

December 2, 2011

Ms. Susan J. Pelz, P.E.
Solid Waste Program Manager
FDEP, Southwest District
13051 North Telecom Parkway
Temple Terrace, FL 33637-9026

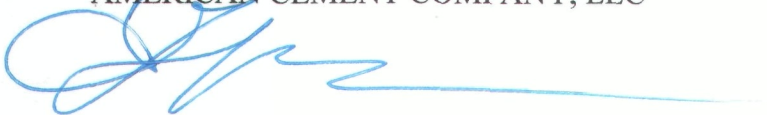
**RE: Additional Information for June 24, 2011 Response to the Department's May 12, 2011 Inspection Report
American Cement Waste Tire Facility, WACS ID No. 98523, Sumter County**

Please find enclosed a report containing information requested by your letter on November 2, 2011. The information shows the industrial byproducts on site are not-hazardous waste and are contained properly to protect the environment from contamination.

If you have further questions or comments, please contact me at (352) 569-2217.

Sincerely,

AMERICAN CEMENT COMPANY, LLC

A handwritten signature in blue ink, appearing to be 'Charles Robertson', with a long horizontal line extending to the right.

Charles Robertson
Environmental Manager

Copies to: Stephanie Watson, FDEP
Cary Cohrs, ACC
William Wall, ACC
Candice Hoisington, ACC

Dept. Of Environmental Protection

DEC 05 2011

Southwest District

AMERICAN CEMENT COMPANY, LLC

BYPRODUCT
DEMONSTRATION

December 2, 2011

Dept. Of Environmental Protection

DEC 05 2011

Southwest District

ByProduct Demonstration

Type and Source of Materials Stockpiled South and North of the Facility:

South Stockpile is comprised of Seminole Bottom Ash, an Industrial Byproduct, from Seminole Electric Co-op and Corp in Palatka, Florida. The Seminole Electric contact is Malcolm Fabre at (386) 328-9255 ext. 2114. The material is coal ash from the electric generating process. There are 27,247 tons in the south stockpile.

See site plan in Appendix 1.

North Stockpile is comprised of Coal Fines, a mixture of 60% coal and 40% soil, Spanish Gypsum, and Synthetic Gypsum.

The Synthetic Gypsum is an Industrial Byproduct, from Progress Energy in Crystal River, Florida. The contact at Progress Energy is Rob Reynolds at (919) 546-6240. The material, another byproduct of the electric generating process is calcium sulfate, calcium, and sulfate dihydrate. There are 54,146 tons in the north stockpile.

See site plan in Appendix 2.

Industrial Byproduct Demonstration:

The Seminole Bottom Ash at the south stockpile meets the criteria of Rule 62-770.220(2)(d), F.A.C.:

1. A majority of the industrial byproducts are demonstrated to be sold, used, or reused within one year.

The Seminole Bottom Ash is used as a raw material in the manufacture of clinker. American Cement Company, LLC is expected to consume ash being delivered into its process over 12 months.

2. The industrial byproducts are not discharged, deposited, injected, dumped, spoiled, leaked, or placed into or upon land or water so that such industrial byproducts or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground water, or otherwise enter the environment such that a threat of contamination in excess of water quality standards or air quality standards is caused, or a significant threat to public health is caused.

The Seminole Bottom Ash is stored on one (1) foot thick compacted clay underneath the storage area combined with a berm made of clay with a topsoil layer to promote vegetation growth for erosion control as shown in the drawing in Appendix 3.

As proof of no contamination of water and groundwater RCRA 8 Metals were tested in water in a pond located south of the south stockpile. See also FDEP Safe Drinking Water Program lab results from December 2010 of the Potable Water System with only chlorine contact treatment. These lab results are in Appendix 4.

3. The industrial byproducts are not hazardous waste.

TCLP results for the Seminole Bottom Ash is well below RCRA limits as can be seen in the lab report, page 2 of 9, in Appendix 5.

The Seminole Bottom Ash does not have any of the hazardous waste characteristics of Ignitability, Corrosivity, Reactivity, or Toxicity. Lab results in Appendix 5, page 2 of 9, shows a pH of 9.0 which is not corrosive. Appendix 6 contains the Seminole Electric Bottom Ash MSDS. Section IV – Fire and Explosion Data of the MSDS shows the bottom ash is non-combustible, and non-flammable. Section V – Reactivity Data shows the bottom ash is stable and polymerization will not occur. Section VI – Health Hazard Data does not show the material to be toxic. Section VII – Procedures for Safe Handling and Use specifically states the material is not a hazardous waste. Standard work gloves and safety glasses are recommended when handling.

The Synthetic Gypsum at the north stockpile meets the criteria of Rule 62-770.220(2)(d), F.A.C.:

1. A majority of the industrial byproducts are demonstrated to be sold, used, or reused within one year.

The Synthetic Gypsum is used as an additive in the manufacture of cement. American Cement Company, LLC is expected to consume synthetic gypsum being delivered into its process over 12 months.

2. The industrial byproducts are not discharged, deposited, injected, dumped, spoiled, leaked, or placed into or upon land or water so that such industrial byproducts or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, including ground water, or otherwise enter the environment such that a threat of contamination in excess of water quality standards or air quality standards is caused, or a significant threat to public health is caused.

The Synthetic Gypsum is stored on one (1) foot thick compacted clay underneath the storage area combined with a berm made of clay with a topsoil layer to promote vegetation growth for erosion control as shown in the drawing in Appendix 3.

As proof of no contamination groundwater see the FDEP Safe Drinking Water Program lab results from December 2010 of the Potable Water System with only chlorine contact treatment. These lab results are in Appendix 4.

3. The industrial byproducts are not hazardous waste.

TCLP results for the Synthetic Gypsum is well below RCRA limits as can be seen in the lab report, page 1 of 9, in Appendix 5.

The Synthetic Gypsum does not have any of the hazardous waste characteristics of Ignitability, Corrosivity, Reactivity, or Toxicity. Lab results in Appendix 5, page 1 of 9, shows a pH of 8.0 which is not corrosive. Appendix 7 contains the Synthetic Gypsum MSDS. Section 5 – Fire Fighting Measures of the MSDS shows the material is no known flash point and auto ignition and flammability are non-applicable. Section 10 – Chemical Stability and Reactivity shows the material is stable and polymerization will not occur. Section 11 – Toxicological Information does not show the material to be toxic.

The lab reports and MSDS prove the industrial byproducts are not hazardous waste. Any unforeseen disruption in plant operations such as sales, or mechanical failure could impact the consumption rate of these materials.

APPENDIX 1

SOUTH PILE SITE PLAN

NEW KILN LINE

LEGEND

- RAW MATERIAL STORAGE
- ROLLER MILL
- ROLLER MILL DRIVE SHAFT FAN
- RAW / MILL BUILDING
- BAKERSHOUSE DRIVE SHAFT FAN
- RAW DRIVE SHAFT FAN
- BAKERSHOUSE SHAFT
- PREHEATER
- RAW COMPRESSION TOWER
- RAW TO FAN
- ROTARY KILN
- CLINDER BUILDING
- COOLER WIND STRUCTURE
- TOSSER WIND DRIVE SHAFT FAN
- CLINDER CONVEYOR TO SHAFT
- CLINDER STORAGE SHAFT
- CLINDER STORAGE BUILDING
- TOSSER SHAFT
- ROLLER MILL DRIVE SHAFT FAN
- SIGNAL EXHAUST TOWER
- CLINDER STORAGE SHAFT & BLOWER ROOM
- FACTORIAL PLANT
- COAL STORAGE BUILDING
- RAW COAL SHAFT
- COAL SHAFT
- CRACKER-BLAST ANALYZER
- COMPRESSION ROOM BULL (FOR PLANT AIR COMPRESSORS)
- COMPRESSION ROOM BULL (FOR PLANT AIR AND SHOWN PUMP COMPRESSORS)
- COMPRESSION ROOM BULL (FOR BAKERSHOUSE RAW AND SHOWN, BLOWERS, PUMP RAW)
- ELECTRICAL ROOM #1 - RAW MATERIAL STORAGE BUILDING
- ELECTRICAL ROOM #2 - ROLLER MILL
- ELECTRICAL ROOM #3 - PREHEATER
- ELECTRICAL ROOM #4 - SHOWN-BY GENERATOR
- ELECTRICAL ROOM #5 - TOSSER COOLER
- ELECTRICAL ROOM #6 - FORTH MILL
- ELECTRICAL ROOM #7 - COOLER WIND / FACTORY PLANT
- ELECTRICAL ROOM #8 - MAINTENANCE BUILDING
- COMPRESSION ROOM BULL (FOR PLANT AIR COMPRESSORS)
- WATER
- BACK TANK AND PUMP 1000

