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BUREAU OF AIR REGULATION

Ms. Trina Vielhauer  
Division of Air Resources  
Department of Environmental Protection  
2600 Blair Stone Road, MS # 5500  
Tallahassee, Florida 32399-2400

**SUBJECT: Comments to Draft Air Permit No. PSD-FL-358**  
Sumter Cement Company – Center Hill Plant  
DEP File No. 1190041-001-AC  
Proposed New Kiln, Center Hill, Sumter County, FL

Dear Ms. Vielhauer:

Sumter Cement Company (SCC) submits the following comments in response to the Florida Department of Environmental Protection's (Department) Draft Air Permit No. PSD -FL-358. Where needed SCC has included text from the Department's Draft Permit in *italic* for clarity with SAC comments following sections of the Draft Permit.

If the Department has any questions regarding the comments supplied or would wish to discuss in further detail please feel free to contact me at (386) 935-5039 or by e-mail at [jhorton@suwanneecement.com](mailto:jhorton@suwanneecement.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'J Horton', is written over a horizontal line.

Joe Horton  
Sumter Cement Company

CC: Dan Fritz - SCC  
Edvaldo Rabelo - SCC  
Celso Martini - SCC  
Al Linero - DEP

**1. SCC provides the following comment in response to Section 3. D Pyroprocessing, Condition 21. Mercury Compliance Demonstration: b. Mercury Continuous Emissions Monitoring System (Hg-CEM):**

In discussions with the Department SCC has outlined concerns over the unproven technology of a mercury Continuous Emission Monitor (CEM) in a cement application. Relatively no experience other than short-term testing has been conducted with monitors reporting to meet the new Performance Specification 12A (PS-12A). In testing of three different Hg-CEM's conducted at one cement plant in the US. several operational as well accuracy problems were noted<sup>1</sup>. SCC agrees with the Department that within the coming years advances in the technology should allow for a more reliable and accurate Hg-CEM.

SCC would propose the following language modifications to the proposed condition (deletions ~~strikethrough~~ and additions double underlined):

**21. Mercury Compliance Demonstration:**

- b. *Mercury Continuous Emissions Monitoring System (Hg-CEMS): Within 60 days following the first year of operation, the owner or operator shall install any model of Hg-CEMS that has been demonstrated to meet the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor phase Mercury Continuous Monitoring Systems in Stationary Sources," or that has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program. During the subsequent 90 days, the owner or operator shall certify the Hg-CEMS. If the owner or operator can not certify the CEM within 90 days and provides to the Department information from the vendor of the CEM on reasons why the CEM can not be certified in the 90 day period, the Department shall grant and extension to certify the CEM. ~~and~~ After certification the owner or operator will begin reporting Hg mass emissions data. The owner or operator shall adhere to the calibration drift and quarterly accuracy assessment procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B. The 12-month rolling mass emissions shall be estimated based on the actual data collected no later than 10 days following the end of the month. The CEM is not to be used as the means of compliance unless the owner or operator notifies the Department of the intent to use the CEM in this means. Upon certification, the owner or operator may use the Hg-CEMS to demonstrate compliance with the cumulative 12-month rolling mass emission limitation (184 pounds per rolling 12-month period) in lieu of the procedures described in the preceding paragraph. Prior to use of the Hg-CEMS as the method to demonstrate compliance, the owner or operator shall submit written notice to the Department, and receive approval for a missing data substitution plan. For purposes of this requirement, the first year of operation ends 365 calendar days following the first day the kiln produces clinker.*

After 365 days of operation of the Hg-CEM the owner or operator can request to the Department for removal of the CEM if it is not to be used as the means of compliance.

*[Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.]*

As discussed with the Department, should known problems be identified in either other industrial uses of the CEM or specifically in cement applications prior to the required date of installation, SCC would request the ability to delay the installation requirements until such known deficiencies are corrected.

Reason by which SCC would deem necessary to request the removal of the CEM from the Department after 365 days of operation of the CEM would include any of the following:

- o The CEM is not be able to achieve certification to the PS 12A within the 365 day period with the help of the Vendor and upon providing the Department with information from the Vendor in support of this.

