UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

March 1, 2021

Mr. Craig Gordinier
LHoist Montevallo Plant Manager
3309 US HWY 31
Calera, AL 35040

03/01/2021

Dear Mr. Gordinier,

On October 29th, 2020 you submitted a request, to Mr. Skyler Sanderson of Alabama Department of Environmental Management (ADEM), for use of an Alternative Monitoring Procedure, as allowed in 40 CFR 63.8(f), during startup of your lime kilns subject to 40 CFR 63, Subpart AAAAA, National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants (Subpart AAAAA). On November 29th, 2020, your request was subsequently forwarded from ADEM to Mr. David McNeal at US EPA Region 4 for consideration, as ADEM felt they were not the appropriate responders to your original request. On December 29th, 2020 you submitted a follow up letter to Mr. McNeal after hearing that your initial request might be denied, reiterating your request to ADEM and asking for further consideration. Considering the potential for national significance, EPA's Region 4 further reached out to EPA's Office of Air Quality Planning and Standards in Research Triangle Park, NC and we have engaged in several deliberations within our office and with EPA's Region 4 regarding your request. This letter serves as the official Environmental Protection Agency reply to your request.

In your request you specify that your affected lime kilns are controlled by baghouse fabric filters and that the exhaust from those baghouses are monitored using baghouse leak detector systems (BLDS), as required by 40 CFR 63.7113(d) through (f) and Table 6 in Subpart AAAAA. You have requested to use a BLDS or particulate matter detector (PMD) for Kilns 3 and 4 as an alternative to the Subpart AAAAA requirement to use a continuous opacity monitoring system (COMS). Subpart AAAAA requires the use of COMS to demonstrate compliance with the 15% opacity limit for existing lime kilns equipped with a fabric filter through the applicable startup and shutdown emissions limits found in Table 2 of the revised Subpart AAAAA.

The central issue in our consideration of your request is the following. While the rule requirement of particulate matter (PM) monitoring is met through use of the BLDS or PMDs during normal operation, these technologies do not report PM concentrations in percent opacity, the units in which the Subpart AAAAA is expressed. Instead the BLDS or PMDs indicate the presence of PM in the flue gas. To enable use of these technologies to monitor for percent opacity as required by Subpart AAAAA for startup emissions monitoring we would be effectively be changing the emissions standard from 15% opacity to

"presence of dust – yes/no". As a result, your request would be considered an alternative emission standard as defined in 40 CFR part 63.2, which states:

> "*Alternative emission standard* means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act."

As noted in the definition above, approval of an alternative emission standard requires a notice and comment rulemaking process. Additionally, a key requirement of an alternative emission standard is that the proposed alternative does not impact the stringency of the existing emissions standard; in this case 15% opacity. Without a correlation curve for a BLDS or PMD that demonstrates signal output calibrated to, and reported as percent opacity, and could enable us to consider your request as an alternative test method under 40 CFR 63.7(f), we are unable to approve your request.

You may wish to know that we have had conversations with BLDS/PMD manufacturers who have made inquiries to our office about this specific issue, and we have asked them for documentation of such a correlation for their product. To date, no manufacturer has provided us with any data or information that substantiates such a correlation. Due to the difference in outputs of these monitoring technologies (BLDS vs COMS) you will want to investigate your options for opacity monitoring during startup/shutdown to meet compliance with the 15% opacity limit for operations during those periods.

Additionally, there is a concern with opacity monitoring on your common stack in that opacity measurements made during startup/shutdown for one kiln may be diluted by effluent from another kiln emitting at a lower PM concentration resulting from normal operations. We recommend that you identify a COMS location appropriate for opacity monitoring for startup/shutdown periods for each kiln.

Please let me know if you have additional questions about this matter. We are happy to clarify this letter should you have additional concerns.

Very sincerely,

STEFFAN JOHNSON
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Date: 2021.03.01 15:32:57 -05'00'

Steffan M Johnson

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