REPORT IN SUPPORT OF AN APPLICATION FOR A PSD CONSTRUCTION PERMIT REVIEW

NATURAL RESOURCES OF CENTRAL FLORIDA, INC. dba AMERICAN CEMENT COMPANY **Cement Plant** Sumterville, Sumter County, Florida

September 29, 2005



ENVIRONMENTAL SERVICES

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

dba American Cement Company = 37,5 meters Scale 1"

NORTH

TO C.R. 470 PACK, H=17.4m CEMENT, H=56.4m 400100 FINISH, H=36.7m GYPSUM, H=12.8m 400000 CLINKER, H=63.2m COAL, H=12.8m 399900 COOLER, H=30.5m H=27.1m PREHEAT, H=97.7m BAG, DUST, H=24.4m 3182000 399800 BLEND, H=60 m MAIN STACK (E21) (399810, 3181923) ROLLER, H=47.4m 399700 HALL, H=32.0m

NATURAL RESOURCES OF CENTRAL FLORIDA, INC. dba American Cement Company Scale 1" = 37.5 meters



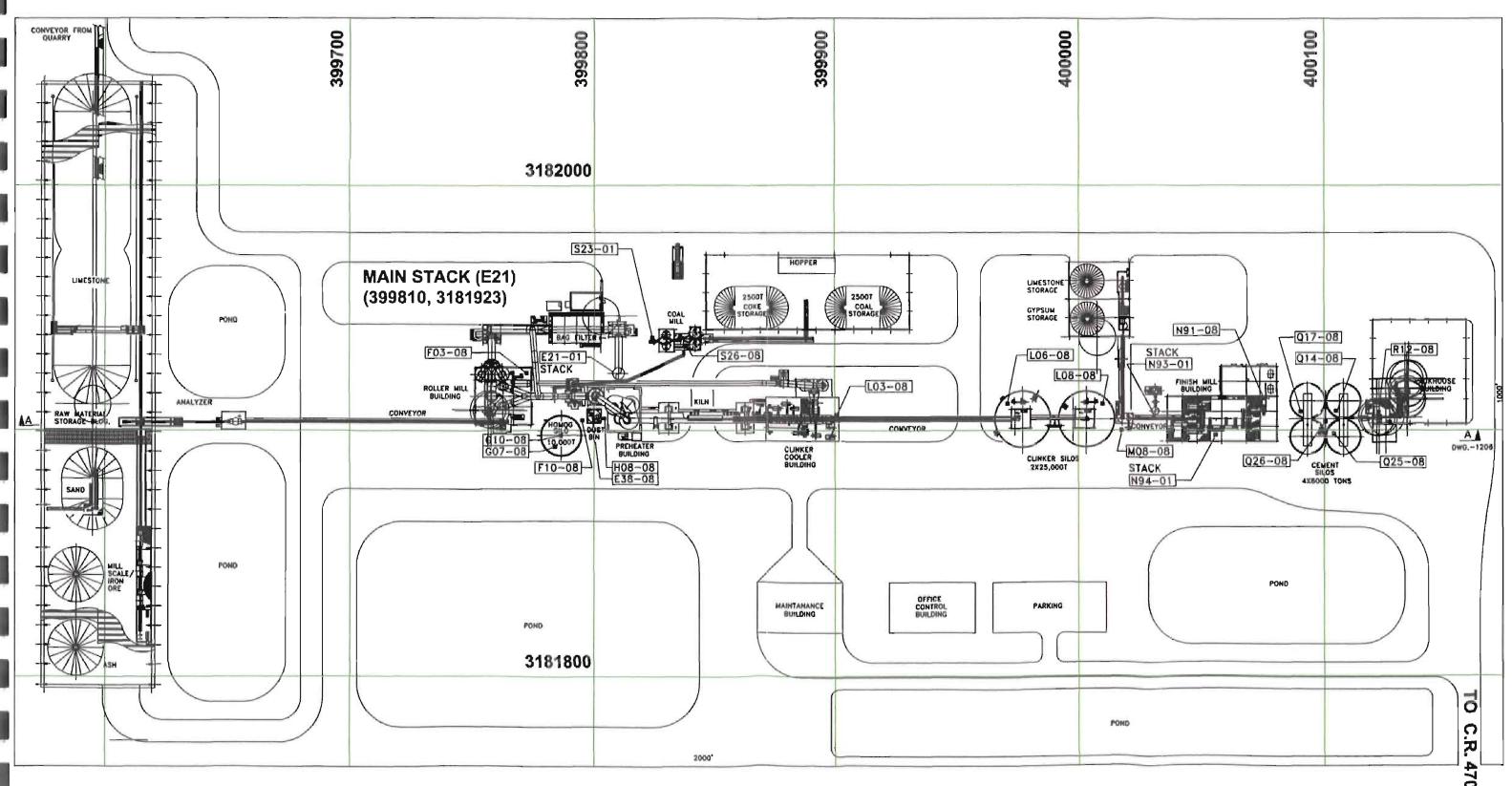


Table 6-3. Summary of Previous PM/PM10/PM2.5 BACT Determinations from Preheaters, Precalciners, Calciners, and Kilns at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No.	Date Issued	Process Type	Fuel Used	Throughput	Emission Limit (as presented in Clearinghouse)	Emission Limit (converted *)	Control Equipment Description	% Effi
articulate	Matter (PM)										
	1) FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-350/0010087-013-A	(July 2005	PREHEATER/PRECALCINER KILN	COAL	125.0 TPH CLINK	28.8 LB/HR	0.23 lb/ton clinker	Baghouse	
	2) RINKER FLORIDA CRUSHED STONE COMPANY	FL	PSD-FL-351/0530021-009-A		PREHEATER/PRECALCINER KILN	COAL	125.0 TPH CLINK	28.8 LB/HR	0.23 lb/ton clinker	Baghouse	
A-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT	IA	17-01-005	12/11/2003	KJLN/CALCINER/PREHEATER	COAL	150 TPH CLINK	0.516 LB/ TON CLINK	0.516 lb/ton clinker	ESP.	
/A-0272	ROANOKE CEMENT	VA	20232	6/13/2003	LIME KILN	COAL	1,300,000 TPY CLINK	83.9 LB/H; 297.5 TPY	0.565 lb/ton (hourly); 0.46 lb/ton (annual)	ESP and GCP	
A-0052	LAFARGE CORPORATION	IA	PROJ. # 00-057	7/1/2002	PREHEATER/PRECALCINER KILN	COAL	3,488 TON PER DAY	0.3 LB/T	0.516 LB/TON Clinker	BAGHOUSE	9
NA-0327	PORTLAND CEMENT CLINKERING PLANT	WA	PSD-90-03	10/5/2001	KILN EXHAUST STACK	COAL	3,486 TONTER DAT	10.6 LB/H; 46 tpy	0.516 LB/TON CHIRE		,
		TX								BAGHOUSE	
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT		PSD-TX-145 M1	6/29/2001	GRINDING/ PREHEATING/ KILN, K-19			32.24 LB/H; 135.41 tpy		ESP	
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1	6/29/2001	GRINDING/ PREHEATING/ KILN, K-19			36.33 LB/H; 152.59 tpy		ESP	
CO-0043	RIO GRANDE PORTLAND CEMENT CORP.	co	98PB0893	9/25/2000	PREHEATER/PRECALCINER, KILN		950,000 TPY CLINK	0.01 gr/dscf, 0.105 lb/ton	0.105 lb/ton clinker	High-Teinp Baghouse	
L-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.	FL	1210465-001-AC	6/1/2000	IN LINE KILN & RAW MILL	Nat. Gas	178 T/H	0.13 LB/T	0.13 LB/T	BAGHOUSE	
MI-0287	HOLNAM, INC.	MI	60-71L	3/20/2000	CEMENT KILNS, WET PROCESS (2)	COAL	100 T/H FEED	130 LB/H, 1.3 lb/ton	1.3 lb/ton	Fabric Filter, Slurry Scrubber	
CO-0047	HOLNAM, FLORENCE	CO	98-FR-0895	7/29/1999	KILN/PREHEATER/BYPASS & CLINKER COOLER EXHAUST			132.1 T/YR		BAGHOUSE	
N-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	KILN OPERATION	COAL	360 T/H	0.016 gr/dscf, 0.3 lb/ton	0.3 lb/ton	ESP	
O-0048	HOLNAM, LAPORTE CO.	CO	11LR338-1	9/22/1998	CALCINER/ KILN		584,000 T/YR	27.3 LB/H	0.33 lb/ton	BAGHOUSE.	9
-0112	LONE STAR INDUSTRIES, INC.	IN	133-5886-00002-3241	9/18/1998	CEMENT KILN, WET PROCESS,	COAL	75 TPH Clinker	40.5 LB/H	0.3 LB/T	ESP	
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	DRY/WET KILN & ALKALI BYPASS BAGHOUSE STACK (KS-1)		378,650 TPY DRY KILN	193.53 LB/H; 847.85 tpy	4.48 lb/ton (dry)	BAGHOUSE	
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	DRY KILN EXHAUST BAGHOUSE (KS-1A)		730,000 TPY Clinker	25.44 LB/H	0.31 lb/ton clinker	BAGHOUSE	
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	ALKALI BYPASS BAGHOUSE STACK (9A)			5.39 LB/H; 23.63 tpy		BAGHOUSE	
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	WET KILN EXHAUST BAGHOUSE (KS-1B)		378,650 TPY Clinker	162.7 LB/H; 712.8 tpy	3.76 lb/ton	BAGHOUSE	
X-0282	CAPITOL CEMENT DIVISION CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	ALKALI BYPASS BAGHOUSE STACK (9A)		370,000 111 CHIRE	3.06 LB/H; 13.41 tpy	5.70 10/10/1	BAGHOUSE	
							220 000 TAVE CLEVED		0.17 15/10- 01/20-		
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	DRY KILN EXHAUST BAGHOUSE (KS-1A)	6041	730,000 T/YR CLINKER	14.44 LB/H; 63.24 tpy	0.17 lb/ton clinker	BAGHOUSE IS	
11-0354	HOLNAM, INC	MI	60-71K	6/23/1998	CEMENT KILNS, WET PROCESS, (2)	COAL	100 T/H	1.3 LB/T	1.3 lb/ton	Baghouse	
L-0057	ILLINOIS CEMENT COMPANY	IL	97030016	6/12/1998	KILN, CEMENT, PREHEATER-PRECALCINER		3,000 TPD Cement	0.208 LB/T	0,208 lb/ton clinker	FABRIC FILTER	
N-0086	SIGNAL MOUNTAIN CEMENT COMPANY,	TN	47-065-3070	5/29/1998	DRY FEED KILN	PETROLE	160 T/H	18.3 LB/H	0.3 LB/T	BAGHOUSE	
R-0036	DURKEE FACILITY	OR	01-0029	2/26/1998	KJLN			436 LB/D	0.3 lb/ton 6-hr	BAGHOUSE	
R-0036	DURKEE FACILITY	OR	01-0029	2/26/1998	KILN FEED FOR PREHEATER			0.019 GR/DSCF, 3-hr; 90 lb/day		BAGHOUSE	
L-0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228	12/23/1996	KILN	COAL	14 T/H	0.2 LB/T clinker	0.23 LB/T clinker	ESP.	
T-0059	ASH GROVE CEMENT COMPANY	UT	DAQE-958-96	10/24/1996	KILN	COAL	170 T/H	23.45 LB/H	0.14 LB/T	BAGHOUSE.	
-0110	FL CRUSHED STONE	FL	PSD-FL-227	11/17/1995	KILN	COAL	83 T/H	0.02 LB/T feed	0.02 LB/T feed	FABRIC FILTER	
Y-0044	MOUNTAIN CEMENT COMPANY-LARAMIE FACILITY		CT-1137	3/6/1995	KILN, COAL	COAL	45.3 T/H COAL	13.59 LB/H	0.3 LB/TON	ESP	
rticulate	Matter (PM ₁₀)										
ui ticuinit i	FLORIDA CRUSHED STONE COMPANY	FL	PSD-FL-351/0530021-009-A	(Draft - 7/7/05	PREHEATER/PRECALCINER KILN	COAL	125.0 TPH CLINKER	25.0 LB/HR	0.20 lb/ton clinker	Baghouse	
A-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT	IA	17-01-005	12/11/2003	KILN/CALCINER/PREHEATER	COAL	150 TPH CLINK	0.516 LB/ TON CLINK	0.516 LB/T	ESP.	
D-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD						0.510 LB/1		
				4/10/2003	ROTARY KILN #6	COAL	2,250 T/D	0.01 GR/DSCF		FABRIC FILTER	
O-0059	CONTINENTAL CEMENT COMPANY, LLC	МО	2002-02-038	9/24/2002	ROTARY KILN	COAL	183 T/H	99 %		FABRIC FILTER	
A-0052	LAFARGE CORPORATION	IA	PROJECT NUMBER 00-05		PREHEATER/PRECALCINER KILN	COAL	3,488 T/D	0.516 lb/ton clinker	0.516 LB/T	Baghouse	9
X-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1	6/29/2001	GRINDING/ PREHEATING/ KILN, K-19			40 LB/H; 168 TPY		ESP	
0-0043	RIO GRANDE PORTLAND CEMENT CORP.	CO	98PB0893	9/25/2000	KILN, CLINKER		950,000 T/YR Clinker	0.01 gr/dscf, 0.097 lb/ton	0.097 lb/ton clinker	High-Temp Fabric Filter	9
0-0043	RIO GRANDE PORTLAND CEMENT CORP.	co	98PB0893	9/25/2000	PREHEATER/PRECALCINER, KILN		950,000 T/YR Clinker	45.9 T/YR	0.097 LB/T, 12-month rolling	High-Temp Filter Baghouse	
