Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

October 1,, 2015

Mr. Tom Messer, Plant Manager
Suwannee American Cement, LLC.
5117 U.S. Highway 27
Branford, Florida 32008

Re: Suwannee American Cement Plant
Facility ID No. 1210465
Kiln (Emissions Unit No. 004)
Request for Portland Cement MACT Compliance Date Extension

Dear Mr. Messer:

On August 31, 2015, the Department of Environmental Protection (Department) received a request[1] submitted on behalf of Suwannee American Cement (SAC) for an extension of the compliance date for 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry (Portland Cement MACT rule)[2] for the cement kiln at the SAC plant. Specifically, SAC requests an extension of up to one year, from September 9, 2015 to September 9, 2016, of the compliance date with respect to hydrogen chloride (HCl) emissions limits from the kiln and all other requirements associated with this pollutant (monitoring, recordkeeping, reporting, etc.). Federal regulations allow for up to a one-year extension to comply with MACT standards for purpose of installing controls.[3] The authority to grant such an extension is delegated to the Department, which operates an approved Title V air operation permit program.[4]

HCl Monitoring

SAC is one of the cement production facilities in the state that has procured and installed a continuous emissions monitoring system (CEMS) for HCl which is a compliance option in the Portland Cement MACT rule. Some other facilities are using sulfur dioxide (SO_2) emissions as a surrogate for HCl emissions with compliance shown by an SO_2 CEMS.

The HCl CEMS at SAC has been in operation for several months. Based on the initial operation of the HCl CEMS, SAC has shown by generally accepted accuracy audit procedures that the kiln should be able to comply with the HCl emissions limit in the Portland Cement MACT Rule of 3 parts per million, by volume, at 7 percent oxygen (ppmvd@7% O_2). It should also be noted, that a review of the reported emission of HCl from SAC over the last eleven years (2004 to 2014) showed a significant drop in HCl emission. From 2004 to 2007, HCl emission averaged over 50 tons per years (TPY) while from 2008 to 2014, HCl emission averaged less than 5 TPY; a 92% reduction.

While the HCl CEMS at SAC can currently show compliance with the HCl emission limit using generally accepted accuracy audit procedures, the Portland Cement MACT rule requires the use of calibration gases that are certified by and traceable to the National Institute of Standards and Technology (NIST). NIST-traceable HCl calibration gases at the low concentrations needed are not yet widely available. Due to this limited availability, SAC will not be able to demonstrate continuous compliance by the September 9, 2015, compliance date of the Portland Cement

[1] SAC initial extension request dated 8/31/2015. http://goo.gl/fO2VH0

[2] The Maximum Achievable Control Technology (MACT) standards are specified in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Major Sources: Portland Cement Manufacturing Industry. See Title 40, Part 63, Subpart LLL of the Code of Federal Regulations (CFR) adopted and incorporated at Rule 62-204.800(11)(b)48., F.A.C.

[3] See the NESHAP General Provisions at 40 CFR 63.6(i), adopted and incorporated at Rule 62-204.800(11)(d)1., F.A.C.

[4] See the NESHAP General Provisions at 40 CFR 63.6(i)(4)(i)(A), adopted and incorporated at Rule 62-204.800(11)(d)1, F.A.C.

MACT rule. At this time, it is unknown when appropriate HCl NIST-traceable gases will become available.

EPA guidance

In an email correspondence (Link to EPA Email) from the EPA Office of Air Quality Planning and Standards (OAQPS) to EPA regional offices dated May 13, 2015, EPA acknowledged that the issue of the availability of NIST-traceable HCl calibration gases is a legitimate reason for which facilities will be unable to comply with the HCl monitoring requirements of the rule by the September 9, 2015 compliance date. Also, EPA specifically stated that, "*These issues are tied to installation of controls whereby processes/control systems cannot be effectively operated without the feedback from the associated continuous emissions monitoring systems. Thus, we believe approval of these requests for extension of compliance is recommended for a period of one year regarding … the HCl compliance limit ….*"

