission Unit: ~~Raw~~ Mill System Process Rate = ~~127~~ 159.4 TPH Dry Feed				
~~Iron Ore Bin~~	~~Baghouse~~	~~2D-61~~	~~0.01~~	~~5~~ e
~~Fly Ash Bin~~	~~Baghouse~~	~~2D-64~~	~~0.01~~	~~5~~ e
Filter Dust Bin Transport	Baghouse	~~2D-77~~ 2E-67	0.01	5
Raw Meal Transport	Baghouse	2F-~~03~~ 02	0.01	5
~~Lime Silo Storage~~	~~Baghouse~~	~~2F-21~~	~~0.01~~	~~5~~ e
Raw Mill Storage and Homogenizing Silos	Baghouse	2G-~~2T~~-01	0.01	5
Emission Unit: ~~Kiln~~ Operations Process Rate = ~~303~~ 325 MMBTU/hr				
Kiln Feed System	Baghouse	2H-05, 2E-66	0.01	5
Kiln Main Stack	Baghouse	2E-40		10
Emission Unit: ~~Finish~~ Mill Process Rate = ~~83~~ 104.2 TPH Clinker				
Gypsum Storage Bin	Baghouse	2L-14	0.01	5
Clinker Transport	Baghouse	2L-03	0.01	5
Belt Conveyor	Baghouse	2M-~~08~~ 04	0.01	5
Finish Mill Discharge Vent	Baghouse	2N-02	0.01	5
Finish Mill Sepal Separator	Baghouse	2N-08	0.01	5
Clinker Storage Silo	Baghouse	2L-05	0.01	5
Emission Unit: ~~Cement~~ Handling Process Rate: ~~>90~~ ~115 TPH Portland Cement				
Cement Storage Silo A	Baghouse	~~2Q-01, 2Q-20~~ 2Q-18	0.01	5
Cement Storage Silo B	Baghouse	~~2Q-01, 2Q-20~~ 2Q-18	0.01	5
Cement Silo Discharge Hopper A	Baghouse	~~2Q-01, 2Q-20~~ 2Q-28	0.01	5
Cement Silo Discharge Hopper B	Baghouse	2Q-38	0.01	5
Emission Unit: Coal Handling Process Rate = 10.3 TPH				
~~Coal Transport Conveyor~~	~~Baghouse~~	~~25-03~~	~~0.01~~	~~5~~ e
~~Coal Storage Bin~~	~~Baghouse~~	~~25-01~~	~~0.01~~	~~5~~ e
Coal Handling and Storage (Fugitive)				5/20

Coal Mill | Baghouse | 25-15 | 0.01 | 5
Coal Dust Bin | Baghouse | 25-20 | 0.01 | 5

Table II
Allowable Emissions
Main Stack

POLLUTANT	BACT EMISSION LIMIT		EMISSION RATE		BASIS
	lb/ton clinker	lb/ton dry feed	lbs/hr	tons/yr	
PM/PM_{10} (kiln)	0.306 ~~0.310~~	0.200	31.875 ~~25.400~~	139.613 ~~111.250~~	BACT
PM/PM_{10} (cooler)	0.153 ~~0.150~~	0.100	15.938 ~~12.700~~	69.806 ~~55.620~~	BACT-NSPS
SO_2	0.230 ~~0.270~~	0.150 ~~0.176~~	23.958 ~~22.410~~	104.938 ~~98.156~~	BACT
NO_x *	2.800	1.830	291.667 ~~232.400~~	1277.500 ~~1017.912~~	BACT
CO	2.000	1.307	208.333 ~~166.000~~	912.500 ~~727.080~~	BACT
VOC	0.085 ~~0.100~~	0.056 ~~0.065~~	8.854 ~~8.300~~	38.781 ~~36.354~~	FCS/DEP
H_2SO_4	0.014	0.009	1.458 ~~1.162~~	6.388 ~~5.090~~	FCS DATA
Beryllium	8.50 ~~9.90~~E-07	5.56 ~~6.47~~E-07	8.85 ~~8.22~~E-05	3.88 ~~3.60~~E-04	FCS/DEP
Mercury	2.40E-05	1.57E-05	2.50 ~~1.99~~E-03	1.10E-2 ~~8.72E-03~~	FCS DATA
Lead	5.20E-04	3.40E-04	5.42 ~~4.32~~E-02	2.37 ~~1.89~~E-01	FCS DATA

Note: * FCS shall have up to 18 months after startup of commercial operation to achieve this standard.