D-0027	LEHIGH PORTLAND CEMENT COMPANY	MD	06-6-0356R	6/8/2000	CEMENT MANUFACTURING, PREHEATER/PRECALCINER	COAL	2,214,000 T/YR	96 T/YR	0.087 LB/T	Enclos., Wet Supp., Paved Rds	
D-0027	LEHIGH PORTLAND CEMENT COMPANY	MD	06-6-0356R	6/8/2000	CEMENT MANUFACTURING, PREHEATER/PRECALCINER	COAL	2,214,000 T/YR	620 T/YR	0.56 LB/T	Baghouses	
-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.	FL	1210465-001-AC	6/1/2000	IN LINE KILN & RAW MILL	Nat. Gas	178 T/H	0.11 LB/T	0.11 LB/T	BAGHOUSE	
0-0047	HOLNAM, FLORENCE	co	98-FR-0895	7/29/1999	KILN/PREHEATER/BYPASS & CLINKER COOLER EXHAUST			132.1 T/YR		BAGHOUSE	
-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	KILN OPERATION	COAL	360 T/H	0.014 GR/DSCF	0.3 lb/ton	ESP	
I-0081	LONE STAR INDUSTRIES, INC.	IΝ	133-10159	4/16/1999	ALKALI BYPASS DUST BINS	COAL	300 1/11	0.014 Gr/DSCF 0.01 GR/DSCF; 0.64 lb/hr	0.5 10/10/1	BAGHOUSE	
X-0279	NORTH TEXAS CEMENT COMPANY	TX	PSD-TX-893	3/4/1999	MAIN KILN/SCRUBBER STACK	COAL	3,100 T/D	123 TPY	0.22 lb/ton clinker		
0-0279 0-0048	HOLNAM, LAPORTE CO.					COAL	•			Scrubber and Baghouse	
		co	11LR338-1	9/22/1998	CALCINER/ KILN	6047	584,000 T/YR	21.3 LB/H; 74.8 TPY	0.32 lb/ton (hourly); 0.26 lb/ton (annual)	Baghouse	
1112	LONE STAR INDUSTRIES, INC.	IN	133-5886-00002-3241	9/18/1998	CEMENT KILN, WET PROCESS,	COAL	75 T/H	37.3 LB/H	0.28 LB/T	ESP	
(-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	DRY/WET KILN & ALKALI BYPASS BAGHOUSE STACK (KS-1)		378,650 TPY DRY KILN	164.2 LB/H; 719.34 TPY	3.80 lb/ton (dry)	BAGHOUSE	
-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	DRY KILN EXHAUST BAGHOUSE (KS-1A)		730,000 T/YR CLINKER	21.37 LB/H	0.26 lb/ton	BAGHOUSE	
-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	ALKALI BYPASS BAGHOUSE STACK (9A)			4.53 LB/H; 19.85 TPY		BAGHOUSE	
C-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	WET KILN EXHAUST BAGHOUSE (KS-1B)		378,650 T/YR CLINKER	138.3 LB/H; 605.9 TPY	3.20 lb/ton	BAGHOUSE IS	
0-0048	LAFARGE CORPORATION	МО	0897-019	8/20/1997	RAW MILL, PREHEATER/PRECALCINER KINL(EP		1,584,071 TONS	19.22 LB/HR, 24-HR	0.11 lb/ton (24-hr)	BAGHOUSE	
-0173	SOUTHDOWN, INC.	FL	PSD-FL-233	6/27/1997	KILN		165 T/H	0.18 LB/T	0.18 LB/T	FABRIC FILTERS.	
-0173	SOUTHDOWN, INC.	FL	PSD-FL-233							FABRIC FILTERS.	
				6/27/1997	KILN		165 T/H, I-hour max	0.18 LB/T	0.18 LB/T		
0173	SOUTHDOWN, INC.	FL	PSD-FL-233	6/27/1997	KILN	0047	165 T/H, 1-hour max	0.09 LB/T	0.09 LB/T	FABRIC FILTERS.	
-0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228	12/23/1996	KILN, PORTLAND	COAL	14 T/H	0.23 LB/T, clinker	0.20 LB/T, clinker	ESP.	
Γ-0059	ASH GROVE CEMENT COMPANY	UT	DAQE-958-96	10/24/1996	KILN	COAL	170 T/H	21.11 LB/H	0.12 LB/T	BAGHOUSE.	
T-0062	HOLNAM, DEVIL'S SLIDE PLANT	UT	DAQE-522-96	5/13/1996	KILN	COAL		14 LB/H		BAGHOUSE.	
V-0032	GREAT STAR CEMENT CORPJUNITED ROCK PRODUCT	r: NV	A139	10/24/1995	CEMENT KILN		1.6 MILLION TONS	23.7 lb/hr; 0.015 gr/dscf; 88 TPY		BAGHOUSE.	
known (3)	B) HOLCIM, LEE ISLAND	MO	062004-005	6/8/2004	IN-LINE KILN AND RAW MILL	COAL		•	0.28 LB/TON CLINKER (3-hr stack test)	BAGHOUSE.	
known (3	B) HOLCIM, LEE ISLAND	MO	062004-005	6/8/2004	KILN/CALCINER/PREHEATER	COAL			,	BAGHOUSE.	
articulate l	Matter (PM25)										
	PORTLAND CEMENT CLINKERING PLANT	WA	PSD-90-03	10/5/2001	KILN EXHAUST STACK			0.005 GR/DSCF, 24-HR		BAGHOUSE	
A-0307											

^a Based on 8,760 hours per year.

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.
(1) Source: Department of Environmental Protection, Florida Division of Air Resource Management, March 29, 2005.
(2) Source: Department of Environmental Protection, Florida Division of Air Resource Management, July 7, 2005.
(3) Source: Department of Natural Resources, Missouri Air Conservation Commission, June 8, 2004.

Table 6-4. Summary of Previous PM/PM₁₀ BACT Determinations from Clinker Coolers at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No.	Date Issued	Throughput	Emission Limit (as presented in Clearinghouse)	Emission Limit(converted *)	Control Equipment	% Effic.
<u>Particulate</u>	Matter (PM)								
UT-0059	ASH GROVE CEMENT COMPANY	UT	DAQE-958-96	10/24/1996		10.69 LB/H; 0.01 gr/dscf		Baghouse	
IA-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT	IΑ	17-01-005	12/11/2003	150 TPH Clinker	0.015 GR/DSCF	0.1 LB/T	Baghouse	
MO-0059	CONTINENTAL CEMENT COMPANY, LLC	MO	2002-02-038	9/24/2002	182.60 T/H			Baghouse	
IA-0052	LAFARGE CORPORATION	IA	Proj. No. 00-057	7/1/2002	145.30 TONS OF	0.015 GR/DSCF	0.1 LB/TON	Baghouse	99.9
FL-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.	· FL	1210465-001-AC	6/1/2000	178 T/H	0.07 LB/T DRY PM	0.07 LB/T DRY PM F	EEDESP	
CO-0047	HOLNAM, FLORENCE	CO	98-FR-0895	7/29/1999		60.2 T/YR		Baghouse	
IN-0112	LONE STAR INDUSTRIES, INC.	IN	133-5886-00002-3241	9/18/1998	75 T/H	13.5 LB/H	0.082 LB/T	Baghouse	
OR-0036	DURKEE FACILITY	OR	01-0029	2/26/1998		0.1 GR/DSCF, 3-hr	0.1 LB/T, 6-hr	Baghouse	
FL-0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228	12/23/1996	14 T/H	0.1 LB/T, dry	0.16 LB/T clinker	ESP	
FL-0110	FL CRUSHED STONE	FL	PSD-FL-227	11/17/1995	83 T/H	0.01 LB/T, clinker	0.01 LB/T clinker	FABRIC FILTER	
WY-0044	MOUNTAIN CEMENT COMPANY-LARAMIE FACILITY	WY	CT-1137	3/6/1995		0.01 GR/ACF; 0.09 lb/hr		Baghouse	99.9
<u>Particulate</u>	Matter (PM ₁₀)								
IA-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT	IA	17-01-005	12/11/2003	150 TPH Clinker	0.015 GR/DSCF	0.092 LB/T	Baghouse	
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	2,250 T/D	0.01 GR/DSCF	0.091 lb/ton	FABRIC FILTER	
IA-0052	LAFARGE CORPORATION	IA	Proj. # 00-057	7/1/2002	1,028,599 TPY	0.015 GR/DSCF		Baghouse	99.9
FL-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.	FL	1210465-001-AC	6/1/2000	178 T/H	0.06 LB/T DRY PH	0.06 LB/T DRY PH FE	ED ESP	
CO-0047	HOLNAM, FLORENCE	CO	98-FR-0895	7/29/1999		60.2 T/YR		Baghouse	
IN-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	183 T/H CLINKER	0.015 GR/DSCF	0.02 lb/ton	BAGHOUSE	
CO-0048	HOLNAM, LAPORTE CO.	CO	11LR338-1	9/22/1998	584,000 T/YR CLINKER	37.7 T/YR	0.13 LB/T	Baghouse	99.9
IN-0112	LONE STAR INDUSTRIES, INC.	· IN	133-5886-00002-3241	9/18/1998	75 T/H	12.4 LB/H	0.075 LB/T	BAGHOUSE	
TX-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998		12.25 LB/H; 53.66 TPY		Baghouse	
MO-0048	LAFARGE CORPORATION	MO	0897-019	8/20/1997	1,028,599 TONS	11.74 LB/HR, 24 HR	0.10 lb/ton	BAGHOUSE	99.9
FL-0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228	12/23/1996	14 T/H	0.13 LB/T, clinker	0.13 LB/T, clinker	ESP	
UT-0059	ASH GROVE CEMENT COMPANY	UT	DAQE-958-96	10/24/1996		9.63 LB/H; 0.009 gr/scf		Baghouse	
NV-0032	GREAT STAR CEMENT CORP./UNITED ROCK PRODUCTS O	ORP. NV	A139	10/24/1995		21 LB/HR & .015 GR/DSCF		Baghouse	99
							LB/TON CLINKI	ER	
	•						(3-HR STACK		
Unknown (1) HOLCIM, LEE ISLAND	MO	062004-005	6/8/2004			0.07 TEST)	Baghouse	

^a Based on 8,760 hours per year.