In the same email, EPA also stated, "*The new performance specification (PS) for the measurement of HCl is PS-18. This PS, which will provide the regulated facilities with significantly more technology and quality assurance options than the currently required PS, has been delayed, and thus will not be promulgated until later this summer. Subpart LLL currently specifies PS 15, but allows for the use, upon promulgation, of any other performance specification for HCl CEMS in appendix B to part 60 of this chapter (78FR10051). This section of the rule is actually referring to PS-18, which has been in development for three years with industry stakeholder involvement, and is the preferred PS for both the industry and the Agency. The actual promulgation date of PS-18 does not allow enough time for sources to purchase and install equipment, certify the monitoring system, and initiate the 30-day compliance test period by the September 9, 2015 date.*"

It should be noted that EPA published the final version of PS 18 for calibration of HCl CEMS in the Federal Register[5] on July 7, 2015. However, according to NIST, NIST-traceable HCl calibration gases are still only available in very limited quantities thereby making it difficult for facilities to meet the HCl monitoring requirements by the compliance deadline of the Portland Cement MACT Rule.

Given the information detailed above, the Department finds that SAC's request meets the criteria for obtaining an extension of the compliance date from September 9, 2015 to no later than September 9, 2016 for the kiln. This one-year compliance extension request regarding Part 63 Subpart LLL is limited to the HCl compliance limit demonstration. All other requirements of Part 63, Subpart LLL remain in effect. Results of HCl performance tests must be submitted in accordance with Section 63.1348 of Section 63, Subpart LLL. The Department's Northeast District office will incorporate this extension together with the proposed conditions in Attachment A into SAC's Title V air operation permit.

If you have any questions regarding this matter, please contact David Read at 850-717-9075.

Sincerely,

David Lyle Read, P.E.
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For:
Jeffery F. Koerner, Deputy Director
Division of Air Resource Management

cc:
Max Lee, Koogler and Associates, Inc.: mlee@kooglerassociates.com
Krishna Cole, SAC Environmental Manager: krishnac@vcsmc.com
Rita Felton-Smith, FDEP NED: Rita.Felton-Smith@dep.state.fl.us

[5] Federal Register, Volume 80, Page 38628, "Performance Specification 18-Performance Specifications and Test Procedures for Hydrogen Chloride Continuous Emission Monitoring Systems at Stationary Sources; Link

Richard Rachal, FDEP NED: Richard.rachal@dep.state.fl.us
Al Linero, Koogler and Associates, Inc.: alinero@kooglerassociates.com
Vincent Warger, Koogler and Associates, Inc.: vwarger@kooglerassociates.com

ATTACHMENT A

Proposed Conditions for Draft Title V Operation Permit

1. Compliance Date Extension: For the specific federal HCl requirements on the Kiln (Emissions Unit No. 004), the Portland Cement MACT compliance date is extended from September 9, 2015 until 60 days after the NIST-traceable HCl calibration gases become commonly available (according to NIST), but no later than September 9, 2016. This includes all related requirements for this pollutant (monitoring, record keeping, reporting, etc.). Results of HCl performance tests must be submitted in accordance with 40 CFR 63.1348. [40 CFR 63, Subpart LLL; 40 CFR 63.6(i); and Rule 62-204.800(11)(d)1., F.A.C.]

2. Progress Reports: For the fourth calendar quarter of 2015 and the first and second calendar quarters of 2016 (as applicable), the permittee shall submit a report no later 30-days after the end of each quarter to the Department summarizing the progress to date in obtaining NIST-traceable calibration gas for HCl, progress to date in certifying the HCl CEMS, and progress to date in completing the relative accuracy test auditing (RATA) via EPA PS-18. In addition, the report should include HCl CEMS monitoring results utilizing the current practices in place at the facility and indicate how these results compare to the Subpart LLL HCl emission limit of 3 parts per million by volume, dry at 7% oxygen (3 ppmvd @ 7% O_2) on a rolling 30-day average basis. Each report shall be submitted within 15 days following the end of each calendar quarter. [40 CFR 63, Subpart LLL; 40 CFR 63.6(i)(10) and (11), Rule 62-204.800(11)(d)1., F.A.C., and Rule 62-4.070, F.A.C.]