TECHNICAL EVALUATION

APPLICANT

Suwannee American Cement, LLC
5117 U.S. Highway 27
Branford, Florida 32008-2463

Branford Cement Plant
Facility ID No. 1210465

PROJECT

Project No. 1210465-025-AC
Exemption from Requirement to Obtain an Air Construction Permit and Authorization
Disposal of Expired Medications or Confiscated Drugs from a Community Collection Event
in Cement Kiln No. 1 (Project)

COUNTY

Suwannee County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

October 2012

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control - General Provisions); 62-210 (Stationary Sources - General Requirements); 62-212 (Stationary Sources - Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources - Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Facility Description and Location

This facility is an existing Portland cement manufacturing plant categorized under Standard Industrial Classification No. 3241.

The existing Branford Cement Plant is located in Suwannee County at 5117 US Highway 27 in Branford, Florida. The UTM coordinates Zone 17, 321.4 km East and 3315.9 km North.

This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

The applicant requested a case-by-case permitting exemption from an air construction (AC) permit for the one-time disposal of expired medications or confiscated drugs from a community collection event in the Cement Kiln No. 1 (project). The community collection event is scheduled for October 6, 2012. The event anticipates a collection of about 100 pounds of materials to be taken to the Cement Kiln No. 1 for disposal.

The Cement Kiln No. 1 operates under the current valid Title V air operation permit, Permit No. 1210465-019-AV, effective July 7, 2010. The Cement Kiln No. 1 vents to a baghouse (Emissions Unit Identification Number (E.U. ID No.) 004).

The Branford Cement Plant employs the following state of the art air pollutant emission control devices: baghouses for dust (particulate matter) control; electrostatic precipitator (ESP) for dust (particulate matter) control; selective non-catalytic reduction system (SNCR) for NOx control; hydrated lime injection for sulfur dioxide (SO_2) control; and, a multi-channel burner system for the control of combustion.

The plant has state of the art continuous emission monitoring systems (CEMS) in place for the monitoring of NOx, sulfur dioxide (SO_2), total hydrocarbons (THC, a substitute for volatile organic compounds (VOC)) and opacity. Unlike incinerators, the cement process has an inherent scrubbing ability due to the fact that gases from combustion

flow countercurrent to kiln feed material inputs (approximately 85% limestone), and also the hot gases are used in the raw material milling process to dry the raw materials and carry the milled material off the grinding table.

Application (Request) Processing Schedule

Request for Exemption from an AC Permit dated October 2, 2012 and received on October 2, 2012 (complete "application").

Complete details of the proposed project were provided in the letter dated October 2, 2012, from Suwannee American Cement, LLC which is accessible via the Department's world wide web site at http://appprod.dep.state.fl.us/air/emission/apds/default.asp by entering the project number shown above.

Relevant Documents

- Permit No. 1210465-019-AV, Current Title V Air Operation Permit.

2. DEPARTMENT REVIEW

The expired medications or confiscated drugs (material) to be destroyed can be introduced into the calciner combustion chamber in a region of the pyroprocessing system that is maintained at a nominal temperature of 1,600 degrees Fahrenheit. According to the applicant, the expected gas residence time in the pyroprocessing system is about 3 seconds. This should provide sufficient residence time at a high enough temperature to destroy all organics. The resulting residual gases and ash are extensively scrubbed in the cementitious particulate matter control system. Furthermore, any ash should be bound and mixed in the product (clinker). It is anticipated that any resulting gaseous emissions from the combustion of the material will likely not even leave trace signals.

The nominal kiln feed rate is about 170 short tons per hour (or 340,000 pounds/hour). Therefore, 100 pounds of the material represents only about 0.03% of the total mass input into the pyroprocessing system. Due to the size of kiln system, the quantity of material to be destroyed should have essentially no impact on the pyroprocessing system and its emissions.

3. DETERMINATION

Pursuant to Rule 62-4.040(1)(b) , F.A.C. and for the reasons stated in this Technical Evaluation, the Office of Permitting and Compliance hereby determines that the proposed activity (project) will not emit air pollutants "*... in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified.*" Therefore, the project is exempt from the requirement to obtain an AC permit. The applicant is authorized to conduct this one-time activity.

This determination may be revoked if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect. A copy of this letter shall be maintained at the site of the proposed activity. This permitting decision is made pursuant to Chapter 403, Florida Statutes.

Mr. Scott M. Sheplak, P.E. is the permit processor responsible for reviewing the request and drafting the exemption. Additional details of this analysis may be obtained by contacting him by telephone at 850/717-9074 or by e-mail at scott.sheplak@dep.state.fl.us in the Department's Office of Permitting and Compliance at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.