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.

⁽¹⁾ Source: Department of Natural Resoucres, Missouri Air Conservation Commission, June 8, 2004.

Table 6-6. Summary of Previous PM/PM₁₀ BACT Determinations from Finish Mills at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No.	Date Issued	Process Type	Throughput	Control Equipmen	Emission Limit 1	Emission Limit 2	% Effic.
Particulate M	1atter (PM)			· · · · · · · · · · · · · · · · · · ·		_				
MO-0059	CONTINENTAL CEMENT COMPANY, LLC	MO	2002-02-038	9/24/2002	FINISH MILL, CLINKER GRINDING, ELEVATOR	114.2 T/H	BAGHOUSE			
CO-0047	HOLNAM, FLORENCE	CO	98-FR-0895	7/29/1999	FINISH MILL SYSTEM		BAGHOUSE	70.78 T/YR		
TX-0279	NORTH TEXAS CEMENT COMPANY	TX	PSD-TX-893	3/4/1999	FINISH MILL SYSTEM VENT		BAGHOUSE	9.83 LB/H; 43.1 TPY		
OR-0036	DURKEE FACILITY	OR	01-0029	2/26/1998	FINISH GRINDING MILL FEED BELT		BAGHOUSE	0.1 gr/dscf, 3-hr		
OR-0036	DURKEE FACILITY	OR	01-0029	2/26/1998	FINISH MILL #2		BAGHOUSE	0.017 gr/dscf, 3-hr	69 LB/D	
WY-0044	MOUNTAIN CEMENT COMPANY-LARAMIE FACILITY	WY	CT-1137	3/6/1995	FINISH MILL C" EXISTING GRINDING MILL USED IN		BAGHOUSE	0.01 GR/ACF	1.89 LB/H	99.
Particulate M	latter (PM ₁₀)									
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 3	35 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 4	40 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 5	45 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 6	45 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 7 (MILL SWEEP)	85 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 7 (MILL SEPARATOR)	85 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL NO. 7 (TRANSFER)	500 T/H	FABRIC FILTER	0.01 GR/DSCF		
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003	FINISH MILL #7 (TRANSFER #2)	500 T/H	FABRIC FILTER	0.01 GR/DSCF		
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1	6/29/2001	FM NO. 1 SEPARATOR, N-13		BAGHOUSE	1.26 LB/H	5.29 T/YR	
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1	6/29/2001	FM NO. 1 AIRSLIDES, N-22		BAGHOUSE	0.36 LB/H	1.51 T/YR	
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1		FM NO. 2 SEPARATOR, N-63		BAGHOUSE	1.26 LB/H	5.29 T/YR	
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1	6/29/2001	FM NO. 2 AIRSLIDES, N-69		BAGHOUSE	0.36 LB/H	1.51 T/YR	
CO-0047	HOLNAM, FLORENCE	CO	98-FR-0895	7/29/1999	FINISH MILL SYSTEM		BAGHOUSE	70.78 T/YR		
IN-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	FINISH MILL, NO. 3	95 T/H	FABRIC FILTER	0.01 GR/DSCF	1.97 LB/H	
IN-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	FINISH MILL TRANSFER EQUIPMENT	235 TPH	BAGHOUSE	0.015 gr/dscf	0.01 GR/DSCF	:
IN-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	FINISH MILL TRANSFER NO. 3		FABRIC FILTER	0.015 GR/DSCF	0.01 GR/DSCF	;
TX-0279	NORTH TEXAS CEMENT COMPANY	TX	PSD-TX-893	3/4/1999	FINISH MILL SYSTEM VENT		BAGHOUSE	9.83 LB/H	43.1 T/YR	
MO-0048	LAFARGE CORPORATION	MO	0897-019	8/20/1997	FINISH MILL, HOPPER, CEMENT AIR SEPARATION	1401600 TONS	BAGHOUSE	3.46 LB/HR		
Unknown (1)	HOLCIM, LEE ISLAND	MO	062004-005	6/8/2004	FINISH MILL AND PRODUCT LOADOUT	-	BAGHOUSE			

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.
(1) Source: Department of Natural Resources, Missouri Air Conservation Commission, June 8, 2004.

Table 6-9. Summary of Previous SO₂ BACT Determinations from Cement Kilns, Preheaters, and Calciners at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No.	Date Issued Process Type	Fuel Used	Throughput	Emission Limit (as presented in Clearinghouse)	Emission Limit (converted ^a)	Control Equipment Description	% Ef
Jnknown (1)) FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-350/0010087-013-AC	July 2005 PREHEATER/PRECALCINER KILN	COAL	125 TPH CLINKER	28.8 LB/HR	0.23 lb/ton clinker	Inherently limited by process.	
nknown (2)) RINKER FLORIDA CRUSHED STONE COMPANY	FL	PSD-FL-351/0530021-009-AC	7/7/2005 PREHEATER/PRECALCINER KILN	COAL	125 TPH CLINKER	28.8 LB/HR	0.23 lb/ton clinker	Inherently limited by process.	
-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT	1A	17-01-005	12/11/2003 KILN/CALCINER/PREHEATER	COAL	150 TPH CLINK	1.01 LB/TON CLINK	1.01 LB/ TON CLINK	WET SCRUBBER.	
D- 0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003 ROTARY KILN #6	COAL	2,250 T/D	632 LB/H	6.74 lb/ton	Inherent scrubbing effect of processing limestone	
L-0200	CEMEX, INC.	AL	105-0002-Z004	9/13/2002 CEMENT KILN	COAL	230 T/H	160 LB/H	0.821 LB/T		
-0052	LAFARGE CORPORATION	lA	PN 00-057	7/1/2002 PREHEATER/PRECALCINER KILN	COAL	3,488 T/D	500 LB/D; 4,850 TPY	0.143 lb/ton (daily)	Dry Scrubber Equivalent. Lime is generated from	
									limestone in feed and comes into contact with SO2 and	l
									some SO2 captured in waste kiln dust.	
A -0307	PORTLAND CEMENT CLINKERING PLANT	WA	PSD-90-03	10/5/2001 KILN EXHAUST STACK			180 ppm @ 10% O2, 1-hr		During kiln preheating period, shutdown and during	
									maintenance of baghouse, only nat. gas will be burned	
									and sulfur rings shall be removed if the ring was the	
C-0355	PORTLAND CEMENT MANUFACTURING PLANT	TV	DCD TV 145 MI	(/20/2001 CRINDRIC/ PREHEATRIC/ KILAL V. 10			20 I D/II 04 TBV		cause of the shutdown.	
-0333 -0043	RIO GRANDE PORTLAND CEMENT CORP.	TX CO	PSD-TX-145 M1 98PB0893	6/29/2001 GRINDING/ PREHEATING/ KILN, K-19		050 000 TAYR Clinks	20 LB/H; 84 TPY	100 1 8/5	NONE INDICATED.	
-0045	RIO GRANDE FOR ILAND CEMENT CORP.	CO	98PB0893	9/25/2000 PREHEATER/PRECALCINER, KILN		950,000 T/YR Clinker	1.99 LB/T, 12-month rolling	1.99 LB/T	Raw materials quarry will be managed for optimum	
									sulfur contents. SO2 will be absorbed in a 5-stage precalciner/preheater Kiln.	
D-0027	LEHIGH PORTLAND CEMENT COMPANY	MD	06-6-0356R	6/8/2000 PREHEATER/PRECALCINER	COAL	2,214,000 T/YR	1041 T/YR	0.94 lb/ton	Options include the installation of a 5-stage	
D-0027	ELIMONT ON TEXAND CEMENT COMPANY	MD	00-0-0350K	0/0/2000 FREHEATERFRECALCINER	COAL	2,214,000 1/1 K	1041 1/1K	0.94 16/10/1	preheater/precalciner pyroprocessing plant and use of	
									raw material with sulfur < 0.03%.	
L-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.	FL	1210465-001-AC	6/1/2000 IN LINE KILN & RAW MILL	Nat. Gas	178 T/H	0.27 LB/T CLINKER	0.27 LB/T CLINKER	Low sulfur materials and process control	
11-0287	HOLNAM, INC.	MI	60-71L	3/20/2000 CEMENT KILNS, WET PROCESS (2)	COAL	100 T/H Feed	21.7 LB/T	21.7 LB/T	SULFUR IN FUEL LIMIT HAS BEEN DROPPED IN	ı
				5-20-2000 CHAILETT THE THE CHEST (2)	000				SCRUBBER	
S-0022	MONARCH CEMENT COMPANY	KS	10069	1/27/2000 2 PRECALCINERS (EACH)	Nat. Gas	107.6 TPH	421 LB/H; 622.3 TPY	3.91 lb/ton (hourly);	BAGHOUSE	
								1.32 lb/ton (annual)	
0-0047	HOLNAM, FLORENCE	СО	98-FR-0895	7/29/1999 KILN/PREHEATER/BYPASS & CLINKER COOLE	R		623.23 T/YR	•	WET LIME SCRUBBER	
	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999 KILN OPERATION	COAL	360 T/H	3317 T/YR	2.10 lb/ton	WE SIND SONOEDER	
X-0279	NORTH TEXAS CEMENT COMPANY	TX	PSD-TX-893	3/4/1999 MAIN KILN/SCRUBBER STACK	COAL	3,100 T/D	2840 LB/H; 1,577 TPY	21.99 lb/ton (hourly);	SCRUBBER AND BAGHOUSE	
								2.79 lb/ton (annual)	
-0112	LONE STAR INDUSTRIES, INC.	IN	133-5886-00002-3241	9/18/1998 CEMENT KILN, WET PROCESS,	COAL	75 T/H	543 LB/H	4.03 LB/T feed	SULFUR CONTENT OF COAL SHALL NOT	
	CARIMOL OF UNIT DIVISION								EXCEED 3 PERCENT	
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998 DRY/WET KILN & ALKALI BYPASS		378.650 TPY Dry	2400 LB/H; 10,512 tpy	55.52 lb/ton (dry); 28.8	DRY SCRUBBER.	
						Kiln/730,000 tpy		lb/ton		
X-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998 DRY KILN EXHAUST BAGHOUSE (KS-1A)		730,000 T/YR Clinker	840 LB/H: 3,679.2 TPY	10.08 lb/ton	DRY SCRUBBER ACHIEVEING AT LEAST 30%	
				y receiped and make a second or a my		7,00000 7,777 01111101		13.101	REDUCTION.	
K-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998 ALKALI BYPASS BAGHOUSE STACK (9A)			360 LB/H; 1.576.8 TPY		NONE	
	CAPITOL CEMENT DIVISION	TX.	PSD-TX-120M3	9/16/1998 WET KILN EXHAUST BAGHOUSE (KS-1B)		378,650 T/YR Clinker	1200 LB/H; 5,256 TPY	27.76 lb/ton	NONE	
11-0354	HOLNAM, INC	MI	60-71K	6/23/1998 CEMENT KILNS, WET PROCESS, (2)	COAL	100 T/H	11940 T/YR ·	21.7 LB/T clinker	SULFUR IN FUEL LIMITED TO 2.5% MAX, 2.17%	combin
-0057	ILLINOIS CEMENT COMPANY	IL.	97030016	6/12/1998 KILN, CEMENT, PREHEATER-PRECALCINER		3,000 TPD Cement	0.8 LB/T	0.8 LB/T	INHERENT ABSORPTION OF SO2 IN PRODUCT	
	DURKEE FACILITY	OR	01-0029	2/26/1998 KILN			10 PPMV; 150 lb/day	0.44.0.00	LOW SULFUR FUEL	3-H A
0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228	12/23/1996 KILN, PORTLAND	COAL	14 T/H	0.16 LB/T	0.16 LB/T	FUEL S LIMITS AND PROCESS DESIGN	CLINK R
T-0059	ASH GROVE CEMENT COMPANY	UT	DAQE-958-96	10/24/1004 KILN	CO 41	170 7/1	LDAGADTU		LOW SULFER FUEL	R
	HOLNAM, DEVIL'S SLIDE PLANT	UT	DAQE-538-96 DAQE-522-96	10/24/1996 KILN 5/13/1996 KILN	COAL COAL	170 T/H	1 LB/MMBTU 110 LB/H		LOW SULFUR	
	FL CRUSHED STONE	FL	PSD-FL-227	11/17/1995 KILN	COAL	83 T/H	0.27 LB/T	0.27 LB/T	PROCESS REMOVES ACID	CLINK
2-0110	TE CROSHED STORE	I L	130-11-227	11/1//1995 KIEN	COAL	03 I/II	0.27 LB/1	0.27 LB/1	ROCESS REMOVES ACID	R
IV-0032	GREAT STAR CEMENT CORP./UNITED ROCK	NV	A139	10/24/1995 CEMENT KILN/CLINKER COOLER			208 TPY	0.416 LB/TON	FUEL SPEC: LIMIT FUEL TO COAL WITH 1%	
	PRODUCTS CORP.							CLINKER	SULFUR (COAL SULFUR ANALYSIS)	
/Y-0044	MOUNTAIN CEMENT COMPANY-LARAMIE	WY	CT-1137	3/6/1995 KILN, COAL	COAL	45.3 T/H COAL •	406 LB/H (3 Hr)		LOW SULFUR COAL AND ABSORPTION OF SO2	
	FACILITY								BY THE	
O-0059	CONTINENTAL CEMENT COMPANY, LLC	МО	2002-02-038	9/24/2002 ROTARY KILN	COAL	183 T/H	12 LB/T Clinker, 3-hr	12 LB/T Clinker, 3-h	WET SCRUBBER	
							rolling; 10 lb/ton 24-hr	rolling: 10 lb/ton		
NI 0084	CICNLA MOVEMENT DI OPLITTICO CONTRACTO	-	17.075.000					24-hr	and a continuous	
	SIGNAL MOUNTAIN CEMENT COMPANY,	TN	47-065-3070	5/29/1998 DRY FEED KILN	Pet. Coke	160 T/H	500 PPM; 89.3 lb/hr		GOOD COMBUSTION	
0-0048	LAFARGE CORPORATION	MO	0897-019	8/20/1997 RAW MILL, PREHEATER/PRECALCINER KILN		1,584,071 TONS	477.3 LB/HR, 3 HR AVG	2.64 lb/ton (3-hr)	INHERENT DRY SCRUBBING	
								LB/TON	INHERENT DRY SCRUBBING AND LIME SRAY	r
nlmoven (2)	HOLCIM LEE ISLAND	140	0/2004 005	(IDIDOCAL WILL AND ALL CONTROL TO THE CONTROL TO TH			COL A DIAM		WHEN RAW MILL NOT OPERATING, SELECTIVE	E
iikiiowii (3)	HOLCIM, LEE ISLAND	мо	062004-005	6/8/2004 KILN/CALCINER/PREHEATER	COAL		694 LB/HR	1.26 rolling ave.)	QUARRYING OF MATERIALS	

