STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit:

Suwannee American Cement, LLC
Post Office Box 410
Branford, Florida 32008

DEP File No. 1210465-012-AC
Production Capacity and Fly Ash Injection Test
Suwannee American Cement Plant
Suwannee County

Enclosed is the Permit Number 1210465-012-AC to evaluate the feasibility of a clinker production rate increase by conducting a production capacity and fly ash test during 120 operating days over a six-month period of time at the Suwannee American Cement Plant in Suwannee County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

for Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10/20/04 to the person(s) listed:

Celso Martini, SAC*
Claude Grinfeder, SAC*
Joe Horton, SAC
Larry Sellers, Esq.*
Frank Darabi, P.E.
Steve Cullen, P.E.
John Koogler, P.E.
Chris Kirts, DEP NED
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Tom Workman, DEP
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Virginia Seacrist
Bob and Lynn Milner
Linda Pollini
Helen Beaty
Bessie Robinson
Craig Pittman, St. Pete Times
Chuck Yagel*

Clerk Stamp

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

(Clerk) 10/20/04 (Date)

FINAL DETERMINATION

Suwannee American Cement Plant

Production Capacity and Fly Ash Test Program

DEP File No. 1210465-012-AC

On September 24, 2004 the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" to conduct a production capacity and fly ash test program at the Suwannee American Cement Plant located on U.S. Highway 27, in Suwannee County.

The package included the Department's Draft Air Construction Permit, the "Intent to Issue Air Construction Permit," the "Technical Evaluation and Preliminary Determination," and the "Public Notice of Intent to Issue Air Construction Permit." The Department sent copies of the package to various persons, agencies, and municipalities including those who had asked that they be informed of any Department permitting activities related to the subject facility. Suwannee American Cement, LLC published the Public Notice in The Suwannee Democrat on October 1, 2004 and provided to the Department the required proof of publication.

The Department received comments only from the applicant. By the letter dated September 29, 2004 Suwannee American Cement, LLC submitted the following comment:

"SAC assumes the intent of the construction permit allows for a construction and use of silos and feed equipment to inject fly ash into the calciner for purposes of the test. This equipment would only be used for purposes of the test and during the approved test period. SAC would seek permanent approval for use of equipment beyond the approved test period from the Department".

The Department agrees that the permit allows for construction and use of silos and feed equipment to inject fly ash into the calciner as well as a baghouse. An Emission Unit designated as "xxx – Temporary Fly Ash Injection" was included in the draft permit. The Department has determined that instead of a separate emission unit, it would be more appropriate to add a temporary emission point under existing "Emission Unit 002 – Raw Material Processing Operations Controlled by Baghouses." This temporary permit will show Emission Unit 002 with the Emission Point U-02-01 designated as "Dust Collector for Fly Ash Silos U-01-01." The layout of the silos is shown in the drawing at the end of this determination.

Following are the exact changes made in the final permit compared with the draft permit:

PLACARD PAGE – STATEMENT OF BASIS

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install and temporarily use fly ash silos with a baghouse and feed equipment. The permittee is authorized to conduct tests for the production rate and fly ash injection capacities in accordance with the conditions of this permit and as described in the application. Apart from the temporary increase in feed rate, clinker production, fuel use rate, and injection of fly ash into the calciner, the permittee shall operate the facility in accordance with the previously approved permits, drawings, plans, and other documents on file with the Florida Department of Environmental Protection ("DEP" or "the Department"). This temporary permit supplements the original air construction permit and its subsequent modifications. It does not modify any other requirements from such previously issued air permits except a provision for certain emissions data exclusion (lb NOx/ton of clinker) for periods of off-capacity clinker production during the capacity evaluation program.

PAGE 2 AND PAGE 5 – EMISSION UNITS

This permit addresses the following emission units.

EU No.	Emission Unit Description
002	Raw Material Processing Operations Controlled by Baghouses[1]
004	In line kiln/raw mill controlled by baghouse – main stack
005	Clinker cooler controlled by ESP
~~xxx~~	~~Temporary fly ash injection into the calciner~~

1. Emission Unit 002 includes numerous Emission Points including new Emission Point U-02-01 - Dust Collector for Fly Ash Silos U-01-01.

SECTION 3, CAPACITY EVALUATION PROGRAM, CONDITION 2

2. **Temporary Operating Rates:** Subject to the conditions of this permit, the permittee is authorized to install and temporarily use fly ash silos with a baghouse and feed equipment and is temporarily authorized to conduct a capacity evaluation program to: evaluate the technical feasibility of increasing production in the existing in line kiln/raw mill/clinker cooler system as constructed; evaluate the technical feasibility of increasing production in the in line kiln/raw mill/clinker cooler system by directly injecting fly ash (a raw material) into the calciner; and to determine the emissions at the higher operating rates. Within the electrical, structural, process, and mechanical capabilities of the kiln, the permittee is authorized to temporarily operate at the following maximum process and production rates at any time during the capacity evaluation program.

Emissions Unit Rates	Temporary Maximum Operating Rate Range
004 - Kiln Process	178 to 205 tons per hour (including dry preheater feed plus direct fly ash feed to the calciner) Up to 27 tons per direct fly ash feed to the calciner
	364 to 420 million BTU heat input per hour
005 - Clinker Production	105 to 115.5 tons per hour
~~xxx – Fly Ash Injection~~	~~Up to 27 tons per hour direct feed to the calciner~~ ~~(Included in 205 TPH kiln process rate)~~

For purposes of the capacity evaluation program only, the clinker production rate identified in the above table shall be determined by the following equation:

Clinker Production = [(Feed) (Kiln Feed LOI Factor) + (Fly Ash Injection) (Fly Ash LOI Factor)]

Where:

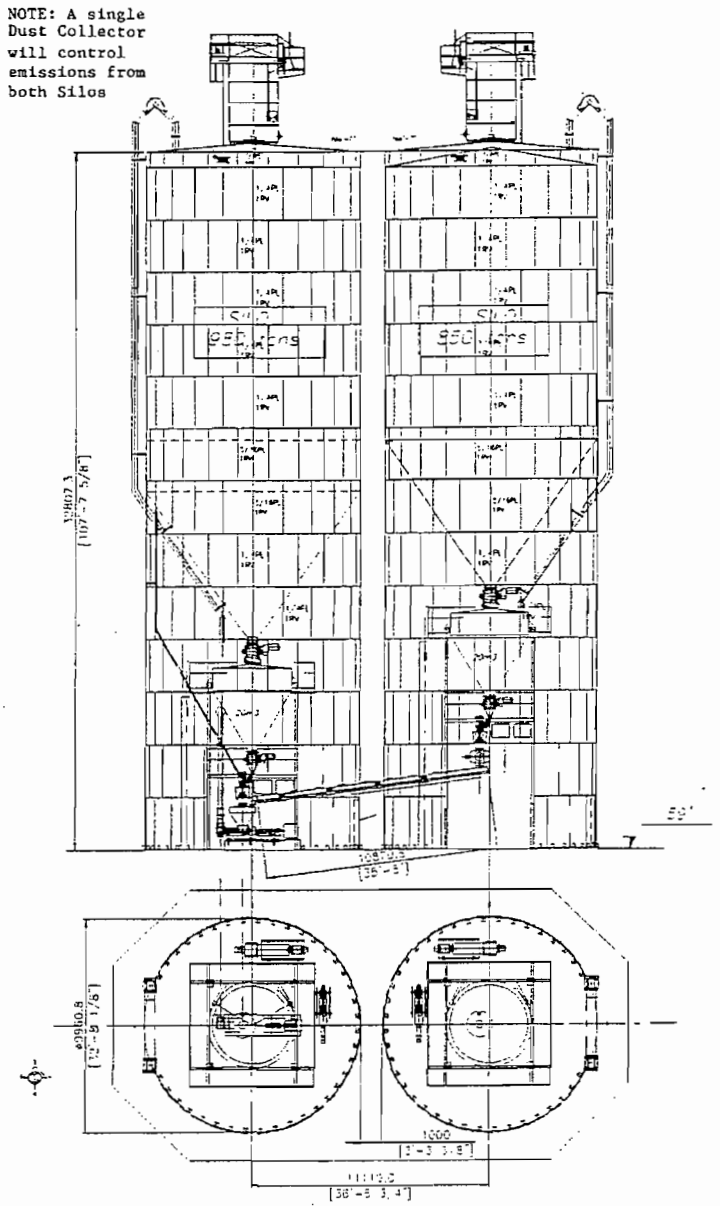
- Kiln feed is determined by the Poldos control system.
- Fly ash is determined from the rotary feed system or equivalent.
- LOI for the kiln feed and fly ash is based on a monthly average determined from daily measurements.

At all times, the emission units shall remain subject to the conditions of all existing permits related to air pollution and control equipment during the temporary capacity evaluation program. All required CEMS and COMS shall be properly functioning when operating within the temporary maximum rate range. [Rule 62-4.070(3), F.A.C.]

4. **Duration:** The temporary capacity evaluation program is limited to no more than 120 operating days and shall end no later than April 30, 2005. Upon completion of the capacity evaluation program or the expiration of this permit (whichever occurs first), the permittee shall cease to operate at production and process rates in excess of the original Air Construction Permit No. 1210465-001-AC (PSD-FL-259) and shall cease to use the temporary fly ash silos, baghouse and injection system. For this permit, "operational day" means any day that includes operation within the temporary maximum rate range specified above. [Applicable Permit, Applicant Request]

Note: End of changes.

Following is the approximate layout of the fly ash silos.



Side and Overhead Views of Fly Ash Storage Silos

The Department's Final Action is to issue the Air Construction Permit as drafted but with the changes noted above.

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

PERMITTEE

Suwannee American Cement, LLC
Post Office Box 410
Branford, Florida 32008

Authorized Representative:
Celso Martini, Plant Manager

Permit No. 1210465-012-AC
Cement Plant (SIC No. 3241)
Capacity Evaluation Program
Expires: April 30, 2005

PROJECT AND LOCATION

This permit authorizes Suwannee American Cement, LLC to conduct a production capacity evaluation program at the existing Branford Cement Plant located at US Highway 27 and County Road 49 in Suwannee County, Florida. The UTM coordinates are: Zone 17; 321.4 km E and 3315.9 km N.

STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install and temporarily use fly ash silos with a baghouse and feed equipment. Permittee is authorized to conduct tests for the production rate and fly ash injection capacities in accordance with the conditions of this permit and as described in the application. Apart from the temporary increase in feed rate, clinker production, fuel use rate, and injection of fly ash into the calciner, the permittee shall operate the facility in accordance with the previously approved permits, drawings, plans, and other documents on file with the Florida Department of Environmental Protection ("DEP" or "the Department"). This temporary permit supplements the original air construction permit and its subsequent modifications. It does not modify any other requirements from such previously issued air permits except a provision for certain emissions data exclusion (lb NOx/ton of clinker) for periods of off-capacity clinker production during the capacity evaluation program.

CONTENTS

Michael G. Cooke, Director
Division of Air Resource Management

10/19/04
(Date)

FACILITY AND PROJECT DESCRIPTION

The existing Suwannee American Cement (SAC) facility consists of a portland cement plant, the associated quarry, and raw material and cement handling operations. The plant processes raw materials in a preheater/precalciner kiln with in-line raw mill to produce clinker. The clinker is milled and combined with gypsum to produce portland cement.

Authorized fuels for the pyroprocessing system include natural gas, coal, petroleum coke, whole tires and tire derived fuel (TDF). An authorized tire gasification system has not yet been constructed. The plant has a coal processing operation that will crush coal and petroleum coke. Petroleum coke has not yet been used.

The plant was constructed in accordance with Air Permit No. PSD-FL-259, as modified. That permit established short term production limits (24-hour average) of 178 tons per hour (TPH) of material fed to the preheater (dry basis), 105 TPH of clinker, 364 MMBtu per hour of heat input (MMBtu/hr) and 150 TPH of portland cement production. It also specifies annual production limits (based on a rolling 12-month basis) of 1,427,880 tons per year (TPY) of material fed to the preheater (dry basis), 839,500 TPY of clinker production, and 1,191,360 TPY of portland cement production. The plant is currently operating under the air construction permit while awaiting action on the application for a Title V air operation permit.