PROPOSED REVISIONS TO PPSA PERMIT

Includes typographical corrections given in
February 9, 1996 letter
from Tom Mountain, FCS to Buck Oven, FDEP

I. Air

A. Emission Limitations

1 -15. No change

16. Stack emissions from cement plant II shall not exceed the following site specific limitations for the cement kiln, clinker cooler, raw mill and preheater as given in Permit No. AC95-274892:

(dry basis) POLLUTANT	Emission Limits LBS/TON KILN FEED	MAX. ALLOWABLE EMISSIONS LBS./HR.	TONS/YR.
Particulate (Cooler)	0.1	~~12.7~~ 15.9	~~55.6~~ 69.8
Particulate (Kiln)	0.2	~~25.4~~ 31.9	~~111.3~~ 139.6
SO_2	~~0.18~~ 0.15	~~22.4~~ 24.0	~~98.2~~ 104.9
NOx	1.83	~~232.4~~ 291.7	~~1018~~ 1277.5

The measured emission rates will be the combined rates from the Unit II cement kiln stack. Visible emissions shall not be equal to or greater than 10% opacity, also determined at the Unit II cement plant stack. Permit No. AC95-274892 also specifies:

a. The raw and finished material feed rates and fuel types for cement plant II;

b. The operating conditions required for proper operation and startup/shutdown periods; and

c. The testing, monitoring, recordkeeping, and reporting requirements for cement plant II.

17. Minor source cement plant II particulate emissions due to the storage and/or use of raw materials, intermediate (cement kiln dust) and final (clinker) products will be controlled through the use of silos and/or covered conveyors equipped with fabric filter baghouses designed for outlet grain loading of 0.01 gr/acf. A visible emission reading of 5% opacity or less may be used to establish compliance with the lb/hour emission limits for each source given in the permits. A visible emission reading greater than 5% opacity will require the permittee to perform a stack test using EPA Methods contained in 40 CFR 60, Appendix A with minimum requirements for stack sampling facilities, source sampling and reporting in accordance with 62-297, FAC.

B. Air Monitoring Program

1. A flue gas oxygen meter shall be installed for the unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The permittee shall install and operate continuous monitoring devices for the boiler/cement plant I exhaust for sulfur dioxide and opacity to demonstrate compliance with the pound-per-hour SO_2 emission limits and visible emission limits, respectively, in Conditions I.A.1.a and I.A.2.a. The monitoring devices shall meet the applicable requirements of Section 62-297.500, FAC. and 40 CFR 60.45, and 40 CFR 60.13. including certification of each device. The permittee will provide the department with 30 days notice on each certification.

H. Cement Kiln #2 , and its associated equipment, shall be constructed and operated in accordance with PSD FL 227

APPENDIX B

AIR PERMIT APPLICATION FORMS

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Florida Crushed Stone Company
2. Site Name : Florida Crushed Stone Company
3. Facility Identification Number : [X] Unknown
4. Facility Location : Florida Crushed Stone Company Street Address or Other Locator : 10311 Cement Plant Road City : Brooksville County : Hernando Zip Code : 34601-
5. Relocatable Facility? [ ] Yes [X] No 6. Existing Permitted Facility? [X] Yes [ ] No

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Joseph T. Piermatteo
Title : Senior Vice President

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Florida Crushed Stone Company
Street Address : 10311 Cement Plant Road
City : Brooksville
State : FL Zip Code : 34601-____

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (352)799-7881 Fax : (352)799-3508

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions units.*

Signature Joseph T Piermatteo Date Sept 9, 1996

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
Unknown	Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)	AC1A
Unknown	Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)	AC1A
Unknown	Belt Conveyer, 2M-04 (vents to dust collector 2M-09)	AC1A
Unknown	Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)	AC1A
Unknown	Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)	AC1A
Unknown	Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)	AC1A
Unknown	Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16	AC1A
Unknown	Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17	AC1A
Unknown	Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)	AC1A
Unknown	Clinker Transport, 2L-03 (vents to dust collector 2L-16)	AC1A
Unknown	Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)	AC1A
Unknown	Clinker Bin, 2M-15 (vents to dust collector 2M-18)	AC1A
Unknown	Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)	AC1A
Unknown	Sepol Separator, 2N-08 (vents to dust collector 2N-20)	AC1A

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
Unknown	Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13	AC1A
Unknown	Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14	AC1A
Unknown	kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill	AC1A
Unknown	Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)	AC1A

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

[X] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

[ ] Attached - Amount : _____ [X] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :

   Modification to existing construction permit AC-274892. Construction of a cement production facility. Design changes include incorporation of indirect fired kiln with indirect fired precalciner. Also, alterations to minor particulate sources.

2. Projected or Actual Date of Commencement of Construction : 01-Oct-1996

3. Projected Date of Completion of Construction : 31-Mar-1998

Professional Engineer Certification

1. Professional Engineer Name : Larry Roberts
   Registration Number : 18040

2. Professional Engineer Mailing Address :

   Organization/Firm : Central Power and Lime, Inc.
   Street Address : 10311 Cement Plant Road
   City : Brooksville State : FL Zip Code : 34601-___

3. Professional Engineer Telephone Numbers :
   Telephone : (352)799-7881 Fax : (352)799-3508

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant 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

(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.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions 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.