^a Based on 8,760 hours per year.

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.
(1) Source: Department of Environmental Protection, Florida Division of Air Resource Management, March 29, 2005.
(2) Source: Department of Environmental Protection, Florida Division of Air Resource Management, July 7, 2005.
(3) Source: Department of Natural Resources, Missouri Air Conservation Commission, June 8, 2004.

Table 6-12. Summary of Previous NO, BACT Determinations from Cement Kilns and Preheaters/Precalciners/Calciners at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No.	Date Issued	Process Type	Fuel	Throughput	Emission Limit	Emission Limit	% Effic. Control Equipment Description
Unknown (1)	FLORIDA ROCK INDUSTRIES, INC.	EI	PSD-FL-350/0010087-013-A(July 2005	PREHEATER/PRECALCINER KILN	Used COAL	125,00 TPH CLINKER	(as presented on Clearinghouse) 243.8 LB/HR	(as calculated)"	Multi-staged Combustion and/or SNCR
Unknown (2)	RINKER FLORIDA CRUSHED STONE COMPANY		PSD-FL-351/0530021-009-A(PREHEATER/PRECALCINER KILN PREHEATER/PRECALCINER KILN	COAL	125.00 TPH CLINKER	243.8 LB/HR	1.95 lb/ton clinker	Multi-staged Combustion and/or SNCR
MS-007 i	HOLCIM (US), INC.	MS	1630-00025	8/20/2004	PREHEATER/PRECALCINER KILN	COAL	650,000 TPY Clinker	10 LB/T	1.95 lb/ton clinker 10 LB/T	5 GOOD COMBUSTION PRACTICE
IA-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT		17-01-005		VII NI/CAL CINIED/DREUEATED	COAL	150 TPH CLINK	2.85 LB/ TON CLINK	2.85 LB/T	SNCR, Low-NOx Burners, Comb. Control, and Proper Kiln Design
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE		28.1101-PSD	4/10/2003	KILN/CALCINER/PREHEATER ROTARY KILN #6	COAL		2.83 LB/ TON CLINK 2267 T/YR	2.85 LB/1 5.52 lb/ton	PREHEATER/PRECALCINATOR SYSTEM
AL-0203	HOLCIM (US), INC.		503-8026-X021				2,250 T/D	2998 T/YR	****	PREHEATER/FRECALCHIVATOR STSTEM
	CONTINENTAL CEMENT COMPANY, LLC			2/4/2003	Kiln System (Calcining Kiln, Preheater, w/Precalcine		390 T/H		1.76 lb/ton	SNCR. LOW NOX BURNERS TOP AIR DUCT
MO-0059			2002-02-038 PROJECTNI 00.057	9/24/2002	ROTARY KILN	COAL	183 T/H	8 lb/t clinker, 30-day rolling	8 lb/t clinker, 30-day rolling	
IA-0052	LAFARGE CORPORATION		PROJECT No. 00-057	7/1/2002	PREHEATER/PRECALCINER KILN	COAL	3,488 T/D	2546 T/YR	4 LB/TON CLINKER	GOOD COMBUSTION PRACTICES
WA-0307	PORTLAND CEMENT CLINKERING PLANT		PSD-90-03	10/5/2001	KILN EXHAUST STACK			650 ppm @ 10% O2, 24-hr		NONE INDICATED.
TX-0355	PORTLAND CEMENT MANUFACTURING PLANT		PSD-TX-145 M1	6/29/2001	GRINDING/ PREHEATING/ KILN, K-19			660 LB/H		NONE INDICATED.
CO-0043	RIO GRANDE PORTLAND CEMENT CORP.		98PB0893			_	950,000 T/YR Clinker	2.32 LB/T	2.32 LB/T	MULTI-STAGE COMBUSTION AND RECIRCULATION.
MD-0027	LEHIGH PORTLAND CEMENT COMPANY		06-6-0356R	6/8/2000	PREHEATER/PRECALCINER	COAL	2,214,000 T/YR	4871 T/YR	4.40 lb/ton	5-Stage Preheater/Precalciner Pyroprocessing Plant
FL-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.		1210465-001-AC	6/1/2000	IN LINE KILN & RAW MILL	Nat. Gas	.178 T/H	2.9 LB/T CLINKER	2.9 LB/T CLINKER	Multi-Stage Combustion w/Sep. Line Calciner Comb. Chamber
MI-0287	HOLNAM, INC.		60-71L	3/20/2000	,	COAL	100 T/H FEED	6 LB/T	6 LB/T	30 30% REMOVAL IN SLURRY-SCRUBBER, RTOS.
KS-0022	MONARCH CEMENT COMPANY	KS	10069	1/27/2000		Nat. Gas	107.6 TPH	200 T/MO	5.09 lb/ton	99 NATURAL GAS
CO-0047	HOLNAM, FLORENCE	CO	98-FR-0895	7/29/1999	Kiln/Preheater/Bypass & Clinker Cooler Exhaust			2922.71 T/YR		LOW NOX COMBUSTION SYSTEM
IN-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999	KILN OPERATION	COAL	360 T/H	4428 T/YR	2.81 lb/ton	LOW NOX CALCINER, GOOD COMBUSTION PRACTICES
TX-0279	NORTH TEXAS CEMENT COMPANY	TX	PSD-TX-893	3/4/1999	MAIN KILN/SCRUBBER STACK	COAL	3,100 T/D	1085 LB/H	8.4 lb/ton (short-term); 2.8 lb/ton (annual)	LOW-NOX CALCINER AND LOW-NOX IN-LINE CALCINER
CO-0048	HOLNAM, LAPORTE CO.	· CO	11LR338-1	9/22/1998	CALCINER/ KILN		584,000 T/YR	900 LB/H	13.5 lb/ton (short-term); 8.6 lb/ton (annual)	Design of Burner/Kiln to Control Alkali from Limestone
N-0112 .	LONE STAR INDUSTRIES, INC.	IN	133-5886-00002-3241	9/18/1998	CEMENT KILN, WET PROCESS,	COAL	75 T/H	471 LB/H	6.28 lb/ton	LOW NOX BURNERS AND GOOD COMBUSTION
TX-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	Dry/Wet Kiln & Alkali Bypass Baghouse Stack		378,650 TPY DRY KILN/730,000 tpy	950 LB/H	21.98 lb/ton dry; 11.4 lb/ton wet	
TX-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	DRY KILN EXHAUST BAGHOUSE (KS-1A)		730,000 T/YR Clinker	450 LB/H	5.40 lb/ton wet	NONE
TX-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998	WET KILN EXHAUST BAGHOUSE (KS-IB)		378,650 T/YR Clinker	450 LB/H	10.41 lb/ton dry	NONE
MI-0354	HOLNAM, INC	MI	60-71K	6/23/1998	CEMENT KILNS, WET PROCESS, (2)	COAL	100 T/H	3377 T/YR	6 LB/T clinker	
IL-0057	ILLINOIS CEMENT COMPANY		97030016	6/12/1998	KILN, CEMENT, PREHEATER-PRECALCINER		3,000 TON/D CEMENT	4.5 LB/T CLINKER	4.5 LB/T CLINKER	CONVERSION TO PRECALCINER KILN
TN-0086	SIGNAL MOUNTAIN CEMENT COMPANY.	TN	47-065-3070			Pet. Coke	160 T/H	1500 PPM	2.52 lb/ton	GOOD COMBUSTION
MO-0048	LAFARGE CORPORATION		0897-019	8/20/1997	RAW MILL, PREHEATER/PRECALCINER KILN		1,584,071 TONS	1894.8 TON/YR	2.39 lb/ton	GOOD COMBUSTION practices
FL-0173	SOUTHDOWN, INC.	FL	PSD-FL-233	6/27/1997	KILN	Mixed	165 T/H, 1-Hr Max	1.8 LB/T	I.8 LB/T	GCP and Burner Design w/ Primary Comb. Air Control
FL-0173	SOUTHDOWN, INC.	FL	PSD-FL-233	6/27/1997			165 T/H, 1-Hr Max	1.72 LB/T	1.72 LB/T	GCP and Burner Design w/ Primary Comb. Air Control
FL-0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228			COAL	14 T/H	2,45 LB/T	2.45 LB/T	Process Control and Secondary Combustion of Fuel
UT-0059	ASH GROVE CEMENT COMPANY		DAOE-958-96	10/24/1996		COAL	170 T/H	400 LB/H	2.35 lb/ton	LOW NOX BURNER.
UT-0062	HOLNAM, DEVIL'S SLIDE PLANT	UT	DAQE-5330-96			COAL	170 1711	251 LB/H	2.33 10/1011	LOW NOX BURNER
	FL CRUSHED STONE		PSD-FL-227			COAL	83 T/H	2.8 LB/T	2.8 LB/T	COMBUSTION PRACTICES
NV-0032	GREAT STAR CEMENT CORP./UNITED ROCK PROD. COR		A139		CEMENT KILN/CLINKER COOLER	COAL	63 I/H	3.1 LB/TON CLINKER	3.1 LB/TON CLINKER	50 SNCR UREA INJECTION SYSTEM AT PREHEATER
WY-0044	MOUNTAIN CEMENT COMPANY-LARAMIE FACILITY		CT-1137			COAL	45 771 00 41		3.1 LB/TON CLINKER	20 COMBUSTION UNIT DESIGN (WELL DESIGNED
				3/6/1995	KILN, COAL		45 T/H COAL	208.8 LB/H (30-DAY)		GOOD COMBUSTION PRACTICES AND MULTI-STAGED
Unknown (3)	HOLCIM, LEE ISLAND	МО	062004-005	6/8/2004	KILN/CALCINER/PREHEATER	COAL		1543 LB/HR (30-day rolling ave.)	2.8 LB/TON CLINKER LB/TON CLINKER (30-DAY	COMBUSTION
Unknown (4)	HOLNAM, HOLLY HILL	SC		5/29/2003	KILN SYSTEM	COAL	2,462,318 ton clink/yr	4.33 LB/TON CLINKER	4.48 ROLLING AVE.); higher limit during	30 LNB, MSC
MS-0071	HOLCIM (US), INC., ARTESIA	МО	1630-00025			COAL	6,500,000 TON CLINKER/YR TON CLINKER/YR: MAX:	10 lb/ton	10 LB/TON	5 GOOD COMBUSTION PRACTICE
Unknown (5),(6	6) DRAKE CEMENT	ΑZ	DRAFT				660.000 83.33 TPH CLINKER	95 lb/hr (24-hr ave);	1.95 lb/ton (30-day rolling ave.)	SNCR