This current permit project (No. 1210465-012-AC) authorizes SAC to conduct a "capacity evaluation program" to assess the plant's production rate capacity as constructed as well as with a new fly ash injection method. The temporary program is limited to 120 operating days and is scheduled for completion by April 30, 2005. Operational and emissions information gathered during the capacity evaluation program will be used to evaluate the feasibility of a pending request for a permanent increase in the clinker production rate.

This permit authorizes SAC to evaluate the pyroprocessing system at preheater feed rates greater than 178 tons per hour and to determine the efficacy of directly injecting fly ash into the calciner in addition to the preheater. During the capacity evaluation program, the sum of dry material feed to the preheater and fly ash injected into the calciner shall be no greater than 205 TPH, the clinker production rate shall be no greater than 115.5 TPH, and the fuel use limit shall be no greater than 420 MMBtu/hr, all on a 24-hour basis.

Existing permitted emission limits remain unchanged and in effect during the capacity evaluation program except for a provision for the production-based NOx emissions data exclusion (lb NO_X/ton of clinker) for periods of off-capacity clinker production as specified in this permit.

EMISSION UNITS

This permit addresses the following emission units.

EU No.	Emission Unit Description
002	Raw Material Processing Operations Controlled by Baghouses
004	In line kiln/raw mill controlled by baghouse – main stack
005	Clinker cooler controlled by ESP

REGULATORY CLASSIFICATION

Title III: The Suwannee American Cement Facility is classified as a "Major Source" per 40 CFR 63.2, Definitions (adopted and incorporated by reference by the Department at Paragraph 62-204.800(11)(d)) because it consists of a group of stationary sources located within a contiguous area and under common control that emit or have the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The facility is subject to the Major (Greenfield) Source requirements of National Emission

Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, Code of Federal Regulations (CFR) Title 40, Part 63, Subpart LLL.

Title V: Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Prevention of Significant Deterioration (PSD): This facility is located in an area (Suwannee County) designated as "attainment" for all criteria pollutants. The facility is considered a "Portland Cement Plant," which is one of the 28 PSD source categories with the lower PSD applicability threshold of 100 tons per year (see Table 212.400-1, Rule 62-212.400, F.A.C.). Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a Major Facility with respect to Rule 62-212.400, F.A.C.

New Source Performance Standards (NSPS): The facility is subject to: 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants; 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants; and 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.

State Rule: Some emissions units are subject to Rule 62-296.701, F.A.C., Portland Cement Plants.

RELEVANT DOCUMENTS

The documents listed below are the basis of this permit. The permit application and additional information referenced are not a part of this permit, but the information is specifically related to this permitting action and the following documents are on file with the Department.

- Air Permit No. PSD-FL-259 issued on June 1, 2000, which was the original air construction permit for the new facility.
- Air Permit No. PSD-FL-259A issued on November 8, 2002, which modified the permit as follows: added requirement for notification of the anticipated date that equipment would be commissioned; and removed the startup notification specified by 40 CFR 60.7(a)(2) because it was repealed by EPA in 1999.
- Air Permit No. PSD-FL-259B issued on January 18, 2003, which modified the permit as follows: extended expiration date to June 30, 2004; added requirements for plant managers; added construction schedule; added requirements for permit transfer; revised data retrieval requirements; and revised CEMS requirements for kiln.
- Air Permit No. PSD-FL-259C issued on May 15, 2003, which modified the following items: clarified emissions point descriptions for several baghouses; and clarified CEMS requirements for kiln.
- Permit No. 121065-008 (PSD-FL-259D) issued October 18, 2004, 2004, which modifies the permit as follows: extend expiration date to March 31, 2005; install a permanent hydrated lime injection system; base the compliance averaging time for VOC on a 30 operating-day basis instead of a 30 calendar-day basis; and clarify the correct sampling point for determining mercury in raw materials.
- Application No. 121065-012-AC received on August 26, 2004 requesting a 120 operating-day testing program to evaluate production rate and fly ash injection capacity.
- Draft Permit No. 121065-012-AC for this permitting action distributed September 24, 2004.
- Comments received on October 1, 2004 from Suwannee American Cement LLC.
- Final Determination and Final Notice issued October 18, 2004.

1. Permitting Authority: All applications for permits to construct or modify an emission unit subject to the Prevention of Significant Deterioration or Nonattainment review requirements should be submitted to the Bureau of Air Regulation, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 (phone number: 850/488-0114). All documents related to applications for permits to operate and minor modifications shall be submitted to the Air Resource Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 (phone number: 904/807-3300).

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 (phone number: 904/807-3300).

3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Formats), Appendix GC (General Conditions), and Appendix GT (General Testing Requirements).

4. Applicable Regulations, Forms, and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the applicable permits and applications. The facility is subject to all applicable provisions of Chapter 403, F.S., Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; 40 CFR 60 (Subparts A, F, Y, and OOO); and 40 CFR 63 (Subparts A and LLL). The terms used in this permit have specific meanings as defined in the applicable chapters of the F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300, and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Additional Permits: The scope of this temporary project is to develop information in support of a separate air construction permit for a permanent production increase. Any final action authorizing a permanent production increase requires a revision to the Title V air operation permit. [Rule 62-213.400, F.A.C.]

This permit addresses the following emission units.

EU No.	Emission Unit Description
002	Raw Material Processing Operations Controlled by Baghouses[1]
004	In line kiln/raw mill controlled by baghouse – main stack
005	Clinker cooler controlled by ESP

1. Emission Unit 002 includes numerous Emission Points including new Emission Point U-02-01 - Dust Collector for Fly Ash Silos U-01-01.

CAPACITY EVALUATION PROGRAM

1. Relation to Other Permits: The conditions of this permit are in addition to those of any other air construction or operation permits. [Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

2. Temporary Operating Rates: Subject to the conditions of this permit, the permittee is authorized to install and temporarily use fly ash silos with a baghouse and feed equipment and is temporarily authorized to conduct a capacity evaluation program to: evaluate the technical feasibility of increasing production in the existing in line kiln/raw mill/clinker cooler system as constructed; evaluate the technical feasibility of increasing production in the in line kiln/raw mill/clinker cooler system by directly injecting fly ash (a raw material) into the calciner; and to determine the emissions at the higher operating rates. Within the electrical, structural, process, and mechanical capabilities of the kiln, the permittee is authorized to temporarily operate at the following maximum process and production rates at any time during the capacity evaluation program.

Emissions Unit Rates	Temporary Maximum Operating Rate Range
004 - Kiln Process	178 to 205 tons per hour (including dry preheater feed plus direct fly ash feed to the calciner) 27 tons per direct fly ash feed to the calciner
	364 to 420 million BTU heat input per hour
005 - Clinker Production	105 to 115.5 tons per hour

For purposes of the capacity evaluation program only, the clinker production rate identified in the above table shall be determined by the following equation:

Clinker Production = [(Feed) (Kiln Feed LOI Factor) + (Fly Ash Injection) (Fly Ash LOI Factor)]

Where:

- Kiln feed is determined by the Poldos control system.
- Fly ash is determined from the rotary feed system or equivalent.
- LOI for the kiln feed and fly ash is based on a monthly average determined from daily measurements.

At all times, the emission units shall remain subject to the conditions of all existing permits related to air pollution and control equipment during the temporary capacity evaluation program. All required CEMS and COMS shall be properly functioning when operating within the temporary maximum rate range. [Rule 62-4.070(3), F.A.C.]

3. Schedule: At least 14 days before beginning the capacity evaluation program, the permittee shall submit to the Permitting and Compliance Authorities a preliminary schedule detailing the program phases, operating scenarios, operational data collection, emissions data collection, and emissions testing protocol. The permittee shall update the schedule as necessary. [Rule 62-4.070(3), F.A.C.]

4. Duration: The temporary capacity evaluation program is limited to no more than 120 operating days and shall end no later than April 30, 2005. Upon completion of the capacity evaluation program or the expiration of this permit (whichever occurs first), the permittee shall cease to operate at production and process rates in excess of the original Air Construction Permit No. 1210465-001-AC (PSD-FL-259) and shall cease to use the temporary fly ash silos, baghouse and injection system. For this permit, "operational day" means any day that includes operation within the temporary maximum rate range specified above. [Applicable Permit, Applicant Request]

5. Operating Scenarios: The permittee shall evaluate the following operating scenarios.

   a. *Case 1*: Operate the in-line kiln system within the temporary maximum rate range without direct fly ash injection to the calciner to evaluate the existing capacity as constructed. At least 8 hours of data shall be gathered to identify the existing capacity as constructed.

   b. *Case 2*: Operate the in-line kiln system at a clinker production of approximately 105 tons per hour while injecting fly ash directly into the calciner at intervals of 3 tons per hour until the maximum fly ash injection capacity for the temporary fly ash injection system is determined. At least 3 hours of data shall be gathered at each fly ash injection rate.

   c. *Case 3*: Operate the in-line kiln system within the temporary maximum rate range while injecting fly ash directly into the calciner at intervals of 3 tons per hour until the maximum fly ash injection capacity for the temporary fly ash injection system is determined. At least 3 hours of data shall be gathered at each fly ash injection rate.

   The permittee may evaluate other operating scenarios within the temporary maximum rate range as necessary. All operation shall be within the electrical, structural, process, and mechanical capabilities of the kiln. If the above specified operating rates or fly ash injection rates are not possible, the permittee shall document this with the suspected reason. Whenever operating within the temporary maximum rate range or directly injecting fly ash into the calciner, the permittee shall continuously monitor and record the following information: dry feed material to the preheater (TPH); fly ash feed directly to the calciner (TPH); clinker production (TPH) by indirect calculation method as defined in Condition 2; clinker production (TPH) by direct measurement using the installed weigh scale; heat input rates (MMBtu/hour) to the kiln from each fuel in use; all required CEMS data; and all required COMS data. [Rule 62-4.070(3), F.A.C.]

EMISSIONS

6. Emissions Standards: Except as described in Condition 7, this permit does not change any emission standards or establish any new emissions standards for the in line kiln system. During the temporary capacity evaluation program, the in line kiln system shall comply with the requirements of all existing, valid Department permits. [Rules 62-4.030, 62-4.070(3), and 62-210.300(1)(b), F.A.C.]

7. NOx Data Exclusion: The following provisions apply only during the capacity evaluation program and only for 24-hour periods during which fly ash is directly injected into the calciner.
   a. "Off-capacity clinker production" is defined as clinker production below 85 tons per hour.
   b. If the 24-hour period includes off-capacity clinker production, up to two 1-hour production-based NO_X emission averages (lb/ton clinker) collected during such periods may be excluded from the 24-hour compliance average.
   c. No such data exclusion is permitted for clinker production below 85 tons per hour unless fly ash is being injected directly into the calciner. Operators shall minimize such incidents of off-capacity clinker production to the extent possible. The owner or operator shall monitor and record the number of 1-hour NO_X emission rates excluded from the determination of compliance with the production-based NO_X emission limit. [Applicant Request].

8. Unconfined Particulate Emissions: During the capacity evaluation program, unconfined particulate matter emissions shall be minimized by taking the reasonable precautions specified in the current air construction permit, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

EMISSIONS TESTING AND MONITORING REQUIREMENTS

9. Test Notification: The permittee shall provide at least a 15-day advance notice of any scheduled stack tests to afford the Compliance Authority the opportunity to witness the tests. If unavoidable circumstances occur that would delay the stack tests, the permittee shall keep the Compliance Authority informed of the delays and the new schedule. At its discretion, the Compliance Authority may allow a shorter advance notice. [Rule 62-297.310(7)(a)9, F.A.C.]

