



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

OFFICE OF  
AIR, WASTE AND  
TOXICS

MAR 03 2014

Stuart Clark  
Program Manager  
Air Quality Program  
Washington State Department of Ecology  
P.O. Box 47600  
Olympia, WA 98504

Dear Mr. Clark:

This is in response to the Washington Department of Ecology's request that the U.S. Environmental Protection Agency (EPA) review a draft amendment to the May 22, 2007 prevention of significant deterioration (PSD) permit for the electric steam generating project at the Simpson Tacoma Kraft (STK) facility in Tacoma, Washington. The draft PSD permit amendment was prepared by Ecology in response to March 24, 2010 and August 20, 2010 applications from STK. The amendment would relax the nitrogen oxides (NO<sub>x</sub>) best available control technology (BACT) limit and the annual NO<sub>x</sub> emission limit for Power Boiler #7 at the STK facility.

As you are aware, the EPA PSD regulations which apply in Washington (40 CFR 52.21) do not include provisions for amending or revising permits. However, EPA has issued guidance over the years with respect to revising federal PSD permits, including guidance specifically directed at revising BACT limits. The EPA document most relevant to STK's applications is the November 19, 1987 Memorandum titled "Request for Determination on Best Available Control Technology (BACT) Issues – Ogden Martin Tulsa Municipal Waste Incineration Facility" (Ogden Memo).

The Ogden Memo lays out three criteria – all of which must be met - in determining whether a BACT limit can be revised consistent with federal PSD requirements:

- (1) The source was constructed in conformity with the permit (see 40 CFR 52.21(r)(1));
- (2) The permitted BACT levels are inappropriate as a result of errors, faulty data, or incorrect assumptions contained in the permit application; and
- (3) The source investigated all available options to reduce emissions and demonstrated that compliance cannot be achieved.

With respect to Ecology's draft amendment, EPA has evaluated the September 2006 PSD application (including the consultant's report referenced in that application), Ecology's 2007 technical analysis, and the limits established in the 2007 PSD permit. Based on that review, the EPA did not find any errors, faulty data, or incorrect assumptions with Ecology's 2007 NO<sub>x</sub> BACT determination in light of STK's 2006 description of the proposed modifications to the boiler, the expected performance of the proposed NO<sub>x</sub> emissions control technology, and the characteristics of the fuels specified in STK's 2006 permit application upon which emissions and control efficiencies were based. We therefore conclude that, under the second Ogden Memo criterion above, the 2007 NO<sub>x</sub> BACT limit and the annual NO<sub>x</sub> emission limit were not inappropriate for the project proposed in STK's 2006 permit application.

In addition, as you also know, Region 10's Office of Compliance and Enforcement has been investigating compliance with federal PSD requirements at the STK facility. As outlined in the February 12, 2014 letter from Edward J. Kowalski to Betsy G. Stauffer (enclosed), the EPA has reason to believe that STK did not construct the electric steam generator project consistent with the representations in STK's 2006 PSD permit application and the terms and conditions of the 2007 PSD permit issued by Ecology under the PSD delegation agreement between Ecology and the EPA. It also appears that the measured increases in NO<sub>x</sub> emissions are a result of both changes to the design of the boiler and changes in the fuels that are now being burned from what was proposed by STK in its 2006 PSD permit application. This puts into question consistency with the first Ogden Memo criterion above.

In summary, the second of the three criteria in the Ogden memo for revising a BACT emission limit is not met in this case because the EPA does not find the 2007 BACT level to be inappropriate. The first criterion has likely not been met because the EPA has reason to believe that STK did not construct in conformity with the 2007 PSD permit. Finally, STK has not provided sufficient information (specifically information on the quantities of salt-laden fuel currently being burned in Power Boiler #7) for EPA to determine whether or not the third criterion has been met. In light of these conclusions, STK's existing federal PSD permit may not be revised consistent with the federal PSD requirements to increase the NO<sub>x</sub> BACT limit and annual NO<sub>x</sub> emission limit.

On a separate but closely related topic, during the course of our investigation into the basis for the NO<sub>x</sub> BACT limit, we found that the original November 7, 1991 PSD avoidance limits for Power Boiler #7 are still included in the EPA-approved State Implementation Plan (SIP). In 1991, EPA determined, and Ecology agreed, that the post-construction regulatory order establishing enforceable conditions to net the new boiler out of PSD and Part D New Source Review (NSR) needed to be approved by EPA into the SIP to make the conditions federally enforceable. This was because, at that time, there was no other mechanism in the Washington SIP for making the limits federally enforceable. Ecology submitted the order as part of the Tacoma PM10 SIP in 1994 and EPA approved the order into the SIP (59 FR 51506, October 12, 1994). Given the permitted changes to the boiler since 1994, it may be appropriate to remove (or revise) the limits in the SIP; this will require a formal SIP revision request from Ecology demonstrating that the limits are no longer needed for purposes of PSD and Part D NSR avoidance.