FEBRUARY 18, 2008

AMERICAN CEMENT COMPANY

PORTLAND CEMENT PLANT

RAW MATERIAL STORAGE

ROLLER MILL

ROLLER MILL DRIVE SHAFT FAN

RAW / MILL BUILDING

BAKERSHOUSE DRIVE SHAFT FAN

RAW DRIVE SHAFT FAN

BAKERSHOUSE SHAFT

PREHEATER

RAW COMPRESSION TOWER

RAW TO FAN

ROTARY KILN

CLINDER BUILDING

COOLER WIND STRUCTURE

TOSSER WIND DRIVE SHAFT FAN

CLINDER CONVEYOR TO SHAFT

CLINDER STORAGE SHAFT

CLINDER STORAGE BUILDING

TOSSER SHAFT

ROLLER MILL DRIVE SHAFT FAN

SIGNAL EXHAUST TOWER

CLINDER STORAGE SHAFT & BLOWER ROOM

FACTORIAL PLANT

COAL STORAGE BUILDING

RAW COAL SHAFT

COAL SHAFT

CRACKER-BLAST ANALYZER

COMPRESSION ROOM BULL (FOR PLANT AIR COMPRESSORS)

COMPRESSION ROOM BULL (FOR PLANT AIR AND SHOWN PUMP COMPRESSORS)

COMPRESSION ROOM BULL (FOR BAKERSHOUSE RAW AND SHOWN, BLOWERS, PUMP RAW)

ELECTRICAL ROOM #1 - RAW MATERIAL STORAGE BUILDING

ELECTRICAL ROOM #2 - ROLLER MILL

ELECTRICAL ROOM #3 - PREHEATER

ELECTRICAL ROOM #4 - SHOWN-BY GENERATOR

ELECTRICAL ROOM #5 - TOSSER COOLER

ELECTRICAL ROOM #6 - FORTH MILL

ELECTRICAL ROOM #7 - COOLER WIND / FACTORY PLANT

ELECTRICAL ROOM #8 - MAINTENANCE BUILDING

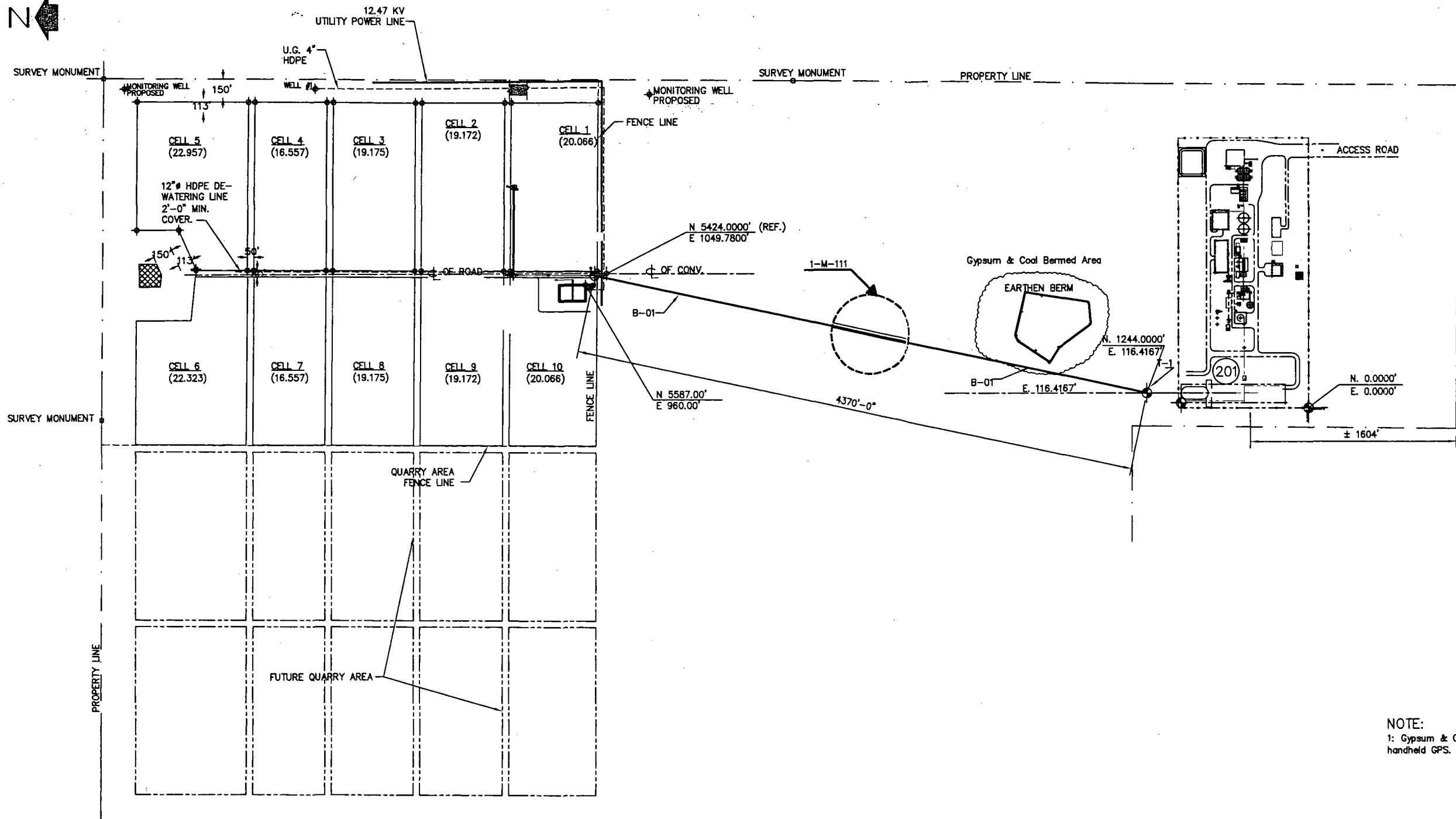
COMPRESSION ROOM BULL (FOR PLANT AIR COMPRESSORS)

WATER

BACK TANK AND PUMP 1000

APPENDIX 2

NORTH PILE SITE PLAN



NOTE:
1: Gypsum & Coal Berm location determined using handheld GPS.

PLOT PLAN QUARRY AREA

NOTE: THIS SEAL APPLIES ONLY TO THIS DOCUMENT. I DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTRODUCED TO BE USED FOR ANY PART OR PARTS OF THIS PROJECT OR ANY OTHER PROJECT.

DESIGNED	_____
DRAWN	BS
CHECKED	_____
APPROVED	_____
DATE	11/30/11

0	RELEASE FOR CONSTRUCTION	T.G.	J.Q.	GM	08/23/07
A	ISSUED FOR BIDS	T.G.	J.Q.	GM	07/27/07
REV	REVISIONS	DWN	CD	APP	DATE

DESIGNED	_____
DRAWN	BS
CHECKED	_____
APPROVED	_____
DATE	11/30/11

DESIGNED	_____
DRAWN	_____
CHECKED	_____
APPROVED	_____
DATE	_____

**AMERICAN**
CEMENT COMPANY

American Cement Company, LLC
P.O. Box 445
Sumterville, Florida 33585
American Cement Company, LLC
4750 E C 470
Sumterville, Florida 33585

**SUMTERVILLE CEMENT PLANT
QUARRY AREA
Gypsum & Coal Bermed Area**

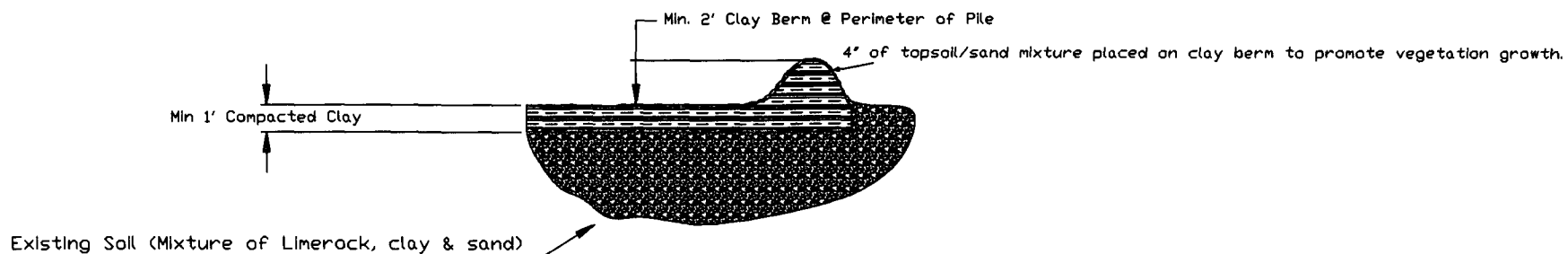
SCALE:	REV
PROJECT NO.	Sketch
DRAWING NO.	