10. Stack Tests – In Line Kiln (EU-004): Within the electrical, structural, process, and mechanical capabilities of the in-line kiln system, the permittee shall conduct the stack tests in accordance with the following provisions.
    a. At the operating rates specified below, the permittee shall conduct stack tests (one for each pollutant) to determine compliance with the existing emissions standards for carbon monoxide and particulate matter.
    b. The permittee shall conduct dioxin/furan tests if there is a significant change in the feed that was used in the previous performance test. A Loss on Ignition (LOI) value of 30 percent or more shall be considered a significant change in the feed.
    c. For mercury, the permittee shall calculate and report mercury emissions in accordance with the procedure specified in the current air construction permit.
    d. Stack testing shall be performed at the in-line kiln main stack while the preheater, kiln, precalciner, cooler, and raw mill are operating simultaneously (compound operation). For each required stack test, the permittee shall operate the in-line kiln system to produce at least 110 tons per hour of clinker while injecting fly ash directly into the calciner within at least 90% of the highest sustained fly ash injection rate as determined by the results of operating scenario Case 3 in Condition 5.
    e. The permittee shall conduct each required stack test using the methods approved in the current air construction permit. Each required stack test shall consist of at least three test runs.
    f. For each required stack test, the permittee shall report the following continuous monitoring data: nitrogen oxides, sulfur dioxide, volatile organic compounds (total hydrocarbons), and opacity. In addition, the permittee shall report the continuous opacity monitoring data from the clinker cooler (EU-005) for each required test.
    g. For each required stack test, the permittee shall report the following information: dry feed material to the preheater (TPH); fly ash feed directly to the calciner (TPH); clinker production (TPH) by indirect calculation method as defined in Condition 2; clinker production (TPH) by direct measurement using the installed weigh scale; and heat input rates (MMBtu/hour) to the kiln from each fuel in use.
    h. During each day that stack tests are conducted on the in-line kiln system (EU-004), a representative sample of each fuel used shall be taken and analyzed for the following fuel properties: heating value (Btu/lb), moisture (% by weight), nitrogen (% by weight), sulfur (% by weight), chlorides (% by weight), ash (% by weight), and mercury (ppm by weight).
    i. During each day that stack tests are conducted on the in-line kiln system (EU-004), a representative sample of the fly ash injected into the calciner shall be taken and analyzed for the same constituents as preheater feed. In addition, the fly ash shall be tested for ammonia, chloride, carbon, loss on ignition (LOI), and mercury.

    [Rules 62-4.070(3) and 62-297.310, F.A.C.]

11. Test Procedures: General stack test procedures are summarized in Appendix GT of this permit. [Rule 62-297.310, F.A.C.]

12. Monitoring: During the capacity evaluation program, the permittee shall continuously monitor and record all information specified by the existing air construction permit including operational parameters, CEMS data, and COMS data. [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

13. Stack Test Reports: The permittee shall prepare and submit reports for all required stack tests in accordance with the requirements in Rule 62-297.310(8), F.A.C. The permittee shall submit a written report that summarizes the results within 45 days of completing each required stack test. All stack test data collected during the temporary testing program shall be submitted for review. For each test run, the report shall also indicate the following information: dry material feed to the preheater (TPH); fly ash injection directly to the calciner (TPH); clinker production (TPH); heat input rates (MMBtu/hour) from each fuel in use; CEMS and COMS data; and ambient conditions.

14. Fuel and Fly Ash Analyses: Within 45 days of taking a fuel or fly ash sample required by this permit, the permittee shall submit a report detailing the results of the analyses. [Rule 62-4.070(3), F.A.C.]

15. CEMS Data: The permittee shall provide the Department with data disks containing all CEMS data and production data for the duration of the capacity test. The permittee shall provide a description to decipher and review the data. The data should indicate when the raw mill is on (compound operation) and when it is off. [Rule 62-4.070(3), F.A.C]

16. Final Report on the Capacity Evaluation Program: Within 90 days of completing the capacity evaluation program and no later than July 30, 2005, the permittee shall submit a technical report detailing the capacity evaluation program and its findings. The report shall be comprehensive and include, but not be limited to, the following:

    - For each day the plant operated within the temporary maximum rate range or directly injected fly ash into the calciner, an hour-by-hour summary of the following information: dry material feed to the preheater (TPH); fly ash injection directly to the calciner (TPH); clinker production (TPH); portland cement production (TPH); heat input rates (MMBtu/hour) from each fuel in use; CEMS data; and COMS data.
    - For each emissions stack test conducted, a summary of the information required in Condition 13.
    - An assessment of the precision and accuracy of the methods used to determine feed material rates and indirectly calculate clinker production.
    - An assessment of the precision and accuracy of direct measurement of clinker production using the installed scales.
    - A discussion of any operational problems encountered at the higher authorized rates.
    - Details of any mechanical, electrical, structural, and process limitations that were identified during the course of the capacity evaluation program.

    [Rule 62-4.070(3), F.A.C.]

17. Engineering Report on Kiln: Any future or pending applications for a permanent production increase shall include an engineering report describing the full capability of the kiln to sustain the requested production rates while meeting proposed emission rates. The report shall be sealed by professional engineers or other experts as appropriate in structural, mechanical, electrical, process, and environmental disciplines. A single report from the kiln manufacturer would suffice to fulfill this requirement. [Rule 62-4.070(3), F.A.C.]

19. Emissions Limited and Subject to Revision for SO_2 and NOx: Based on results of compliance tests and continuous monitoring data, the Department may revise the emission limits for sulfur dioxide and nitrogen oxides downward to make these limits more stringent provided that overall control attained for all air pollutants including SO_2, NOx, VOC and CO is optimized. Such revision shall be based on data that represents a full range of operating conditions and a representative period of time. Such revision, if required by the Department, shall be in the form of a federally enforceable permit and shall be publicly noticed by the permittee.
[Rules 62-4.070(3) and 62-212.400(7)(a), F.A.C., Permit 1210465-001 (PSD-FL-259)]

APPENDIX GC
General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

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

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

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

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

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

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

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

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

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

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (N/A);
    b. Determination of Prevention of Significant Deterioration (N/A); and
    c. Compliance with New Source Performance Standards (N/A).

14. The permittee shall comply with the following:

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

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

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

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

Suwannee American Cement
SAC
Branford, Florida, USA

P.O. Box 410
Branford, Fl 32008

September 29, 2004

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

SUBJECT: **Suwannee American Cement Comments**
DEP File No. 1210465-012-AC
Production capacity and Fly Ash Injection Test
Suwannee American Cement – Branford Plant
Facility ID No. 1210465
PSD-FL-259D

Dear Mr. Linero:

Suwannee American Cement (SAC) submits the following comment in reference to the Departments Construction Permit (DEP File No. 1210465-012-AC) for Production Capacity and Fly Ash Injection Test:

> SAC assumes the intent of the construction permit allows for a construction and use of silos and feed equipment to inject fly ash into the calciner for purposes of the test. This equipment would only be used for purposes of the test and during the approved test period. SAC would seek permanent approval for use of equipment beyond the approved test period from the Department.

If you have any questions or require any additional information, please feel free to contact me at (386) 935-5039 or by e-mail at jbhorton@suwanneecement.com.

Sincerely,

Joe Horton
Suwannee American Cement

CC: Trina Vielhauer – DEP
Celso Martini – SAC
C. Kirts, WCD
C. Yaeger

The Suwannee Democrat

Published Weekly
Post Office Box 370- Phone 362-1734
Live Oak, Suwannee County, Florida 32064

SAC

OCT 0 8 2004

RECEIVED

RECEIVED

OCT 1 4 2004

BUREAU OF AIR REGULATION

STATE OF FLORIDA
COUNTY OF SUWANNEE:

Before the undersigned authority personally appeared

Katherine Sasser

who on oath says that she is
Legal Secretary

of The Suwannee Democrat, a weekly newspaper published at Live Oak in Suwannee County, Florida; that the attached copy of advertisement, being a

Air Construction Permit

in the matter of

was published in said newspaper in the issues of

October 1, 2004

Affiant further says that the said , The Suwannee Democrat is a newspaper published at Live Oak in said Suwannee County, Florida, and that the said newspaper has heretofore been continuously published in said Suwannee County, Florida, each week and has been entered as second class mail matter at the post office in Live Oak, in said Suwannee County, Florida, for a period of one year next 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.

Katherine Sasser

Sworn to and subscribed before me this 5th, day of October, 2004.

Christine M. White

(SEAL) Notary Public

Personally known ✓ or produced identification _____

Type of identification produced _____,

CHRISTINE M. WHITE
Notary Public, State of Florida
My comm. exp. Sept. 4, 2008
Comm. No. DD 350033

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No.: 1210465-012-AC

Suwannee American Cement Plant
Production Capacity and Fly Ash Injection Test

Suwannee County

The Florida Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit to Suwannee American Cement LLC to conduct a production capacity and fly ash injection test program at the cement plant located on U.S. Highway 27, in Suwannee County. The previously issued Best Available Control Technology (BACT) determination applies to the facility. The permittee's name and address are: Suwannee American Cement LLC (SAC), Post Office Box 410, Branford, Florida 32008.

The plant started up in February 2003, is presently operating at or near full capacity and has demonstrated compliance with the current BACT limitations. At the present time, the plant production capacity is limited to 105 tons per hour (TPH) of clinker which is accomplished by feeding a maximum of 178 TPH of raw materials to the preheater.

Raw materials include sources of calcium, silica, aluminum, and iron such as limestone, sand, bauxite, clay, fly ash, iron ore, and mill scale. Allowable fuels are natural gas for startup, coal, tires, and petroleum coke. Tires and petroleum coke have not yet been burned at the facility.

SAC proposes to evaluate the feasibility of increasing clinker production by injecting some fly ash directly into the calciner instead of introducing all of it with other raw materials at the preheater. This will make it possible to increase the amount of total raw materials entering the process, thus producing more clinker. The testing will occur during 120 operating days over a six-month period.

During the test period, SAC will try to achieve as much as 115.5 TPH of clinker production by increasing total feed to as much as 205 TPH. The fuel use limit will be increased during the testing from 364 to 420 million Btu per hour.

SAC will abide by all of the existing BACT limits in terms of pounds per hour (lb/hr). Because of then nature of the tests, there will be periods of high and low production in terms of TPH. During the periods of low production, the lb/hr emission rates will be substantially less than allowed and substantially less than emissions during high production. During the low production periods, BACT emissions expressed as pounds per ton of clinker (lb/ton) could temporarily exceed the limits because of the small denominator (tons) and the short averaging times. Such events will be minimized.

SAC has continuous emission monitoring systems (CEMS) for nitrogen oxides (NOx), sulfur dioxide (SO2), visible emissions (opacity), control equipment temperature, and total hydrocarbons (conservative measure for VOC) with real-time transmission to the Department. Key data area available at www.suwanneecement.com

SAC has submitted an application to permanently increase production. However the Department will not act on that application until it can be deemed complete following the test program authorized by this permitting action. SAC will be required to submit the production and emission results of the test program and a scaled engineering report describing any physical changes associated with a permanent increase and the technical rationale for uprating the kiln capacity. The Department will at that time make a determination regarding the applicability of New Source Review and will require another public notice prior to permanent authorization of a production increase.

The Department will issue the FINAL permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit action for a period of (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulations 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 in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the Permit with the attached conditions unless a timely petition for an 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, F.S. 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 #35, Tallahassee, 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 be filed with 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), F.S., however, any person who asked the Department for 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 determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. 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 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 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 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, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends to require reversal or modification on 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 in respect to the agency's 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, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. 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 party to the proceeding, in accordance with the requirements set forth 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 of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: (850) 921-9523
Fax: (850) 922-6979

Department of Environmental Protection
Northeast District Office
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
Telephone: (904) 807-3233
Fax: (904) 448-4363

The complete project file includes the Draft Air Construction Permit, Technical Evaluation and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Program Administrator for the South Permitting Section, Bureau of Air Regulation, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/921-8523 for additional information. The draft permit modification as well as original permit and BACT determination and any other permitting actions to-date can be viewed at www.dep.state.fl.us/air/permitting/construction/suwannee.htm
10/01

Suwannee American Cement
SAC
Branford, Florida, USA

P.O. Box 410
Branford, Fl 32008

September 29, 2004

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

SUBJECT: **Suwannee American Cement Comments**
DEP File No. 1210465-012-AC
Production capacity and Fly Ash Injection Test
Suwannee American Cement – Branford Plant
Facility ID No. 1210465
PSD-FL-259D

Dear Mr. Linero:

Suwannee American Cement (SAC) submits the following comment in reference to the Departments Construction Permit (DEP File No. 1210465-012-AC) for Production Capacity and Fly Ash Injection Test:

> SAC assumes the intent of the construction permit allows for a construction and use of silos and feed equipment to inject fly ash into the calciner for purposes of the test. This equipment would only be used for purposes of the test and during the approved test period. SAC would seek permanent approval for use of equipment beyond the approved test period from the Department.

If you have any questions or require any additional information, please feel free to contact me at (386) 935-5039 or by e-mail at jbhorton@suwanneecement.com.