Signature _____ Date 9/9/96

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Tom W. Mountain
Title : Environmental Manager

2. Application Contact Mailing Address :

Organization/Firm : Florida Crushed Stone Company
Street Address : 10311 Cement Plant Road
City : Brooksville
State : FL Zip Code : 34605-1508

3. Application Contact Telephone Numbers :

Telephone : (352)799-7881 Fax : (352)799-3508

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : 17 East (km) : 360.00 North (km) : 3162.50			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 28 34 55 Longitude (DD/MM/SS) : 82 25 52			
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 :			

Facility Contact

1. Name and Title of Facility Contact : Tom W. Mountain Environmental Manager
2. Facility Contact Mailing Address : Organization/Firm : Florida Crushed Stone Company Street Address : 10311 Cement Plant Road City : Brooksville State : FL Zip Code : 34601-____
3. Facility Contact Telephone Numbers : Telephone : (352)799-7881 Fax : (352)799-3508

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	N
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	N
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

B. FACILITY REGULATIONS

Rule Applicability Analysis

Not Applicable

B. FACILITY REGULATIONS

List of Applicable Regulations

40 CFR 50, National Primary and Secondary Ambient Air Quality Standards

40 CFR 52, Subpart K Approval and Promulgation of Implementation Plans, Florida

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

40 CFR 64, Compliance Assurance Monitoring (proposed)

62-103 FAC, Rules of Administrative Procedure

62-204 FAC, Air Pollution Control General Provisions

62-213 FAC, Operation Permits for Major Sources of Air Pollution

62-4 FAC, Permits

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification

D. FACILITY POLLUTANT DETAIL INFORMATION

Pollutant _____

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	See Prior App.
2. Facility Plot Plan :	Attachment 1
3. Process Flow Diagram(s) :	Attachment 2
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	See Prior App.
5. Fugitive Emissions Identification :	See Prior App
6. Supplemental Information for Construction Permit Application :	See main report

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :
8. List of Equipment/Activities Regulated under Title VI :
9. Alternative Methods of Operation :
10. Alternative Modes of Operation (Emissions Trading) :
11. Identification of Additional Applicable Requirements :
12. Compliance Assurance Monitoring Plan :
13. Risk Management Plan Verification :
14. Compliance Report and Plan :
15. Compliance Certification (Hard-copy Required) :

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2

Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3

Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 4

Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5

Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6

Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 7

Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8

Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 9

Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 10

Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 11

Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 12

Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 13

Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 14

Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 15

Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 16

Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 17

Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 18

Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

[X] 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.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 2

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 3

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 4

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 5

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 6

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 7

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Clinker Transport, 2L-03 (vents to dust collector 2L-16)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 8

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 9

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Clinker Bin, 2M-15 (vents to dust collector 2M-18)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Belt Conveyer, 2M-04 (vents to dust collector 2M-09)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 11

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 12

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Sepol Separator, 2N-08 (vents to dust collector 2N-20)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 13

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 14

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 15

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 16

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 17

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 18

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)		
2. Emissions Unit Identification Number : [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emissions Unit Control Equipment 1

1. Description : Main Facility Baghouse #2E-40
2. Control Device or Method Code : 16

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emissions Unit Control Equipment 2

1. Description : Chloride and Alkaline Bypass Baghouse #2K-07
2. Control Device or Method Code : 16

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emissions Unit Control Equipment 3

1. Description : Flue Gas Alkalinety
2. Control Device or Method Code :

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emissions Unit Control Equipment 4

1. Description : Staged Combustion
2. Control Device or Method Code : 25

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emissions Unit Control Equipment 5

1. Description : High Temperature Combustion
2. Control Device or Method Code :

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2D-75
2. Control Device or Method Code : 17

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2F-14
2. Control Device or Method Code : 17

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2G-12
2. Control Device or Method Code : 17

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2H-15
2. Control Device or Method Code : 17

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2L-08
2. Control Device or Method Code : 18

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2L-16
2. Control Device or Method Code : 16

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2L-06
2. Control Device or Method Code : 16

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2M-18
2. Control Device or Method Code : 17

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2M-09
2. Control Device or Method Code : 17

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2N-13
2. Control Device or Method Code : 17

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2N-20/23
2. Control Device or Method Code : 18

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2Q-13
2. Control Device or Method Code : 17

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2Q-14
2. Control Device or Method Code : 17

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2Q-16
2. Control Device or Method Code : 17

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2Q-17
2. Control Device or Method Code : 17

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2S-17/19
2. Control Device or Method Code : 17

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Emissions Unit Control Equipment 1

1. Description : Baghouse dust collector #2S-21
2. Control Device or Method Code : 17

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Polysius	Model Number : N/A
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	355	mmBtu/hr	
2. Maximum Incinerator Rate :		lb/hr	tons/day
3. Maximum Process or Throughput Rate :			
4. Maximum Production Rate :	104	tons clinker/hr	
5. Operating Capacity Comment : Maximum clinker production rate is 104-1/6 tons clinker/hr. The total heat input is the sum of the heat inputs to three burners. The heat input to the shaft dryer is 30 mmBtu/hour. The total heat input to the kiln and precalciner is 325 mmBtu/hr.			

