



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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July 7, 2010

Ms. Eveleen Muehlethaler
Vice President, Environmental Affairs
Port Townsend Paper Corp.
P.O. Box 3170
100 Mill Road
Port Townsend, WA 98368

Dear Ms. Muehlethaler:

PSD Applicability Determination of the Cogeneration Project

Port Townsend Paper Corp. (PTPC) submitted a Notice of Construction (NOC) application to Ecology's Industrial Section dated May 28, 2010, for approval to construct the Cogeneration Project. The project will install a new steam turbine generator to produce about 25 MW of electrical power. To provide the volume and pressure of steam needed, additional superheater tubes will be added to the Recovery Furnace. Boiler 10 will also have modifications to its superheater to produce higher pressure and temperature steam.

Boiler 10 will also receive a new dry electrostatic precipitator (ESP), a new selective non-catalytic reduction (SNCR) system, a new overfired air system, and caustic solution will be used in the existing scrubber liquor to increase the efficiency of sulfur dioxide (SO₂) removal. The induced draft (ID) and forced draft (FD) fans and feedwater pumps will be upgraded. A modified solid fuel handling system will also be installed and two new solid fuel storage piles added. A new haul road route will use trucks instead of loaders to haul wood fuel from existing barge unloading to the existing fuel pile. Additional wood fuel will provide the energy for the additional steam. Fossil fuel use will be minimized and not increased.

Because the rate of black liquor solids fed to the Recovery Furnace will not change due to the project, PTPC estimates that there will be no increase in emissions from the Recovery Furnace. Since there was a physical change in this furnace, PTPC provided a past actual to future actual calculation done according to PSD regulations¹ confirming this.

Due to the extensive use of new emission controls, PTPC has calculated that Boiler 10 will have CO and VOC emission rate increases that are less than 50% of the PSD significance levels. Particulate (TSP, PM₁₀ and PM_{2.5}), SO₂, NO_x, TRS, H₂S, and H₂SO₄ emission rates will either decrease (be less than baseline actual emissions), or be equal to the baseline actual emissions after the project.

¹ PSD applicability procedure in 40 CFR 52.21(a)(2) as implemented based on the December 31, 2002, Federal Register starting on page 80186.



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The solid fuel handling changes will create additional fugitive particulate emissions. These are estimated to be less than 50% of their respective PSD significance levels on their own, before being combined with the Boiler 10 particulate emission changes.

Conclusion

Ecology's Air Quality Program (Ecology) has reviewed the May 28, 2010, application and its emissions calculations presented by PTPC, along with additional information presented on June 14, 2010. Based on the application, additional information, and EPA guidance, Ecology accepts the PSD applicability analysis submitted by PTPC. Ecology's decision to accept PTPC's analysis does not constitute Ecology's endorsement of the accuracy or completeness of the project's scope or estimated emissions. Rather, Ecology does not currently have any reason to object to the PSD applicability determination made by PTPC regarding the Cogeneration Project. PTPC is responsible for ensuring that the Cogeneration Project and any related projects, comply with the PSD requirements of WAC 173-400-700 and all applicable PSD permits issued to the facility.

Ecology recommends that Industrial Section permit this project using the authority of WAC 173-400-110 NSR regulations for pollutants that have hourly increases, and WAC 173-400-114 for pollutants that do not have hourly increases due to the project. New permit limits established under the BACT and RACT provisions of these two provisions will assure that the Cogeneration Project emissions reflect Ecology's determination of BACT and RACT for those emissions. Based on the information presented to date, emission limits based on a determination of BACT and RACT will result in emissions increases due to the project that are less than 50% of their respective PSD significance levels. Compliance with the new permit limits assures that the project will not be a major modification and that there will not be a reasonable possibility that the project will cause a significant increase of a PSD pollutant. This removes any future recordkeeping requirements of WAC 173-400-720(4)(iii)(C).

Ecology commends PTPC for developing a project such as this that will reduce emissions through adding modern emission controls, reduce the environmental impact of their facility on the local community, and develop a new source of income for the company.

Sincerely,



Jeff Johnston, Ph.D.
Manager, Science and Engineering Section

jj/te

cc: Robert Burmark, Ecology
Aaron Day, Trinity Consultants
Marc Heffner, Ecology, Industrial Section
Nancy Helm, U.S. EPA Region 10