SAC's comment.
Consent Order signatures
Proof of publication.

Sincerely,

Joe Horton
Suwannee American Cement

CC: Trina Vielhauer – DEP
Celso Martini – SAC
C. Kirts, NWD
C. Bagwell

Al

shall, at least 30 days prior to the sale or conveyance of the property or Facility, (1) notify the Department of such sale or conveyance, (2) provide to the Department the name and address of the purchaser, or operator, or person(s) in control of the Facility, and (3) provide a copy of this Consent Order with all attachments to the new owner. The sale or conveyance of the Facility shall relieve the Respondent of the obligations imposed in this Consent Order.

30. This Consent Order is a settlement of the Department's civil and administrative authority arising from Florida Statutes to resolve the allegations addressed herein. This Consent Order is not a settlement of any criminal liabilities, which may arise under Florida law, nor is it a settlement of any liabilities under federal law.

31. This Consent Order is a final order of the Department pursuant to Section 120.52(7), F.S., and it is final and effective on the date filed with the Clerk of the Department unless a Petition for Administrative Hearing is filed in accordance with Chapter 120, Florida Statutes. Upon the timely filing of a petition this Consent Order will not be effective until further order of the Department.

FOR THE RESPONDENT:

B. P. Ahl

10/11/2004
Date

Suwannee American Cement, LLC
Post Office Box 410
Branford, FL 32008

Done and ordered this 14th day of October, 2004 in Duval County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Marion J. Taylor
Director of District Management
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590

The Suwannee Democrat

Published Weekly
Post Office Box 370- Phone 362-1734
Live Oak, Suwannee County, Florida 32064

SAC

OCT 0 8 2004

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RECEIVED

OCT 1 4 2004

BUREAU OF AIR REGULATION

STATE OF FLORIDA
COUNTY OF SUWANNEE:

Before the undersigned authority personally appeared

Katherine Sasser

who on oath says that she is

Legal Secretary

of The Suwannee Democrat, a weekly newspaper published at Live Oak in Suwannee County, Florida; that the attached copy of advertisement, being a

Air Construction Permit

in the matter of

was published in said newspaper in the issues of

October 1, 2004

Affiant further says that the said , The Suwannee Democrat is a newspaper published at Live Oak in said Suwannee County, Florida, and that the said newspaper has heretofore been continuously published in said Suwannee County, Florida, each week and has been entered as second class mail matter at the post office in Live Oak, in said Suwannee County, Florida, for a period of one year next 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.

Katherine Sasser

Sworn to and subscribed before me this 5th, day of October, 2004.

Christine M. White

(SEAL) Notary Public

Personally known ✓ or produced identification _____

Type of identification produced _____,

CHRISTINE M. WHITE
Notary Public, State of Florida
My comm. exp. Sept. 4, 2008
Comm. No. DD 350033

Note:
Published Notice inserted by me and corresponds to the Notice provided by DEP.

The Suwannee Democrat

Published Weekly
Post Office Box 370- Phone 362-1734
Live Oak, Suwannee County, Florida 32064

STATE OF FLORIDA
COUNTY OF SUWANNEE:

RECEIVED
OCT 14 2004
BUREAU OF AIR REGULATION

Before the undersigned authority personally appeared

Katherine Sasser
who on oath says that she is
Legal Secretary
of The Suwannee Democrat, a weekly newspaper published at Live Oak in Suwannee County, Florida; that the attached copy of advertisement, being a

Modification
Air Construction Permit
in the matter of

was published in said newspaper in the issues of

October 1, 2004

Affiant further says that the said , The Suwannee Democrat is a newspaper published at Live Oak in said Suwannee County, Florida, and that the said newspaper has heretofore been continuously published in said Suwannee County, Florida, each week and has been entered as second class mail matter at the post office in Live Oak, in said Suwannee County, Florida, for a period of one year next 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.

Katherine Sasser

Sworn to and subscribed before me this 5th, day of October, 2004.

Christine M. White
(SEAL) Notary Public

Personally known ✓ or produced identification_____

Type of identification produced_____,

CHRISTINE M. WHITE
Notary Public, State of Florida
My comm. exp. Sept. 4, 2008
Comm. No. DD 350033

Note: Published Notice inspected by me and corresponds to the Notice provided by DEP.

Department of Environmental Protection

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

Jeb Bush
Governor

Colleen M. Castille
Secretary

September 24, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Celso A. Martini, Plant Manager
Suwannee American Cement, LLC
Post Office Box 410
Branford, Florida 32008

Re: DEP File No. 1210465-012-AC
Suwannee American Cement Plant – Branford, Suwannee County

Dear Mr. Martini:

Enclosed is one copy of the Draft Air Construction Permit to conduct production capacity and fly ash injection testing for 120 operating days at the Suwannee American Cement Plant. The Department's Intent to Issue Air Construction Permit and the "Public Notice of Intent to Issue Air Construction Permit" are also included.

The "Public Notice" must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of Publication, such as a newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit. The Department reserves the right to publish the Public Notice at anytime. If the Department publishes the Public Notice, the applicant is relieved of this responsibility.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A.A. Linero, Program Administrator, at the letterhead address. If you have any questions please call Mr. Linero at 850/921-9523.

Sincerely,

Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/aal

Enclosures

In the Matter of:

Suwannee American Cement, LLC
Post Office Box 410
Branford, Florida 32008

DEP File No. 1210465-012-AC
Production Capacity and Fly Ash Injection Test
Suwannee American Cement Plant
Suwannee County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of DRAFT Permit attached) for the proposed action, detailed in the application specified above, for the reasons stated below.

The applicant, Suwannee American Cement, LLC (SAC), applied on August 26, 2004 (date received) to the Department to evaluate the feasibility of a clinker production rate increase by conducting a production capacity and fly ash test during 120 operating days over a six-month period of time at the SAC Plant in Suwannee County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required.

The Department intends to issue this air construction permit based on the belief that the applicant has provided reasonable assurances to indicate that operation of these emission units as indicated herein will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C, you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published as soon as possible one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in Section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of Public Notice of Intent to Issue Air 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 in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an 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.

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 #35, Tallahassee, 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 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 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 determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. 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 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 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 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, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of 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.

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 hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. 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, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Mediation is not available in this proceeding. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction permit Modification (including the Public Notice, Technical Evaluation and Preliminary Determination, and the Draft Permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 9/24/04 to the person(s) listed:

Celso Martini, SAC*	Jim Stevenson	Patrice Boyes, Esq.*
Claude Grinfeder, SAC*	Tom Workman, DEP	Kathy Cantwell
Joe Horton, SAC	Mark Latch, DEP	Ralph Ashodian
Larry Sellers, Esq.*	December McSherry	Virginia Seacrist
Frank Darabi, P.E.	Svenn Lindskold	Bob and Lynn Milner
Steve Cullen, P.E.	Tom Greenhalgh*	Linda Pollini
John Koogler, P.E.	Dave Bruderly	Helen Beaty
Chris Kirts, DEP NED	Chris Bird, Alachua Co. DER	Bessie Robinson
Jim Little, EPA	Chair, Alachua Co. BCC*	Craig Pittman, St. Pete Times
John Bunyak, NPS	J. Calvin Gaddy	Chuck Yagel*

Clerk Stamp

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

(Clerk) 9/24/04 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No.: 1210465-012-AC

Suwannee American Cement Plant
Production Capacity and Fly Ash Injection Test

Suwannee County

The Florida Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit to Suwannee American Cement LLC to conduct a production capacity and fly ash injection test program at the cement plant located on U.S. Highway 27, in Suwannee County. The previously issued Best Available Control Technology (BACT) determination applies to the facility. The permittee's name and address are: Suwannee American Cement LLC (SAC), Post Office Box 410, Branford, Florida 32206.

The plant started up in February 2003, is presently operating at or near full capacity and has demonstrated compliance with the current BACT limitations. At the present time, the plant production capacity is limited to 105 tons per hour (TPH) of clinker which is accomplished by feeding a maximum of 178 TPH of raw materials to the preheater.

Raw materials include sources of calcium, silica, aluminum, and iron such as limestone, sand, bauxite, clay, fly ash, iron ore, and mill scale. Allowable fuels are natural gas for startup, coal, tires, and petroleum coke. Tires and petroleum coke have not yet been burned at the facility.

SAC proposes to evaluate the feasibility of increasing clinker production by injecting some fly ash directly into the calciner instead of introducing all of it with other raw materials at the preheater. This will make it possible to increase the amount of total raw materials entering the process, thus producing more clinker. The testing will occur during 120 operating days over a six-month period.

During the test period, SAC will try to achieve as much as 115.5 TPH of clinker production by increasing total feed to as much as 205 TPH. The fuel use limit will be increased during the testing from 364 to 420 million Btu per hour.

SAC will abide by all of the existing BACT limits in terms of pounds per hour (lb/hr). Because of the nature of the tests, there will be periods of high and low production in terms of TPH. During the periods of low production, the lb/hr emission rates will be substantially less than allowed and substantially less than emissions during high production. During the low production periods, BACT emissions expressed as pounds per ton of clinker (lb/ton) could temporarily exceed the limits because of the small denominator (tons) and the short averaging times. Such events will be minimized.

SAC has continuous emission monitoring systems (CEMS) for nitrogen oxides (NO_X), sulfur dioxide (SO_2), visible emissions (opacity), control equipment temperature, and total hydrocarbons (conservative measure for VOC) with real-time transmission to the Department. Key data are available at: www.suwanneecement.com

SAC has submitted an application to permanently increase production. However the Department will not act on that application until it can be deemed complete following the test program authorized by this permitting action. SAC will be required to submit the production and emission results of the test program and a sealed engineering report describing any physical changes associated with a permanent increase and the technical rationale for uprating the kiln capacity. The Department will at that time make a determination regarding the applicability of New Source Review and will require another public notice prior to permanent authorization of a production increase.

The Department will issue the FINAL permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit action for a period of fourteen (14) days from the date of publication of Public Notice of Intent to 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 in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an 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 # 35, Tallahassee, 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 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 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 determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. 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.

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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 hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. 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, in accordance with the requirements set forth 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 of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: (850) 921-9523
Fax: (850) 922-6979

Department of Environmental Protection
Northeast District Office
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
Telephone: (904) 807-3233
Fax: (904) 448-4363

The complete project file includes the application, Draft Permit, Technical Evaluation, previous permits, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/921-9523, for additional information. Key documents can be viewed at www.dep.state.fl.us/air/permitting/construction/suwannee.htm

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

SUWANNEE AMERICAN CEMENT, LLC
BRANFORD, SUWANNEE COUNTY

Portland Cement Manufacturing Facility
Production Capacity and Fly Ash Injection Testing

DEP File Nos. 1210465-012-AC

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

September 24, 2004

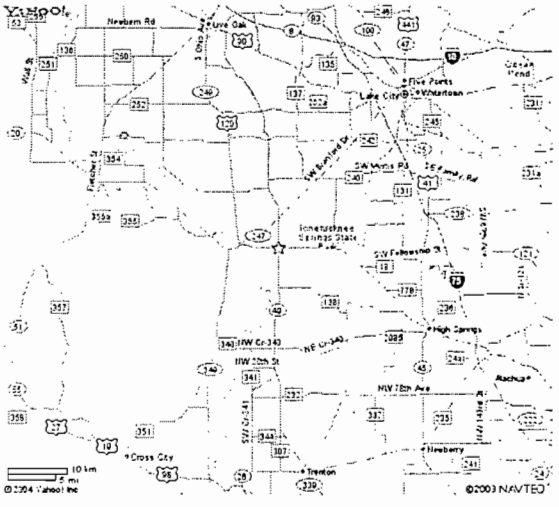
I. APPLICANT NAME AND ADDRESS

Suwannee American Cement LLC
Post Office Box 410
Branford, Florida 32008
Authorized Representative: Mr. Celso Martini, Plant Manager

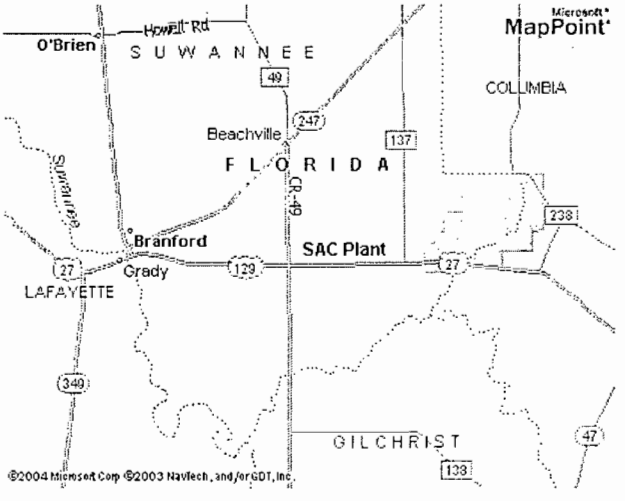
II. FACILITY INFORMATION

A. FACILITY LOCATION

Suwannee American Cement, LLC (SAC), owns and operates the cement plant located at U.S. Highway 27 and County Road 49 in Branford, Suwannee County. The UTM coordinates of the facility are Zone 17; 321.4 km East and 3315.9 km North.



