



May 5, 2008

Mr. Jon Heinrich
Bureau of Air Management
P.O. Box 7921
Madison, WI 53707

Dear Jon:

The following comments are submitted on behalf of the members of the Wisconsin Paper Council regarding proposed revisions to NR 446 relating to mercury emissions from coal-fired electric generating units in Wisconsin.

The Wisconsin Paper Council is opposed to the proposed rule changes.

Our interest in this rule is as a major electric ratepayer. The paper industry is the largest industrial energy user in the state. Energy costs typically make up 20-30% of total production costs. *Monthly* energy bills can be \$750,000 to \$1,000,000 for paper companies. A significant portion of this cost is for purchased electricity.

Electric utilities that would need to comply with the proposed changes to NR 446 will simply pass on the cost of controls, plus a profit margin, to ratepayers. It is the ratepayers, not the utility, that will pay, and the paper industry is a major ratepayer. Based on 2002 data, we estimate that the paper industry accounts for approximately 7.6% of all electricity purchases in the state. Given the contraction in the paper industry, the current proportion is probably closer to 7.0%.

We have two major areas of concern with the proposed rule. One is process, the lack of consultation prior to release of the proposed changes, the very short time period - even considering the three-week comment extension - that has been allowed to review and analyze the proposal, the weak justification for the changes, and the potential disconnect between Wisconsin regulatory action and expected federal action.

The other is costs and benefits of the proposed changes. It is virtually impossible for the department, affected utilities, or ratepayers to accurately predict costs and benefits. In effect, the department is betting many millions of ratepayer dollars that

its cost estimates are accurate. There is no risk to the department for this bet, but there is substantial risk for ratepayers.

We strongly urge the department to slow down this rulemaking until all parties better understand what the potential costs and benefits of state-only regulation at this stringent level of control are.

Process

We were unaware of the substance of the proposed changes until they were made public at the beginning of March. The public comment period, originally scheduled to close on April 14, was extended until May 5. Speculation is that the Natural Resources Board will consider final approval in June. This rule is moving forward very quickly.

Wisconsin has an existing mercury control rule on the books. Compliance deadlines in the proposed rule are 2015 at the earliest. From a practical standpoint, there is no reason to rush the proposed changes – particularly without a thorough understanding of costs and benefits. The pace at which this rule is moving makes it extremely difficult for the public to figure out what it means, from a practical standpoint.

The department can only proceed with the proposed rule if it makes a finding that the changes are needed to protect public health and welfare. The department issued a "finding" that basically said that mercury was bad, wildlife and humans are at risk, and that more emission reductions are good. What the "finding" never addressed was the incremental benefits of the proposed rule compared to the existing rule. How much less mercury will wildlife and humans be exposed to statewide under the proposed rule, compared to existing law, and what, if any, benefit will result? We suspect that, had such an analysis been done, the answer would have been no measurable environmental benefit.

Everyone knows that the federal EPA will propose a mercury rule to replace the vacated Clean Air Mercury Rule (CAMR). Nobody knows what the federal rule will look like. The only thing we know for sure is that it will be different from the proposed Wisconsin rule. Differences between state and federal regulations could cause compliance problems and could result in increased costs if utilities are forced to change compliance strategies in mid-course. The prudent course of action, given current Wisconsin law and the long compliance window in the proposed rule, is to simply wait for EPA to act and then comply with the federal

rule. Everyone in the country would be on the same economic and compliance footing.

Finally, the notice of public hearings for the proposed rule states that the State Implementation Plan (SIP) is being revised. No further clarification is provided. The department is proposing a Wisconsin-only mercury rule and it should not be included in the SIP. Inclusion of state-only mercury provisions in the SIP will increase the likelihood of compliance problems once EPA issues its rule.

Costs and Benefits

In evaluating the rule in the very short time period in which we have been given to make comments, our goal was to make a cost-benefit assessment to determine whether the economic costs imposed would be justified by the environmental benefits gained. This was essentially an impossible task within the time available for comment. Multiple regulatory programs, the Clean Air Interstate Rule (CAIR) for example, have potential impacts on the level of mercury emissions and the costs of control. Assigning the cost of control to the proposed rule versus the existing mercury rule, some other regulation, such as CAIR, or some other reason, such as a consent decree, is very difficult. The effectiveness of mercury control technologies and the cost of these controls are just now being assessed for the level of control specified in the proposed rule. Affected utilities are still sorting through compliance options and few, if any, know exactly how they will comply with the proposed rule. The ambient environmental benefits resulting from the few hundred pounds of additional mercury reduction attributable to the proposed rule is unknown.

In an effort to come up with at least a common understanding how costs and benefits could be reasonably estimated, we met with department staff twice, had several other phone conversations, and exchanged numerous e-mails. Progress is being made, but we are far from comfortable with the information that we have now.