APPENDIX 3

STORAGE AREA PROTECTION DETAIL

Notes:

1. Detail relates to all storage of non native material.
2. Compaction is typically carried out using Dozer tracks.



REV.	DATE	REV.	DATE	DRAWING OFFICE	SCALE	ACC-SUMTERVILLE	American Cement Company	FILENAME	PRINT_AT
				DRAWING OFFICE	NTS	STOCKPILE-GROUND-BASE	Maintenance Dept.	NO. DRAWING ROOM/PLACE DRAWINGS	
				DRAWN BY	DATE	TYPICAL-DETAIL	4750 E C470	001	
				BS	08-06-08		Sumterville, FL 33585	D-2-001	0
							PH.352 5695393, FAX.352 5695397		

APPENDIX 4

WATER TEST RESULTS

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

June 1, 2011
Work Order: 1104720

Laboratory Report

Project Name		American Cement Company						
Parameters	Units	Results *	Method	PQL	MDL	Prepared	Analyzed	By
Sample Description		Grab-POND-TSS						
Matrix		Surface Water						
SAL Sample Number		1104720-01						
Date/Time Collected		05/27/11 13:47						
Collected by		Client						
Date/Time Received		05/31/11 09:15						
<u>Inorganics</u>								
Total Suspended Solids	mg/L	2	SM 2540D	1	1	05/31/11 10:13	06/01/11 10:05	JAG
Sample Description		Comp-POND-TSS						
Matrix		Surface Water						
SAL Sample Number		1104720-02						
Date/Time Collected		05/27/11 14:00						
Collected by		Client						
Date/Time Received		05/31/11 09:15						
<u>Inorganics</u>								
Total Suspended Solids	mg/L	3	SM 2540D	1	1	05/31/11 10:13	06/01/11 10:05	JAG

General Utilities

7621 Frog Log Lane

Leesburg, FL 34748

June 1, 2011

Work Order: 1104720

*** Qualifiers, Notes and Definitions**

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with **, all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below.
Questions regarding this report should be directed to Client Services at 813-855-1844.

Francis I. Daniels

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218

**General Utilities**7621 Frog Log Lane
Leesburg, FL 34748

June 6, 2011

Work Order: 1104724

Laboratory Report

Project Name		American Cement Company						
Parameters	Units	Results *	Method	PQL	MDL	Prepared	Analyzed	By
Sample Description		Grab-POND-Metals						
Matrix		Surface Water						
SAL Sample Number		1104724-01						
Date/Time Collected		05/27/11 13:45						
Collected by		Client						
Date/Time Received		05/31/11 09:15						
Metals								
Arsenic	mg/L	0.00093 U	EPA 200.8	0.0050	0.00093	06/02/11 09:22	06/03/11 03:05	VWC
Barium	mg/L	0.0017	EPA 200.8	0.00050	0.00018	06/02/11 09:22	06/03/11 03:05	VWC
Cadmium	mg/L	0.00027 U	EPA 200.8	0.00050	0.00027	06/02/11 09:22	06/03/11 03:05	VWC
Chromium	mg/L	0.0013 I	EPA 200.8	0.0050	0.00035	06/03/11 16:25	06/03/11 17:04	VWC
Lead	mg/L	0.00025 U	EPA 200.8	0.00050	0.00025	06/02/11 09:22	06/03/11 03:05	VWC
Mercury	mg/L	0.00010 U	EPA 245.1	0.00050	0.00010	06/01/11 08:13	06/01/11 16:20	AWS
Selenium	mg/L	0.00093 U	EPA 200.8	0.0050	0.00093	06/03/11 14:52	06/03/11 15:56	VWC
Silver	mg/L	0.000069 U	EPA 200.8	0.00050	0.000069	06/02/11 09:22	06/03/11 03:05	VWC
Sample Description		Comp-POND-Metals2						
Matrix		Surface Water						
SAL Sample Number		1104724-02						
Date/Time Collected		05/27/11 14:00						
Collected by		Client						
Date/Time Received		05/31/11 09:15						
Metals								
Arsenic	mg/L	0.00093 U	EPA 200.8	0.0050	0.00093	06/02/11 09:22	06/03/11 03:11	VWC
Barium	mg/L	0.0039	EPA 200.8	0.00050	0.00018	06/02/11 09:22	06/03/11 03:11	VWC
Cadmium	mg/L	0.00027 U	EPA 200.8	0.00050	0.00027	06/02/11 09:22	06/03/11 03:11	VWC
Chromium	mg/L	0.0016 I	EPA 200.8	0.0050	0.00035	06/03/11 16:25	06/03/11 17:06	VWC
Lead	mg/L	0.00025 U	EPA 200.8	0.00050	0.00025	06/02/11 09:22	06/03/11 03:11	VWC
Mercury	mg/L	0.00010 U	EPA 245.1	0.00050	0.00010	06/01/11 08:13	06/01/11 16:20	AWS
Selenium	mg/L	0.00093 U	EPA 200.8	0.0050	0.00093	06/03/11 14:52	06/03/11 15:59	VWC
Silver	mg/L	0.000069 U	EPA 200.8	0.00050	0.000069	06/02/11 09:22	06/03/11 03:11	VWC

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

June 6, 2011

Work Order: 1104724

* Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with **, all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below. Questions regarding this report should be directed to Client Services at 813-855-1844.

A handwritten signature in black ink, appearing to read "Francis I. Daniels".

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 fax 813-855-2218

SAL Project No. 1104724

Chain of Custody.xls
Rev.Date 11/18/01

Chain of Custody

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



Florida Department of Environmental Protection Safe Drinking Water Program Laboratory Reporting Format

General Utilities
American Cement Company

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler - please type or print legibly)

System Name: American Cement Company

PWS I.D. #:

6	6	0	5	0	3	3
---	---	---	---	---	---	---

System Type (check one):

☐

Community

☐

Noncommunity

☒

Nontransient Noncommunity

☐

Transient Noncommunity

Address: 4750 East CR 470.

City: Sumterville

Zip Code: 33585

Phone: _____

Fax: _____

E-Mail Address: _____

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: 1003082-01

Sample Date: 12/8/10

Sample Time: 9:36 am

☐

AM

PM

(Circle One)

Sample Location (be specific): ACC-POE

Location Code: _____

Disinfection Residual (Required when reporting results for trihalomethanes and haloacetic acids)

mg/L

Field pH: _____

Sample Type (Check Only One)

☐

Distribution

☒

Entry Point (to Distribution)

☐

Plant Tap (not for compliance with 62-550)

☐

Raw (at well or intake)

☐

Max. Residence Time

☐

Ave. Residence Time

☐

Near First Customer

Reason (s) for Sample (Check all that apply)

☐

Routine Compliance with 62-550

☐

Confirmation of MCL Exceedance*

☐

Composite of Multiple Sites **

☐

Other: _____

☐

Replacement (of Invalidated Sample)

☐

Special (not for compliance with 62-550)

☐

Clearance (permitting)

Sampling Procedure Used or Other Comments

* See 62-550.500(6) for requirements and restrictions.
And 62-550.5.12(3) for nitrate or nitrite exceedances.

** See 62-550.500(4) for requirements and
attach a results page for each site

SAMPLER CERTIFICATION

I, T Levi

(Print Name)

Operator

(Print Title)

do HEREBY CERTIFY

that the above public water system and sample collection information is complete and correct.

Signature: _____

Date: 21 Dec 2010

Certified Operator #: 2241

Phone #: _____

Sampler's Fax #: _____

Sampler's E-Mail: _____

Reporting Format 62-550-730

Effective January 1995. Revised February 2010

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

General Utilities
American Cement Company

LABORATORY CERTIFICATION INFORMATION (to be completed by lab - please type or print legibly)

Lab Name: Southern Analytical Laboratories, Inc. Florida DOH Certification #: E84129 Certification Expiration Date: 06/30/2011

ATTACH CURRENT DOH ANALYTE SHEET*

Address: 110 Bayview Blvd Oldsmar, FL 34677 Phone: (813) 855-1844

Were any analyses subcontracted? ☐ Yes ☒ No If yes, please provide DOH certification number(s): _____

ATTACH CURRENT DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB*

ANALYSIS INFORMATION (to be completed by lab)

Date Sample(s) Received: 12/10/2010

PWS ID (From Page 1): 6605033 Sample Number (From Page 1): 1003082-01 Lab Assigned Report # or Job ID: 1003082-01

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

Inorganics

- ☐ All Except for Asbestos
☒ Partial
☐ Nitrate
☐ Nitrite
☐ Asbestos

Synthetic Organics

- ☐ All 30
☒ All Except Dioxin
☐ Partial
☐ Dioxin Only

Volatile Organics

- ☒ All 21
☐ Partial

Disinfection Byproducts

- ☐ Trihalomethanes
☐ Haloacetic Acids
☐ Chlorite
☐ Bromate

Radionuclides

- ☐ Single Sample
☐ Qtrly Composite

Secondaries

- ☐ All 14
☒ Partial

LAB CERTIFICATION

I, Francis I. Daniels, Laboratory Director do HEREBY CERTIFY
(Print Name) (Print Title)

that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature: *Francis I. Daniels* Date: 12/22/2010

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

CONFIRMATION & NOTIFICATION IS REQUIRED WITHIN 24 HOURS FOR NITRATE AND NITRITE MCL EXCEEDANCES

NON-DETECTS ARE TO BE REPORTED AS THE MDL WITH A "U" QUALIFIER (Non-detects reported as "BDL" or with a "<" are not acceptable.)