^a Based on 8,760 hours per year.

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.
(1) Source: Department of Environmental Protection, Florida Division of Air Resource Management, March 29, 2005.
(2) Source: Department of Environmental Protection, Florida Division of Air Resource Management, July 7, 2005.
(3) Source: Department of Natural Resources, Missouri Air Conservation Commission, June 8, 2004.
(4) Source: Department of Health and Environmental Control, Bureau of Air Quality, South Carolina, May, 29, 2004.
(5) Source: Vaidyanatha, Balaji, Arizona Department of Environmental Quality. Email Correspondence, September 23, 2005.
(6) Draft limits.

Table 6-13. Summary of Recent BACT Determinations for CO Emissions from Cement Kilns, Calciners, and Preheaters at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No. I	Oate Issued Process Type	Fuel Used	Throughput	Emission Limit (as presented in Clea <u>ring</u> house)	Emission Limit (converted ")	% Effic. Control Equipment Description
PA-0236	Essroc Cement, Nazareth Plant I	PA	48-309-118	2/11/2003 KILN SYSTEM			5187 LB/HR (1 HR AVE.)	1363 LB/HR (12-mo. Ave)	•
Unknown (1)		MT	drafi	KILN SYSTEM	COAL	425,000 ton clink /yr		1.46 LB/TON CLINKER	GOOD COMBUSTION PRACTICES
Unknown (2)	Buzzi Unicem, USA, Selina Plant-River Cement Co.	MO	DRAFT	12/1/2004 KILN SYSTEM	COAL	2,220,000 ton clink /yr	691 LB/HR-30 day roll	2.73 LB/TON CLINKER	GOOD COMBUSTION PRACTICES
Unknown (3)	Holnain, Holly Hill	SC	TV-1860-0005	4/15/2003 KILN SYSTEM	COAL	2462318 ton clink /yr		8 LB/TON CLINKER -30 day roll	GOOD COMBUSTION PRACTICES
Unknown (4)	Giant Cement, Portland Cement plant	SC	0900-0002-DO	5/29/2003 KILN SYSTEM	COAL		1049 LB/HR	6.8 LB/TON CLINKER -30 day roll	GOOD COMBUSTION PRACTICES GOOD COMBUSTION PRACTICES AND MULT
Unknown (5)	Holcim (US), Inc., Lee Island Project	МО	062004-005	6/8/2004 KILN/CALCINER/PREHEATER	COAL	TON CLINKER/YR; MAX:	6 LB/TON CLINKER -30 day roll	3307 LB/HR - 30 day roll	STAGED COMBUSTION
Unknown (6)	DRAKE CEMENT	ΑZ	DRAFT			660,000 83.33 TPH CLINKER		3.6 lb/ton (3 hr ave.)	Good Combustion Practices
Unknown (7)	RINKER FLORIDA CRUSHED STONE COMPANY	FL	PSD-FL-351/0530021-009-AC	7/7/2005 PREHEATER/PRECALCINER KILN	COAL	125.00 TPH CLINKER	450 LB/HR	3.60 lb/ton clinker	Combustion Control
Unknown (8)	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-350/0010087-013-AC	July 2005 PREHEATER/PRECALCINER KILN	COAL	125.00 TPH CLINKER	450 LB/HR	3.60 lb/ton clinker	Combustion Control
WV-0022	CAPITOL CEMENT DIVISIONMARTINSBURG PLANT	WV	R14-0026	6/2/2005 PREHEATER/PRECALCINER KILN	COAL	5,900 TPD	39 LB/HR	4.0 lb/ton clinker	GOOD COMBUSTION PRACTICES
A-0070	LEHIGH CEMENT COMPANY - MASON CITY PLANT	IΑ	17-01-005	12/11/2003 KILN/CALCINER/PREHEATER	COAL	150 TPH Clinker	3.7 LB/T	3.7 LB/T	PROPER KILN DESIGN AND OPERATION
SD-0003	GCC DACOTAH - DACOTAH QUARRYS LIMESTONE	SD	28.1101-PSD	4/10/2003 ROTARY KILN #6	COAL	2,250 T/D	3,250 LB/H; 2,002 TPY	34.67 lb/ton (hourly); 4.88 lb/ton (annual)	GOOD COMBUSTION PRACTICES
MO-0059	CONTINENTAL CEMENT COMPANY, LLC	MO	2002-02-038	9/24/2002 ROTARY KILN	COAL	183 T/H	12 lb/ton clinker (1-hr); 10 l/bton (8-hr)	12 lb/ton clinker (1-hr); 10 lb/ton (8-hr)	PYROCLON
AL-0200	CEMEX, INC.	AL	105-0002-Z004	9/13/2002 CEMENT KILN	COAL	230 T/H	725 LB/H	3.72 LB/T	
A-0052	LAFARGE CORPORATION	IA	PROJECT NUMBER 00-057	7/1/2002 PREHEATER/PRECALCINER KILN	COAL	3,488 T/D	4.5 lb/ton clinker	4.5 lb/ton clinker	GOOD COMBUSTION PRACTICES
N/A-0307	PORTLAND CEMENT CLINKERING PLANT	WA	PSD-90-03	10/5/2001 KILN EXHAUST STACK			1045 PPM @ 10%O2; 538 lb/hr (8-hr)		NONE INDICATED.
ΓX-0355	PORTLAND CEMENT MANUFACTURING PLANT	TX	PSD-TX-145 M1	6/29/2001 GRINDING/ PREHEATING/ KILN, K-19			460 LB/H; 1,932 TPY		GCPs AND GOOD COMBUSTION UNIT DESIGN
CO-0043	RIO GRANDE PORTLAND CEMENT CORP.	CO	98PB0893	9/25/2000 PREHEATER/PRECALCINER, KILN		950,000 T/YR CEMENT CLINKER	2.11 LB/T	2.11 lb/ton (12-month rolling avg.)	90 MULTI-STAGE COMBUSTION AND GCP
MD-0027	LEHIGH PORTLAND CEMENT COMPANY	MD	06-6-0356R	6/8/2000 PREHEATER/PRECALCINER	COAL	2,214,000 T/YR	3328 T/YR	3.01 lb/ton (12-month rolling avg.)	Process Modification and Operational Monitoring
FL-0139	SUWANNEE AMERICAN CEMENT COMPANY, INC.	FL	1210465-001-AC	6/1/2000 IN LINE KILN & RAW MILL	NAT. GAS	178 T/H	3.6 LB/T CLINKER	3.6 LB/T CLINKER	COMBUSTION CONTROL
MI-0287	HOLNAM, INC.	MI	60-71L	3/20/2000 CEMENT KILNS, WET PROCESS (2)	COAL	100 T/H FEED			FABRIC FILTER, SLURRY SCRUBBER, RTO.
KS-0022	MONARCH CEMENT COMPANY	KS	10069	1/27/2000 2 PRECALCINERS (EACH)	NAT. GAS	120 MMBTU/H	5,000 LB/H; 2,093.3 TPY		99 NATURAL GAS
S-0020	ASH GROVE CEMENT	KS	1330001	8/26/1999 PREHEATER/PRECALCINER KILN	COAL	331 T/H	5,000 LB/H; 1,409 TPY	15.11 lb/ton (hourly); 0.97 lb/ton (annual)	Computerized process monitoring, GCP
CO-0047	HOLNAM, FLORENCE .	CO	98-FR-0895	7/29/1999 Kiln/Preheater/Bypass & Clinker Cooler Exhaust			3988.7 T/YR		GOOD COMBUSTION
N-0081	LONE STAR INDUSTRIES, INC.	IN	133-10159	4/16/1999 KILN OPERATION	COAL	360 T/H	2930 T/YR	3.65 LB/T clinker	GOOD COMBUSTION PRACTICES
ΓX-0279	NORTH TEXAS CEMENT COMPANY	TX	PSD-TX-893	3/4/1999 MAIN KILN/SCRUBBER STACK	COAL	3,100 T/D	2209 LB/H; 3,225 TPY	17.10 lb/ton (hourly); 5.70 lb/ton (annual)	GOOD COMBUSTION PRACTICES
N-0112	LONE STAR INDUSTRIES, INC.	IN	133-5886-00002-3241	9/18/1998 CEMENT KILN, WET PROCESS,	TDF	75 T/H	22.8 LB/H	0.30 lb/ton clinker (wet process)	
ΓX-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998 WET KILN EXHAUST BAGHOUSE		378,650 T/YR CLINKER	80 LB/H; 350 TPY	1.85 lb/ton	NONE
MI-0354	HOLNAM, INC	MI	60-71K	6/23/1998 CEMENT KILNS, WET PROCESS, (2)	COAL	100 T/H	3515 T/YR	6.4 LB/T clinker	
TN-0086	SIGNAL MOUNTAIN CEMENT COMPANY,	TN	47-065-3070	5/29/1998 DRY FEED KILN	PET. COKE	160 T/H	248 LB/H; 1,085 TPY	1.55 lb/ton clinker	GOOD COMBUSTION PRACTICES
DR-0036	DURKEE FACILITY		01-0029	2/26/1998 KILN			490 LB/H; 8-hr		NONE
MO-0048	LAFARGE CORPORATION		0897-019	8/20/1997 RAW MILL, PREHEATER/PRECALCINER KIL	N	1,584,071 TONS	842 TON/YR	1.06 lb/ton	GOOD COMBUSTION practices
FL-0173	SOUTHDOWN, INC.	FL	PSD-FL-233	6/27/1997 KILN		165 T/H (1-hr)	1.2 LB/T	1.2 lb/ton kiln feed	COMBUSTION CONTROLS
OR-0022	ASH GROVE CEMENT COMPANY		01-0029	3/10/1997 PYROPROCESSING KILN	NAT. GAS	113 TON CLINKER/H	490 LB/H	4.34 lb/ton	GCP as monitored by CO and O2 CEMS
	PUERTO RICAN CEMENT COMPANY, INC.		PR-0101	2/25/1997	COAL	4,100 TPD Clinker	296.6 LB/H, 8-H	1.74 lb/ton clinker	COMBUSTION CONTROLS.
L-0224	FLORIDA ROCK INDUSTRIES, INC.	FL	PSD-FL-228	12/23/1996 KILN, PORTLAND	COAL	14 T/H	2.5 LB/T	2.5 LB/T clinker	COMBUSTION CONTROLS .
JT-0062	HOLNAM, DEVIL'S SLIDE PLANT	UT	DAQE-522-96	5/13/1996 KILN	COAL		438 LB/H		COMBUSTION CONTROLS
FL-0110	FL CRUSHED STONE		PSD-FL-227	11/17/1995 KILN	COAL	83 T/H	2 LB/T	2 LB/T clinker, 1-hr	GOOD COMBUSTION PRACTICES
NV-0032	GREAT STAR CEMENT CORP,/UNITED ROCK PRODUC		A139	10/24/1995 CEMENT KILN/CLINKER COOLER			5.67 LB/TON CLINKER	5.67 LB/TON CLINKER	GOOD COMBUSTION PRACTICE, AIR/FUEL
WY-0044	MOUNTAIN CEMENT COMPANY-LARAMIE FACILITY	WY	CT-1137	3/6/1995 KILN, COAL	COAL	45.3 T/H COAL	3.2 LB/H .		PROPER COMBUSTION/BURNER

