



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

JUN 25 2012

REPLY TO THE ATTENTION OF:

Andrew Stewart
Chief
Permits and Stationary Source Modeling Section
Wisconsin Department of Natural Resources
101 South Webster Street
P.O. Box 7921
Madison, Wisconsin 53707

Dear Mr. Stewart:

The Wisconsin Department of Natural Resources (WDNR) is preparing to propose the Clean Air Act (CAA) Title V operating permit renewal for Appleton Coated LLC (Appleton Coated), permit #445031290-P10. The U.S. Environmental Protection Agency received copies of comments on the draft permit which David Bender submitted on behalf of the Midwest Environmental Defense Center, the Clean Water Action Council of Northeast Wisconsin and the Sierra Club (commenters) on March 19, 2010 when WDNR originally public noticed the permit, and copies of comments submitted by the commenters on May 12, 2012, when WDNR re-noticed the permit.

In order to ensure that the permit meets Title V permitting requirements and that the permit record is transparent and provides adequate technical support for WDNR's decisions, I would like to take this opportunity to provide you with some guidance that WDNR should consider as it works to respond to the comment regarding the superheater replacement project at boiler B23 (facility boiler #10) in 2006, which did not receive a construction permit, and whether it was subject to prevention of significant deterioration (PSD) requirements.

Title V requires that all applicable requirements be included in the Title V permit. *See* 40 C.F.R. § 70.6(a)(1). The term "applicable requirement," as defined in 40 C.F.R. § 70.2 includes "any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act."

In determining whether a project triggers PSD, the Clean Air Act and EPA's regulations specify a two-step test. The first step is to determine if the activity is a non-exempt physical or operational change, and if it is, the second step is to determine whether emissions will increase above significance threshold levels because of the change. EPA's regulations contain some narrow exceptions to the definition of physical or operational change. 40 C.F.R. § 52.21(b)(2)(iii) states that a physical change or change in the method of operation shall not include routine maintenance, repair, and replacement. The determination of whether a proposed physical change is "routine" is a case-specific determination which takes into consideration four

factors: the purpose, nature and extent, frequency, and cost of the work, as well as other relevant factors to arrive at a common-sense finding.

On August 13, 2004, WDNR requested concurrence from EPA that the replacement of superheater tubes at boiler B23 was routine. The request WDNR submitted to EPA contained a four-factor routine maintenance analysis based on the purpose, nature and extent, frequency, and cost. At that time, EPA did not comment on WDNR's analysis. However, after carefully reviewing all the information, and in light of the relevant factors, EPA believes WDNR may have incorrectly determined that the proposed project was "routine" for the reasons discussed below.

Pursuant to EPA's 1988 applicability determination for Wisconsin Electric Power Company's (WEPCO) Port Washington facility, (the Clay Memorandum), the determination of whether a proposed change is routine is a case-specific determination based on purpose, nature and extent, frequency, cost, and any other relevant factors. The purpose of the Appleton Coated project was not to repair or replace limited portions of tubing that had deteriorated, but to replace the entire superheater after 20 years of operation. Information provided by Appleton Coated prior to the project was that these tubes were too thin and in danger of rupturing and therefore had to be replaced. However, in spite of this danger, Appleton Coated claimed that it did not have to decrease the load on these tubes and that it was still operating the boiler at normal capacity. This appears contrary to the statement that the tubes were in danger of rupturing. Replacing these tubes essentially extended the life of the boiler. Regarding the frequency of such repairs, the boiler at Appleton Coated was installed in 1985, and had not undergone a superheater tube replacement project prior to 2006. A one time replacement is not frequent. In addition, the cost estimate provided to EPA to replace the superheater was \$450,000, which was the approximate equivalent of what Appleton Coated spent on its entire annual maintenance outage at the time. For these reasons, EPA believes that the project in question was not routine.¹

The next step for determining PSD applicability if a project is not routine is to look at whether a significant emissions increase and significant net emissions increase resulted from the project. The applicable test in 2006 for determining whether the change at this source resulted in a significant emissions increase was the "actual to potential" test. This involves comparing recent pre-change, or "baseline," actual emissions to the expected potential emissions following the change. As stated in the September 18, 1989, memorandum from John Calcagni to William B. Hathaway, "[t]he comparison of prior 'actual' to future 'potential' emissions is made on a unit-by-unit basis for all emissions units at the source that will be affected by the change. It is done for the emission unit(s) undergoing the physical change or change in the method of operation and also for any other units at which normal operations could be affected by the change at the source." More specifically, this involves a review for possible emissions increases and decreases at process-related emissions units upstream and downstream from the modified or new unit, even

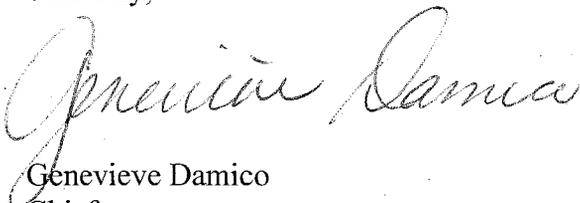
¹ This is consistent with other similar boiler tube replacement projects at pulp and paper mills in Wisconsin that were found to be non-routine by EPA, such as the P.H. Glatfelter determination, which entailed the replacement of all of the steam tubes in the boiler at a cost of \$450,000. This is also consistent with the Ohio Edison decision (*United States of America, et al. v. Ohio Edison Company, et al.*, 276 F. Supp. 2d 829 (S.D. Ohio 2003)) which involved the replacement of major boiler components that had never before been replaced, which also predicted a prevention of tube failures, and were found to be non-routine.

though the original design or permitted capacity may not have changed, if the present effective capacity of the process on a "historical actual-to-future potential to emit" has changed as a result of the modification. Thus, if the modification allows the facility to operate at higher production rates than the baseline pre-modification levels, the potential increase(s) in emissions associated with the increased production from all units involved in the process must also be factored in to determine whether the modification triggers PSD applicability.

Once all emission increases and decreases are calculated for all regulated pollutants, a comparison is made to determine if the net increase exceeds the significance threshold associated with each pollutant. Since we have reason to believe the project in question was not routine, WDNR should conduct this emissions analysis to determine whether or not PSD was triggered by the superheater replacement project.

We look forward to working with you to address our comments before WDNR proposes the permit to EPA. If you have questions on these comments, or would like to discuss this matter further, please feel free to contact Susan Kraj, of my staff, at (312) 353-2654.

Sincerely,

A handwritten signature in cursive script that reads "Genevieve Damico".

Genevieve Damico
Chief
Air Permits Section