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	24	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	234	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	170	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	170	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Not Applicable	Model Number :
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	150	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Not Applicable	Model Number :
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	100	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Not Applicable	Model Number :
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	100	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	114	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	120	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	195	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Not Applicable	Model Number :
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	195	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	150	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	150	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	540	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Not Applicable	Model Number :
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	540	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Emissions Unit Details

1. Initial Startup Date :		
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Not Applicable		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	18	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Not Applicable	Model Number :
4. Generator Nameplate Rating : MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	17	Tons/Hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Rule Applicability Analysis

Not Applicable

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Rule Applicability Analysis

Not Applicable

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

List of Applicable Regulations

40 CFR 50, National Primary and Secondary Ambient Air Quality Standards

40 CFR 52, Subpart K, Approval and Promulgation of Implementation Plans, Florida

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

40 CFR 64, Compliance Assurance Monitoring (proposed)

62-4 FAC, Permits

62-103 FAC; Rules of Administrative Procedure

62-204 FAC, Air Pollution Control - General Provisions

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources, Preconstruction Review

62-213 FAC, Operation Permits for Major Sources of Air Pollution

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

List of Applicable Regulations

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

List of Applicable Regulations

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

List of Applicable Regulations

62-210 FAC, Stationary Sources - General Requirements

62-212 FAC, Stationary Sources - Preconstruction Review

62-296 FAC, Stationary Sources - Emission Standards

62-297 FAC, Stationary Sources - Emissions Monitoring

40 CFR 60, Subpart F, New Source Performance Standards for Portland Cement Plants

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 2 & 4, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point)		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Emissions from the cement kiln, clinker cooler, raw mill system, preheater, precalciner and shaft dryer all exhaust out a single stack		
5. Discharge Type Code :	V	
6. Stack Height :	320	feet
7. Exit Diameter :	14.0	feet
8. Exit Temperature :	258	°F
9. Actual Volumetric Flow Rate :	312523	acfm
10. Percent Water Vapor :	12.00	%
11. Maximum Dry Standard Flow Rate :	202243	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack exit temperature, flow rate and percent moisture are worst case operating conditions with respect to modeling. At nominal conditions, representative values for flow rate and exhaust temperature would be: 405,381 ACFM, 305 deg. F, 246,217 dSCFM		

See attached document for further discussion.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 2

Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 3, Attachment 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	102	feet
7. Exit Diameter :	1.7	feet
8. Exit Temperature :	200	°F
9. Actual Volumetric Flow Rate :	4500	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	3528	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 3

Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 2 & 3, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	30	feet
7. Exit Diameter :	1.4	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	3000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	2426	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 4

Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 3, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	219	feet
7. Exit Diameter :	3.3	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	17000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	13745	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 5

Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 3, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	73	feet
7. Exit Diameter :	2.1	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	7200	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	5821	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 5, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	110	feet
7. Exit Diameter :	1.6	feet
8. Exit Temperature :	95	°F
9. Actual Volumetric Flow Rate :	4000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	3729	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 7

Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 5, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	32	feet
7. Exit Diameter :	1.6	feet
8. Exit Temperature :	240	°F
9. Actual Volumetric Flow Rate :	4000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	2957	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 8

Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 5, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	203	feet
7. Exit Diameter :	1.6	feet
8. Exit Temperature :	240	°F
9. Actual Volumetric Flow Rate :	4000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	2957	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 9

Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 5, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	110	feet
7. Exit Diameter :	2.4	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	9000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	7277	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 10

Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 5, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	15	feet
7. Exit Diameter :	2.1	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	7000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	5660	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 11

Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 6, Att2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	123	feet
7. Exit Diameter :	5.0	feet
8. Exit Temperature :	212	°F
9. Actual Volumetric Flow Rate :	40000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	30800	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 12

Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 6, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	123	feet
7. Exit Diameter :	8.6	feet
8. Exit Temperature :	160	°F
9. Actual Volumetric Flow Rate :	115000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	95977	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 13

Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 7, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	203	feet
7. Exit Diameter :	2.1	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	7200	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	5821	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 14

Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 7, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	203	feet
7. Exit Diameter :	2.1	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	7200	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	5821	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 15

Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 7, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	30	feet
7. Exit Diameter :	1.4	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	3000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	2426	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 16

Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 7, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	30	feet
7. Exit Diameter :	1.4	feet
8. Exit Temperature :	180	°F
9. Actual Volumetric Flow Rate :	3000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	2426	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 17

Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 8, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	40	feet
7. Exit Diameter :	3.9	feet
8. Exit Temperature :	150	°F
9. Actual Volumetric Flow Rate :	24000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	20358	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 18

Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Sht 8, Att 2	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Not Applicable		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not Applicable		
5. Discharge Type Code :	V	
6. Stack Height :	40	feet
7. Exit Diameter :	1.1	feet
8. Exit Temperature :	150	°F
9. Actual Volumetric Flow Rate :	2000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	1697	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 360.000 North (km) : 3162.500		
14. Emission Point Comment : Stack characteristics are at typical operating conditions		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 24.00	5. Maximum Annual Rate : 209,419.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 234.00	5. Maximum Annual Rate : 1,517,232.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4

Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 170.00	5. Maximum Annual Rate : 1,489,200.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 170.00	5. Maximum Annual Rate : 1,489,200.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 150.00	5. Maximum Annual Rate : 1,314,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 7

Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 100.00	5. Maximum Annual Rate : 876,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 8

Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) :

cement manufacturing, tons of material handled

2. Source Classification Code (SCC) : 3-05-006-12

3. SCC Units : Tons Transferred Or Handled

4. Maximum Hourly Rate : 100.00

5. Maximum Annual Rate : 876,000.00

6. Estimated Annual Activity Factor : 0.00

7. Maximum Percent Sulfur :

8. Maximum Percent Ash :

9. Million Btu per SCC Unit :

10. Segment Comment :

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 9

Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 114.00	5. Maximum Annual Rate : 912,500.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 10

Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 120.00	5. Maximum Annual Rate : 912,500.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 11

Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 195.00	5. Maximum Annual Rate : 912,500.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 12

Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, tons of material handled	
2. Source Classification Code (SCC) : 3-05-006-12	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 195.00	5. Maximum Annual Rate : 912,500.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 13

Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, cement silos, tons of cement produced	
2. Source Classification Code (SCC) : 3-05-006-18	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 150.00	5. Maximum Annual Rate : 500,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 14

Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, cement silos, tons of cement produced	
2. Source Classification Code (SCC) : 3-05-006-18	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 150.00	5. Maximum Annual Rate : 500,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 15

Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, cement load out, tons of cement produced	
2. Source Classification Code (SCC) : 3-05-006-19	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 540.00	5. Maximum Annual Rate : 500,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 16

Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, cement load out, tons of cement produced	
2. Source Classification Code (SCC) : 3-05-006-19	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 540.00	5. Maximum Annual Rate : 500,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 17

Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, pulverized coal kiln feed units, tons processed	
2. Source Classification Code (SCC) : 3-05-006-21	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 18.00	5. Maximum Annual Rate : 120,888.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 18

Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : cement manufacturing, pulverized coal kiln feed units, tons processed	
2. Source Classification Code (SCC) : 3-05-006-21	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 16.50	5. Maximum Annual Rate : 120,888.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Cement Manufacturing: Tons of Clinker Produced	
2. Source Classification Code (SCC) : 3-05-006-23	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 104.20	5. Maximum Annual Rate : 912,500.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
3 - PM	016		EL
4 - PM10	016		EL
5 - CO			EL
6 - VOC			EL
7 - SAM			EL
8 - H021	016		EL
9 - H114	016		EL
10 - H110	016		EL
1 - NOX	025		EL
2 - SO2			EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	016		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	016		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 17
Coal Mill; 2S-15 (vents to dust collector system 2S-17/19)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 291.67 lb/hour 1,277.50 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 2.8 lbs/ton clinker * 104-1/6 tons/hr = 291.667 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **SO2**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 23.96 lb/hour 104.94 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.23 lbs/ton clinker * 104-1/6 tons/hr = 23.958 lbs/hour
9. Pollutant Potential/Estimated Emissions Comment : SO2 controlled by alkaline nature of cement kiln flue gas. Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 47.81 lb/hour 209.42 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.3 lbs/ton kiln feed * 159.375 tons kiln feed/hr = 47.813 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 47.81 lb/hour 209.42 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.3 lbs/ton kiln feed * 159.375 tons kiln feed/hr = 47.813 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Please refer to permit application document for additional detail

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted :	**CO**
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	208.33 lb/hour 912.50 tons/year
4. Synthetically Limited?	[ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor :	Reference : BACT analysis
7. Emissions Method Code :	0
8. Calculations of Emissions :	2 lb/ton clinker * 104-1/6 tons clinker/hr = 208.333 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :	Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : **VOC**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 8.85 lb/hour 38.78 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.085 lbs/ton clinker * 104-1/6 tons clinker/hr = 8.854 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : **SAM**	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	1.46 lb/hour 6.39 tons/year
4. Synthetically Limited? [ ] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference : BACT analysis	
7. Emissions Method Code : 0	
8. Calculations of Emissions : 0.014 lbs/ton clinker * 104-1/6 tons clinker/hr = 1.458 lbs/hr	
9. Pollutant Potential/Estimated Emissions Comment : Please refer to permit application document for additional information.	