Regional Map Showing Branford Area



Suwannee American Cement Plant Location

B. FACILITY CLASSIFICATION CODE (SIC)

Major Group No. 32, Clay, Glass, and Concrete Products
Industry Group No. 324 Cement, Hydraulic
Industry No. 3241 Cement, Hydraulic

C. FACILITY CATEGORY

SAC's Cement Plant emits more than 100 tons per year (TPY) of several regulated air pollutants and is, therefore, classified as a "Major Source of Air Pollution" or "Title V Source," per the definitions in Rule 62-212.200, Florida Administrative Code (F.A.C.).

This industry is listed in Table 212.400-1, "Major Facilities Categories", Section 62-212.400, F.A.C. Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide (SO_2), nitrogen oxides (NO_X), or particulate matter (PM/PM_{10}) characterize the existing installation as a Major Facility per the definitions in Rule 62-210.200, F.A.C. and subject it to applicability review for the requirements of Prevention of Significant Deterioration (PSD) per Rule 62-212.400, F.A.C. Accordingly, the original SAC project was subject to New Source Review (NSR) including the PSD provisions and requirement to conduct a determination of Best Available Control Technology (BACT).

Per Table 212.400-2, "Regulated Air Pollutants – Significant Emission Rates", any further modifications at the facility resulting in emissions increases greater than 40 TPY of NO_X or SO_2, 7 TPY of sulfuric acid mist (SAM), 25/15 TPY of PM/PM_{10}, 3 TPY of fluorides, 1200 pounds per year (lb/yr) of lead or 200 lb/yr of mercury require review per the PSD rules and a determination for Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

The facility is also subject to a number of industry-specific regulations and permit specific conditions. Among these is designation as a major source of hazardous air pollutants (HAPs) and applicability of the major source provisions of 40 CFR 63, Subpart LLL – National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

III. ORIGINAL PROJECT

The Florida Department of Environmental Protection ("Department") issued a permit to SAC in June 2000 to construct the existing facility. The plant employs the modern dry process technology including a preheater and calciner (PH/C kiln) along with indirect firing.

The major equipment at the plant includes the PH/C kiln, a clinker cooler, raw mill, finish mill, silos, conveyers, and particulate control/dust collection and recycling equipment. The cement product is stored in silos and is shipped by truck.

The following diagram is of a PH/C kiln that approximates the one installed at SAC.

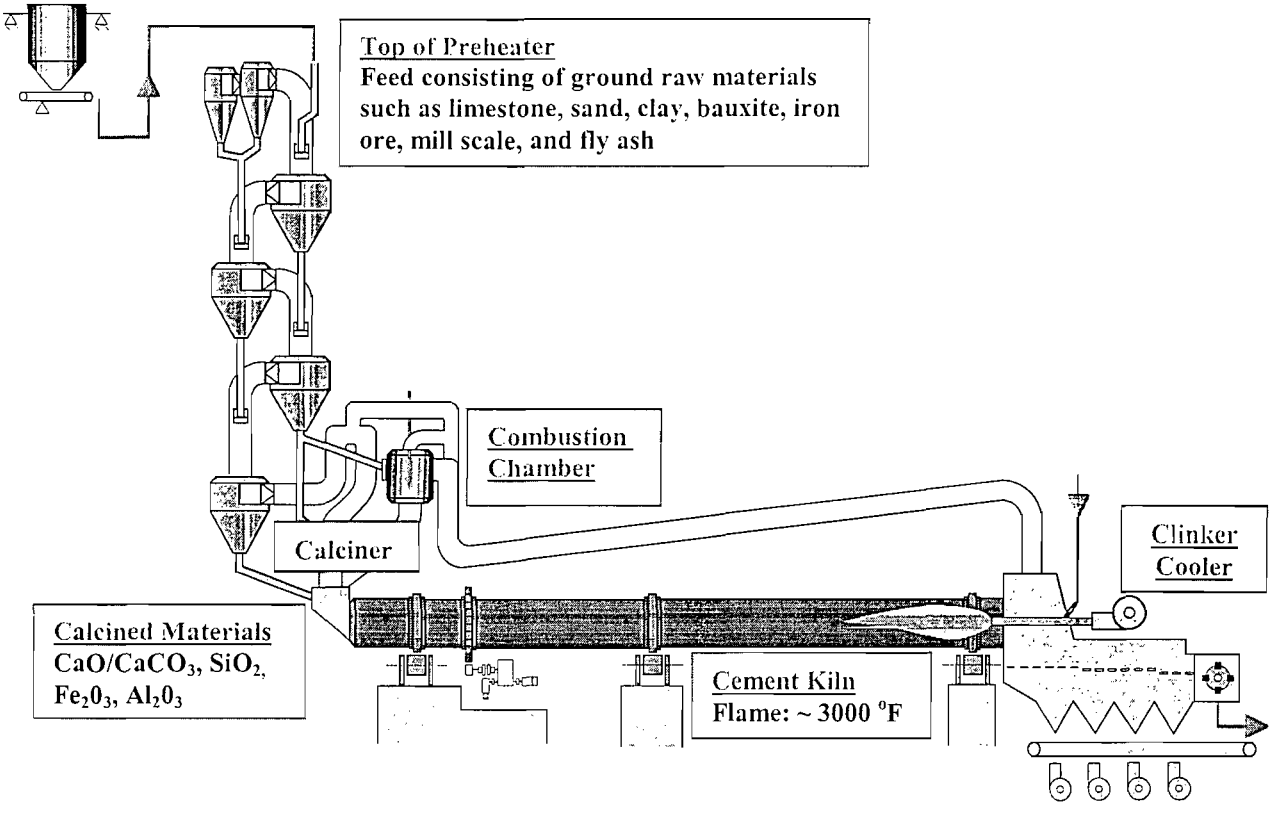


Diagram of Dry Process Cement Kiln with Preheater and Calciner Kiln

Raw meal is finely divided dried material that includes sources of calcium, silica, iron and aluminum. These sources can include limestone, sand, clay, bauxite, iron ore, mill scale, and fly ash. It is continuously weighed on feed scales and introduced at the top of the preheater tower as shown in the diagram. As it falls through the preheater it is contacted and progressively heated by exhaust gases from the calciner and kiln.

The calciner has a burner in a separate combustion chamber that provides the necessary heat to drive off carbon dioxide from the limestone converting it to free lime ($CaCO_3 = CaO + CO_2$). The calciner operates at a temperature of approximately 2000 degrees F and burns coal.

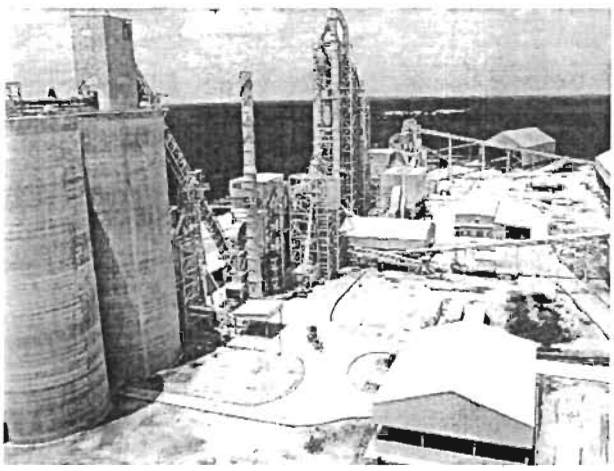
The calcined materials enter the kiln where they are further heated and transformed into nodules of clinker. These exit the kiln near the main kiln coal burner that operates at approximately 3000 °F. The clinker falls into the cooler where it is cooled by ambient air.

The heated air from the clinker cooler is used as secondary air to support combustion at the kiln burner and is also conveyed along a tertiary air duct to support combustion in and near the calciner combustion chamber.

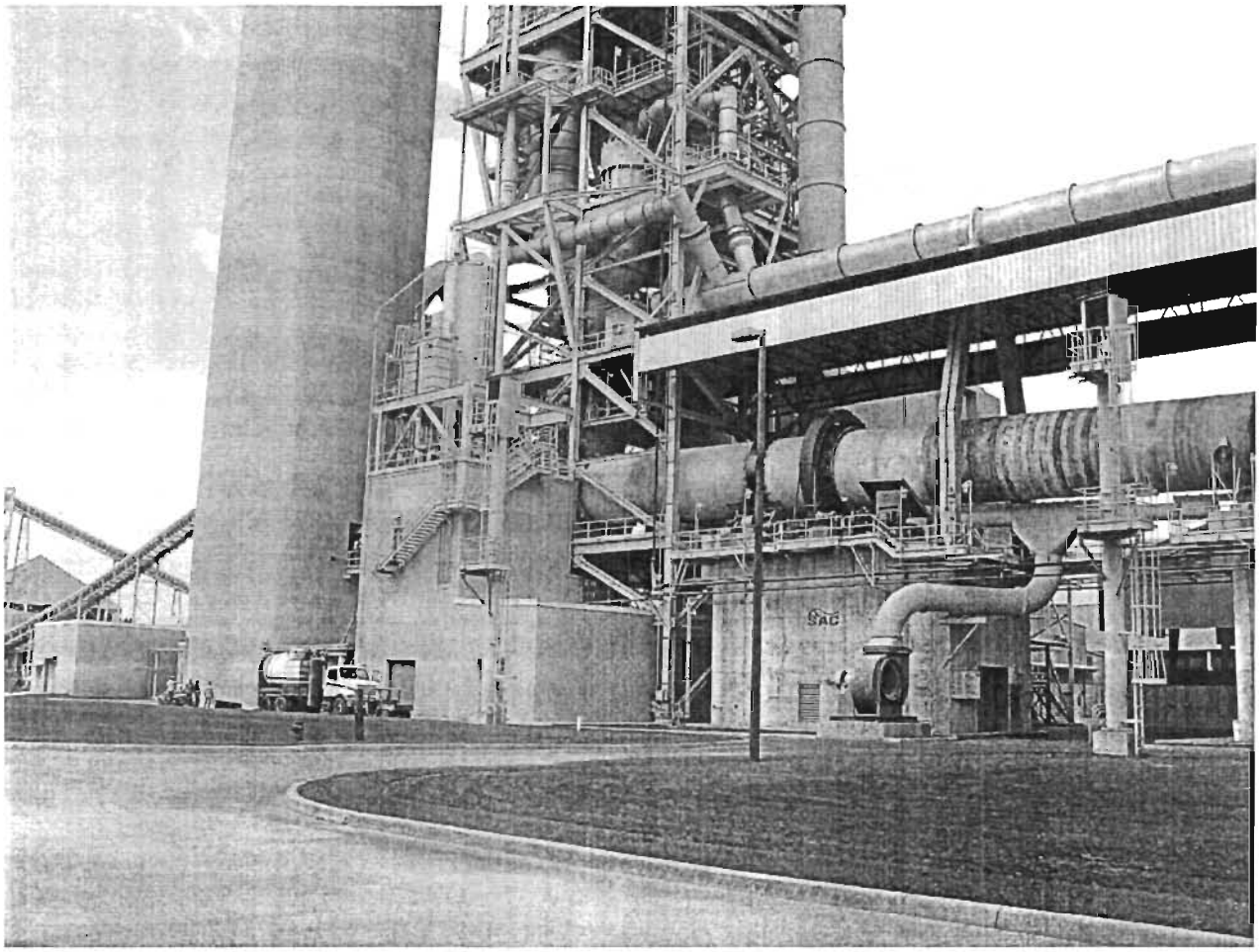
Cooled exhaust gases leaving the preheater go through the raw mill (not shown) where the remaining heat is used to dry incoming coarse raw materials. As the raw materials are ground they are lifted by the exhaust gas flow and conveyed to the main baghouse (not shown) that also serves the purpose of a particulate control device. The finely divided dry material in the baghouse is conveyed to storage silos and then weighed and introduced into the process at the top of the preheater as discussed above.