COMPLIANCE DETERMINATION (to be completed by DEP or DOH - attach notes as necessary)

Sample Collection & Analysis Satisfactory: ☐ Yes ☐ No Replacement Sample or Report Requested (circle or highlight group(s) above)

Person Notified: _____ Date Notified: _____ DEP/DOH Reviewing Official: _____

Reporting Format 62-550-730
Effective January 1995. Revised February 2010

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format****INORGANIC CONTAMINANTS**

62-550.310(1)

Report Number / Job ID: 1003082-01

PWS ID (From Page 1): 6605033

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1005	Arsenic	0.010	mg/L	0.00093	U	EPA 200.8	0.00093	12/14/10	18:50	E84129
1010	Barium	2	mg/L	0.0086	I	EPA 200.7	0.0050	12/13/10	16:37	E84129
1015	Cadmium	0.005	mg/L	0.00027	U	EPA 200.8	0.00027	12/14/10	18:50	E84129
1020	Chromium	0.1	mg/L	0.0045	I	EPA 200.8	0.00035	12/14/10	18:50	E84129
1024	Cyanide	0.2	mg/L	0.0050	U	SM 4500CN-E	0.0050	12/17/10	16:00	E84129
1025	Fluoride	4.0	mg/L	0.20		EPA 300.0	0.010	12/14/10	14:24	E84129
1030	Lead	0.015	mg/L	0.00031	I	EPA 200.8	0.00025	12/14/10	18:50	E84129
1035	Mercury	0.002	mg/L	0.00010	U	EPA 245.1	0.00010	12/15/10	9:01	E84129
1036	Nickel	0.1	mg/L	0.0027	I	EPA 200.7	0.0010	12/13/10	16:37	E84129
1045	Selenium	0.05	mg/L	0.00093	U	EPA 200.8	0.00093	12/14/10	18:50	E84129
1074	Antimony	0.006	mg/L	0.00013	U	EPA 200.8	0.00013	12/14/10	18:50	E84129
1052	Sodium	160	mg/L	6.9		EPA 200.7	0.010	12/14/10	13:34	E84129
1075	Beryllium	0.004	mg/L	0.00088	I	EPA 200.7	0.00010	12/13/10	16:37	E84129
1085	Thallium	0.002	mg/L	0.00024	U	EPA 200.8	0.00024	12/14/10	18:50	E84129

*Qualifiers:

U=Analyte was undetected. Indicated concentration is method detection limit.

I=The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



Florida Department of Environmental Protection Safe Drinking Water Program Laboratory Reporting Format

SECONDARY CONTAMINANTS

62-550.320

Report Number / Job ID: 1003082-01

PWS ID (From Page 1): 6605033

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1025	Fluoride	2.0	mg/L	0.20		EPA 300.0	0.010	12/14/10	14:24	E84129

*Qualifiers:

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Florida Department of Environmental Protection Safe Drinking Water Program Laboratory Reporting Format

VOLATILE ORGANICS

62-550.310(4)(a)

Report Number / Job ID: 1003082-01

PWS ID (From Page 1): 6605033

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Analysis Date	Analysis Time	DOH Lab Certification #
2378	1,2,4-Trichlorobenzene	70	ug/L	0.3	U	EPA 524.2	0.3	0.5	12/15/10	19:35	E84129
2380	cis-1,2-Dichloroethylene	70	ug/L	0.09	U	EPA 524.2	0.09	0.5	12/15/10	19:35	E84129
2955	Xylenes (total)	10,000	ug/L	0.1	U	EPA 524.2	0.1	0.5	12/15/10	19:35	E84129
2964	Dichloromethane	5	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2968	o-Dichlorobenzene	600	ug/L	0.1	U	EPA 524.2	0.1	0.5	12/15/10	19:35	E84129
2969	para-Dichlorobenzene	75	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2976	Vinyl chloride	1	ug/L	0.3	U	EPA 524.2	0.3	0.5	12/15/10	19:35	E84129
2977	1,1-Dichloroethylene	7	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2979	trans-1,2-Dichloroethylene	100	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2980	1,2-Dichloroethane	3	ug/L	0.1	U	EPA 524.2	0.1	0.5	12/15/10	19:35	E84129
2981	1,1,1-Trichloroethane	200	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2982	Carbon tetrachloride	3	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2983	1,2-Dichloropropane	5	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2984	Trichloroethylene	3	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2985	1,1,2-Trichloroethane	5	ug/L	0.2	U	EPA 524.2	0.2	0.5	12/15/10	19:35	E84129
2987	Tetrachloroethylene	3	ug/L	0.1	U	EPA 524.2	0.1	0.5	12/15/10	19:35	E84129
2989	Monochlorobenzene	100	ug/L	0.1	U	EPA 524.2	0.1	0.5	12/15/10	19:35	E84129
2990	Benzene	1	ug/L	0.1	U	EPA 524.2	0.1	0.5	12/15/10	19:35	E84129
2991	Toluene	1000	ug/L	0.09	U	EPA 524.2	0.09	0.5	12/15/10	19:35	E84129
2992	Ethylbenzene	700	ug/L	0.08	U	EPA 524.2	0.08	0.5	12/15/10	19:35	E84129
2996	Styrene	100	ug/L	0.05	U	EPA 524.2	0.05	0.5	12/15/10	19:35	E84129

NOTE: Results indicating non-detection with a reported lab MDL > .5 ug/L will not be accepted for compliance.

*Qualifiers:

U=Analyte was undetected. Indicated concentration is method detection limit.

SOUTHERN ANALYTICAL LABORATORIES, INC.

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Florida Department of Environmental Protection Safe Drinking Water Program Laboratory Reporting Format

SYNTHETIC ORGANICS

62-550.310(4)(b)

Report Number / Job ID: 1003082-01

PWS ID (From Page 1): 6605033

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Extraction Date	Analysis Date	Analysis Time	DOH Lab Certification #
2005	Endrin	2	ug/L	0.05	U	EPA 525.2	0.05	0.01	12/14/10	12/14/10	22:22	E84129
2010	Lindane	0.2	ug/L	0.07	U	EPA 525.2	0.07	0.02	12/14/10	12/14/10	22:22	E84129
2015	Methoxychlor	40	ug/L	0.04	U	EPA 525.2	0.04	0.1	12/14/10	12/14/10	22:22	E84129
2020	Toxaphene	3	ug/L	0.55	U	EPA 508.1	0.55	1	12/14/10	12/15/10	23:21	E84129
2031	Dalapon	200	ug/L	0.52	U	EPA 515.3	0.52	1	12/15/10	12/16/10	4:05	E84129
2032	Diquat	20	ug/L	1.8	U	EPA 549.2	1.8	0.4	12/15/10	12/17/10	14:25	E84129
2033	Endothall	100	ug/L	12	U	EPA 548.1	12	9	12/15/10	12/17/10	12:55	E84129
2034	Glyphosate	700	ug/L	6.5	U	EPA 547	6.5	6	12/15/10	12/15/10	21:16	E84129
2035	Di(2-ethylhexyl)adipate	400	ug/L	0.6	U	EPA 525.2	0.6	0.6	12/14/10	12/14/10	22:22	E84129
2036	Oxamyl (Vydate)	200	ug/L	0.44	U	EPA 531.1	0.44	2	12/16/10	12/17/10	3:47	E84129
2037	Simazine	4	ug/L	0.08	U	EPA 525.2	0.08	0.07	12/14/10	12/14/10	22:22	E84129
2039	Di(2-ethylhexyl)phthalate	6	ug/L	2	U	EPA 525.2	2	0.6	12/14/10	12/14/10	22:22	E84129
2040	Picloram	500	ug/L	0.25	U	EPA 515.3	0.25	0.1	12/15/10	12/16/10	4:05	E84129
2041	Dinoseb	7	ug/L	0.22	U	EPA 515.3	0.22	0.2	12/15/10	12/16/10	4:05	E84129
2042	Hexachlorocyclopentadiene	50	ug/L	0.02	U	EPA 525.2	0.02	0.1	12/14/10	12/14/10	22:22	E84129
2046	Carbofuran	40	ug/L	0.98	U	EPA 531.1	0.98	0.9	12/16/10	12/17/10	3:47	E84129
2050	Atrazine	3	ug/L	0.08	U	EPA 525.2	0.08	0.1	12/14/10	12/14/10	22:22	E84129
2051	Alachlor	2	ug/L	0.06	U	EPA 525.2	0.06	0.2	12/14/10	12/14/10	22:22	E84129
2065	Heptachlor	0.4	ug/L	0.2	U	EPA 525.2	0.2	0.04	12/14/10	12/14/10	22:22	E84129
2067	Heptachlor epoxide	0.2	ug/L	0.07	U	EPA 525.2	0.07	0.02	12/14/10	12/14/10	22:22	E84129
2105	2,4-D	70	ug/L	1.1	U	EPA 515.3	1.1	0.1	12/15/10	12/16/10	4:05	E84129
2110	2,4,5-TP (Silvex)	50	ug/L	0.11	U	EPA 515.3	0.11	0.2	12/15/10	12/16/10	4:05	E84129
2274	Hexachlorobenzene	1	ug/L	0.08	U	EPA 525.2	0.08	0.1	12/14/10	12/14/10	22:22	E84129
2306	Benzo(a)pyrene	0.2	ug/L	0.07	U	EPA 525.2	0.07	0.02	12/14/10	12/14/10	22:22	E84129
2326	Pentachlorophenol	1	ug/L	0.054	U	EPA 515.3	0.054	0.04	12/15/10	12/16/10	4:05	E84129
2383	Polychlorinated biphenyls (PCBs)	0.5	ug/L	0.22	U	EPA 508.1	0.22	0.1	12/14/10	12/15/10	23:21	E84129
2931	Dibromochloropropane	0.2	ug/L	0.0053	U	EPA 504.1	0.0053	0.01	12/15/10	12/16/10	10:53	E84129
2946	Ethylene dibromide (EDB)	0.02	ug/L	0.0053	U	EPA 504.1	0.0053	0.02	12/15/10	12/16/10	10:53	E84129
2959	Chlordane	2	ug/L	0.048	U	EPA 508.1	0.048	0.2	12/14/10	12/15/10	23:21	E84129

** Non-detects with a reported lab MDL <50% of the MCL are acceptable for compliance with 62-550.310(4)(b)

*Qualifiers:

U=Analyte was undetected. Indicated concentration is method detection limit.

