

NATIONAL COUNCIL FOR AIR AND STREAM IMPROVEMENT, INC. P.O. Box 13318, Research Triangle Park, NC 27709-3318 Phone (919) 941-6400 Fax (919) 941-6401

> John E. Pinkerton, Ph.D. Vice President, Air Quality (919) 941-6406 jpinkerton@ncasi.org

January 5, 2010

Mr. Jim Eddinger Energy Strategies Group (D243-01) Sectors Policies and Program Division U.S. Environmental Protection Agency Research Triangle Park, NC 27711

Dear Jim:

Subject: Review of EPA Method 29 Results for Mercury

Considering the importance placed on emission test results for the Boiler MACT rulemaking, NCASI has been reviewing several stack sampling and associated laboratory reports for solid fuel boilers that may be among the 'best performers' for mercury in either the coal or biomass subcategories. Our initial focus has been on test results in the 2008 ICR survey data base where the reported mercury emission rates were less than 1 lb/ 10^{12} Btu heat input. A number of the reports we have reviewed were also sent to you in response to EPA's October 2009 request for supporting documentation from 'best performers'.

There are several problems with the majority of the reported mercury emission rates that we examined, mainly associated with values below detection limits for one or more of the five components in the EPA Method 29 sampling train. For the 2009 EPA-mandated sampling, EPA gave explicit instructions on how such non-detect values should be handled when reporting sampling results. However, a variety of approaches were used in the pre-2009 reports. Given the inconsistencies between the pre-2009 and 2009 procedures for handling non-detects, we believe the mercury results from the 2008 survey responses should not be combined with those from the 2009 sampling at this time. A detailed review of the stack test reports and associated laboratory mercury analysis reports should be conducted so that appropriate adjustments can be made to the earlier sampling results so that all non-detects are handled according to the instructions EPA issued for the 2009 sampling. EPA will also need to check the reports for the 2009 sampling to make sure the reporting instructions were properly followed.

We believe the subject of non-detects will have to be addressed in the analysis of mercury emissions data for the purposes of setting mercury emission limits. How non-detects are handled will affect the identification of the 'best performing' 12% and analysis of emissions variability for those units.

The attachment summarizes the results of our review of mercury test results and offers comments on how non-detects might be handled for the purposes of a mercury emission limit. We are currently examining 2009 test reports for mercury, as well as HCl and dioxin/furan, and hope to communicate any significant findings to you by the end of this month.

We would be happy to discuss any questions you or your contractor may have on the attached or on our ongoing review of the 2009 reports.

Sincerely,

John E. Pinkerton

John E. Pinkerton

cc:

R. Wayland, EPA B. Shrager, EPA A. Singleton, ERG A. Reitter, NewPage D. Lane, Rayonier T. Hunt, AF&PA A. Jain, NCASI