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : **H021**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.00 lb/hour 0.00 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 8.5E-07 lbs/ton clinker * 104-1/6 tons clinker/hr = 8.85E-5 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Actual emission unit emission rate is 8.85E-5 lbs/hr and 3.88E-4 tons/yr. Emission factor is 8.5E-7. This form limits the precision of the emission values input. Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : **H114**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.00 lb/hour 0.01 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 2.4E-5 lbs/ton clinker * 104-1/6 tons clinker/hr = 2.5E-3 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Actual emission unit emission rate is 2.50E-3 lbs/hr and 1.10E-2 tons/year. This form limits the precision of the emission values input. Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : **H110**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.05 lb/hour 0.24 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT analysis
7. Emissions Method Code : 0
8. Calculations of Emissions : 5.2E-4 lbs/ton clinker * 104-1/6 tons clinker/hr = 5.42E-2 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment : Actual emission unit emission rate is 5.42E-2 lbs/hr and 2.37E-1 tons/year. This form limits the precision of the emission values input. Please refer to permit application document for additional information.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.30 lb/hour 1.32 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 3528 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.302 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.21 lb/hour 0.91 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 2426 dSCFM * 60 min/hr * 0.01 gr/dSCF* 1lb/7000 gr = 0.208 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 1.18 lb/hour 5.16 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 13745 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 1.178 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.50 lb/hour 2.19 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 5821 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.499 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Pollutant Potential/Estimated Emissions : Pollutant __1__

1. Pollutant Emitted : **PM**	
2. Total Percent Efficiency of Control : 99.90 %	
3. Potential Emissions : 0.32 lb/hour 1.40 tons/year	
4. Synthetically Limited? [ ] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions: to tons/year	
6. Emissions Factor : Reference : BACT determination	
7. Emissions Method Code : 0	
8. Calculations of Emissions : 3729 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.320 lbs/hr	
9. Pollutant Potential/Estimated Emissions Comment :	

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.25 lb/hour 1.11 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 2957 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.253 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.25 lb/hour 1.11 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 2957 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.253 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.62 lb/hour 2.73 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 7277 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.624 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.49 lb/hour 2.12 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 5660 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.485 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 2.64 lb/hour 11.56 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 30800 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 2.640 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 8.23 lb/hour 36.03 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 95977 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 8.227 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.50 lb/hour 2.19 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 5821 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.499 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.50 lb/hour 2.19 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 5821 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.499 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.21 lb/hour 0.91 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 2426 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.208 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 0.21 lb/hour 0.91 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 2426 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.208 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 99.90 %
3. Potential Emissions : 1.75 lb/hour 7.64 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : BACT determination
7. Emissions Method Code : 0
8. Calculations of Emissions : 20358 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 1.745 lbs/hr
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**	
2. Total Percent Efficiency of Control : 99.90 %	
3. Potential Emissions : 0.14 lb/hour 0.64 tons/year	
4. Synthetically Limited? [ ] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions: to tons/year	
6. Emissions Factor : Reference : BACT determination	
7. Emissions Method Code : 0	
8. Calculations of Emissions : 1697 dSCFM * 60 min/hr * 0.01 gr/dSCF * 1lb/7000 gr = 0.145 lbs/hr	
9. Pollutant Potential/Estimated Emissions Comment :	

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	2.80	lbs/ton clinker		
4. Equivalent Allowable Emissions :	291.67	lb/hour	1,277.50	tons/year
5. Method of Compliance : stack test and continuous emission monitoring				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emission rate based on BACT analysis.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.23	lbs/ton clinker		
4. Equivalent Allowable Emissions :	23.96	lb/hour	104.94	tons/year
5. Method of Compliance : Stack test and continuous emission monitor.				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emission rate based on BACT analysis.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.30	lb/tn kiln feed		
4. Equivalent Allowable Emissions :	47.81	lb/hour	209.42	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Emissions limited in 40 CFR Part 60, Subpart F.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.30	lb/tn kiln feed		
4. Equivalent Allowable Emissions :	47.81	lb/hour	209.42	tons/year
5. Method of Compliance : emissions testing				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Emissions limited in 40 CFR Part 60, Subpart F.				

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.30	lb/hour	1.32	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.21	lb/hour	0.91	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	1.18	lb/hour	5.16	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.50	lb/hour	2.19	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.32	lb/hour	1.40	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01		gr/dSCF	
4. Equivalent Allowable Emissions :	0.25	lb/hour	1.11	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.25	lb/hour	1.11	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		OTHER		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		0.01		gr/dSCF
4. Equivalent Allowable Emissions :	0.62	lb/hour	2.73	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01		gr/dSCF	
4. Equivalent Allowable Emissions :	0.49	lb/hour	2.12	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	2.64	lb/hour	11.56	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	8.23	lb/hour	36.03	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		OTHER		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		0.01		gr/dSCF
4. Equivalent Allowable Emissions :				
	0.50	lb/hour	2.19	tons/year
5. Method of Compliance :				
Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
Allowable emissions set by BACT determination.				