APPENDIX 5

SYNTHETIC GYPSUM
BOTTOM ASH
TCLP / TOTAL TEST
RESULTS

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

November 23, 2011
Work Order: 1110507

Laboratory Report

Project Name		American Cement Company						
Sample Description		Synthetic Gypsum Comp						
Matrix		Solid						
SAL Sample Number		1110507-01						
Date/Time Collected		11/07/11 16:01						
Collected by		C. Robertson						
Date/Time Received		11/10/11 18:30						
Parameters	Units	Results *	Method	PQL	MDL	Prepared	Analyzed	By
Inorganics								
pH	SU	8.0	EPA 9040	0.10	0.10	11/18/11 15:03	11/18/11 16:07	LAS
Total Solids	% by wt	69.71	EPA 160.3/SM 2540G	0.01	0.01	11/11/11 15:00	11/15/11 09:59	JAG
Metals								
Arsenic	mg/kg dry	16	EPA 6010	1.2	0.29	11/16/11 16:14	11/17/11 16:16	VWC
Barium	mg/kg dry	1.7	EPA 6010	0.59	0.15	11/16/11 16:14	11/17/11 16:16	VWC
Cadmium	mg/kg dry	0.029 U	EPA 6010	0.12	0.029	11/16/11 16:14	11/17/11 16:16	VWC
Chromium	mg/kg dry	8.9	EPA 6010	0.47	0.12	11/16/11 16:14	11/17/11 16:16	VWC
Lead	mg/kg dry	0.29 U	EPA 6010	1.2	0.29	11/16/11 16:14	11/17/11 16:16	VWC
Mercury	mg/kg dry	0.29	EPA 7471	0.19	0.01	11/16/11 06:53	11/16/11 12:26	AWS
Selenium	mg/kg dry	22	EPA 6010	5.9	1.5	11/16/11 16:14	11/17/11 16:16	VWC
Silver	mg/kg dry	0.029 U	EPA 6010	0.12	0.029	11/16/11 16:14	11/17/11 16:16	VWC
Metals (TCLP) EPA 1311								
Arsenic	mg/L	0.010 U	EPA 6010	0.040	0.010	11/23/11 08:00	11/23/11 10:00	VWC
Barium	mg/L	0.19	EPA 6010	0.10	0.0050	11/23/11 08:00	11/23/11 10:00	VWC
Cadmium	mg/L	0.0016 I	EPA 6010	0.010	0.0010	11/23/11 08:00	11/23/11 10:00	VWC
Chromium	mg/L	0.0040 U	EPA 6010	0.010	0.0040	11/23/11 08:00	11/23/11 10:00	VWC
Lead	mg/L	0.028 I	EPA 6010	0.10	0.010	11/23/11 08:00	11/23/11 10:00	VWC
Mercury	mg/L	0.00010 U	EPA 7470	0.00050	0.00010	11/22/11 10:29	11/23/11 11:17	AWS
Selenium	mg/L	0.083 I	EPA 6010	0.20	0.050	11/23/11 08:00	11/23/11 10:00	VWC
Silver	mg/L	0.0010 U	EPA 6010	0.020	0.0010	11/23/11 08:00	11/23/11 10:00	VWC

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

November 23, 2011

Work Order: 1110507

Laboratory Report**Project Name** American Cement Company

Sample Description Bottom Ash
Matrix Solid
SAL Sample Number 1110507-02
Date/Time Collected 11/07/11 16:09
Collected by C. Robertson
Date/Time Received 11/10/11 18:30

Parameters	Units	Results *	Method	PQL	MDL	Prepared	Analyzed	By
Inorganics								
pH	SU	9.0	EPA 9040	0.10	0.10	11/18/11 15:03	11/18/11 16:07	LAS
Total Solids	% by wt	96.76	EPA 160.3/SM 2540G	0.01	0.01	11/11/11 15:00	11/15/11 09:59	JAG
Metals								
Arsenic	mg/kg dry	4.6	EPA 6010	3.8	0.96	11/16/11 16:14	11/17/11 16:22	VWC
Barium	mg/kg dry	45	EPA 6010	1.9	0.48	11/16/11 16:14	11/17/11 16:22	VWC
Cadmium	mg/kg dry	0.096 U	EPA 6010	0.38	0.096	11/16/11 16:14	11/17/11 16:22	VWC
Chromium	mg/kg dry	6.4	EPA 6010	1.5	0.38	11/16/11 16:14	11/17/11 16:22	VWC
Lead	mg/kg dry	4.1	EPA 6010	3.8	0.96	11/16/11 16:14	11/17/11 16:22	VWC
Mercury	mg/kg dry	0.02 U	EPA 7471	0.41	0.02	11/16/11 06:53	11/16/11 12:26	AWS
Selenium	mg/kg dry	4.8 U	EPA 6010	19	4.8	11/16/11 16:14	11/17/11 16:22	VWC
Silver	mg/kg dry	0.47	EPA 6010	0.38	0.096	11/16/11 16:14	11/17/11 16:22	VWC
Metals (TCLP) EPA 1311								
Arsenic	mg/L	0.063	EPA 6010	0.040	0.010	11/23/11 08:00	11/23/11 10:04	VWC
Barium	mg/L	0.034 I	EPA 6010	0.10	0.0050	11/23/11 08:00	11/23/11 10:04	VWC
Cadmium	mg/L	0.0023 I	EPA 6010	0.010	0.0010	11/23/11 08:00	11/23/11 10:04	VWC
Chromium	mg/L	0.0066 I	EPA 6010	0.010	0.0040	11/23/11 08:00	11/23/11 10:04	VWC
Lead	mg/L	0.077 I	EPA 6010	0.10	0.010	11/23/11 08:00	11/23/11 10:04	VWC
Mercury	mg/L	0.00010 U	EPA 7470	0.00050	0.00010	11/22/11 10:29	11/23/11 11:17	AWS
Selenium	mg/L	0.23	EPA 6010	0.20	0.050	11/23/11 08:00	11/23/11 10:04	VWC
Silver	mg/L	0.0010 U	EPA 6010	0.020	0.0010	11/23/11 08:00	11/23/11 10:04	VWC

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2216

**General Utilities**

7621 Frog Log Lane

Leesburg, FL 34748

November 23, 2011

Work Order: 1110507

Inorganics - Quality Control

Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BK11510 - TS prep										
Blank (BK11510-BLK1)					Prepared: 11/11/11 Analyzed: 11/15/11					
Total Solids	0.01 U	0.01	0.01	% by wt						
Duplicate (BK11510-DUP1)					Source: 1109564-01 Prepared: 11/11/11 Analyzed: 11/15/11					
Total Solids	3.90	0.01	0.01	% by wt		3.78			3	10
Duplicate (BK11510-DUP2)					Source: 1110507-02 Prepared: 11/11/11 Analyzed: 11/15/11					
Total Solids	96.5	0.01	0.01	% by wt		96.8			0.3	10
Batch BK11840 - pH 9040 prep										
Duplicate (BK11840-DUP1)					Source: 1110507-02 Prepared & Analyzed: 11/18/11					
pH	9.01	0.10	0.10	SU		9.01			0	10
Reference (BK11840-SRM1)					Prepared & Analyzed: 11/18/11					
pH	6.85	0.10	0.10	SU	6.9		99	95-105		

SOUTHERN ANALYTICAL LABORATORIES, INC.

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General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

November 23, 2011

Work Order: 1110507

Metals - Quality Control

Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BK11601 - Mercury Digestion of Soils, Sediments & Sludges										
Blank (BK11601-BLK1)					Prepared & Analyzed: 11/16/11					
Mercury	0.02 U	0.40	0.02	mg/kg wet						
LCS (BK11601-BS1)					Prepared & Analyzed: 11/16/11					
Mercury	0.54	0.40	0.02	mg/kg wet	0.50		107	80-120		
Matrix Spike (BK11601-MS1)					Source: 1109564-01		Prepared & Analyzed: 11/16/11			
Mercury	4.0	2.6	0.13	mg/kg dry	3.3	0.57	103	70-130		
Matrix Spike Dup (BK11601-MSD1)					Source: 1109564-01		Prepared & Analyzed: 11/16/11			
Mercury	3.9	2.6	0.13	mg/kg dry	3.3	0.57	102	70-130	2	20
Batch BK11643 - EPA 3050B										
Blank (BK11643-BLK1)					Prepared: 11/16/11 Analyzed: 11/17/11					
Cadmium	0.10 U	0.40	0.10	mg/kg wet						
Lead	1.0 U	4.0	1.0	mg/kg wet						
Barium	0.50 U	2.0	0.50	mg/kg wet						
Selenium	5.0 U	20	5.0	mg/kg wet						
Chromium	0.40 U	1.6	0.40	mg/kg wet						
Arsenic	1.0 U	4.0	1.0	mg/kg wet						
Silver	0.10 U	0.40	0.10	mg/kg wet						
LCS (BK11643-BS1)					Prepared: 11/16/11 Analyzed: 11/17/11					
Barium	41	2.0	0.50	mg/kg wet	40		102	85-115		
Lead	43	4.0	1.0	mg/kg wet	40		109	85-115		
Selenium	37	20	5.0	mg/kg wet	40		93	85-115		
Silver	8.3	0.40	0.10	mg/kg wet	8.0		104	85-115		
Cadmium	39	0.40	0.10	mg/kg wet	40		97	85-115		
Chromium	39	1.6	0.40	mg/kg wet	40		99	85-115		
Arsenic	41	4.0	1.0	mg/kg wet	40		103	85-115		