The facility has been constructed and began operation in February 2003. Several photographs of the plant are shown below. SAC has conducted compliance tests and applied for a Title V Operation Permit. At this time, it is operating at or near its full capacity.

Cement Plant Under Construction (Photo DEP)



Completed Cement Plant (Photo SAC Website)



Kiln Inlet, Main Stack, Lower Preheater, Calciner, and Tertiary Air Ducts (Photo A. Linero)

IV. ADDITIONAL PROJECTS

SAC has requested an air construction permit to:

- Add capability to introduce fly ash directly to the calciner in addition to the top of the preheater; and
- Increase clinker production.

The Department advised SAC that it will be necessary to conduct tests to demonstrate the efficacy of fly ash introduction to the calciner and higher production while meeting the Department's emission limitations. SAC applied on August 26 to conduct production testing during 120 operating days over a six month period.

FLY ASH INJECTION

Fly ash is the finely divided residue from the combustion of ground or powdered coal and is usually obtained from electric power plants. Typical fly ash contains silica, aluminum, and iron compounds and even some calcium. High quality fly ash (for example low in ammonia and carbon) can be substituted for cement in certain types of concrete. Fly ash can also be used as a raw material in lieu of other potential sources such as clay, sand, bauxite, iron ore, etc.

Fly ash is currently mixed with the other raw materials prior to being dried and ground to form the feed. The fly ash constitutes approximately 8-10 percent of the material mix and helps to provide the chemical composition of kiln feed required to produce clinker.

SAC presently introduces fly ash with the rest of the feed at the top of the preheater tower where the temperature is in the range of 750-800°F. From that point, the feed travels downward through the preheater tower, increasing in temperature until it reaches the calciner where the temperature is approximately 1500 °F. During the progression of the feed down through the preheater, carbonaceous material in the fly ash can volatilize and cause the release of organic compounds (THC/VOC) and carbon monoxide (CO) to the atmosphere.

SAC proposes to inject fly ash directly into the calciner where the carbonaceous material can be completely combusted along with the fuel fired to the calciner. SAC believes that more complete combustion of the carbonaceous material will occur. Therefore less THC, VOC, and CO will be produced, and the emission of these gases to the atmosphere will be minimized.

By injecting fly ash directly into the calciner instead of introducing it into the raw mill and ultimately at the top of the preheater, it is possible to increase the amount of limestone and other raw materials entering the process. This makes it possible to increase clinker production given that other equipment (such as burners, fans, the kiln, cooler, etc.,) is inherently overdesigned or can be upgraded.

PRODUCTION CAPACITY TESTING

Diversion of fly ash to the calciner creates the possibility of increased clinker production given sufficient capacity of burners, fans, the cooler, etc. The existing permit limits the introduction of feed at the preheater to 178 tons per hour (TPH), clinker production to 105 TPH, and 364 million Btu heat input per hour (mmBtu/hr). Ultimately SAC requests to increase the feed rate to 205 TPH (including fly ash feed to the calciner), increase clinker production to 115.5 TPH of clinker and fuel use to 420 mmBtu/hr.

The tests will determine the extent to which existing vessels, pumps, fans, burners, etc. are overdesigned or can be uprated as well as any additional projects needed to accomplish the requested permanent increase. Injection of fly ash into the calciner will make it possible to increase total feed without challenging the materials handling capability of the preheater feed system and the preheater cyclones. The details of the testing and requirements are given in the accompanying draft permit. The highlights are given below.

The testing will be conducted during 120 operating days over a period of six months. Except for one exception during low load discussed below, the kiln shall continue to comply with all existing emission standards in terms of pounds per hour (lb/hr) and pounds per ton of clinker (lb/ton). The values recorded by the continuous emission monitoring systems (CEMS) will continue to be transmitted in real time to the Department's district office in Jacksonville. These values include sulfur dioxide (SO_2), nitrogen oxides (NO_X), total hydrocarbons (THC) and visible emission (opacity).

Mercury emissions will continue to be estimated by analyzing raw materials and fuel. Historically, clinker cooler and kiln particulate emissions have been much lower than allowed by the permit. The Department believes that particulate emissions will continue to be very low.

Past tests indicate that dioxin and furan emissions are also much less than allowed by the present permit and the National Emission Standards for Hazardous Air Pollutants at 40 CFR Part 63, Subpart LLL for portland cement plants. The permittee shall conduct dioxin/furan tests if there is a significant change in the feed that was used in the previous performance test. A Loss on Ignition (LOI) value for the fly ash of 30 percent or more shall be considered a significant change in the feed. However injection of the higher LOI fly ash directly into the calciner would counteract the tendency to form dioxin and furan formation potential.

Testing requirements are detailed in the draft permit distributed with this evaluation.

SAC has requested relief during testing from NO_X emission limits expressed in terms of lb/ton of clinker (but not lb/hr). They believe some measure of relief is needed during the learning associated with optimizing injection points and flows within the complex atmosphere of the calciner.

Typically, process rate is maximized not only for the sake of production, but also because the cyclones in the preheater require certain minimum rates to effectively separate raw materials from one cyclone to the next. Hours characterized by low production usually mean that the process is down for part of the time rather than actual low load operation. During portions of those hours the denominator in the lb/ton term is low and a high lb/ton value can occur.

The Department will allow exclusion of two hours per day during which fly ash injection to the calciner is practiced and low production occurs.

SAC shall submit test results and a technical report summarizing the following: a description of the production capacity tests; pollutant emissions when operating at higher rates; ambient conditions during each test; feed rates; and heat input rates. The final report shall also detail any operational problems as well as mechanical, electrical, structural, and process limitations identified during the course of the test.

For purposes of the capacity evaluation program only, the clinker production rate shall be determined by the following equation:

Clinker Production = [(Feed) (Kiln Feed LOI Factor) + (Fly Ash Injection) (Fly Ash LOI Factor)]

Where:

- Kiln feed is determined by the Poldos control system.
- Fly ash is determined from the rotary feed system or equivalent.
- LOI for the kiln feed and fly ash is based on a monthly average determined from daily measurements.

The technical report shall include an engineering assessment describing the full capability of the process to sustain the requested production rates while meeting the permitted emission rates. The report shall be sealed by professional engineers or other experts as appropriate in structural, mechanical, electrical, process, and environmental disciplines. It shall include a description of any additional projects required to attain or maintain the requested production rates. A single report from the kiln manufacturer or acknowledged pyroprocessing expert would suffice to fulfill this requirement.

VI. CONCLUSION

The Department will authorize 120 operating days of production and fly ash injection testing over a six month period ending April 30, 2005.

Some mass emission increases will occur as a result of the testing because of increased fuel and material use and clinker production. These will be within the emission limits authorized by the original air construction permit and the Department has determined that a PSD/BACT review is not required for the testing program.

The original permitted BACT limits still apply during the test period except for the exclusion mentioned above. Ultimately the Department may revise the NO_X and SO_2 limits downward for normal operation (i.e. non-test conditions) per Subsection B, Specific Condition 12 of the original permit.

DRAFT PERMIT

PERMITTEE

Suwannee American Cement, LLC
Post Office Box 410
Branford, Florida 32008

Authorized Representative:
Celso Martini, Plant Manager

Permit No. 1210465-012-AC
Cement Plant (SIC No. 3241)
Capacity Evaluation Program
Expires: April 30, 2005

PROJECT AND LOCATION

This permit authorizes Suwannee American Cement, LLC to conduct a production capacity evaluation program at the existing Branford Cement Plant located at US Highway 27 and County Road 49 in Suwannee County, Florida. The UTM coordinates are: Zone 17; 321.4 km E and 3315.9 km N.

STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct tests for the production rate and fly ash injection capacities in accordance with the conditions of this permit and as described in the application. Apart from the temporary increase in feed rate, clinker production, fuel use rate, and injection of fly ash into the calciner, the permittee shall operate the facility in accordance with the previously approved permits, drawings, plans, and other documents on file with the Florida Department of Environmental Protection ("DEP" or "the Department"). This temporary permit supplements the original air construction permit and its subsequent modifications. It does not modify any other requirements from such previously issued air permits except a provision for certain emissions data exclusion (lb NOx/ton of clinker) for periods of off-capacity clinker production during the capacity evaluation program.

CONTENTS

DRAFT

Michael G. Cooke, Director (Date)
Division of Air Resource Management

FACILITY AND PROJECT DESCRIPTION

The existing Suwannee American Cement (SAC) facility consists of a portland cement plant, the associated quarry, and raw material and cement handling operations. The plant processes raw materials in a preheater/precalciner kiln with in-line raw mill to produce clinker. The clinker is milled and combined with gypsum to produce portland cement.

Authorized fuels for the pyroprocessing system include natural gas, coal, petroleum coke, whole tires and tire derived fuel (TDF). An authorized tire gasification system has not yet been constructed. The plant has a coal processing operation that will crush coal and petroleum coke. Petroleum coke has not yet been used.

The plant was constructed in accordance with Air Permit No. PSD-FL-259, as modified. That permit established short term production limits (24-hour average) of 178 tons per hour (TPH) of material fed to the preheater (dry basis), 105 TPH of clinker, 364 MMBtu per hour of heat input (MMBtu/hr) and 150 TPH of portland cement production. It also specifies annual production limits (based on a rolling 12-month basis) of 1,427,880 tons per year (TPY) of material fed to the preheater (dry basis), 839,500 TPY of clinker production, and 1,191,360 TPY of portland cement production. The plant is currently operating under the air construction permit while awaiting action on the application for a Title V air operation permit.

This current permit project (No. 1210465-012-AC) authorizes SAC to conduct a "capacity evaluation program" to assess the plant's production rate capacity as constructed as well as with a new fly ash injection method. The temporary program is limited to 120 operating days and is scheduled for completion by April 30, 2005. Operational and emissions information gathered during the capacity evaluation program will be used to evaluate the feasibility of a pending request for a permanent increase in the clinker production rate.

This permit authorizes SAC to evaluate the pyroprocessing system at preheater feed rates greater than 178 tons per hour and to determine the efficacy of directly injecting fly ash into the calciner in addition to the preheater. During the capacity evaluation program, the sum of dry material feed to the preheater and fly ash injected into the calciner shall be no greater than 205 TPH, the clinker production rate shall be no greater than 115.5 TPH, and the fuel use limit shall be no greater than 420 MMBtu/hr, all on a 24-hour basis.

Existing permitted emission limits remain unchanged and in effect during the capacity evaluation program except for a provision for the production-based NOx emissions data exclusion (lb NO_X/ton of clinker) for periods of off-capacity clinker production as specified in this permit.

EMISSION UNITS

This permit addresses the following emission units.

EU No.	Emission Unit Description
004	In line kiln/raw mill controlled by baghouse – main stack
005	Clinker cooler controlled by ESP
xxx	Temporary fly ash injection into the calciner

REGULATORY CLASSIFICATION

Title III: The Suwannee American Cement Facility is classified as a "Major Source" per 40 CFR 63.2, Definitions (adopted and incorporated by reference by the Department at Paragraph 62-204.800(11)(d)) because it consists of a group of stationary sources located within a contiguous area and under common control that emit or have the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. The facility is subject to the Major (Greenfield) Source requirements of National Emission

Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, Code of Federal Regulations (CFR) Title 40, Part 63, Subpart LLL.

Title V: Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Prevention of Significant Deterioration (PSD): This facility is located in an area (Suwannee County) designated as "attainment" for all criteria pollutants. The facility is considered a "Portland Cement Plant," which is one of the 28 PSD source categories with the lower PSD applicability threshold of 100 tons per year (see Table 212.400-1, Rule 62-212.400, F.A.C.). Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a Major Facility with respect to Rule 62-212.400, F.A.C.

New Source Performance Standards (NSPS): The facility is subject to: 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants; 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants; and 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.

State Rule: Some emissions units are subject to Rule 62-296.701, F.A.C., Portland Cement Plants.