^a Based on 8,760 hours per year.

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.

(1) Source: Montana Department of Environmental Quality, September 21, 2005.
(2) Source: Missouri Air Pollution Control Prgram: September 2005.
(3) Source: Department of Health and Environmental Control, Bureau of Air Quality, South Carolina, May, 29, 2004.
(4) Source: Department of Health and Environmental Control, Bureau of Air Quality, South Carolina, March, 24, 2003.
(5) Source: Department of Natural Resources, Missouri Air Conservation Commission, June 8, 2004.
(6) Source: Vaidyanatha, Balaji, Arizona Department of Environmental Quality. Email Correspondence, September 23, 2005.
(7) Source: Department of Environmental Protection, Florida Division of Air Resource Management, July 7, 2005.
(8) Source: Department of Environmental Protection, Florida Division of Air Resource Management, March 29, 2005.

Table 6-14. Summary of Previous VOC BACT Determinations from Cement Kilns. Preheaters, and Calciners at Portland Cement Plants

RBLC ID	Facility Name	State	Permit No. Da	ate Issued Process Type	Fuel Used	Throughput	Emission Limit 1	Emission Limit 2	Control Equipment Description
Unknown (2)) RINKER FLORIDA CRUSHED STONE COMPANY) FLORIDA ROCK INDUSTRIES. INC. CAPITOL CEMENT DIVISION-MARTINSBURG PLANT	FL FL WV	PSD-FL-351/0530021-009-AC PSD-FL-350/0010087-013-AC R14-0026	7/7/2005 PREHEATER/PRECALCINER KILN July 2005 PREHEATER/PRECALCINER KILN 6/2/2005 PREHEATER/PRECALCINER KILN	COAL COAL COAL	125 TPH CLINKER 125 TPH CLINKER 5,900 TPD	15 LB/HR 15 LB/HR 3,960 LB/HR	0.12 lb/ton clinker 0.12 lb/ton clinker 0.14 LB/TON CLINKEF (12-month rolling)	Combustion control Combustion control GOOD COMBUSTION PRACTICES
AL-0200	CEMEX, INC.	AL	105-0002-Z004	9/13/2002 CEMENT KILN	COAL	230 T/H	136 LB/H	0.698 LB/T	Hareffeld
FL-0231	RINKER/MIAMI CEMENT PLANT	FL	PSD-FL-324	3/1/2002 IN-LINE KILN/RAW MILL/CLINKER COOLER SYSTEM	COAL	137 T/H CLINKER	0.12 LB/TON CLINKER		PROPER COMBUSTION CONTROL AND RAW MATERIAL SELECTION.
TX-0355 MD-0027	PORTLAND CEMENT MANUFACTURING PLANT LEHIGH PORTLAND CEMENT COMPANY	TX MD	PSD-TX-145 M1 06-6-0356R	6/29/2001 GRINDING/ PREHEATING/ KILN. K-19 6/8/2000 MATERIAL STORAGE AND TRANSFER			15 LB/H; 63 TPY 165 T/YR		NONE INDICATED. ANY ADD ENVIRONMENTALLY
FL-0139 MI-0287	SUWANNEE AMERICAN CEMENT COMPANY, INC. HOLNAM, INC.	FL MI	1210465-001-AC 60-71L	6/1/2000 IN LINE KILN & RAW MILL 3/20/2000 CEMENT KILNS, WET PROCESS (2)	NATURAL GAS COAL	178 T/H 100 T/H FEED	•	·	INFEASIBLE COMBUSTION CONTROL RTOS, THREE IN PARALLEL PER KILN. STANDBY ACTIVATED CARBON FOR
	HOLNAM, FLORENCE	СО	98-FR-0895	7/29/1999 COAL MILL VENT BAGHOUSE			16.2 T/YR		BACKUP. GOOD COMBUSTION
CO-0047 TX-0279	HOLNAM, FLORENCE NORTH TEXAS CEMENT COMPANY	CO TX	98-FR-0895 PSD-TX-893	7/29/1999 KILN/PREHEATER/BYPASS & CLINKER COOLER EXHAUS 3/4/1999 MAIN KILN/SCRUBBER STACK	COAL	3100 T/D	180.5 T/YR 686 LB/H; 1,008 TPY	5.31 lb/ton (hourly); 1.78 lb/ton (annual)	GOOD COMBUSTION GOOD COMBUSTION PRACTICES
N-0112 TX-0282	LONE STAR INDUSTRIES, INC. CAPITOL CEMENT DIVISION	IN TX	133-5886-00002-3241 PSD-TX-120M3	9/18/1998 CEMENT KILN. WET PROCESS. 9/16/1998 DRY/WET KILN & ALKALI BYPASS BAGHOUSE STACK (K	TDF S-1)	75 T/H 378,650 TPY DRY KILN/7:	9.13 LB/H 277.55 LB/H; 395.58 TPY	0.12 lb/ton 6.42 lb/ton (dry, hourly); 2.1 lb/ton (dry,	
TX-0282	CAPITOL CEMENT DIVISION	TX	PSD-TX-120M3	9/16/1998 DRY KILN EXHAUST BAGHOUSE (KS-1A)		730000 T/YR CLINKER	97.55 LB/H; 320.44 TPY	annual) 1.17 lb/ton (hourly); 0.88 lb/ton (annual)	3 NONE
TX-0282	CAPITOL CEMENT DIVISION CAPITOL CEMENT DIVISION HOLNAM, INC	TX TX MI	PSD-TX-120M3 PSD-TX-120M3 60-71K	9/16/1998 ALKALI BYPASS BAGHOUSE STACK (9A) 9/16/1998 WET KILN EXHAUST BAGHOUSE (KS-1B) 6/23/1998 CEMENT KILNS, WET PROCESS, (2)	COAL	378650 T/YR CLINKER 100 T/H	2.87 LB/H; 9.44 TPY 15 LB/H; 65.7 TPY 7217 T/YR	0.35 lb/ton 13 LB/T clinker	NONE NONE COOLING AIR CONDENSER REMOVES PAH AND
							·		ORGANICS BEFORE BAGHOUSE. ACTIVATED CARBON IS INJECTED FOR ADSORPTION
	SIGNAL MOUNTAIN CEMENT COMPANY SOUTHDOWN, INC. (CEMEX)	TN FL	47-065-3070 PSD-FL-233	5/29/1998 DRY FEED KILN 6/27/1997 KILN	PET. COKE	160 T/H CLINKER 165 T/H (1-hr)	10.7 LB/H 0.09 LB/T	0.07 lb/ton clinker 0.09 LB/T kiln feed	OFPOLLUTANTS. GOOD COMBUSTION GOOD COMBUSTION PRACTICES
	PUERTO RICAN CEMENT COMPANY, INC.	PR	PR-0101 .	2/25/1997	COAL	4100 TPD OF CLINKER	20.5 LB/H, 24-H	0.12 LB/T	COMBUSTION CONTROLS
	FLORIDA ROCK INDUSTRIES, INC. MOUNTAIN CEMENT COMPANY-LARAMIE FACILITY	FL WY	PSD-FL-228 CT-1137	12/23/1996 KILN. PORTLAND 3/6/1995 KILN. COAL	COAL	14 T/H 45.3 T/H COAL	0.11 LB/T clinker 7.3 LB/H	0.11 LB/T clinker	COMBUSTION controls PROPER COMBUSTION/BURNER
Unknown (3)) Holcim (US), Inc., Lee Island Project	МО	062004-005	6/8/2004 KILN/CALCINER/PREHEATER	COAL	? ?	LB/HR (30-Day 182 Block)	LB/TON 0.33 CLINKER	GOOD COMBUSTION PRACTICES AND SELECTIVE QUARRYING
Unknown (4)) Giant Cement, Portland Cement plant	SC	0900-0002-DO	5/29/2003 KILN SYSTEM	COAL		LB/HR (30-Day 85 Roll)	LB/TON 0.55 CLINKER LB/TON	GOOD COMBUSTION PRACTICES
Unknown (5)) Holnam, Holly Hill	sc		5/29/2003 KILN SYSTEM	COAL	2462318 ton clink /yr	TDN //2	0.27 stack test) LB/TON	GOOD COMBUSTION PRACTICES GOOD COMBUSTION and
Unknown (6)) Holcim, cement kiln	со	98-FR-0895	12/1/2004 KILN SYSTEM	COAL	2,220,000 ton clink /yr	TPY (12-mo. 843 Rolling)	CLINKER (30-da; 0.9 roll)	Y SELECTIVE QUARRY PRACTICES

Source: EPA's RACT/BACT/LAER Clearinghouse, 2005.