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1944 FAX 813-855-2218



General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

November 23, 2011
Work Order: 1110507

Metals - Quality Control

Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BK11643 - EPA 3050B										
Matrix Spike (BK11643-MS1)		Source: 1109564-01			Prepared: 11/16/11 Analyzed: 11/17/11					
Lead	110	7.2	1.8	mg/kg dry	72	32	108	75-125		
Chromium	79	2.9	0.72	mg/kg dry	72	7.0	101	75-125		
Cadmium	72	0.72	0.18	mg/kg dry	72	0.96	99	75-125		
Barium	230	3.6	0.90	mg/kg dry	72	160	106	75-125		
Selenium	95	36	9.0	mg/kg dry	72	16	111	75-125		
Arsenic	120	7.2	1.8	mg/kg dry	72	42	111	75-125		
Silver	20	0.72	0.18	mg/kg dry	14	5.7	100	75-125		
Matrix Spike Dup (BK11643-MSD1)		Source: 1109564-01			Prepared: 11/16/11 Analyzed: 11/17/11					
Cadmium	71	0.73	0.18	mg/kg dry	73	0.96	96	75-125	0.5	50
Chromium	79	2.9	0.73	mg/kg dry	73	7.0	98	75-125	0.9	50
Arsenic	120	7.3	1.8	mg/kg dry	73	42	107	75-125	0.8	50
Lead	110	7.3	1.8	mg/kg dry	73	32	110	75-125	3	50
Silver	21	0.73	0.18	mg/kg dry	15	5.7	103	75-125	4	50
Barium	250	3.7	0.92	mg/kg dry	73	160	124	75-125	7	50
Selenium	92	37	9.2	mg/kg dry	73	16	103	75-125	4	50

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1944 FAX 813-855-2218

**General Utilities**

7621 Frog Log Lane

Leesburg, FL 34748

November 23, 2011

Work Order: 1110507

Metals (TCLP) EPA 1311 - Quality Control

Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BK11813 - Metals Preparation for EPA Method 200.7										
Blank (BK11813-BLK1)					Prepared & Analyzed: 11/23/11					
Cadmium	0.0010 U	0.010	0.0010	mg/L						
Barium	0.0050 U	0.10	0.0050	mg/L						
Silver	0.0010 U	0.020	0.0010	mg/L						
Selenium	0.050 U	0.20	0.050	mg/L						
Lead	0.010 U	0.10	0.010	mg/L						
Chromium	0.0040 U	0.010	0.0040	mg/L						
Arsenic	0.010 U	0.040	0.010	mg/L						
LCS (BK11813-BS1)					Prepared & Analyzed: 11/23/11					
Silver	0.070	0.020	0.0010	mg/L	0.080		88	85-115		
Chromium	0.38	0.010	0.0040	mg/L	0.40		95	85-115		
Lead	0.39	0.10	0.010	mg/L	0.40		97	85-115		
Selenium	0.37	0.20	0.050	mg/L	0.40		91	85-115		
Cadmium	0.37	0.010	0.0010	mg/L	0.40		94	85-115		
Barium	0.38	0.10	0.0050	mg/L	0.40		96	85-115		
Arsenic	0.37	0.040	0.010	mg/L	0.40		92	85-115		
Matrix Spike (BK11813-MS1)					Source: 1110822-01		Prepared & Analyzed: 11/23/11			
Chromium	0.40	0.010	0.0040	mg/L	0.40	ND	99	75-125		
Cadmium	0.39	0.010	0.0010	mg/L	0.40	ND	97	75-125		
Silver	0.078	0.020	0.0010	mg/L	0.080	ND	97	75-125		
Arsenic	0.43	0.040	0.010	mg/L	0.40	0.038	99	75-125		
Selenium	0.44	0.20	0.050	mg/L	0.40	ND	111	75-125		
Lead	0.45	0.10	0.010	mg/L	0.40	0.040	104	75-125		
Barium	0.50	0.10	0.0050	mg/L	0.40	0.018	119	75-125		
Matrix Spike Dup (BK11813-MSD1)					Source: 1110822-01		Prepared & Analyzed: 11/23/11			
Selenium	0.38	0.20	0.050	mg/L	0.40	ND	96	75-125	15	30
Cadmium	0.39	0.010	0.0010	mg/L	0.40	ND	96	75-125	0.8	30
Silver	0.076	0.020	0.0010	mg/L	0.080	ND	95	75-125	2	30
Arsenic	0.44	0.040	0.010	mg/L	0.40	0.038	101	75-125	2	30
Chromium	0.40	0.010	0.0040	mg/L	0.40	ND	101	75-125	1	30
Barium	0.49	0.10	0.0050	mg/L	0.40	0.018	118	75-125	0.9	30
Lead	0.46	0.10	0.010	mg/L	0.40	0.040	104	75-125	0.3	30

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 SAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 FAX 813-855-2218



General Utilities
7621 Frog Log Lane
Leesburg, FL 34748

November 23, 2011

Work Order: 1110507

Metals (TCLP) EPA 1311 - Quality Control

Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch BK12209 - Digestion Procedure for Hg Analysis by EPA 245.1										
Blank (BK12209-BLK1)					Prepared: 11/22/11 Analyzed: 11/23/11					
Mercury	0.00010 U	0.00050	0.00010	mg/L						
LCS (BK12209-BS1)					Prepared: 11/22/11 Analyzed: 11/23/11					
Mercury	0.0051	0.00050	0.00010	mg/L	0.0050		101	85-115		
Matrix Spike (BK12209-MS1)					Source: 1110685-01 Prepared: 11/22/11 Analyzed: 11/23/11					
Mercury	0.0051	0.00050	0.00010	mg/L	0.0050		102	70-130		
Matrix Spike Dup (BK12209-MSD1)					Source: 1110685-01 Prepared: 11/22/11 Analyzed: 11/23/11					
Mercury	0.0051	0.00050	0.00010	mg/L	0.0050		101	70-130	0.2	30

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November 23, 2011

Work Order: 1110507

* Qualifiers, Notes and Definitions

Results followed by a "U" indicate that the sample was analyzed but the compound was not detected. Results followed by "I" indicate that the reported value is between the laboratory method detection limits and the laboratory practical quantitation limit.

A statement of estimated uncertainty of test results is available upon request.

For methods marked with **, all QC criteria have been met for this method which is equivalent to a SAL certified method.

Test results in this report meet all the requirements of the NELAC standards. Any applicable qualifiers are shown below. Questions regarding this report should be directed to Client Services at 813-855-1844.



FDOH Laboratory No.E84129
NELAP Accredited

Francis I. Daniels, Laboratory Director
Leslie C. Boardman, Q.A. Manager

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 fax 813-855-2218

Acc

SAL Project No. 1110507

[illegible]

APPENDIX 6

BOTTOM ASH MSDS

Progress Energy
410 S Wilmington St
Raleigh, NC 27601

Product Safety: (919) 546-7375
www.progress-energy.com
Version Date: January 2, 2007
Version: 2

SECTION 1
CHEMICAL PRODUCT AND IDENTIFICATION

PRODUCT: FGD Synthetic Gypsum
CHEMICAL FAMILY: Calcium Sulfate Dihydrate (CaSO₄•2H₂O)

SECTION 2
COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL	WT%	TLV (mg/m ³)	PEL (mg/m ³)	CAS NUMBER
Calcium Sulfate Dihydrate (CaSO ₄ •2H ₂ O)	95-98	10	15 (T) / 5 (R)	10101-41-4
Fly ash	<1	10	15 (T) / 5 (R)	68131-74-8
Crystalline Silica	<1	0.05 (R)	0.1 (R)	14808-60-7

(T) – Total (R) – Respirable (NE) – Not Established mmpfc - million particles per cubic foot of air
Respirable crystalline silica: IARC: Group 1 carcinogen, NTP: Known human carcinogen. The weight percent for silica represents total quartz and not the respirable fraction.



Food and Drug Administration [CFR Title 21, v.3, sec 184.1230] – Calcium Sulfate is Generally Recognized as Safe (GRAS).

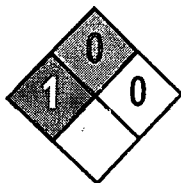
All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL).

SECTION 3
HAZARD IDENTIFICATION

INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings:

Health: 1
Fire: 0
Reactivity: 0



HMS Ratings:

Health: *0
Fire: 0
Reactivity: 0

HEALTH	*	0
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		E

0 = Minimal Hazard
1 = Slight Hazard
2 = Moderate Hazard
3 = Serious Hazard
4 = Severe Hazard

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

*Respirable crystalline silica can cause lung disease and/or cancer. E- Safety glasses, gloves and dust respirator

EMERGENCY OVERVIEW: This product is not expected to produce any unusual hazards during normal use. Exposure to high dust levels may irritate the skin, eyes, nose, throat, or upper respiratory tract.

