

operate at the “target compliance level,” which is 50 percent of the emission limit, (0.005 lb/10⁶ Btu) we then have a unit operating at 3.75 mg/acm with an equivalent emission limit of 7.5 mg/acm. Not only will it be virtually impossible to conduct correlation testing at three PM concentrations (low, mid and high), it is far from clear that any type of valid PM CEM correlation can be established over such a limited data range. Using 7.5 mg/acm as the emission limit: low becomes 0 to 3.75 mg/acm; mid is 1.88 to 5.63; and high is 3.75 to 7.5 mg/acm. Anyone who believes he or she can regulate and control PM emissions from a coal-fired EGU that precisely has never set foot in such a facility. If EPA finalizes the MATS fPM limit to 0.010 lb/10⁶ Btu, there is a much stronger technical argument to eliminate PM CEMS as a compliance option altogether and rely on quarterly stack testing with longer run times for all EGUs.

EPA states that 3-hr stack testing runs are the solution to minimizing both costs and uncertainty associated with the proposed lower fPM emission limit. While 3-hr testing runs may be acceptable for a standard compliance test that consists of three independent test runs, it is quite unreasonable for either PS-11 initial correlation tests and/or response correlation audits (RCAs). As noted above, PS-11 correlation testing requires a minimum of 15 runs and allows the owner/operator to discard up to five runs to improve correlations. Thus, it is not unusual to conduct 20 test runs for the PS-11 initial correlation test.⁷

A 20-run test program with 3-hr test runs will require on the order of 2 weeks. This is an excessive amount of time to take a unit off dispatch and hold constant load conditions for the sake of testing. How ironic it would be to displace renewable generation with a coal-fired EGU for 2 weeks simply to complete EPA-required testing. The increase in stack testing cost will be significant.⁸ Granted, longer test runs improve Method 5 accuracy at low PM concentrations. However, longer test runs will neither expand the range of the data nor the quality of the resulting PM CEMS correlations. The range of the data will be limited even with longer test runs, and the robustness on any resulting correlation will be questionable.

Portland Cement Argument

EPA acknowledges that in the 2012 Portland Cement rulemaking, the Agency was aware of the difficulty in using PM CEMS to demonstrate compliance with a fPM emission limit in the range of 5 to 8 mg/dscm.⁹ In the MATS RTR proposal, EPA attempts to dismiss comparisons to the Portland Cement rule by asserting that the particle characteristics between the two source categories are different. We agree that the particle

⁷ The RCA requires a minimum of 12 individual runs, and also allows owners/operators to discard up to five runs. Thus, 17 individual runs are often performed for an RCA.

⁸ RLR Consulting obtained a budgetary cost estimate of \$80,000 for conducting PS-11 correlation test with the proposed sample volume requirement of 4 dscm. The budgetary estimate is \$30,000 for conducting PS-11 correlation test under the current MATS requirements.

⁹ The Portland Cement fPM emission limit is expressed in the units of pounds of particulate per ton of clinker produced. Thus, the conversion to PM concentration (mg/dscm) is not exact but depends on plant-specific parameters.