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.50	lb/hour	2.19	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.21	lb/hour	0.91	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.21	lb/hour	0.91	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	1.75	lb/hour	7.64	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dSCF		
4. Equivalent Allowable Emissions :	0.14	lb/hour	0.64	tons/year
5. Method of Compliance : Visual Observation				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emissions set by BACT determination.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	2.00	lb/ton clinker		
4. Equivalent Allowable Emissions :	208.33	lb/hour	912.50	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emission rate based on BACT analysis.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.09	lbs/ton clinker		
4. Equivalent Allowable Emissions :	8.85	lb/hour	38.78	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emission rate based on BACT analysis.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	lbs/ton clinker		
4. Equivalent Allowable Emissions :	1.46	lb/hour	6.39	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emission rate based on BACT analysis.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.00	lbs/ton clinker		
4. Equivalent Allowable Emissions :	0.00	lb/hour	0.00	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Allowable emission rate based on BACT analysis. The emission factor = 8.5E-7 lbs/ton clinker. The hourly emission rate = 8.85E-5 lbs/hr and 3.88 E-4 tons/yr. This form limits the precision of the input values.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.00	lbs/ton clinker		
4. Equivalent Allowable Emissions :	0.00	lb/hour	0.01	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : The emission factor is 2.4E-5 lbs/ton clinker. Emissions are 2.50E-3 lbs/hr and 1.10E-2 tons/year. Allowable emission rate based on BACT analysis.				

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Pollutant Information Section 10

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		OTHER		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		0.00		lbs/ton clinker
4. Equivalent Allowable Emissions :	0.05	lb/hour	0.24	tons/year
5. Method of Compliance : stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : The emission factor is 5.2E-4 lbs/ton clinker. Emissions are 5.42E-2 lbs/hr and 2.37E-1 tons/yr. Allowable emission rate based on BACT analysis.				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 10
2. Basis for Allowable Opacity : RULE
3. Requested Allowable Opacity : Normal Conditions : 10 % Exceptional Conditions : 10 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : Continuous Opacity Monitor
5. Visible Emissions Comment : Visible emissions limit based on value allowed by NSPS 40 CFR 60 Subpart F.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 5

2. Basis for Allowable Opacity : OTHER

3. Requested Allowable Opacity :

Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour

4. Method of Compliance :

Visual Observation - EPA Method 9

5. Visible Emissions Comment :

Visible emissions limit set by BACT determination.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 5

2. Basis for Allowable Opacity : OTHER

3. Requested Allowable Opacity :

Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour

4. Method of Compliance :

Visual Observation - EPA Method 9

5. Visible Emissions Comment :

Visible emissions limit set by BACT determination.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5	
2. Basis for Allowable Opacity :	OTHER	
3. Requested Allowable Opacity :		
Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour
4. Method of Compliance : Visual Observation - EPA Method 9		
5. Visible Emissions Comment : Visible emissions limit set by BACT determination.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5	
2. Basis for Allowable Opacity :	OTHER	
3. Requested Allowable Opacity :		
Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour
4. Method of Compliance :		
Visual Observation - EPA Method 9		
5. Visible Emissions Comment :		
Visible emissions limit set by BACT determination.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 5

2. Basis for Allowable Opacity : OTHER

3. Requested Allowable Opacity :

Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour

4. Method of Compliance :

Visual Observation - EPA Method 9

5. Visible Emissions Comment :

Visible emissions limit set by BACT determination.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 5

2. Basis for Allowable Opacity : OTHER

3. Requested Allowable Opacity :

Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour

4. Method of Compliance :

Visual Observation - EPA Method 9

5. Visible Emissions Comment :

Visible emissions limit set by BACT determination.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5	
2. Basis for Allowable Opacity :	OTHER	
3. Requested Allowable Opacity :		
Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour
4. Method of Compliance :		
Visual Observation - EPA Method 9		
5. Visible Emissions Comment :		
Visible emissions limit set by BACT determination.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5	
2. Basis for Allowable Opacity :	OTHER	
3. Requested Allowable Opacity :		
Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour
4. Method of Compliance :		
Visual Observation - EPA Method 9		
5. Visible Emissions Comment :		
Visible emissions limit set by BACT determination.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	5 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Visual Observation - EPA Method 9	
5. Visible Emissions Comment :	
Visible emissions limit set by BACT determination.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5	
2. Basis for Allowable Opacity :	OTHER	
3. Requested Allowable Opacity :		
Normal Conditions :	5	%
Exceptional Conditions :	5	%
Maximum Period of Excess Opacity Allowed :	0	min/hour
4. Method of Compliance : Visual Observation - EPA Method 9		
5. Visible Emissions Comment : Visible emissions limit set by BACT determination.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 5
2. Basis for Allowable Opacity : OTHER
3. Requested Allowable Opacity : Normal Conditions : 5 % Exceptional Conditions : 5 % Maximum Period of Excess Opacity Allowed : 0 min/hour
4. Method of Compliance : Visual Observation - EPA Method 9
5. Visible Emissions Comment : Visible emissions limit set by BACT determination.