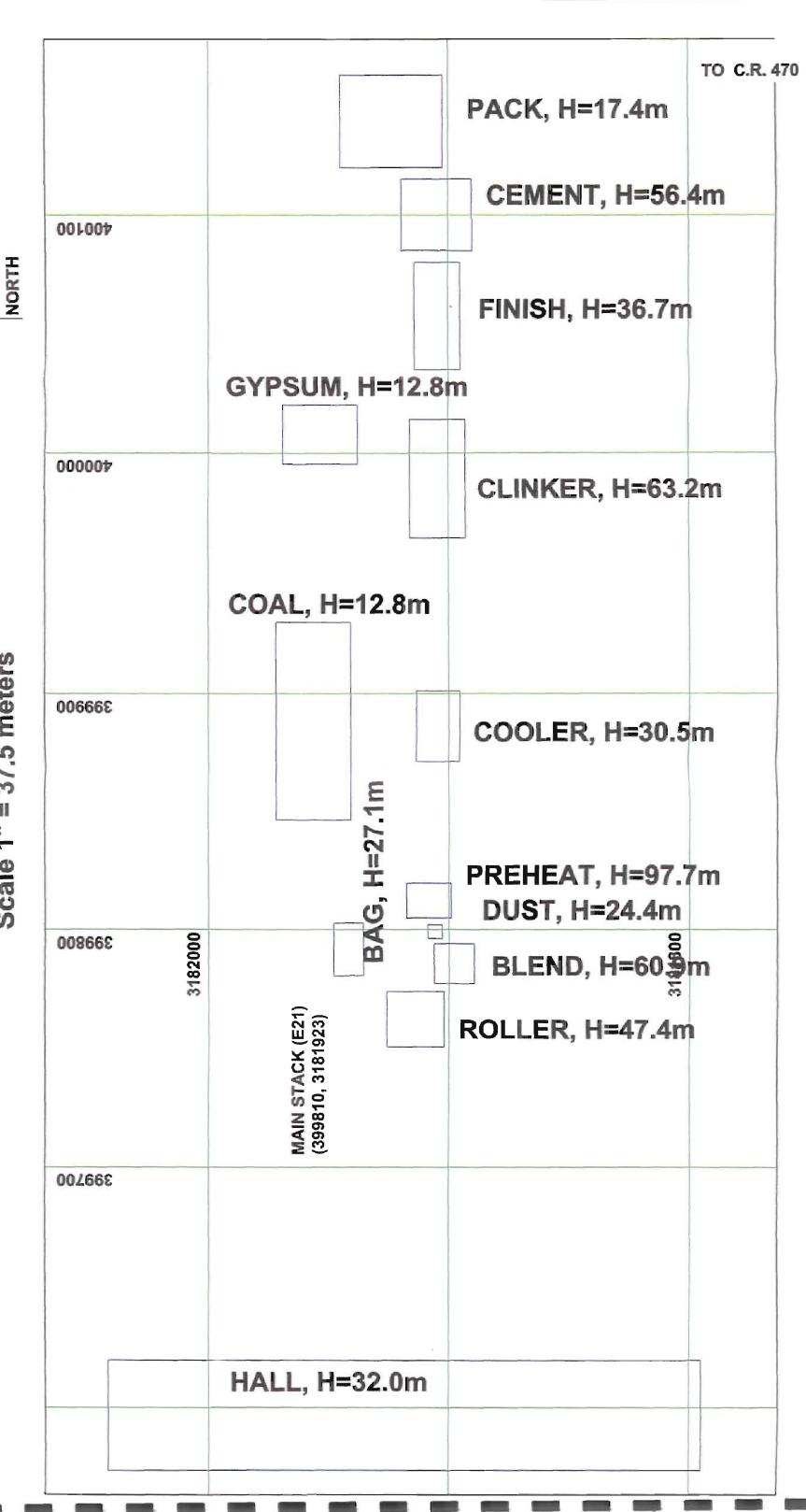
(1) Source: Department of Environmental Protection, Florida Division of Air Resource Management, July 7, 2005.

(2) Source: Department of Environmental Protection, Florida Division of Air Resource Management, March 29, 2005.

Source: Department of Natural Resources, Missouri Air Conservation Commission, June 8, 2004.
 Source: Department of Health and Environmental Control, Bureau of Air Quality, South Carolina, March, 24, 2003.
 Source: Department of Health and Environmental Control, Bureau of Air Quality, South Carolina, May. 29, 2004.
 Source: Colorado Air Pollution Control Division, December 2004.

NATURAL RESOURCES OF CENTRAL FLORIDA, INC.

dba American Cement Company Scale 1" = 37,5 meters Scale 1"

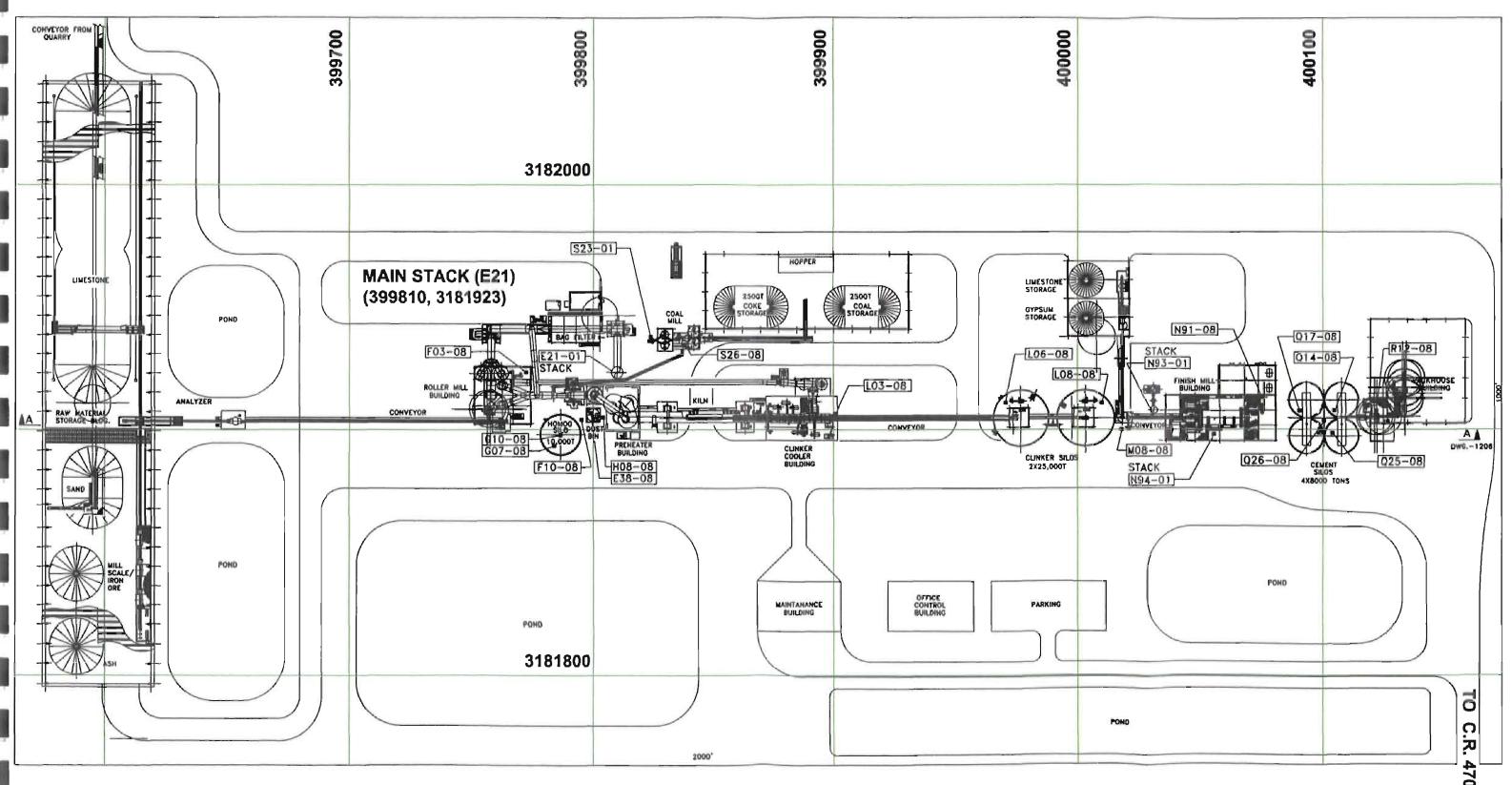


NATURAL RESOURCES OF CENTRAL FLORIDA, INC.

H	001004	PACK, H=17.4m CEMENT, H=56.4m
NORTH		FINISH, H=36.7m GYPSUM, H=12.8m
CENTRAL FLORIDA, INC. ment Company 7,5 meters	00000⊅	CLINKER, H=63.2m COAL, H=12.8m
RESOURCES OF CENTRAL FLO dba American Cement Company Scale 1" = 37,5 meters	399900	COOLER, H=30.5m E1.27 PREHEAT, H=97.7m DUST, H=24.4m
NATURAL RESC	3182000	BLEND, H=60.39m ROLLER, H=47.4m
	00266ε	
		HALL, H=32.0m

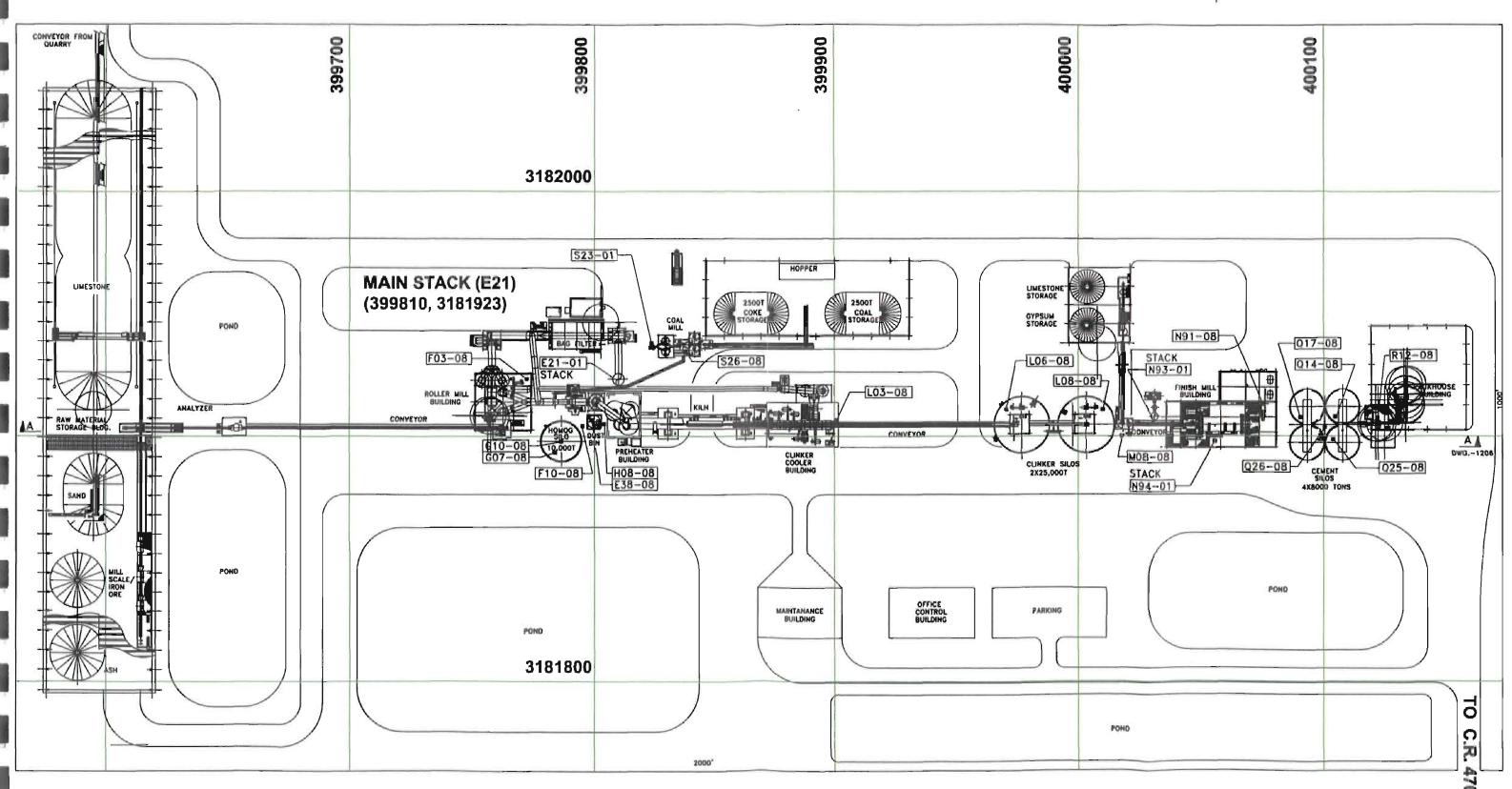
NATURAL RESOURCES OF CENTRAL FLORIDA, INC. dba American Cement Company Scale 1" = 37.5 meters