We believe that our cost-benefit approach is the correct way to assess the proposed rule. We strongly urge the department to allow additional time to properly analyze the proposed rule.

Costs

The department estimates the cost of the proposed rule at between \$38 million and \$91 million annually. The cost of purchased electricity is expected to rise by between 0.06 and 0.14 cents per kilowatt-hour. This estimate may not fully

account for potential costs associated the multi-pollutant option and we are working with the department on this question. Taking the department's estimate at face value, the cost to the paper industry would be about \$2.66 million to \$6.37 million annually, assuming the paper industry purchases 7% of electricity statewide. The analysis isn't quite that simple, but the likely impacts appear to be in the millions of dollars per year for our industry.

In the current economic climate, and in the face of rising natural gas, coal, fiber, chemical, and other costs, our industry simply cannot absorb additional costs for a regulation that, in our opinion, will have little, if any, measurable environmental benefit. This is not the way to keep Wisconsin's paper industry competitive in a global marketplace.

We should note that the department's cost estimate does not appear to include the approximate 11-12% profit margin that the Public Service Commission will add on to these costs, assuming that the affected utilities choose to finance these pollution control expenditures through customer rates, rather than other mechanisms, like environmental trust bonds. One way to help lower the cost of environmental regulations, like the proposed mercury rule, is to give the Public Service Commission the authority to require the use of environmental trust bonding, where appropriate. We strongly urge the department, the Public Service Commission, and Governor Doyle to support environmental trust bond legislation.

We must also note that there are other studies relating to the cost of mercury, sulfur dioxide, and nitrogen oxide control. These studies contain total control costs in the hundreds of millions to billions of dollars, raising questions about whose estimates are correct. Invariably, one study states costs in one way, while another states costs in a different way, making comparison very difficult. We are working with department staff to get everything on an apples-to-apples basis, but we aren't there yet.

Regarding mercury control technology, it appears that progress is being made to make mercury control more effective and less costly. That does not mean that control technology capable of reaching 90% reduction levels is commercially available. The U.S. Department of Energy (DOE) and the National Energy Technology Laboratory (NETL) are in the process of field testing mercury control technology at utilities around the country. A Phase II report issued in May 2007 included the following cautions:

- "This report provides "study level" cost estimates..."; page 6.
- "The accuracy of the cost estimates presented here are expected to be nominally +/- 30%..."; page 6.

- "The cost estimates developed here assume an uncomplicated retrofit and minimal economic impact..." page 6.
- "The economics are also based on the assumption that mercury control via ACI will not cause any balance-of-plant impacts."; page 6.
- "...the field tests still represent relatively short-term testing at optimum conditions..."; page 10.
- "...the economics presented in this report are plant and condition specific and attempts to use this document as a tool to predict the performance of the mercury control technologies described in this report at other power plants should be conducted cautiously regardless of similarities in coal rank and APCD configuration."; page 10.
- "Although initial field testing of ACI has been relatively successful, additional research, development and demonstration (RD&D) activities are required before it is considered a commercial technology for the broad range of coals burned by, and various APCD installed on, today's coal-fired power plants."; page 13.

DOE/NETL is currently in Phase III field testing which is scheduled for completion in 2009.

Department staff are apparently well of aware of the uncertainties surrounding high level mercury control technologies. Why else would the department propose to conduct a review of rule requirements during 2010 to 2014 to evaluate mercury control technology and consider if the schedule to achieve 90% on EGUs 150 MW and larger is appropriate, including a determination of whether additional compliance flexibility is warranted. While this proposed review is positive, it comes after utilities need to commit to a control strategy.

This regulatory approach of pushing the technology envelope while offering a vague "back door" if things don't work out is risky, potentially costly, and fundamentally a bad way to regulate. It is betting ratepayers money with little regard for risk.

Benefits

At several places the Department claims that 4,400 pounds of mercury could be prevented from entering the atmosphere as a result of the rule changes. We would note that this is more than the entire reported statewide total mercury emissions reported in 2005 and over 1,800 pounds more than reported by all utility sources in 2005, as shown in Table 1-1 of DNR's findings document.

In estimating emission reductions, annual mercury emissions from utilities increase from 2,586 pounds in 2005 (Table 1-1 of findings) to 3,022 pounds in an unidentified pre-modification year (Table 4-1 of findings). The reason, as far as we can tell, is that the proposed rule changes the baseline from actual emissions (as used in current NR 446 and CAMR) to mercury in coal. The effect of this change is to claim credit for mercury reductions associated with the proposed rule that have already been made (due to the effect of existing control equipment). For the purposes of the following discussion we will use 2,586 pounds as the reduction baseline, since it more accurately reflects emissions.

