



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

October 22, 2020

Mr. Darrell Daubert  
General Manager  
WestRock CP, LLC – Stevenson Mill  
1611 County Road 85  
Stevenson, Alabama 35772

Dear Mr. Daubert:

This letter is in response to your September 23, 2020, letter which proposed alternative monitoring procedures (AMPs) for the No. 1 wood-residue boiler located at the WestRock CP, LLC (WestRock) Stevenson Mill in Stevenson, Alabama. The boiler is subject to Title 40, Code of Federal Regulations (CFR), Part 60, Subpart Db - Standards of Performance for Industrial Commercial-Institutional Steam Generating Units. Based upon our review, your proposed AMPs are acceptable when using only wood-residue biomass as fuel to the boiler. Details regarding the AMPs and the basis for our determination are provided in the remainder of this letter.

Boiler No. 1 has a rated heat input capacity of 430 million British thermal units per hour (MMBtu/hour). The boiler burns wood residue as its primary fuel, and is also permitted to burn natural gas, low sulfur (less than 0.5 percent) No. 2 fuel oil and tire derived fuel. Particulate emissions from Boiler No. 1 are controlled by a wet scrubber and wet electrostatic precipitator (WESP) operating in series.

Based on the combination of fuels burned in the boiler, the boiler is subject to the opacity standard promulgated in §60.43b(f) that limits opacity to 20 percent (six-minute average), except for one six-minute average per hour of not more than 27 percent. Under the provisions of §60.48b(a), owners and operators of affected facilities subject to an opacity standard under §60.43b must install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) to monitor the opacity of emissions discharged to the atmosphere and record the output of the system. According to §60.48b(j)(1), the COMS requirement is waived for owners or operator of affected facilities that use particulate matter (PM) continuous emission monitoring system (CEMS) to monitor emissions.

Your letter indicates that the use of a COMS or a PM CEMS is impractical. In the case of COMS, you contend that liquid water or other interferences caused by substances in the effluent gases will interfere with the systems' ability to measure opacity accurately. In the case of a PM CEMS, information developed by the EPA in public record associated with the promulgation of revisions to 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) supports your position that PM CEMS are not demonstrated technologies for the measurement of PM emissions resulting from biomass fueled boilers.

The version of Subpart DDDDD promulgated on March 21, 2011, required the installation of PM CEMS on all boilers with a heat input capacity of 250 MMBTU/hr or more that burn biomass, coal, or residual oil. In conjunction with a reconsideration of Subpart DDDDD promulgated on January 31, 2013, the requirement to use PM CEMS was removed for biomass units, and the basis for this rule change was that the Environmental Protection Agency (EPA) agreed with petitioners that PM CEMS are not demonstrated technologies for biomass units and that significant technical concerns exist regarding the ability to use PM CEMS for monitoring particulate emissions from biomass units. A detailed discussion regarding the EPA's basis for removing the PM CEMS requirement for biomass units can be found in the December 23, 2011, Federal Register (FR) notice for proposed revisions to Subpart DDDDD (76 FR 80609).

Your request for approval of the AMPs was submitted under the provision of 40 CFR §60.13(i)(1) that specifically cites the presence of liquid water or other interferences as one of the situations where the Administrator may approve an alternative to monitoring requirements contained in an applicable standard. The AMPs you submitted are based upon promulgated monitoring provisions in Subpart DDDDD. Based upon our review, the EPA concurs neither a COMS nor a PM CEMS are practical monitoring options for your site-specific circumstance. Therefore, the following AMPs, based upon your proposal, are acceptable to the EPA when using only wood-residue biomass as a fuel for the No.1 boiler:

1. Total secondary electric power for the WESP, operating load or steam generation rate for the boiler, and pressure drop and liquid flow rate for the scrubber, shall be collected at a minimum of once every 15 minutes during performance testing conducted to determine compliance with the PM standard promulgated in 40 CFR §60.43b(c)(1).
2. The lowest hourly total secondary electric power for the WESP and the lowest hourly average scrubber pressure-drop and liquid flow rate shall be determined by computing hourly averages using all 15-minute readings taken during performance testing.
3. The highest hourly operating load or steam generation rate for the boiler shall be determined by computing hourly averages using all 15-minute average readings taken during performance testing.
4. The total secondary electric power for the WESP, boiler operating load or steam generation rate, and scrubber pressure-drop and liquid flow rate shall be monitored continuously following performance testing.
5. The 30-day rolling average total secondary electric power shall be maintained at or above the lowest one-hour average total secondary electric power as determined by the performance testing.
6. The boiler 30-day rolling average operating load or steam generation rate shall be maintained such that it does not exceed 110 percent of the highest hourly average operating load or steam generation rate as determined by the performance testing.
7. The 30-day rolling average scrubber pressure drop and liquid flow rate shall be maintained at or above the lowest one-hour average pressure-drop and liquid flow rate as determined by the performance testing.

Our approval of the AMPs for your wood-residue fired boiler are based upon the following factors:

1. Water droplets in the flue downstream of the wet scrubber and WESP used for controlling PM emissions from the boilers will interfere with the ability to obtain accurate monitoring results with a COMS.
2. The boiler is fired with wood-residue biomass.
3. During the rule development process for Subpart DDDDD, the EPA determined that there are significant concerns regarding the ability of a PM CEMS to monitor PM emissions from biomass units.

4. The AMPs proposed by WestRock are based upon promulgated monitoring procedures contained in Subpart DDDDD.
5. Based upon a review of the Applicability Determination Index (ADI), we have identified one previous determination in which the EPA granted approval to monitor venturi scrubber pressure drop, venturi scrubber liquid flow rate, and WESP total electric power, as an alternative for the installation of a COMS for a boiler subject to Subpart Db (ADI Control Number 1500020). Additionally, the AMPs proposed by WestRock are consistent with similar AMPs recently approved by Region 4 for Subpart Db boilers at the WestRock Mahrt Mill in Phenix City, Alabama and Subpart Db boiler at the Foley Cellulose facility in Perry, Florida.

Please note that our approval does not alter WestRock's obligations to meet all other applicable New Source Performance Standard (NSPS) requirements, including, but not limited to the following NSPS General Provisions:

1. The requirement to maintain and operate affected facilities and associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, per §60.11(d); and
2. The prohibition against concealing emissions which would otherwise constitute a violation of an applicable standard, including the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere, per §60.12.

If additional AMPs are needed for other boiler fuel usage operating scenarios, please submit an additional AMP request to EPA specific to the fuel. The potential fuel usage operating scenarios should detail each maximum hourly permitted capacity for all individual fuels, or a mixture of fuels, in the boiler at a given time.

On the effective date of any amendments promulgated for Subpart DDDDD, that directly affect the PM monitoring requirements for wet scrubbers and/or WESPs, WestRock shall evaluate whether, or not, the changes will require a revised AMP from the EPA, and shall submit, when necessary, a revised AMP request to the EPA. Additionally, if factors change beyond the representation proposed in the requested AMPs, this approval will become null and void.

This approval was coordinated with the EPA's Office of Enforcement and Compliance Assurance (OECA) and Office of Air Quality Planning and Standards (OAQPS). If there any questions concerning this response, please contact Tracy Watson of my staff at (404) 562-8998 or watson.marion@epa.gov.

Sincerely,

**KENNETH  
MITCHELL** Digitally signed by  
KENNETH MITCHELL  
Date: 2020.10.22  
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For Caroline Y. Freeman, Director  
Air and Radiation Division

cc: Sara Ayres, EPA OECA  
Kim Garnett, EPA OAQPS  
Angela Aten, WestRock