PERMITTEE

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

PERMITTING AUTHORITY

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

PROJECT

Air Permit No. 1210465-023-AC
Minor Air Construction Permit
Branford Cement Plant

This permit authorizes the construction of mechanical and pneumatic solid fuel handling and feed systems for the precalciner and main kiln burner; minor modifications to the calciner duct; installation of a new multi-fuel main kiln burner system; and the firing of a variety of alternative fuels (AF) including engineered fuel (EF), tire-derived fuel (TDF), roofing materials, plastics, agricultural biogenic materials, untreated cellulosic biomass, treated cellulosic biomass, carpet-derived fuel, biosolids, and an alternative fuel mix.

NOTICE AND PUBLICATION

The Department distributed a draft minor air construction permit package on February 16, 2012. The applicant published the Public Notice in the Suwannee Democrat on February 29, 2012. The Department received the proof of publication on March 5, 2012. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

Applicant

On March 13, 2012, the Department received comments from the applicant. The following summarizes the comments and the Department's response.

1. The applicant requested that carpet-derived fuel include carpet materials in Condition 5.h. as written below:

   Response: The condition has been changed to: Carpet-Derived Fuel, which includes shredded new, reject or used carpet materials.

2. *Comment*: The applicant requested the title for Condition 7 be changed as follows:

   Response: The condition has been changed to: 7.Proccessed/Prepared ~~Storing and Handling~~ AF: The AF shall be stored:

   a. Under cover or in covered trailers, containers or buildings;
   b. On top of a paved or compacted clay surface; and
   c. Best Management Practices to promote containment and prevent contamination of air, water, and soil.

   [Application No. 120465-023-AC; Rules 62-4.070(3) and 62-296.320, F.A.C.]

3. *Comment*: Regarding Condition 11.d, the permittee is subject to CEM monitoring per 40 CFR 60. All monitoring and maintenance will be performed in accordance with 40 CFR 60.

Response: The Department has modified Condition11.d. as follows: Operators shall discontinue firing AF if: ~~(1)~~ One of the CEMS, COMS or other continuous monitors indicates a non-compliance issue related to alternative fuels.~~; or~~

~~(2) One of the CEMS, COMS or other continuous monitors is down for more than two consecutive hours.~~ [Rule 62-204.800, F.A.C. and 40 CFR ~~75.5~~ ~~10, 24~~; 60 Appendix A; and 40 CFR 63.1349, 1350 and 1354]

4. *Comment*: For condition 13 the permittee has requested a permitting note regarding mercury emissions from biosolids be added to the permit.

   Response: The Department has added the following: *{Permitting Note: The permittee will remain subject to the current Title V permit limitation of 97 lb/yr of Hg, based on material analysis. If the plant runs at least 50 percent of the time, the 24-hour emissions would average 0.5 lb/24-hour. This value (0.5 lb/24-hour period) is less than 5 percent of the allowed Hg emissions of 40 CFR 61.52. As such the permittee is not expected to come near this limit. The compliance requirements for the mercury emissions from biosolids as specified in Condition 21 will be satisfied by Condition 20}*

5. *Comment*: For condition 16 the permittee has requested a permitting note regarding emissions be added to the permit. The Department has added the following:

   Response: *{Permitting note: These emissions are not expected to be affected by alternative fuels.}*

6. *Comment*: The permittee states, "In our review of 40 CFR 61 subpart E and regulations of the Portland cement industry, there are several factors which ensure that this facility should not be duplicatively regulated under this older NESHAP (note this NESHAP was issued prior to the Portland Cement NESHAP) but instead remain subject to NESHAP subpart LLL and current Title V air permit limits. The plant is limited to far lower limits of mercury emissions under the current Title V air permit. In fact, SAC must sample and analyze the biosolids to determine the mercury content as needed to be compliant to item 18. "Condition 18 is more restrictive than 40 CFR 61 Subpart E. Subpart E emissions and testing requirements are addressed by item 18." This is now Condition 21.

   Response: As stated below the Department has added the following permitting note to Condition 21 such that the current sampling is adequate for biosolids: *{Permitting Note: The sampling requirements of Condition 21 may be satisfied with the sampling requirements of Condition 20.}*

7. *Comment:* The permittee requested the following permitting note for condition 21.h.: "Because mercury emissions are a function of input of both raw materials and fuels, the results of this testing will only be an indicator of non-compliance but not a violation. In the event of high results, FDEP can require additional testing. Please add another note that the current TV permit limits of 97 pounds per year, is effectively less than 1/10 of this limit and this limit includes both fuel and raw material."

   Response: This is a federal requirement and cannot be waived.

8. *Comment* : The permittee requested that condition 25 be modified to only include fuel and not heat input. Note that the heat content from a lab analysis is not the same as that obtained in a kiln. The current data logging for fuels should be adequate and such prescription in the air permit is not needed. As well, the recording of fuel input should not be different as that required for conventional fuels. As such, we believe only the first two sentences are needed.

   Response: This condition is in the Title V permit, Permit No. 1210465-019-AV, Condition C.16. This condition must first be revised in the Title V permit to be revised in this permit. Please note that in the Title V permit, Condition F.6 states the following: "Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, **when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.**"

Other Changes

1. *Comment*: The Department has added the following conditions to clarify the requirements of used oil. Off-specification used oil is regulated under 40 CFR 279 Subpart G for boilers and industrial furnaces. 40 CFR 260.10 includes cement kilns in the definition of industrial furnaces.

8. On-Specification Used Oil: The on-specification used oil shall not exceed the following allowable levels and specifications:

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 °F minimum
Total halogens	4,000 ppm maximum

NOTES:

1. Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).
2. The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).
3. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR 266 subpart H when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

a. *Records*: The quantity of used oil accepted and the date of acceptance.

b. *Retention of Records*: All records shall be maintained for at least 3 years.

[Rule 62-710, F.A.C. and 40 CFR 279 Subpart B]

9. Off-Specification Used Oil: The off-specification used oil shall meet the requirements of 40 CFR 279 Subpart G including the following.

a. *Total Halogen Content*: The total halogen content shall be below 1,000 ppm.

b. *Records*: The quantity of used oil accepted and the date of acceptance.

c. *Retention of Records*: All records shall be maintained for at least 3 years.

[Rule 62-710, F.A.C. and 40 CFR 279 Subpart G]

CONCLUSION

The final action of the Department is to issue the permit with the minor changes and clarifications as described above.