Further, the 4,400 pound reduction estimate includes credit for 185 pounds of mercury emissions from utility plants under construction. However, as Table 4-1 clearly shows, the additional reduction under the proposed changes compared to current law is 29 pounds, not 185 pounds.

The issue of what would happen under current law versus the proposed changes is key to understanding the potential benefits of the proposed rule changes. The findings document does not address this issue, forcing us to make some assumptions. For example, it seems reasonable to assume that utilities subject to current law will comply with current law and meet the 75% reduction requirement by 2015. If we assume an across-the-board 75% reduction for the electric utility sector, mercury emissions would drop from 2,586 pounds per year to 776 pounds per year, a drop of 1,810 pounds per year. (Not all units in the utility sector are subject to control under current NR 446. However, those that are not subject to NR 446 are a small fraction of total sector emissions. Further, facilities subject to NR 446 will over-control to some extent to insure compliance. This "over-control" would most likely more than offset any assumed control at unregulated units.) So, the current law 2015 level of emissions could be reasonably assumed to be about 776 pounds of mercury.

Despite the Department's discussion of various control technologies that "are capable of achieving" or that "have the potential to remove", the bottom line is that regulated utilities will need to "hit the number" – they will need to reduce mercury emissions by 90%. We will assume that technology is available to reach a 90% reduction and that affected utilities will comply with the law. (This assumption is made solely for the purpose of calculating environmental benefits. It is an open question as to whether the technology will be commercially available.) Mercury emissions drop from 2,586 pounds of mercury per year, to 259 pounds per year, a 2,327 pound per year reduction. This approach overstates the benefits of the proposed rule because a 90% reduction from mercury in coal is less than a 90% reduction from actual 2005 emissions. However, we don't know how to accurately make the conversion from mercury in coal to actual emissions, so we will give the

benefit of the doubt to the proposed rule and overstate the emission reduction benefits.

The difference between current law – 776 pounds – and a 90% reduction to 259 pounds is the emission reduction benefit of the proposed changes – 517 pounds. If the benefits of the proposed rule on plants under construction (29 pounds) is added the total benefit comes to 546 pounds.

However, even this level of benefit is overstated. Atmospheric mercury deposition involves the global transport of mercury. USEPA has estimated that about one-third of U.S. mercury emissions are deposited within the contiguous United States. The remainder enters the global atmospheric cycle. A study by the State of Michigan, quoted in the findings report, estimates that 50% of mercury emissions are readily deposited. Where these emissions are readily deposited is an open question. Taking a conservative approach by using the Michigan estimate and assuming that all of the 50% is deposited in-state, the 546 pound emissions benefit drops to a maximum 273 pound environmental benefit.

Of what benefit is that 273 pounds of mercury to public health and welfare? Stated in terms more aligned with the statutory directive in s.285.27(2)(b), is the reduction of an additional 273 pounds of mercury needed to provide adequate protection of public health and welfare? Despite a clear statutory directive, the findings report never really answers this question. We don't have the technical capacity to analyze this issue, but we strongly suspect that such a small reduction over the entire state, and in light of mercury deposition originating from global sources, would not result in any measurable environmental improvement. That is, it would likely not provide any additional protection of public health and welfare, over and above current law.

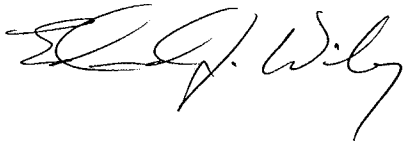
Further, the statutory directive in s.285.27(2)(b) does not exist in isolation. Section 285.11(9) requires the department to prepare and adopt minimum standards for the emission of mercury compounds or metallic mercury into the air, consistent with s.285.27(2)(b). The intent of s.285.11(9), in combination with s.285.27(2)(b), appears to be to limit DNR mercury control initiatives to actions that are no more stringent than necessary to protect public health or welfare. The department has made no demonstration that the proposed rule is the minimum necessary to protect public health or welfare, and we find it difficult to understand how such a finding could be made without an understanding of the specific benefits of the proposed rule compared to current law.

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Conclusion

The proposed rule will impose potentially significant levels of additional cost on ratepayers in Wisconsin while, in all likelihood, providing no measurable environmental benefit. Wisconsin's pulp and paper industry is willing to be part of the solution to environmental problems, if the solution actually makes reasonable progress toward remedying the problem. However, we cannot afford to incur costs for a rule that will likely have no measurable environmental benefit. The department should maintain current law and comply with federal regulations, when they are issued. At a minimum, additional time should be allowed to analyze the potential impacts of the proposed rule.

Sincerely,

A handwritten signature in black ink, appearing to read "E. J. Wilusz". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Edward J. Wilusz
Vice President Government Relations