POTENTIAL HEALTH EFFECTS

ACUTE:

Eyes: Airborne dust or direct contact can cause irritation of eyes. If burning, redness, itching, pain or other symptoms persist or develop, consult physician.

Skin: Direct, prolonged or repeated contact with the skin may cause irritation.

SECTION 3 HAZARD IDENTIFICATION (continued)

POTENTIAL HEALTH EFFECTS

ACUTE (continued):

Inhalation: Dust exposures generated during the handling of the product may irritate eyes, skin, nose, throat, and upper respiratory tract. Labored breathing may occur after excessive inhalation. If respiratory symptoms persist, consult physician.

Ingestion: If ingested may cause temporary irritation to the gastrointestinal tract, especially the stomach. No known effects.

CHRONIC:

Eyes: None known.

Skin: None known.

Ingestion: No known effects.

Inhalation: Exposures to respirable crystalline silica are not expected during the normal use of this product, however actual levels must be determined by workplace hygiene testing.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

TARGET ORGANS: Eyes, skin and respiratory system.

PRIMARY ROUTES OF ENTRY: Inhalation, eyes and skin contact.

SECTION 4
FIRST AID MEASURES

FIRST AID PROCEDURES

Eyes: In case of contact, do not rub or scratch your eyes. Flush thoroughly with water for 15 minutes to remove particles. If irritation persists, consult physician.

Skin: Wash with mild soap and water. A commercially available hand lotion may be used to treat dry skin areas. If skin has become cracked, take appropriate action to prevent infection and promote healing. If irritation persists, consult physician.

Inhalation: Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however if conditions warrant, contact physician.

Ingestion: This product is not intended to be ingested or eaten. No harmful effects expected. No specific recommendations. If gastric disturbance occurs, call physician.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Pre-existing skin diseases such as, but not limited to, rashes and dermatitis.

SECTION 5
FIRE FIGHTING MEASURES

General Fire Hazards:

Not expected to burn.

Extinguishing Media:

Water or use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures:

Wear appropriate personal protective equipment (See section 8).

Unusual Fire & Explosion Hazards:

None

Hazardous Combustion Products:

Above 1450° C - decomposes to calcium oxide (CaO) and sulfur dioxide (SO₂)

SECTION 5 FIRE FIGHTING MEASURES (continued)

Flash Point:	None Known	Auto Ignition:	Not Applicable
Method Used:	Not Applicable	Flammability	Not Applicable
Upper Flammable Limit (UFL):	Not Applicable	Classification:	Not Applicable
Lower Flammable Limit (LFL):	Not Applicable	Rate of Burning:	Not Applicable

**SECTION 6
ACCIDENTAL RELEASE MEASURES**

CONTAINMENT:

No special precautions. Wear appropriate personal protection (See Section 8).

CLEAN-UP:

Use normal clean up procedures. Wear appropriate protective equipment. Ventilate area. If dry, shovel or sweep up material from spillage and place collected material into a container for recovery or waste disposal. Avoid dust generation. Avoid inhalation of dust and contact with eyes and skin. Maintain proper ventilation. If vacuum is used to collect dust, use an industrial vacuum cleaner with a high efficiency air filter. If sweeping is necessary, use dust suppressant. Do not use compressed air for clean up. These procedures will help minimize potential exposures. If washed down, may plug drains.

DISPOSAL:

Follow all local, state, provincial and federal regulations. Never discharge large releases directly into sewers or surface waters. Trace amounts of residue can be flushed to a drain, using plenty of water.

**SECTION 7
HANDLING AND STORAGE**

HANDLING:

Minimize dust generation and accumulation. Avoid breathing dust. Wear the appropriate respiratory protection against dust in poorly ventilated areas and if TLV is exceeded (see Sections 2 and 8). Avoid dust contact with eyes. Wear the appropriate eye protection against dust (See Section 8).
Use good safety and industrial hygiene practices.

STORAGE:

Store at room temperature in a dry location.
Keep containers closed when not in use

**SECTION 8
EXPOSURE CONTROLS / PERSONAL PROTECTION**

ENGINEERING CONTROLS:

If user operations generate airborne dust, use ventilation to keep dust concentrations below permissible exposure limits (See Section 2).

Where general ventilation is inadequate, use process enclosures, local exhaust ventilation, or other engineering controls to control dust levels below permissible exposure limits (see Section 2). If concentrations exceed exposure limits wear a properly fitted NIOSH/MSHA-approved particulate respirator.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

RESPIRATORY PROTECTION:

Wear a NIOSH/MSHA-approved respirator equipped with particulate cartridges when dusty in poorly ventilated areas, and if TLV is exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

OTHER PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face: Wear eye protection (safety glasses or goggles) to avoid particulate irritation of the eye.

Skin: Gloves or protective clothing are usually not necessary but may be desirable in specific work situations. For brief contact, no precautions other than clean body-covering clothing should be needed. Wear gloves and protective clothing to prevent repeated or prolonged skin contact. Barrier creams or skin lotion may be applied to face, neck, wrist and hands when skin is exposed to help prevent drying of skin.

General: Selection of Personal Protective Equipment will depend on environmental working conditions and operations.

**SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Tan to off white	Viscosity	Not Applicable
Physical State	Solid (powder)	Solubility (H ₂ O)	~ 0.21 g/100 g solution
Odor	Low to no odor	Boiling Point	Not Applicable
pH @ 25 ° C	~7	Melting Point	Not Applicable
Particle Size	Varies	Softening Point	Not Applicable
Molecular Weight	~172 g/mole	Freezing Point	Not Applicable
Bulk Density	~ 45-150 lb/ft ³	Vapor Density (Air = 1)	Not Applicable
Specific Gravity (H ₂ O = 1)	2.3-2.5	Vapor Pressure (mm Hg)	Not Applicable
Percent Volatile	Zero	Evaporation Rate (BuAc = 1)	Not Applicable
VOC Content	Zero		

**SECTION 10
CHEMICAL STABILITY AND REACTIVITY**

STABILITY:	Stable.
CONDITIONS TO AVOID:	Contact with incompatibles.
INCOMPATIBILITY:	None known.
HAZARDOUS POLYMERIZATION:	Will not occur.
HAZARDOUS DECOMPOSITION:	Above 1450° C - decomposes to calcium oxide (CaO) and sulfur dioxide (SO ₂)

**SECTION 11
TOXICOLOGICAL INFORMATION**

ACUTE EFFECTS:

Direct contact may cause eye, skin and/or respiratory irritation.

LD₅₀: Not Available for product. LC₅₀: Not Available for product.

SECTION 11 TOXICOLOGICAL INFORMATION (continued)

CHRONIC EFFECTS / CARCINOGENICITY:

Crystalline silica: Exposures to respirable crystalline silica are not expected during the normal use of this product; however, actual levels must be determined by workplace hygiene testing.

Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. The development of silicosis may increase the risks of additional health effects. The risk of developing silicosis is dependent upon the exposure intensity and duration.

In June, 1997, IARC classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

**SECTION 12
ECOLOGICAL INFORMATION**

ENVIRONMENTAL TOXICITY: This product has no known adverse effect on the ecology. A large discharge directly into waterways would not be expected to kill aquatic life.

Ecotoxicity value: Not determined.

**SECTION 13
DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL METHOD:

Dispose of material in accordance with Federal, State, Provincial, and Local regulations. Consult with environmental regulatory agencies for guidance on acceptable disposal practices. Never discharge directly into sewers or surface waters.

**SECTION 14
TRANSPORT INFORMATION**

U.S. DOT INFORMATION: Not a hazardous material per DOT shipping requirements. Not classified or regulated.

Shipping Name	Same as product name.
Hazard Class:	Not classified
UN/NA #:	None. Not classified.
Packing Group:	None.
Label (s) Required:	Not applicable.
GGVSec/MDG-Code:	Not classified.
ICAO/IATA-DGR:	Not applicable.
RID/ADR:	None
ADNR:	None

SECTION 15
REGULATORY INFORMATION

UNITED STATES REGULATIONS

All ingredients of this product are included in the U.S. EPA's Toxic Substances Control Act Chemical Substance Inventory.

MATERIAL	WT%	302	304	313	CERCLA	CAA Sec. 112	RCRA Code
Calcium Sulfate Dihydrate (CaSO ₄ •2H ₂ O)	95-98	NL	NL	NL	NL	NL	NL
Fly ash	<1	NL	NL	NL	NL	NL	NL
Crystalline Silica	<1	NL	NL	NL	NL	NL	NL

Key: NL = Not Listed

SARA Title III Section 302 (EPCRA) Extremely Hazardous Substances: Threshold Planning Quantity (TPQ)

SARA Title III Section 304 (EPCRA) Extremely Hazardous Substances: Reportable Quantity (RQ)

SARA Title III Section 313 (EPCRA) Toxic Chemicals: X= Subject to reporting under section 313

CERCLA Hazardous Substances: Reportable Quantity (RQ)

CAA Section 112 (r) Regulated Chemicals for Accidental Release Prevention: Threshold Quantities (TQ)

RCRA Hazardous Waste: RCRA hazardous waste code



Food and Drug Administration [CFR Title 21, v.3, sec 184.1230] – Calcium Sulfate is Generally Recognized as Safe (GRAS).