RELEVANT DOCUMENTS

The documents listed below are the basis of this permit. The permit application and additional information referenced are not a part of this permit, but the information is specifically related to this permitting action and the following documents are on file with the Department.

- Air Permit No. PSD-FL-259 issued on June 1, 2000, which was the original air construction permit for the new facility.
- Air Permit No. PSD-FL-259A issued on November 8, 2002, which modified the permit as follows: added requirement for notification of the anticipated date that equipment would be commissioned; and removed the startup notification specified by 40 CFR 60.7(a)(2) because it was repealed by EPA in 1999.
- Air Permit No. PSD-FL-259B issued on January 18, 2003, which modified the permit as follows: extended expiration date to June 30, 2004; added requirements for plant managers; added construction schedule; added requirements for permit transfer; revised data retrieval requirements; and revised CEMS requirements for kiln.
- Air Permit No. PSD-FL-259C was issued on May 15, 2003, which modified the following items: clarified emissions point descriptions for several baghouses; and clarified CEMS requirements for kiln.
- Draft Permit No. 121065-008 (PSD-FL-259D) distributed September 24, 2004, which proposes to modify the permit as follows: extend expiration date to March 31, 2005; install a permanent hydrated lime injection system; base the compliance averaging time for VOC on a 30 operating-day basis instead of a 30 calendar-day basis; and clarify the correct sampling point for determining mercury in raw materials.
- Application No. 121065-012-AC received on August 26, 2004 requesting a 120 operating-day testing program to evaluate production rate and fly ash injection capacity.
- Draft Permit No. 121065-012-AC for this permitting action distributed September 24, 2004.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All applications for permits to construct or modify an emission unit subject to the Prevention of Significant Deterioration or Nonattainment review requirements should be submitted to the Bureau of Air Regulation, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 (phone number: 850/488-0114). All documents related to applications for permits to operate and minor modifications shall be submitted to the Air Resource Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 (phone number: 904/807-3300).
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 (phone number: 904/807-3300).
3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Formats), Appendix GC (General Conditions), and Appendix GT (General Testing Requirements).
4. Applicable Regulations, Forms, and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the applicable permits and applications. The facility is subject to all applicable provisions of Chapter 403, F.S., Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; 40 CFR 60 (Subparts A, F, Y, and OOO); and 40 CFR 63 (Subparts A and LLL). The terms used in this permit have specific meanings as defined in the applicable chapters of the F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300, and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Additional Permits: The scope of this temporary project is to develop information in support of a separate air construction permit for a permanent production increase. Any final action authorizing a permanent production increase requires a revision to the Title V air operation permit. [Rule 62-213.400, F.A.C.]

This section of the permit addresses the following existing emissions units.

EU No.	Emission Unit Description
004	In line kiln/raw mill controlled by baghouse – main stack
005	Clinker cooler controlled by ESP
xxx	Temporary fly ash injection into the calciner

CAPACITY EVALUATION PROGRAM

1. Relation to Other Permits: The conditions of this permit are in addition to those of any other air construction or operation permits. [Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

2. Temporary Operating Rates: Subject to the conditions of this permit, the permittee is temporarily authorized to conduct a capacity evaluation program to: evaluate the technical feasibility of increasing production in the existing in line kiln/raw mill/clinker cooler system as constructed; evaluate the technical feasibility of increasing production in the in line kiln/raw mill/clinker cooler system by directly injecting fly ash (a raw material) into the calciner; and to determine the emissions at the higher operating rates. Within the electrical, structural, process, and mechanical capabilities of the kiln, the permittee is authorized to temporarily operate at the following maximum process and production rates at any time during the capacity evaluation program.

Emissions Unit Rates	Temporary Maximum Operating Rate Range
004 - Kiln Process	178 to 205 tons per hour (including dry preheater feed plus direct fly ash feed to the calciner)
	364 to 420 million BTU heat input per hour
005 - Clinker Production	105 to 115.5 tons per hour
XXX - Fly Ash Injection	Up to 27 tons per hour direct feed to the calciner (included in 205 TPH kiln process rate)

For purposes of the capacity evaluation program only, the clinker production rate identified in the above table shall be determined by the following equation:

Clinker Production = [(Feed) (Kiln Feed LOI Factor) + (Fly Ash Injection) (Fly Ash LOI Factor)]

Where:

- Kiln feed is determined by the Poldos control system.
- Fly ash is determined from the rotary feed system or equivalent.
- LOI for the kiln feed and fly ash is based on a monthly average determined from daily measurements.

At all times, the emission units shall remain subject to the conditions of all existing permits related to air pollution and control equipment during the temporary capacity evaluation program. All required CEMS and COMS shall be properly functioning when operating within the temporary maximum rate range. [Rule 62-4.070(3), F.A.C.]

3. Schedule: At least 14 days before beginning the capacity evaluation program, the permittee shall submit to the Permitting and Compliance Authorities a preliminary schedule detailing the program phases, operating scenarios, operational data collection, emissions data collection, and emissions testing protocol. The permittee shall update the schedule as necessary. [Rule 62-4.070(3), F.A.C.]

4. Duration: The temporary capacity evaluation program is limited to no more than 120 operating days and shall end no later than April 30, 2005. Upon completion of the capacity evaluation program or the expiration of this permit (whichever occurs first), the permittee shall cease to operate at production and process rates in excess of the original Air Construction Permit No. 1210465-001-AC (PSD-FL-259). For this permit, "operational day" means any day that includes operation within the temporary maximum rate range specified above. [Applicable Permit, Applicant Request]

5. Operating Scenarios: The permittee shall evaluate the following operating scenarios.

   a. *Case 1*: Operate the in-line kiln system within the temporary maximum rate range without direct fly ash injection to the calciner to evaluate the existing capacity as constructed. At least 8 hours of data shall be gathered to identify the existing capacity as constructed.

   b. *Case 2*: Operate the in-line kiln system at a clinker production of approximately 105 tons per hour while injecting fly ash directly into the calciner at intervals of 3 tons per hour until the maximum fly ash injection capacity for the temporary fly ash injection system is determined. At least 3 hours of data shall be gathered at each fly ash injection rate.

   c. *Case 3*: Operate the in-line kiln system within the temporary maximum rate range while injecting fly ash directly into the calciner at intervals of 3 tons per hour until the maximum fly ash injection capacity for the temporary fly ash injection system is determined. At least 3 hours of data shall be gathered at each fly ash injection rate.

   The permittee may evaluate other operating scenarios within the temporary maximum rate range as necessary. All operation shall be within the electrical, structural, process, and mechanical capabilities of the kiln. If the above specified operating rates or fly ash injection rates are not possible, the permittee shall document this with the suspected reason. Whenever operating within the temporary maximum rate range or directly injecting fly ash into the calciner, the permittee shall continuously monitor and record the following information: dry feed material to the preheater (TPH); fly ash feed directly to the calciner (TPH); clinker production (TPH) by indirect calculation method as defined in Condition 2; clinker production (TPH) by direct measurement using the installed weigh scale; heat input rates (MMBtu/hour) to the kiln from each fuel in use; all required CEMS data; and all required COMS data. [Rule 62-4.070(3), F.A.C.]

EMISSIONS

6. Emissions Standards: Except as described in Condition 7, this permit does not change any emission standards or establish any new emissions standards for the in line kiln system. During the temporary capacity evaluation program, the in line kiln system shall comply with the requirements of all existing, valid Department permits. [Rules 62-4.030, 62-4.070(3), and 62-210.300(1)(b), F.A.C.]

7. NOx Data Exclusion: The following provisions apply only during the capacity evaluation program and only for 24-hour periods during which fly ash is directly injected into the calciner.

   a. "Off-capacity clinker production" is defined as clinker production below 85 tons per hour.

   b. If the 24-hour period includes off-capacity clinker production, up to two 1-hour production-based NO_X emission averages (lb/ton clinker) collected during such periods may be excluded from the 24-hour compliance average.

   c. No such data exclusion is permitted for clinker production below 85 tons per hour unless fly ash is being injected directly into the calciner. Operators shall minimize such incidents of off-capacity clinker production to the extent possible. The owner or operator shall monitor and record the number of 1-hour NO_X emission rates excluded from the determination of compliance with the production-based NO_X emission limit. [Applicant Request].

8. Unconfined Particulate Emissions: During the capacity evaluation program, unconfined particulate matter emissions shall be minimized by taking the reasonable precautions specified in the current air construction permit, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

EMISSIONS TESTING AND MONITORING REQUIREMENTS

9. Test Notification: The permittee shall provide at least a 15-day advance notice of any scheduled stack tests to afford the Compliance Authority the opportunity to witness the tests. If unavoidable circumstances occur that would delay the stack tests, the permittee shall keep the Compliance Authority informed of the delays and the new schedule. At its discretion, the Compliance Authority may allow a shorter advance notice. [Rule 62-297.310(7)(a)9, F.A.C.]

10. Stack Tests – In Line Kiln (EU-004): Within the electrical, structural, process, and mechanical capabilities of the in-line kiln system, the permittee shall conduct the stack tests in accordance with the following provisions.

    a. At the operating rates specified below, the permittee shall conduct stack tests (one for each pollutant) to determine compliance with the existing emissions standards for carbon monoxide and particulate matter.

    b. The permittee shall conduct dioxin/furan tests if there is a significant change in the feed that was used in the previous performance test. A Loss on Ignition (LOI) value of 30 percent or more shall be considered a significant change in the feed.

    c. For mercury, the permittee shall calculate and report mercury emissions in accordance with the procedure specified in the current air construction permit.

    d. Stack testing shall be performed at the in-line kiln main stack while the preheater, kiln, precalciner, cooler, and raw mill are operating simultaneously (compound operation). For each required stack test, the permittee shall operate the in-line kiln system to produce at least 110 tons per hour of clinker while injecting fly ash directly into the calciner within at least 90% of the highest sustained fly ash injection rate as determined by the results of operating scenario Case 3 in Condition 5.

    e. The permittee shall conduct each required stack test using the methods approved in the current air construction permit. Each required stack test shall consist of at least three test runs.

    f. For each required stack test, the permittee shall report the following continuous monitoring data: nitrogen oxides, sulfur dioxide, volatile organic compounds (total hydrocarbons), and opacity. In addition, the permittee shall report the continuous opacity monitoring data from the clinker cooler (EU-005) for each required test.

    g. For each required stack test, the permittee shall report the following information: dry feed material to the preheater (TPH); fly ash feed directly to the calciner (TPH); clinker production (TPH) by indirect calculation method as defined in Condition 2; clinker production (TPH) by direct measurement using the installed weigh scale; and heat input rates (MMBtu/hour) to the kiln from each fuel in use.

    h. During each day that stack tests are conducted on the in-line kiln system (EU-004), a representative sample of each fuel used shall be taken and analyzed for the following fuel properties: heating value (Btu/lb), moisture (% by weight), nitrogen (% by weight), sulfur (% by weight), chlorides (% by weight), ash (% by weight), and mercury (ppm by weight).

    i. During each day that stack tests are conducted on the in-line kiln system (EU-004), a representative sample of the fly ash injected into the calciner shall be taken and analyzed for the same constituents as preheater feed. In addition, the fly ash shall be tested for ammonia, chloride, carbon, loss on ignition (LOI), and mercury.

[Rules 62-4.070(3) and 62-297.310, F.A.C.]

11. Test Procedures: General stack test procedures are summarized in Appendix GT of this permit. [Rule 62-297.310, F.A.C.]

12. Monitoring: During the capacity evaluation program, the permittee shall continuously monitor and record all information specified by the existing air construction permit including operational parameters, CEMS data, and COMS data. [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

13. Stack Test Reports: The permittee shall prepare and submit reports for all required stack tests in accordance with the requirements in Rule 62-297.310(8), F.A.C. The permittee shall submit a written report that summarizes the results within 45 days of completing each required stack test. All stack test data collected during the temporary testing program shall be submitted for review. For each test run, the report shall also indicate the following information: dry material feed to the preheater (TPH); fly ash injection directly to the calciner (TPH); clinker production (TPH); heat input rates (MMBtu/hour) from each fuel in use; CEMS and COMS data; and ambient conditions.

14. Fuel and Fly Ash Analyses: Within 45 days of taking a fuel or fly ash sample required by this permit, the permittee shall submit a report detailing the results of the analyses. [Rule 62-4.070(3), F.A.C.]