- o The CEM is not able to achieve an acceptable runtime as specified in the EPA performance specification despite best efforts by SCC and the Vendor. SCC would provide information to the Department to support the request and document why sufficient runtime can not be achieved.
- o The CEM requires sustainable maintenance to achieve either acceptable accuracy or runtime. SCC would provide information to the Department in support of this request as well as information from the vendor on necessary maintenance or extraordinary circumstances.
- o The CEM does not accurately reflect Mercury emissions as verified through long term comparisons with mass balances or through Stack Testing via an EPA approved method.

**2. SCC provides the following comment in response to Section 3. F Finish Mills Cement Processing, Condition 6. Process Rate Specifications:**

The two finish mills were proposed with a maximum annual production rate of 2,531,640 tons of cement in the application. The condition does not clearly identify this as the maximum rate as used in the application and instead implies a maximum annual rate of 170 tons of cement for each mill at the allowed 8760 hours of operation. This equals a maximum annual rate of 2,978,400 tons of cement, which was not reflected in the application.

SCC would request the following addition to the condition (deletions ~~striketrough~~ and additions double underlined):

6. Process Rate Specification: Each finish mill may process up to 170 tons per hour (TPH) of clinker, gypsum or limestone to produce an equal amount of cement. Total cement production is limited to 2,531,640 tons per year. [Applicant Request]

*{Note: The finish mills are capable of processing more clinker than can be produced by the on-site pyroprocessing system. Any projects to utilize the additional capacity would constitute a modification per Section 2, Condition 7.}*

**3. SCC provides the following comment in response to Section 3. F Finish Mills Cement Processing, Condition 9. Testing Requirements:**

The condition is unclear as to which sources shall be stacked tested and which sources are subject to visual emission testing requirements.

SCC would propose the following language modifications to the proposed condition (deletions ~~striketrough~~ and additions double underlined):

9. Testing Requirements. Each Emission points DC-02 and DC-04 shall be stack tested to demonstrate initial compliance with the applicable emission standards for PM/PM<sub>10</sub> and visible emissions. All other emission points shall be tested for visible emissions only. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup. Thereafter, compliance with the particulate limits (PM/PM<sub>10</sub>) shall be demonstrated within the 12 month period prior to each renewal of the operation permit and compliance with the visible emissions limits for each unenclosed transfer point shall be demonstrated during each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>). [Rule 62-297.310(7)(a), F.A.C.]

**4. SCC provides the following comment in response to Section 3. G Coal and Petroleum Coke Grinding Systems, Condition 8. Testing Requirements:**

The condition is unclear as to which sources shall be stacked tested and which sources are subject to visual emission testing requirements.

SCC would propose the following language modifications to the proposed condition (deletions ~~striketrough~~ and additions double underlined):

- 8. Testing Requirements:** ~~Each~~Emission points DC-06 and DC-07 shall be stack tested to demonstrate initial compliance with the applicable emission standards for PM/PM<sub>10</sub> and visible emissions All other emission points shall be tested for visible emissions only. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup. Thereafter, compliance with the particulate limits (PM/PM<sub>10</sub>) shall be demonstrated within the 12 month period prior to each renewal of the operation permit and compliance with the visible emissions limits for each unenclosed transfer point shall be demonstrated during each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>). [Rule 62-297.310(7)(a), F.A.C.]

**5. SCC provides the following comment in response to Section 3. H Coal and Petroleum Coke Conveying, Condition 6. Testing Requirements:**

The condition is unclear as to which sources shall be stacked tested and which sources are subject to visual emission testing requirements.

SCC would propose the following language modifications to the proposed condition (deletions ~~striketrough~~ and additions double underlined):

- 6. Testing Requirements:** Each emission point shall be ~~stack~~ tested to demonstrate initial compliance with the visible emissions standards. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup. Thereafter, compliance with the visible emissions limits for each unenclosed transfer point shall be demonstrated during each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>). [Rule 62-297.310(7)(a), F.A.C.]

## REFERENCES

1. Constans D, Jameson R., and Raynor G., "Observations and Comments on EPA/DOE Mercury CEMs Demonstration at Holnam's Holly Hill, SC Facility" AWMA International Specialty Conference on Waste Combustion in Boilers and Industrial Furnaces, April 1997.