



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

SEP 18 2015

REPLY TO THE ATTENTION OF:

Ms. Kristin Hart  
Chief  
Permits and Stationary Source Modeling Section  
Bureau of Air Management  
Wisconsin Department of Natural Resources  
PO Box 7921  
Madison, Wisconsin 53707-7921

Dear Ms. Hart:

The U.S. Environmental Protection Agency has the following comments on the Wisconsin Department of Natural Resources' (WDNR) draft Prevention of Significant Deterioration (PSD) permit for Waupaca Foundry, Inc, Plant 2/3 (#14-JJW-192). The draft permit authorizes Waupaca to revise its Best Available Control Technology (BACT) limit to account for diminishing supplies of coke with a sulfur content of 0.6% or less by weight. It was also determined to be necessary to revise the previous BACT limits to account for unexpected peaks of sulfur dioxide (SO<sub>2</sub>) emissions. In the draft permit WDNR finds BACT to be use of the facility's existing dry scrubber and use of low sulfur content coke with a sulfur content of no more than 0.7% by weight. However, WDNR believes that it does not have enough information to set a permanent numerical BACT limit. Instead, the draft permit proposes that Waupaca undertake a BACT study for 24 months to determine the optimal sorbent injection rate. During the time of the study, Waupaca will be required to comply with temporary BACT limits set in the draft permit.

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:

Before requesting a revision of a BACT limit, the Permittee has an initial obligation to comply with the permit. At a minimum the source is required to investigate and report to the permitting agency all available options to keep emissions at the permitted level.<sup>1</sup> In the case of the SO<sub>2</sub> emission peaks, EPA does not believe that the facility provided adequate evidence to demonstrate that they attempted to find alternate means of complying with the existing limits prior to requesting a revision to the permit. EPA believes that Waupaca is obligated to investigate what may be causing the spikes, both during startup and shutdown and during normal operation, and explore options to eliminate or minimize such peaks before applying for a BACT revision. As part of an investigation into the peaks during normal operation, it may be appropriate to require Waupaca to record the type and source of metal feed to the cupola to see if there is a correlation. At this time, EPA believes the permitting action to raise the BACT limit to address the spikes, particularly those occurring during normal

<sup>1</sup> "Request for Determination on Best Available Control Technology Issues—Ogden Martin Tulsa Municipal Waste Incinerator Facility" from Gary McCutchen to J. David Sullivan. November 19, 1987.  
<http://www.epa.gov/region07/air/nsr/nsrmemos/monitor.pdf>

operation, may be premature, particularly as the spikes were measured on an uncertified continuous emissions monitoring systems (CEMS) which when compared to EPA Test Method 6C was found to be reading high. Before revising the BACT limits, Waupaca should verify that the peaks continue after the CEMS is certified and that they are not just a function of the CEMS reading high and provide evidence that the peaks cannot be resolved by any other means.

EPA also believes that the temporary BACT limits are much higher than what is reasonable to call BACT. Even if these limits are temporary, they should still resemble BACT to the best of WDNR's understanding and be justified. It is not reasonable allow a company to avoid complying with a stringent BACT limit for more than two years while this study is underway and a new permit is being developed. In NR 405.02(7), WDNR defines BACT as, "an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the Act" (emphasis added). In the case of the temporary BACT limits, they do not appear to be represent the maximum achievable reduction, even when considering the increase in sulfur content of the coke. For example, the draft permits revises the existing BACT limits of 0.22 lb SO<sub>2</sub>/ton of metal in any hour and the hourly 28.6 lb/hr to a hourly limit of 217 lbs/hr, and 0.38 lbs of SO<sub>2</sub> per ton of metal averaged over a 12 month period and creates a 8-hour average limit 80 lbs of SO<sub>2</sub> per hour. The revised limits do not appear to be justified by either the increase that would be expected from the change in coke sulfur content, or supported by the data collected by the CEMS that show peaks. The new 8- hour average limit was reportedly based off of the observed high 8-hr average emission rate of 44.4 lbs per hour which was recorded by a CEMS that may be reading high. The 217 lb/hr limit is more than twice the maximum 1-hour SO<sub>2</sub> emission rate recorded by the CEMS. Including such large margins of compliance is not justified in the preliminary determination document and EPA does not believe it represents the "maximum" degree of reduction. Please provide justification that the limits provide the maximum reduction possible or revise the limits accordingly.

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