



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

APR 06 2012

Andrew Stewart
Chief
Permits and Stationary Source Modeling Section
Bureau of Air Management
Wisconsin Department of Natural Resources
PO Box 7921
Madison, Wisconsin 53707-7921

Dear Mr. Stewart:

The U.S. Environmental Protection Agency has the following comments on the Wisconsin Department of Natural Resources' (WDNR) draft of the Prevention of Significant Deterioration (PSD) Permit for Manitowoc Public Utilities. The draft permit is being proposed as a PSD permit (#11-DMM-326) and a Title V permit revision (#4360359301-P21). The permit is for the installation of a new 33 million BTU per hour natural gas-fired boiler and the expanded use of renewable biomass as a fuel in two existing boilers.

In order to ensure that the project meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis for the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments.

- 1) In the netting analysis, baseline actual emissions for particulate matter 2.5 microns or less ($PM_{2.5}$) are assumed to be equal to the total Particulate Matter (PM) emissions, according to page 9 of the draft permit's Analysis and Preliminary Determination document. Such an assumption on baseline actual emissions could incorrectly characterize the net increase of emissions, particularly as this assumption is not made when determining the potential to emit of $PM_{2.5}$ emissions from Boiler 9. Please justify why such an assumption is valid or change the method for determining baseline actual emissions to reflect actual only $PM_{2.5}$ emissions from total PM.
- 2) In August 2009, the Manitowoc Public Utilities received an exemption to test the feasibility of replacing not more than 25% by weight of the current fuel mix in Boiler 9 with wood and biomass materials. This testing commenced in August of 2009 and was completed in August of 2010. In June of 2011 the source received another exemption to test the feasibility of using 100% wood and biomass materials in Boiler

9. This testing commenced July 2011 and is scheduled for completion in July of 2012. Page 8 of the Analysis and Preliminary Determination document indicates that the baseline period selected for fluorides is October 2009 to September 2011. This baseline period includes the timeframe in which the source was operating under an exemption and may not be representative of normal source operation as defined in the source's Title V permit. The definition of baseline actual emissions in 40 CFR §52.21(b)(48)(b) indicates that the rate should be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above a legally enforceable emission limitation. While the source did have an exemption, it may not have been in compliance with its Title V permit. Please either select a baseline period for fluorides that does not include operation under the exemption, adjust the baseline actual emissions to exclude non-compliant emissions, or provide evidence the source was in compliance with its Title V permit during the baseline period.
- 3) Page 20 of the Analysis and Preliminary Determination document indicates the allowable sulfur content of petroleum coke for Boiler 8 is to be raised from 6.0% to 8.0%; however this 8.0% limit is not included in the permit. Please add the 8.0% allowable sulfur content limit for petroleum coke in the permit.
- 4) The bullet on page 20 of the Analysis and Preliminary Determination document describing the elected Carbon Dioxide Equivalent (CO₂e) limit for Boiler 8 ends with the phrase “(see discussion below)”. However, a relevant discussion is not evident on the page. To improve clarity, please add discussion of CO₂e to page 20 before the section on Boiler 9 limitations.
- 5) Page 21 of the Analysis and Preliminary Determination document indicates the Manitowoc Public Utilities requested elective limitations on the emissions from Boiler 10 so that the project is a minor modification under PSD for the respective pollutants. Sulfur Dioxide (SO₂), Particulate Matter 10 microns or less (PM₁₀) and PM_{2.5} were among the pollutants for which limits were requested, however, these limits do not appear in the permit. Please add the SO₂, PM₁₀ and PM_{2.5} emission limits for Boiler 10 to the permit.
- 6) Several discrepancies between the limits elected by the source as listed in the Analysis and Preliminary Determination document and as recorded in the draft permit were found. The source chose to elect these limits so that the proposed project is a minor modification under PSD for the limited pollutants. Please explain the difference between the limits in the Analysis and Preliminary Determination document and draft permit or replace the incorrect values with the intended value so the permit and the Analysis and Preliminary Determination document read the same. The discrepancies found are as follows:
- a. Condition E.1.a.(5)(a) of the draft permit records the PM emission limit for Boiler 8 as “1.383 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the PM emission limit for Boiler 8 as “5.4 tons per month”.

- b. Condition E.1.a.(5)(b) of the draft permit records the PM₁₀ emission limit for Boiler 8 as “1.383 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the PM₁₀ emission limit for Boiler 8 as “4.57 tons per month”.
- c. Condition E.1.a.(5)(c) of the draft permit records the PM_{2.5} emission limit for Boiler 8 as “1.383 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the PM_{2.5} emission limit for Boiler 8 as “4.15 tons per month”.
- d. Condition E.2.a.(3) of the draft permit records the SO₂ emission limit for Boiler 8 as “34.125 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the SO₂ emission limit for Boiler 8 as “85.15 tons per month”.
- e. Condition E.4.a.(3) of the draft permit records the Nitrogen Oxide (NO_x) emission limit for Boiler 8 as “7.76 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the NO_x emission limit for Boiler 8 as “31.1 tons per month”.
- f. Condition E.9.a.(2) of the draft permit records the lead emission limit for Boiler 8 as “0.017 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the lead emission limit for Boiler 8 as “0.00026 tons per month”.
- g. Condition E.17.a.(1) of the draft permit records the sulfuric acid mist emission limit for Boiler 8 as “0.64 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the sulfuric acid mist emission limit for Boiler 8 as “0.99 tons per month”.
- h. Condition D.7.a.(2) of the draft permit records the lead emission limit for Boiler 9 as “0.028 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the lead emission limit for Boiler 9 as “0.044 tons per month”.
- i. Condition D.9.a.(2) of the draft permit records the fluoride emission limit for Boiler 9 as “0.368 tons per month” whereas page 20 of the Analysis and Preliminary Determination document provides the fluoride emission limit for Boiler 9 as “0.0375 tons per month”.
- j. Page 21 of the Analysis and Preliminary Determination document provides the CO_{2e} emission limit for Boiler 10 as “1,492 tons per year” whereas page 85 of the draft permit sets the emission limit to “1,492 tons per month”.

- 7) Page 84 of the draft permit contains the Reference Test Method for NO_x Emissions. As this section contains conditions regarding Volatile Organic Compounds (VOCs), please replace the reference test method for NO_x emissions with that of VOC Emission Rates, as in condition E.6.c (1).
- 8) The permit conditions for VOCs and greenhouse gases contained in pages 84 and 85 of the draft permit are both labeled as P.5. It appears that the condition on page 85 should be changed to P.6.

We look forward to working with you to address all of our comments. If you have any further questions, please feel free to contact Andrea Morgan, of my staff, at (312) 353-6058.

Sincerely,



Genevieve Damico
Chief
Air Permits Section