



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAY 24 2012

Mr. William R. Roberson
RMB Consulting & Research, Inc.
5104 Burr Oak Circle
Raleigh, NC 27612

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Dear Mr. Roberson:

I am writing in response to your email request dated April 27, 2012, for consideration of alternative procedures for determining the moisture content of flue gas emissions during low emitting EGU (LEE) testing for mercury as described in 40 CFR Part 63, Subpart UUUUU. In order to determine whether an affected unit qualifies for LEE status, Section 63.10005(h) requires that a performance test be conducted for 30 boiler-operating days using Method 30B. While performing the test, stack gas moisture content data must also be collected using Method 4, or a moisture monitor certified according to 40 CFR Part 75 must be installed.

In lieu of performing Method 4 for 30 boiler-operating days, you propose two possible alternatives for determining the moisture content of the stack gas. Your first proposed alternative is to assume the stack gas is saturated, and to use the stack gas temperature in conjunction with the saturation vapor tables (or the appropriate psychrometric charts) to determine the moisture content. Your second proposed alternative is to measure the mass of water collected in the moisture trap portions of Method 30B, and apply that value to the Method 30B dry gas volume to yield water vapor content (in a manner analogous to Method 4).

We have reviewed your proposal and agree that Method 4 would not be feasible in this situation due to the extremely long run times required. For that reason, we agree that an alternative to determining the moisture content of the stack gas as required by 40 CFR 63.10005 (h) is warranted. Therefore, in order to determine the moisture content of the stack gas during LEE testing for mercury emissions, we are approving the following alternative test procedures:

- Determine and record the weight of the water knockout and desiccant vessels, to within 0.5 g, before and after each Method 30B test run to determine the total mass of moisture collected. Use this mass value in the applicable calculations in Section 12 of Method 4 to determine the moisture content of the stack gas.
- In addition, while performing Method 30B, determine the average temperature of the stack gas and use that average temperature in conjunction with the saturation vapor tables (or the appropriate psychrometric charts) to determine the moisture content of the stack gas (as described in Method 4, Section 4.1).
- The lower of these two values shall be considered the moisture content for LEE determination calculations.

Since this alternative method approval is applicable to other facilities conducting LEE testing under 40 CFR 63.10005(h), we will be posting this letter on our web site at <http://www.epa.gov/ttn/emc/approalt.html> for use by other interested parties.

Please contact Kim Garnett of my staff at (919) 541-1158 or garnett.kim@epa.gov if you have any questions regarding this letter or would like additional information.

Sincerely,



Conniesue B. Oldham, Ph.D., Group Leader
Measurement Technology Group

cc: Bill Maxwell
Barrett Parker