15. CEMS Data: The permittee shall provide the Department with data disks containing all CEMS data and production data for the duration of the capacity test. The permittee shall provide a description to decipher and review the data. The data should indicate when the raw mill is on (compound operation) and when it is off. [Rule 62-4.070(3), F.A.C]

16. Final Report on the Capacity Evaluation Program: Within 90 days of completing the capacity evaluation program and no later than July 30, 2005, the permittee shall submit a technical report detailing the capacity evaluation program and its findings. The report shall be comprehensive and include, but not be limited to, the following:

    - For each day the plant operated within the temporary maximum rate range or directly injected fly ash into the calciner, an hour-by-hour summary of the following information: dry material feed to the preheater (TPH); fly ash injection directly to the calciner (TPH); clinker production (TPH); portland cement production (TPH); heat input rates (MMBtu/hour) from each fuel in use; CEMS data; and COMS data.
    - For each emissions stack test conducted, a summary of the information required in Condition 13.
    - An assessment of the precision and accuracy of the methods used to determine feed material rates and indirectly calculate clinker production.
    - An assessment of the precision and accuracy of direct measurement of clinker production using the installed scales.
    - A discussion of any operational problems encountered at the higher authorized rates.
    - Details of any mechanical, electrical, structural, and process limitations that were identified during the course of the capacity evaluation program.

    [Rule 62-4.070(3), F.A.C.]

17. Engineering Report on Kiln: Any future or pending applications for a permanent production increase shall include an engineering report describing the full capability of the kiln to sustain the requested production rates while meeting proposed emission rates. The report shall be sealed by professional engineers or other experts as appropriate in structural, mechanical, electrical, process, and

environmental disciplines. A single report from the kiln manufacturer would suffice to fulfill this requirement. [Rule 62-4.070(3), F.A.C.]

19. Emissions Limited and Subject to Revision for SO_2 and NOx: Based on results of compliance tests and continuous monitoring data, the Department may revise the emission limits for sulfur dioxide and nitrogen oxides downward to make these limits more stringent provided that overall control attained for all air pollutants including SO_2, NOx, VOC and CO is optimized. Such revision shall be based on data that represents a full range of operating conditions and a representative period of time. Such revision, if required by the Department, shall be in the form of a federally enforceable permit and shall be publicly noticed by the permittee.
[Rules 62-4.070(3) and 62-212.400(7)(a), F.A.C., Permit 1210465-001 (PSD-FL-259)]

APPENDIX GC
General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

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

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

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

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

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

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

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

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

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

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

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (N/A);
    b. Determination of Prevention of Significant Deterioration (N/A); and
    c. Compliance with New Source Performance Standards (N/A).

14. The permittee shall comply with the following:

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

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

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

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

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 624-03-11
August 25, 2004

Via Hand Delivery

Mr. Al Linero
FDEP
2600 Blair Stone Road
MS 5500
Tallahassee, FL 32399-2400

RE: Suwannee American Cement
Branford Plant
Facility ID No. 1210465
Short-Term Test to Evaluate Kiln Production Capacity

Dear Al:

In accordance with discussions that you've had with Suwannee American Cement (SAC) personnel and related to the Air Construction Permit application received from SAC under cover letter dated July 28, 2004, SAC is requesting authorization to conduct a plant operation test to evaluate the injection of fly ash directly into the calciner and to increase the overall feed rate of raw materials to the pyroprocessing system. An Air Permit Application for this test program is attached hereto. Attachment 1 to the permit application describes the proposed test conditions and the time frame anticipated for completing the evaluation.

We would appreciate your expeditious review of this application so that SAC can proceed with the proposed test program as soon as possible. If there are questions regarding this application or if additional information is required, please contact me immediately at 352-377-5822 or jkoogler@kooglerassociates.com.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK/lt

cc: Mr. Celso Martini
Mr. Joe Horton

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 624-03-11
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Via Hand Delivery

Mr. Al Linero
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Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK/lt

cc: Mr. Celso Martini
Mr. Joe Horton

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

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:
- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:
- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions

Identification of Facility

1. Facility Owner/Company Name: Suwannee American Cement	
2. Site Name: Branford Cement Plant	
3. Facility Identification Number: 1210465	
4. Facility Location... Street Address or Other Locator: 5117 U.S. Hwy 27 City: Branford County: Suwannee Zip Code: 32008	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☐ Yes ☒ No

Application Contact

1. Application Contact Name: John B. Koogler, Ph.D., P.E.
2. Application Contact Mailing Address... Organization/Firm: Koogler and Associates, Inc. Street Address: 4014 NW 13th Street City: Gainesville State: FL Zip Code: 32609
3. Application Contact Telephone Numbers... Telephone: (352) 377 - 5822 ext. Fax: (352) 377 - 7158
4. Application Contact Email Address: jkoogler@kooglerassociates.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	9-8-04
2. Project Number(s):	1210465-012-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

[X] Air construction permit.

Air Operation Permit

[ ] Initial Title V air operation permit.
[ ] Title V air operation permit revision.
[ ] Title V air operation permit renewal.
[ ] Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
[ ] Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

[ ] Air construction permit and Title V permit revision, incorporating the proposed project.
[ ] Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

[ ] I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

1. The purpose of this Air Construction Permit is for the authorization of tests to evaluate the injection of fly ash directly into the calciner of the plant and to evaluate plant operating characteristics at a raw materials feed rate (to preheater and calciner) of 205 tph. Presently permitted feed rate is 178 tph. During the test preiod, the heat input rate may increase to 458 mmBTU/hr (from 364 mmBTU/hr) using presently permitted fuels. The plant will continue to comply with all mass emission limiting standards (See Attachment 1).

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
004	In-line Kiln/Raw Mill controlled by Baghouse	NA	NA
005	Clinker Cooler controlled by ESP	NA	NA
008/009	Coal Mill and Coal Handling	NA	NA

Application Processing Fee

Check one: ☐ Attached - Amount: _____ ☒ Not Applicable

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name: **Celso A. Martini – Plant Manager**

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Suwannee American Cement**
   Street Address: **Post Office Box 410**
   City: **Branford** State: **Florida** Zip Code: **32008**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(386) 935-5000** ext. **2516** Fax: **(386) 935-5080**

5. Application Responsible Official Email Address: celsom@suwanneecement.com

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the ~~Title V~~ source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. ~~Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.~~

   Signature 8-19-04 Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: John B. Koogler, Ph.D., P.E.
   Registration Number: 12925
2. Professional Engineer Mailing Address...
   Organization/Firm: Koogler and Associates, Inc.
   Street Address: 4014 NW 13th Street
   City: Gainesville State: FL Zip Code: 32609
3. Professional Engineer Telephone Numbers...
   Telephone: (352) 377 - 5822 ext. Fax: (352) 377 - 7158
4. Professional Engineer Email Address: jkoogler@kooglerassociates.com
5. Professional Engineer Statement:

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

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here [X], if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature 9/25/04

Date

(seal) NO. 12925 STATE OF FLORIDA

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 East (km) 321.4 km North (km) 3315.9 km		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 29/57/45 Longitude (DD/MM/SS) 82/51/03	
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 32	6. Facility SIC(s): 3241
7. Facility Comment : None			

Facility Contact

1. Facility Contact Name: Joe B. Horton, Environmental Manager
2. Facility Contact Mailing Address... Organization/Firm: Suwannee American Cement Street Address: 5117 US Hwy 27 City: Branford State: FL Zip Code: 32008
3. Facility Contact Telephone Numbers: Telephone: (386) 935 - 5039 ext. Fax:(386) 935 - 5080
4. Facility Contact Email Address: jbhorton@suwanneecement.com

Facility Primary Responsible Official

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

1. Facility Primary Responsible Official Name: Celso A. Martini – Plant Manager
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Suwannee American Cement Street Address: Post Office Box 410 City: Branford State: FL Zip Code: 32008
3. Facility Primary Responsible Official Telephone Numbers... Telephone: (386) 935 - 5000 ext. 2516 Fax:(386) 935 - 5080
4. Facility Primary Responsible Official Email Address: celsom@suwanneecement.com

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☒ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment: **Item 6: Presumed Major for HAPs**	

Attachment 1

Suwannee American Cement
SAC
Branford, Florida, USA
P.O. Box 410
Branford, Fl 32008

August 23, 2004

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

SUBJECT: **Temporary Fly Ash Test**
Suwannee American Cement – Branford Plant
Facility ID No. 1210465
PSD-FL-259D

Dear Mr. Linero:

In accordance with our meeting on August 16, 2004, Suwannee American Cement (SAC) requests approval for a temporary test of a Fly Ash Injection System. The Department has received a Permit Application from SAC for a permanent Fly Ash Injection System and this test would allow for SAC to develop information to complete preliminary engineering for the final system design to optimize the location and method of feeding of fly ash into the calciner. This test will also allow SAC to evaluate the feasibility of increasing production due to the introduction of fly ash into the calciner.

This letter requests the approval to conduct, at a maximum, one hundred and twenty (120) days of operational testing of a temporary fly ash system over a six (6) month calendar time period. Since SAC will be testing different locations of injecting fly ash there will be a need to adjust and relocate the injection point which may result in the 120 days of operational testing occurring over a longer calendar period (the requested six-month period). SAC also requests the ability to increase kiln feed rates and clinker production rates during the 120 day operational period of the testing for the evaluation of possible production increase. These increases will be the result of maintaining a feed rate of 178 tons per hour of material to the preheater while introducing fly ash (a feed component) into the calciner.

Currently SAC is limited to a preheater feed rate of 178 tons per hour and a production rate of 105 tons of clinker per hour. During the test SAC would like to temporarily increase the limit for kiln feed rate to 205 tons per hour of preheater feed. Kiln feed would be defined as the sum of the preheater feed and the fly ash is injected into the calciner. The total sum of these two inputs would not exceeded 205 tons per hour. SAC would also need to temporarily increase the clinker production rate from 105 tons per hour to 115.5 tons per hour. Clinker production would be defined as the mass input of the preheater feed times its specific Loss of Ignition (LOI) plus the mass input of the fly ash injected into the calciner times its specific LOI.

SAC will develop new LOI factors for both the preheater feed and the fly ash being injected into the calciner as needed for use in the calculation of clinker production. Additionally the temporary fly ash injection system will have accurate means to monitor the rate of fly ash being injected into the calciner.

SAC is currently limited to a heat input to the kiln system of 364 mmBTU/hr. During the test period SAC would need to temporarily increase the heat input limit to the kiln system to 458 mmBTU/hr. This would allow for the possibility of additional heat input should it be needed for the additional preheater feed and fly ash.

During the test SAC will comply with all emission limits with the units pound of pollutant per hour. However, SAC has concerns with limits expressed in pounds of pollutant per ton of clinker during the test should process upsets occur that limit clinker production. As the Department is aware SAC has short averaging times for some emission limits which amplify the effects of process upsets and periods of low production. Should process upsets occur during the test period that limit clinker production, SAC could have difficulty with the production based emission limits. Because of this, SAC would request some leniency with production-based emission limits should process upsets limit clinker production during the test. With the introduction of the fly ash into the calciner some process upsets may occur, as the purpose of this test is to identify and optimize the delivery of the fly ash to the calciner. During the test, pound per hour emission limits, or more importantly the mass emissions to the environment, will not exceed emission limits present in Construction Permit PSD-FL-259.

Compliance will be insured with continuous emission monitors for NO_x, SO_2, and VOC and continuous opacity monitors for both the kiln main stack and clinker cooler stack. This will insure compliance during the entire period of testing. All emission data are online with the department for real time review.

At the completion of the testing, SAC will submit to the Department a Final Engineering Report on the test and the results.
This shall include the following at a minimum:

- Summary and review of process data and emission data
- Feed rates of preheater feed and fly ash feed
- Engineering Assessment of Project from Qualified Professional

With this Final Report SAC requests that the Department proceed with the review of the the Permit Application previously submitted for the final Fly Ash Injection system. Based on our meeting with the Department on August 16, 2004 SAC hopes the Department can grant approval for the test in as timely manner as possible.

Please also find include a Department of Environmental Protection Construction Permit Application – Long Form, completed by Koogler and Associates.

If you have any questions or require any additional information, please feel free to contact me at (386) 935-5039.

Sincerely,

Joe Horton
Suwannee American Cement

CC: Celso Martini – SAC
Dr. John Koogler – Koogler & Associates