NATURAL RESOURCES OF CENTRAL FLORIDA, INC. dba American Cement Company Scale 1" = 37.5 meters





Paved Road Emissions Estimation

No truck traffic expected between 8 pm and 4 am
E = PM10 (Ib/VMT)

k = base smission factor for particle size
st = surface slit loading (g/m²2)

W = average weight of vehicles (tons)
Road segments for this mode
Customer roads, length (ft)
Road segments
Length per segment
Rate, (tph)
Capacity (tons) per truck
Number of vehicles per hour
Hours per year
Vehicle miles traveled per hour for this mode
Vehicle miles traveled per year for this mode
Emission rate (g/m)
Emission rate (g/scc)
Emission rate per segment for this mode
Cross check

Mode 1; Cement trucks - empty Mode 2; Cement trucks - loaded	Mode 3: Coal trucks - Joaded Mode 4: Coal trucks - empty	Mode 5; Gypsum/limestone trucks - loaded Mode 6; Gypsum/Limestone trucks - empty	Mode 7: Ash/iron trucks - loaded Mode 8: Ash/iron trucks - empty	Mode 9: Employee cars 2-way
PM10 PM	Mode 3: Coal trucks - loaded Mode 4: Coal trucks - empty	DU10 DU	PM40 22 PM EXPLANT PM40 PM 22 3	PM10732 PM
0.1383 0.7088	0.1383 0.7088 0.0318 0.0318 0.1628	0.1383 0.7088	0.0318 0.7088 0.7088 0.7088	0.0015 0.0079
0.016 0.082 PM 0.016 10.082 PM	+0.016 0.082 PM 0.016 0.082 PM	0.016 0.082 PM 0.016 0.082 PM	0.016 0.082 PM	0.016 0.082 PM
0.14 From Florida Rock 0.14 From Florida Rock	0.14 From Florida Rock 0.14 From Florida Rock	0.14 From Florida Rock	0.14 From Florida Rock 0.14 From Florida Rock	N 0 14 From Florida Rock
40 7	45	15 5 3 3 6 15 5 3 5 6 15 6 15 6 15 6 15	15 15 15	74.72
R1-R50 R51-R57 R32-R1	R1-R41 R58-R77 R77-R65 R78-R80 R48-R57, R32-R1	R1-R41 R58-R69 R69-R65 R78-R80 R48-R57, R32-R1	R1-R41 R58-R77 RA1-RA33 R77-R65 R78-R80 R48-R57, R32-R1, RA1-RA33	R1:R30 RE1-RE13
2400 Paved 1872 Paved	2928 Paved 2784 Paved	2544 Paved 2400 Paved	4512 Paved 2784 Paved	2064 Paved
50' 30	59 28 30 30 30 30 30 30 30 30 30 30 30 30 30	50	58 280 35	43
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7:216.0	244 75 3	78 78	35 1 35 7 3	90.0 employees
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0.12 0.64 0.42 2.17	0.07 0.38	0.00 0.11	0.17 0.85	0.00
1 86 7 57 9 51	0.07	0.00 0.47	0.73 3.72 0.10 7.053	0.01
0.0534	0.0094	0,000	0.0030	0.0004
	S 0.0002 PER 14.62m (48') SINGLE PASS 0.00004 PER 14.62m (46') SINGLE PASS	3-10.00005 PER 14.62m (48') SINGLE F 0.00001 PER 14.62m (48') SINGLE PASS		0.000009 PER 14.62m (48') SINGLE PASS
0.0003	0.000155	0.00005	0.000222	0.000018 PER 14.62m (48) DOUBLE PASS

107163 3.76 19.25 PM10, tpy PM,tpy

Affidavit of Publication The Daily Commercial

Leesburg, Lake County, Florida

Case No	_
STATE OF FLORIDA COUNTY OF LAKE	

1200

Before the undersigned authority personally appeared Alan Ferguson who on oath says that he is the Advertising Director of The Daily Commercial, a daily newspaper published at Leesburg in Lake County, Florida, that the attached copy of advertisement, being

10.04382111	
in the matter of Public Not	ice
in the	Court,
was Inserted in said newspaper in t	he issues of

Affiant further says that the said Daily Commercial is a newspaper published in said Leesburg, in said Lake County, Florida, and that the said newspaper has heretofore been continuously published in said Lake County, Florida each day and has been entered as second class matter at the post office in Leesburg in said Lake County, Florida, for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Signed

Alan Ferguson, Advertising Director

Sworn to and subscribed before me this

oromon ____, 2005, by Alan Ferguson,

Advertising Director, who is personally known to me.

(Seal)

Notary Public State of Pronder, My Commission Expires Nov 19, 2009 Commission # DD 471211 Bonded By National Notary Assn

Notary Public

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

OEP File No. 1190042-001-AC (PSD-FL-361)

Natural Resources of Central Florida, Inc. dba
American Cement Company
Sumterville Cement Plant Cement County Department Environ Sumterville Cement Plant Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit to Natural Resources of Central Florida, Inc. to Construct a greenfield construct a greenfield portland cement plant north of County Road 470 and east of Sumterville in

east of Sumterville in Sumter County. A review under the rules for the Prevention of Significant Deterioration of Air Quality (PSD) and Best Available Control Technology (BACT) determinations required for nitrogen oxides (NOX), sulfur dioxide (SO2), volatile organic (SUZ), volatile organic compounds (VOC), carbon monoxide (CO), and particulate matter The applicant's name and

address Resources are business Natural Resources Central Florida, Inc., dba Company, Post 1209, Anthony, Post Office Florida 1209, 32617. American Cement Company

proposes to a nominal construct construct a nominal 1,150,000 tons per year (TPY) dry process portland cement plant. The cement plant. The equipment will include: a primary crusher and conveyance equipment to transport limestone to raw material storage; a raw material storage building for limestone and materials containing silica alumina. containing silica, alumina, iron, and additives; stackers, reclaimers, and conveyance equipment to raw materials drying and milling; a homogenizing

silo; a dry process preheater/ calciner (PH/C) kiln with in-line raw mill capable of producing 3,000 tons per day (TPD) of clinker; a reciprocating clinker cooler; a coal and petroleum coke conveyance equipment to clinker storage; conveyance equipment to the finish mill; cement silos and a truck loadout area; and a packhouse. Numerous baghouses will be included

to contain dust from materials conveyance, conveyance transfer and handling. A single large baghouse will serve exhaust from the PH/C kiln, raw mill, and

clinker cooler. The heat necessary convert the raw materials to clinker will be provided by coal and petroleum coke combustion in the main kiln and calcination burner. NOX emissions will be minimized by indirect firing in a Low NOX main kiln burner, staged combustion in the calciner. and a selective non-catalytic reduction (SNCR) ammonia injection system. SO2 emissions will be controlled by use of inherently low sulfur raw materials and scrubbing by finely divided lime in the calciner. CO and VOC

emissions will be controlled

by promoting complete combustion in the kiln and calciner and minimizing carbon and oily content of raw materials. PM/PM10

raw materials. PM/PM10 from the PH/C kiln, in-line

raw mill, and clinker cooler will be controlled by a single large fabric filter single baghouse. Emissions handling, conveyance, and transfer will be controlled by baghouses. Emissions from raw materials piles, loading operations, transportation, etc. will be controlled by reasonable precautions including paving, road sweeping, watering, planting grass,

tec.
The ACC Plant will be subject to the maximum achievable control technology (MACT) technology (MACT)
requirements in 40CFR63,
Subpart LLL - National
Emission Standards for
Hazardous Air Pollutants
for Portland Cement
Manufacturing Industry. In
addition, the plant will be
subject to the Department's
determination of best determination of best available control technology (BACT). The BACT available control technology (BACT). The BACT determinations for the PH/C kiln, in-line calciner, and clinker cooler are: 1.95 pounds of NOX per ton of clinker (lb/ton); 0.20 lb SO2/ton, 2.9 lb CO/ton, 0.12 lb VOC/ton; and 0.153 lb PM/PM10/ton. The BACT determinations are among the lowest emission limitations among recent limitations among recent determinations in the state ideterminations in and the country. Mercury (Hg) emissions will be limited to 122

pounds per year. Initially compliance will be conservatively estimated based on the concentration based on the concentration of Hg in the fuels and raw materials entering the process. The Department has determined that by the second year of operation, ireliable mercury continuous emission monitors (Hg-CEMS) will be available and requires that a Hn-CEMS he requires that a Hg-CEMS be installed to measure actual emissions. This will be the first Hg-CEMS installation required at any facility in the State of Florida. This also represents the first Hg-CEMS monitor required at

cement plants in the United States.
The Department reviewed The Department reviewed the applicant's ambient air quality analysis for CO, NOx, SO2, VOC and PM/PM10, pollutants subject to PSD for this project. All pollutants were less than their respective Significant Impact Levels for the Class II area (i.e. all areas except for the Class I Chassahowitzka Wilderness Area) except for PM/PM10 on a 24-hour and annual on a 24-hour and annual basis. Therefore, a refined increment modeling analysis, including nearby sources and proposed cement plants in the county, was completed for PM10. The results of this analysis are given in the table below. This refined table below. analysis demonstrated compliance with regulatory requirements which include demonstrating compliance with the ambient air quality standards. Averaging Time 24-hour Ann

Annual Maximum Predicted Impact ug/m3 29 6

Allowable Increment

Compliance with Increment

Percent of Increment 98%

All pollutants were less than their respective Significant Impact Levels for the nearest Class I area (the Chassahowitzka Wilderness Area located 58km from project) therefore, a refined multi-source increment modeling analysis was not required.
Based on the required
analyses, the Department
has reasonable assurance will not cause or significantly contribute to a violation of any ambient air quality standard or PSD The Department will accept comments written

concerning the proposed permit issuance action and requests for a public requests for a public meeting for a period of thirty (30) days from the date of publication of 'Public Notice of Intent to Issue Air Construction Issue Air Construction Permit." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400 Any written comments filed shall be made available for public inspection. If written comments received result action, the in a significant change in the proposed action, the Department shall revise the proposed armit and require, if

Notice. The Department will issue the permit with the attached conditions unless a timely petition administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station # Tallahassee, Florida 33, Talianassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative right to administrative

determination under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. participate as a pais,
Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A netition that disputes the

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as utilimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative

designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from th position taken by it in this notiće. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, accordance with requirements above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: Department Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, 111 S. Suite 4 Tallahassee, Florida 32301 Telephone: (850)488-0114 Fax: (850)922-6979

Department Environmental Protection Southwest District Office 13051 N. Telecom Parkway Temple Terrace, FL 33637-0926 Telephone: (813)632-7600 Fax:(813)632-7668

The complete project file includes the application, technical evaluations. Draft Permit, and the information submitted

responsible exclusive of confidentia records under 403.111, F.S. Interested persons may contact the Program Administrator, South Permitting Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/921-9523, for additional information. Key documents can be viewed

www.dep.state.fl.us/air/per mitting/construction/americ an.htm

NO:04582111 December 20, 2005

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Mr. Cary Cohrs, NRCF dba ACC Post Office Box 1209 	A. Signature X O
Anthony, Florida 32617	3. Service Type Certified Mail Registered Return Receipt for Merchandise C.O.D.
	4. Restricted Delivery? (Extra Fee) ☐ Yes
2. Article Number (Transfer from service label) 7000 16	70 0013 3110 0628
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