We are available to meet with you to discuss regulatory options for addressing NO<sub>x</sub> emissions from STK's Power Boiler #7, and to work with your permitting and SIP staff to determine what would be needed to fix the SIP inconsistencies described above.

If you have any questions about this letter, please give me a call or have your staff contact David Bray at (206) 553-4253.

Sincerely,



Kate Kelly, Director  
Office of Air, Waste and Toxics

Enclosure

cc: Jeff Johnston  
Washington Department of Ecology



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REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

FEB 12 2014

OFFICE OF  
COMPLIANCE AND ENFORCEMENT

Reply to: OCE-127

CERTIFIED MAIL NUMBER - RETURN RECEIPT REQUESTED

Betsy G. Stauffer  
Registered Agent  
Simpson Tacoma Kraft Company, LLC  
917 East 11<sup>th</sup> Street  
Tacoma, Washington 98421

Dear Ms. Stauffer:

Based upon information gathered by the U.S. Environmental Protection Agency (EPA) through on-site inspections, information request responses, and state file reviews, EPA Region 10 has reason to believe that the Simpson Tacoma Kraft Company, LLC (Simpson) facility located in Tacoma, Washington (Facility), may have conducted one or more major modifications without complying with the Clean Air Act's (CAA) Prevention of Significant Deterioration (PSD) requirements. Specifically, EPA has concerns about the projects and issues on the enclosed list.

After EPA issued the information request on August 29, 2011, Simpson requested a meeting with EPA, expressed an interest in working collaboratively with EPA, and requested that EPA first bring any compliance concerns to Simpson's attention informally. In follow-up to that request, EPA is offering Simpson an opportunity to meet and discuss EPA's concerns before EPA considers its next steps. If Simpson is interested in such a meeting, Simpson should come prepared to discuss all relevant information and provide supporting documentation, including but not limited to project descriptions, dates projects were addressed in permit applications, dates projects were commenced, PSD emission calculations, and any other information that will clarify the company's viewpoint.

EPA proposes that this meeting be held on March 6, 2014, at 10:00 AM at the Region 10 Offices in the Park Place building in Seattle. In order to confirm the particulars of this meeting or to request an alternative date or time, please contact either Katie McClintock at (206) 553-2143 or Julie Vergeront, Associate Regional Counsel, at (206) 553-1497 within seven days of receiving this letter. EPA will consider a failure to contact EPA within seven days of receipt to mean that Simpson is declining the opportunity to meet with EPA to informally discuss these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward J. Kowalski".

Edward J. Kowalski  
Director

Enclosure

cc: Plant Manager, Simpson Tacoma Kraft Company, LLC

Stuart Clark, Washington State Department of Ecology

Garin Schrieve, Washington State Department of Ecology

### **Simpson Projects of Concern/Areas for Discussion**

- 1) On Hog Fuel Boiler #7, Simpson undertook physical changes and changes in method of operation not discussed in Simpson's September 2006 permit application (2006 PSD application), and not addressed in the findings of the PSD permit issued May 22, 2007 for the Steam Turbine Generator Project (2007 PSD Permit), including: 1) adding economizer modules, 2) upgrading the fuel feed system instead of installing the feed system, and 3) burning more urban wood. Note that Simpson's PSD Permit Amendment Request of March 24, 2010 states that "Several other factors that may affect NO<sub>x</sub> and CO emission and could be contributing to the overall increase in NO<sub>x</sub> emissions from the boiler include," and listed changes 2 and 3 from above.
- 2) Simpson made a series of changes to Hog Fuel Boiler #7 between 2005 and 2009, including the steam line project, over fire air project, steam turbine project, and the additional changes listed in Simpson's March 24, 2010 PSD Permit Amendment Request. Simpson made changes to its Recovery Boiler and Digesters during this same period. Simpson applied for separate permits (or did not apply for a permit) for each of these changes despite internal documents showing that these changes were viewed as part of one plan. As a result of these separate permit applications, Simpson did not evaluate the aggregated<sup>1</sup> effects of the projects on emissions of all criteria pollutants as required by 40 CFR § 52.21.

One or more of these changes appear to have constituted a major modification that resulted in a net emissions increase of NO<sub>x</sub>, PM, and/or SO<sub>2</sub>. Please be prepared to discuss the specifics of these changes as they relate to PSD applicability, including whether they did or did not constitute a physical change or change in the method of operation; what changes must be aggregated in the PSD applicability analysis; and the actual and potential emissions calculations for all criteria pollutants.

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<sup>1</sup> For a collection of EPA memoranda relevant in determining whether projects should be aggregated, please see 75 FR 19570-71 (April 15, 2010). While the policy discussion in this reconsideration notice does not represent a final agency position without further action by the agency, the numerous memoranda cited in this notice are examples of our historic approach to aggregation.