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December 28, 2018

Shingo Yamazaki
Washington State Dept. of Ecology
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Re: Comments on WestRock Tacoma Steam Limit Project State Environmental Policy Act (SEPA) Mitigated Determination of Non-Significance (MDNS) and Notice of Construction (NOC)

Dear Mr. Yamazaki,

Thank you for providing the opportunity to review and comment on the WestRock Tacoma Steam Limit Project SEPA MDNS and NOC.

Citizens for a Healthy Bay (CHB) is a 28-year-old organization whose mission is to represent and engage people in the cleanup, restoration, and protection of Commencement Bay, its surrounding waters and natural habitat. We are a 501(c)3 nonprofit providing practical, solutions-based environmental leadership in the Puget Sound area. We work side-by-side with residents, businesses, and government to prevent and mitigate pollution and to make our community healthier and more vibrant. We have paid close attention to WestRock (formerly Simpson Tacoma Kraft) since our founding.

Staff and expert members of CHB's Policy and Technical Advisory Committee have reviewed the MDNS, NOC and related regulations. We also attended Ecology's information session and public comment hearing on the project. Our comments are outlined below.

## Background

WestRock is proposing to increase the steam limit at their natural gas Power Boiler #6 (PB6) from 782,000 Klbs/year to its full capacity of 1,517,829 Klbs/year. This increase in steam production will allow the excess steam generated from boilers #4 and #7 to be used to create electricity that will be sold. According to WestRock's NOC application, this increased combustion of natural gas in PB6 and resulting increase in steam production will increase air emissions of particulate matter, sulfur dioxide, nitrogen oxides, lead, formaldehyde, benzene, toluene. At capacity, this project will `increase of greenhouse gas (GHG, in carbon dioxide equivalents) emissions by as much as 60,605 tons/year.

The purpose of this project is to take advantage of low natural gas rates to fuel PB6 to capacity and sell the excess renewable energy generated from boilers #4 and #7 for a premium in the California renewable energy markets. WestRock is taking advantage of a regulatory market distortion. Regulatory market distortions are not illegal, but are problematic when they incentivize the use of a harmful product over a nonharmful product just for profit. By purchasing (and combusting) more, cheap natural gas, WestRock can sell the extra electricity they generate from renewable fuels on the market at a premium. Therefore, WestRock is increasing climate emissions while simultaneously procuring more profits; this undermines the purpose of the clean energy market.

## Increased Air Emissions

WestRock's NOC application demonstrates that the steam limit project is not subject to New Source Review because there is no proposed construction or physical modification. However, in this case, had the full steam limit allowance been requested all-at-once when originally permitted in 2007, this project would have been subject to New Source Review, as well as Potential for Significant Deterioration permitting requirements. Only because the steam limit allowance was broken into two separate permitting actions did this project fall below standards. This is a prime example of the significance and need for considering cumulative impacts when permitting a project.

CHB understands that Ecology is not responsible for setting air emissions standards in the Washington Administrative Code (WAC). However, Ecology is responsible for protecting "Washington's land, air and water for current and future generations"[1] and should consider cumulative air emissions for all projects and project components, not just new or modified sources. ***CHB requests Ecology use best available science to determine what the cumulative emissions rates will be once this project is complete (i.e., current emissions plus projected emissions), and to demonstrate how the cumulative emission rates for this project will meet air emissions standards for human and environmental health.*** CHB supports adding a cumulative emissions impact analysis and standard in the rulemaking update for WAC 173-460, for toxic air pollutants, criteria pollutants, and GHGs.

Appendix C of the NOC provides projected emissions calculations (App C p. 4). Footnote "e" of Table "PB6 Future Projected Potential Emissions: Post Low-$NO_x$ Burner Installation" shows that the 2007 Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report's Global Warming Potential (GWP) for a 100-year timeline was used for the GHG emissions calculation[2]. Because methane (i.e., natural gas), is 85-times more potent than carbon dioxide in the first 20-years after it is emitted, using the 100-year GWP obscures the real climate change impacts of this project by effectively smoothing the rate of global warming over a longer period of time[3].