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. All components of this product are included in the Canadian Domestic Substances List (DSL).

MATERIAL	WT%	IDL Item #	WHMIS Classification:
Calcium Sulfate Dihydrate (CaSO ₄ •2H ₂ O)	95-98	Not Listed	Not Listed
Fly ash	<1	Not Listed	Not Listed
Crystalline Silica	<1	1406	D2A

IDL Item #: Canadian Hazardous Products Act – Ingredient Disclosure List Item #

WHMIS Classification: Workplace Hazardous Material Information System

CARCINOGENICITY CLASSIFICATION OF INGREDIENT(S)

All substances listed are associated with the nature of the raw materials used in the manufacture of this product and are not independent components of the product formulation. All substances, if present, are at levels well below regulatory limits. See Section 11: Toxicology Information for detailed information.

MATERIAL	IARC	NTP	ACGIH	CAL- 65
Respirable Crystalline Silica	1	1	A2	Listed

IARC – International Agency for Research on Cancer (World Health Organization)

1- Carcinogenic to humans

?A – Probably carcinogenic to humans

2B – Possibly carcinogenic to humans

3 - Not classifiable as a carcinogen

4 – Probably not a carcinogen

SECTION 15 REGULATORY INFORMATION (continued)

NTP – National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS)

1- Known to be carcinogen

2- Anticipated to be carcinogens

ACGIH – American Conference of Governmental Industrial Hygienists

A1 – Confirmed human carcinogen

A2 – Suspected human carcinogen

A3 – Animal carcinogen

A4 – Not classifiable as a carcinogen

A5 – Not suspected as a human carcinogen

CAL-65 – California Proposition 65 "Chemicals known to the State of California to Cause Cancer"

**SECTION 16
OTHER INFORMATION**

Label Information**ΔWARNING!**

Dust created from product may cause eye, skin, nose, throat or upper respiratory irritation. Avoid inhalation of dust and eye contact. Use in a well-ventilated area. Wear a NIOSH/MSHA-approved respirator when dusty. Use proper ventilation to reduce dust exposure. Wear eye protection. If eye contact occurs, flush thoroughly with water for 15 minutes. If irritation persists, call physician. Wash thoroughly with soap and water after use. Do not ingest. If ingested, call physician.

Product safety information: (919) 546-7375

KEEP OUT OF REACH OF CHILDREN.

Key/Legend

TLV	Threshold Limit Value
PEL	Permissible Exposure Limit
CAS	Chemical Abstracts Service (Registry Number)
NIOSH	National Institute for Occupational Safety and Health
MSHA	Mine Safety and Health Administration
OSHA	Occupational Health and Safety Administration
ACGIH	American Conference of Governmental Industrial Hygienists
IARC	International Agency for Research on Cancer
DOT	United States Department of Transportation
EPA	United States Environmental Protection Agency
NFPA	National Fire Protection Association
HMIS	Hazardous Materials Identification System
PPE	Personal Protection Equipment
TSCA	Toxic Substances Control Act
DSL	Canadian Domestic Substances List
NDSL	Canadian Non-Domestic Substances List
SARA	Superfund Amendments and Reauthorization Act of 1986
RCRA	Resource Conservation and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
UN/NA#	United Nations/North America number
CFR	Code of Federal Regulations
WHMIS	Workplace Hazardous Material Information System

SECTION 16 OTHER INFORMATION (continued)

Prepared by:
Progress Energy
410 S. Wilmington Street
Raleigh, NC 27601

END

APPENDIX 7

SYNTHETIC GYPSUM MSDS



IDENTITY Bottom Ash				
Section I				
Manufacturer's Name Seminole Electric Cooperative, Inc.		Emergency Telephone Number (386) 328-9255, x-2302 or x-2303		
Address (Number, Street, City, State and ZIP Code) P.O. Box 272000 Tampa, Florida 33688-2000		Telephone Number for Information (386) 328-9255, x-2302 or x-2303		
		Date Prepared 01/03/02		
		Preparer Douglas Dean, PE, CIH		
Section II – Hazardous Ingredients/Identity Information				
Hazardous Components	CAS-NO	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)	% (Typical Range)
Complex amorphous mixture composed primarily of oxides of the elements silicon, aluminum, iron, and calcium	—	10 ¹	10	75-80
Crystalline silica ²	—	3	0.1	3.0-4.5
Magnetite	1790-37-6	NE ⁴	10	2-3
Hematite	1317-60-8	NE ⁴	10	4-7
Mullite	1302-93-8	NE ⁴	10	7-8
Trace metals ⁵		6	8	<0.1
¹ Use total nuisance dust standard.				
² Present as α-quartz and cristobalite.				
³ Respirable dust. Use the formula 10 mg/m3/(%SiO ₂ + 2) for crystalline silica (quartz).				
⁴ NE—Not established. Use standard for exposure to nuisance dust unless crystalline silica exceeds 5%.				
⁵ Various metals present in less than 0.1% by weight (Arsenic is less than 10 mg/kg).				
⁶ Metals listed under OSHA/ACGIH tables. Metals not expected to exceed respective limits provided that total dust exposure is controlled.				
Section III – Physical/Chemical Characteristics				
Boiling Point:	N/A	Specific Gravity (Water = 1):	3.0	
Vapor Pressure (mm Hg):	N/A	Melting Point:	N/A	
Vapor Density (Air = 1):	N/A	Evaporation Rate (Butyl acetate = 1)	N/A	
Solubility in Water: Slight				
Appearance and Color: Grey, granular solid, odorless				
Section IV – Fire and Explosion Data				
Bottom ash is non-combustible, non-flammable mineral matter.				
Unusual Fire or Explosion Hazards: None.				
Extinguishing media: Use appropriate extinguishing media for the surrounding fire.				
Decomposition products: None. Does not decompose on heating.				
Section V – Reactivity Data				
Stability:	Stable	X	Conditions to Avoid: Stable under normal conditions of use, storage and transportation.	
	Unstable			
Incompatibility (Materials to Avoid): None.				
Hazardous Polymerization:	May Occur		Conditions to Avoid: N/A	
	Will Not Occur	X		

Section VI – Health Hazard Data					
Routes of Entry:		Inhalation?	Yes	Skin?	No
					No
<p>Health Hazards (Acute and Chronic): Bottom ash may cause an acute irritation to the respiratory tract in exposed to airborne concentrations that exceed regulated nuisance dust levels. Repeated, prolonged inhalation may cause fibrosis.</p> <p>Contains α-Quartz (crystalline silica). The International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance that may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen.</p>					
<p>Signs and Symptoms of Exposure: Continued and prolonged exposure to airborne dust concentrations in excess of the PEL/TLV may result in cough, wheezing, and irritation of the respiratory tract. Prolonged contact with skin or eyes may cause irritation.</p>					
<p>Medical Conditions Generally Aggravated By Exposure: Overexposure would generally aggravate respiratory system dysfunctions.</p>					
<p>Emergency and First Aid Procedures: <u>Eye:</u> Immediately flush eyes with water for 15 minutes and get medical attention and treat scratched cornea. <u>Skin:</u> Flush and wash skin with soap and water. Get medical attention if irritation persists. <u>Breathing:</u> Move the exposed person to fresh air immediately. Get medical attention if irritation persists.</p>					
Section VII – Procedures for Safe Handling and Use					
<p>Steps to Be Taken in Case Material is Released or Spilled: Do not create unnecessary airborne dust. Avoid inhalation. Use water mist to reduce dust. Provide ventilation as appropriate. Use personal protection for respiratory, skin and eyes in high dust conditions.</p>					
<p>Waste Disposal Method: Bottom ash is not classified as a RCRA hazardous waste. Uncontaminated material may be disposed of as an inert material in a licensed solid waste landfill in accordance with all relevant federal, state and local regulations.</p>					
<p>Precautions to be Taken in Handling and Storage: Do not create unnecessary airborne dust when handling. Certain conditions (e.g., work in enclosed areas) could create overexposure to crystalline silica. Such activities should be evaluated for OSHA compliance with 29 CFR 1910.1000, Subpart Z standards.</p>					
Section VIII – Control Measures					
<p>Respiratory Protection (Specify Type): Use appropriate NIOSH respiratory protection when PEL may be exceeded.</p>					
<p>Ventilation: Provide local or general exhaust ventilation to meet PEL/TLV requirements.</p>					
<p>Protective Gloves: Standard work gloves.</p>			<p>Eye Protection: Safety glasses with side shields or goggles.</p>		
<p>Other Protective Clothing or Equipment: Coveralls or protective clothing may be necessary in high dust levels.</p>					
<p>Work/Hygiene Practices: Wash hands and face prior to eating, drinking, using tobacco products or applying cosmetics. Contact lenses should not be worn when working with this material.</p>					
Section IX – Other Information					
<p>Users are advised to make their own determination as to the suitability in relation to their particular purposes and specific circumstances. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products. Individual responsibility must be taken as to the proper use and handling of this product.</p>					