



MANITOWOC PUBLIC UTILITIES

1303 South 8th Street P.O. Box 1090 Manitowoc, WI 54221-1090 920-683-4600 FAX 920-686-4348
www.mpu.org

Mr. Jon Heinrich
Wisconsin Department of Natural Resources
Bureau of Air Management
P.O. Box 7921
Madison, Wisconsin 53707-7921

May 5, 2008

Subject: Proposed Revisions to NR 446
Relating to the control of mercury emissions from electric generating units in Wisconsin.

Dear Mr. Heinrich:

Manitowoc Public Utilities (MPU) appreciates the opportunity to provide comments regarding the proposed revisions to NR 446 and amendments to NR 439. This rule relates to the control of mercury emissions from electric generating units (EGUs) in Wisconsin. The revisions will modify the existing requirements applicable to the four large utilities in Wisconsin and will also cover four additional small coal-fired utilities including Manitowoc Public Utilities.

MPU is a small municipal cogeneration EGU facility and we offer the following comments for consideration:

1. Small Coal-Fired Electrical Generating Units. MPU has four coal-fired generating units that will be affected by this rule based on the definition of “small coal-fired EGU”. Two of the units are stoker fired boilers and two of the units are circulating fluidized bed (CFB) units. The stoker boilers are fired coal along with biomass and the CFB units are fired petroleum coke along with coal and biomass. Item 5 of the rule summary states that six EGUs operated by four additional utilities will now be covered. This is an understatement as MPU alone has four units.
2. Definition of Small Coal-Fired Electrical Generating Units. MPU requests the Department to revise applicability under NR 446.09 (1) and the “small coal-fired EGU” definition under NR 446.10 (10). The suggested change would re-define a “small coal-fired EGU” to be an electric generating unit with a nameplate capacity greater than 25 MW but less than 150 MW. The suggested definition is consistent with an affected unit under section 112 of the Clean Air Act (CAA). This would

provide consistency as it is expected EPA will develop future EGU mercury emission regulations under CAA section 112 as a result of the recent court CAMR action.

3. BACT Control for Small Coal-Fired Electrical Generating Units. Small Coal-Fired Electrical Generating Units will be required to complete a BACT determination and reduce mercury emissions to a level defined as BACT. We support the BACT scenario; however, a BACT determination is often controversial. We would like to see language added that the BACT determination shall not require control that exceeds the requirements applicable to a large coal-fired EGU (90% removal). We would also like consideration given to an option to forego the BACT determination scenario by accepting a default value of 80% removal for example. Another option could be to define presumptive BACT for small coal-fired EGUs as having mercury emissions equal to or less than 10 pounds per year.
4. EGU Fuel Supply. The proposed rule appears to be designed with the understanding that the affected units are primarily coal fired units. This would be incorrect for our CFB units as their primary fuel is petroleum coke along with coal and biomass. It is critical that the total fuel supply be included in the rule design as mercury supply to the unit is the core component of the calculation of mercury removal. Coal supplies less than ten percent of the heat input to our new unit and even less of the mercury input to the boiler. The calculation of the mercury removal based on the minor mercury input from the coal would not accurately represent the actual mercury removal of the CFB units.
5. CFB Absorbent Impacts. The CFB units fire a significant amount of limestone with the fuel to provide a circulating mass and to remove the sulfur dioxide produced from combustion of the fuels. The limestone input is approximately one pound per 2.7 pounds of fuel and is therefore a major boiler input. Naturally occurring limestone contains approximately 1 ppm of mercury and therefore becomes a significant component of the mercury input to the combustion process. The calculation of mercury removal should consider the impact of firing an essential mercury containing component in the process.
6. Calculation of Mercury Emissions. The proposed rule is not clear if a mercury CEM is required or if annual stack testing would be allowed for a small coal-fired EGU. MPU would like to have the option for stack testing as we believe our emissions are low enough that it would not warrant the cost of installing and maintaining a full mercury CEM system.
7. Mercury CEM. The rule is not clear what will constitute an acceptable CEM. The rule should detail what type of CEM is required, what the test procedure will be to RATA the instrument, what will be required for a daily calibration, the required data management methods such as with a DAS, and if sorbent trap sampling systems will be allowed.

8. Combined Stack Configuration. The proposed rule does not address a combined stack configuration. MPU currently has three units that discharge into a common stack S20. These three units are regulated under the acid rain program and CAIR. The required Part 75 CEM equipment is installed in the common stack S20. In the event that a mercury CEM is required, we would want to add the monitor to the existing system. The common stack monitor would measure the total stack emissions, but would not differentiate which unit was the source of the emission. The calculation of mercury removal would require totalizing the mercury input from all three units.
9. Fuel Testing. The proposed rule is requiring monthly fuel analysis for mercury. The collection of a representative sample often requires an ASTM auto sampler and small EGUs often do not have this expensive equipment installed and it would often not even be feasible. MPU would recommend that the rule allow the analysis for mercury from the sample collected during the delivery of fuel to utilize the representative lot sample already being collected. The rule would need to identify the test methods to be used on fuels/materials other than coal.
10. Minimum Threshold. MPU would like consideration given to the establishment of a mercury threshold value. Facilities with actual mercury emissions below the threshold would be exempt from the new requirements. The DNR estimates the compliance cost for MPU would be 0.04 to 0.12 cents per KWh and this would correspond to \$232,000 to \$696,000 per year based on the 2007 generation. We believe this cost is an unfair burden to our rate payers as our actual emissions are low and the additional expenses will not yield any tangible benefits. The DNR acceptable mercury emission rates from “other sources” support the establishment of a minimum threshold value. The current rule exempts EGUs emitting less than 10 pounds of mercury per year and we would suggest this exemption continue in the new rule.
11. Conformance to Federal Law. The new rule should contain language stating that the rule will be consistent with Federal law and will change as new federal regulations are established.

Thank you for your consideration of this request. Please feel free to contact me at 920-686-4351 if you need additional information or clarification. Again, MPU sincerely appreciates the opportunity to provide DNR with its thoughts, comments and proposals. MPU stands ready to assist DNR in any way possible to craft a responsive, cost effective program for controlling Hg emissions from electric utility steam generating units.

Sincerely,



Nilaksh Kothari, P.E.
General Manager
Manitowoc Public Utilities

This letter emailed on May 5, 2008 to Jon Heinrich, jon.heinrich@wisconsin.gov and to everyone copied on the following list.

Copies to:

MPU – Red Jones
MPU – Tom Reed
MPU – Don Duenkel
MPU – Dale Koch
MPU – Jerry Ahlswede
MPU – Engineering Files

Mayor Kevin Crawford
City Hall
900 Quay Street
Manitowoc, WI 54220-4543
kcrawford@manitowoc.org