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code : O2	2. Pollutant :
3. CMS Requirement : OTHER	
4. Monitor Information : Manufacturer : To be determined. Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Monitor installation required by Florida DEP in accordance with 62-4.070 FAC. Installation and test dates to be determined.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Continuous Monitoring System : Continuous Monitor 2

1. Parameter Code : VE	2. Pollutant :
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : To be determined. Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Continuous opacity monitor installation required by 40 CFR 60, Subpart F. Installation and test dates to be determined.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Continuous Monitoring System : Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant : NOX
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : To be determined. Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : NOx CEM required by Florida DEP in accordance with 62-4.070 FAC. Installation and test dates to be determined at a later date.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Continuous Monitoring System : Continuous Monitor 4

1. Parameter Code : EM	2. Pollutant : SO2
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : To be determined. Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : SO2 CEM required by Florida DEP in accordance with 62-4.070 FAC. Installation and performance test dates to be determined at a later date.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Continuous Monitoring System : Continuous Monitor 5

1. Parameter Code : FLOW	2. Pollutant :
3. CMS Requirement : OTHER	
4. Monitor Information : Manufacturer : To be determined. Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Installation and test date to be determined at a later date.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 10
Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 11
Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 12
Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 13
Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 14
Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 15
Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 16
Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 17
Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 18
Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	2. Pollutant :
3. CMS Requirement :	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Not Applicable	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 5

Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C		

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 6

Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C		

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 10

Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C		

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 11

Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	C	SO2 :	NO2 :	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 2

Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :				
PM : C		SO2 :	NO2 :	
4. Baseline Emissions :				
PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year
5. PSD Comment :				

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 3

Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C		

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 15

Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 16

Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C		

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 17

Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 7

Clinker Transport, 2L-03 (vents to dust collector 2L-16)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C		

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 8

Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 9

Clinker Bin, 2M-15 (vents to dust collector 2M-18)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 18

Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 12

Sepol Separator, 2N-08 (vents to dust collector 2N-20)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 13

Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :				
PM : C	SO2 :		NO2 :	
4. Baseline Emissions :				
PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year
5. PSD Comment :				

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 14

Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :				
PM : C		SO2 :	NO2 :	
4. Baseline Emissions :				
PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year
5. PSD Comment :				

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[X] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 : C	NO2 : C

4. Baseline Emissions :

PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year

5. PSD Comment :

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 4

Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

kiln #2,preheater,precalciner,clinker clr.,dryer,raw mill

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht.2&4, Att 2
2. Fuel Analysis or Specification :	Waived
3. Detailed Description of Control Equipment :	See Prior App.
4. Description of Stack Sampling Facilities :	Waived
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	See Prior App.
7. Operation and Maintenance Plan :	See Prior App.
8. Supplemental Information for Construction Permit Application :	Main Report
9. Other Information Required by Rule or Statue :	Main Report

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 2

Filter Dust Bin Trspt. 2E-67 (vents to dust collector 2D-75)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht. 3, Att. 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 3

Raw Meal Transport 2F-02/11 (vents to dust collector 2F-14)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 2&3, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 4

Raw Mill Storage & Homogenizing Silos 2G-01 (vents to 2G-12)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 3, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 5

Kiln Feed System, 2H-05/2E-66(vents to dust collector 2H-15)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 3, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

Gypsum Storage Bin, 2L-14 (vents to dust collector 2L-08)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 5, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 7

Clinker Transport, 2L-03 (vents to dust collector 2L-16)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 5, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 8

Clinker Storage Silo, 2L-05 (vents to dust collector 2L-06)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 5, Attach 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Application Doc
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 9

Clinker Bin, 2M-15 (vents to dust collector 2M-18)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 5, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 10

Belt Conveyer, 2M-04 (vents to dust collector 2M-09)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 5, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 11

Discharge Vent, 2N-02/2N-08 (vents to dust collector 2N-13)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 6, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 12

Sepol Separator, 2N-08 (vents to dust collector 2N-20)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 6, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 13

Cement Storage Silos A, 2Q-18 (vents to dust collector 2Q-13

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 7, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 14

Cement Storage Silos B, 2Q-18 (vents to dust collector 2Q-14

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 7, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 15

Silo Discharge Hopper A, 2Q-28(vents to dust collector 2Q-16

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 7, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 16

Silo Discharge Hopper B, 2Q-38(vents to dust collector 2Q-17

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 7, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 17

Coal Mill, 2S-15 (vents to dust collector system 2S-17/19)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 8, Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 18

Coal Dust Bin, 2S-20 (Vents to dust collector 2S-21)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Sht 8. Att 2
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Main Report
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)