From:	Steven Storms
To:	Ogle, Stephanie (ECY)
Cc:	Todd Hay; Tarika Powell; Nanette Reetz; Craig Kenworthy
Subject:	Westrock chip expansion
Date:	Thursday, July 19, 2018 11:58:58 AM

Hello Stephanie. I am a retired Chemical Engineer that had more than 40 years experience in the pulp and paper industry. I would like to make several comments about the proposed changes expansion in Tacoma. First, the description seems to contradict itself. First it says that more efficient polution equipment is being installed, but it also says that the emissions will increase. I find this both confusing and misleading. Second, this does not seem to be an environmental project, it appears to be an expansion project written to make it appear as an environmental project. The additional 90 dry tons per day of chips will produce about 40 additional tons of brown paper. As an incremental capacity increase project, I would assume that the Best Available Control Technology would be required. If the emissions are increasing that does not appear to be the case. Additionally, the impact of the incremental capacity has no been mentioned. Besides the increase in chips, there are several other areas that could have substantial impacts. The chips could replace recycled paper, which would change the operation of much of the mill. The most likely case would be that it will increase the total production of the mill. The impact will be felt throughout the mill. Depending on the recycled content, which I assume is about 50 percent, the recovery boiler would be required to provide an additional 5 or 6 percent with probably an even higher increase in emissions. The power boilers will also see an increase in fuel being burned. Both of these sources of emissions have been neglected in the proposal. The other significant change might also be if additional electrical power is required for this 3 percent increase in capacity. In summary, the project appears to present itself as an environmental project. In reality, it is a capacity increase that does not use the BACT. It also does not include all the other changes that would be required to utilize the additional chips. I think you will find these changes will be even more significant that emissions from the chipping system that is described. Thanks for you attention. I hope this is helpful in your evaluation. Steven Storms. 253 202-9925