Additionally, the GWP for methane from the 2007 report is smaller than what is available in the IPCC's 2013 Fifth Assessment Report, further obscuring the real, near-term global-warming impacts of this

1. Washington Department of Ecology. (n.d.a.). *About us*. Retrieved December 10, 2018, from https://ecology.wa.gov/About-us
2. IPCC (2007) Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the IPCC [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp.
3. IPCC (2013). Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.

project. ***These emission calculations should be updated using the 20-year GWPs from the 2013 IPCC report, and then re-evaluated against human and environmental health standards for permitting consideration.*** This request is also supported by a recent letter from the Washington State Attorney General's (AG) Office to the Puget Sound Clean Air Agency (PSCAA), in which the AG requested that PSCAA's recent Tacoma Liquefied Natural Gas Supplemental Environmental Impact Statement (SEIS) "fully respond to…. concerns about the calculations of the short- and long-term global warming potential value of methane. The draft SEIS should ensure that it applies the most current, valid, peer-reviewed assessment of the global warming potential of emissions related to this project."[4]

The global-warming impact of this project is also considerably concealed by not including any assessment of upstream methane emissions. Methane gas can leak from its infrastructure during every step of production – extraction, transmission, processing and distribution.[5, 6] Recent literature shows that the methane gas leakage rate is *at least* three percent, and likely higher. [6, 7] Failing to include a leakage rate in the GHG analysis of this NOC significantly undermines its real environmental harms. ***CHB requests that a full life-cycle assessment of the GHGs from this project be performed, using a three percent leakage rate. The resulting emissions calculations should then be evaluated against human and environmental health standards for permitting consideration.***

<u>Required Mitigation</u>

Item 2 under the "Conditions" section of the NOC stipulates that WestRock must perform mitigation for any GHG emissions that are generated from steam production above 1,142,000 Klbs/year, either through WestRock's purchase of certified GHG offsets or an Ecology-approved alternative. CHB is concerned that without a regulated mitigation rate specified in the WAC, this requirement sets too low of a mitigation precedent for GHG emissions. Recent reports about the progress of climate change indicate that the planet is experiencing rapid warming. Without drastic, unprecedented cuts to GHG emissions, the planet will warm by more than 1.5 degrees Celsius in the next few decades, and potentially 4 degrees Celsius by 2100. The impact of changes beyond 1.5 degrees Celsius is unacceptable to us. It will massively impact the Puget Sound fishery and ecosystem, and change our communities and economy in ways we cannot yet imagine. To prevent more than 1.5 degrees warming, scientists report that global greenhouse gas emissions must fall to zero by 2050 and then go negative. Cutting greenhouse gas emissions to zero by 2050 is a massive task, and will take drastic, unprecedented measures to accomplish. ***Because it is clear we need to take unprecedented actions to prevent the most disastrous impacts from climate change, the required mitigation should, at the very least, undermine the regulatory market distortion addressed above. CHB requests that Ecology require WestRock to mitigate all GHG emissions that are generated from steam production above WestRock's original 2007 steam limit of 782,000 Klbs/year. Additionally, CHB requests that Ecology require any GHG offsets or alternative projects be purchased and completed in the Tacoma attainment area.***

<u>SEPA Checklist</u>

Item a.1 of Section 7, "Environmental Health," of the SEPA Checklist indicates that there is no known or possible contamination at the site from present or past uses. This response completely neglects to acknowledge that the entire Commencement Bay Nearshore and Tideflats is a Superfund site. Additionally, the proposed project is adjacent to the Simpson Tacoma Kraft contaminated site, and is part of the St. Paul Waterway Problem Area. Contaminants found within the Problem Area included 4-methylphenol, phenol, 2-methoxyphenol, and methylethyl benzene[8]. ***CHB requests that this information be included in the SEPA Checklist.***

4. Sherman, William R. Letter to the Puget Sound Clean Air Agency. 21 Nov. 2018.
5. Gilbert, A. Q. & Sovacool, B. K. (2017). US liquefied natural gas (LNG) exports: Boom or bust for the global climate? *Energy, 141*, 1671-1680.
6. McKibben, B. (March 13, 2018). *How Climate Activists Failed to Make Clear the Problem with Natural Gas.* Yale School of Forestry & Environmental Studies.
7. Larson, K. et. al. (2015). *Untapped Potential: Reducing Global Methane Emissions from Oil and Natural Gas Systems*. Rhodium Group.

Additionally, item a.5 of the same section states, "No environmental hazards not already present are anticipated due to the implementation of this project…" It is overwhelmingly accepted that an increase in GHG emissions causes environmental harm [2, 3, 6]. ***CHB requests that this response be amended to reflect the current understanding of- and consensus around climate science and global warming.***

Notification Timeline

Item 3 under the "Conditions" section of the NOC states, "The new steam limit for #6 Power Boiler will go into effect upon submission of the [low-$NO_x$ burner installation] notification." **CHB hopes this is a misprint, and requests this language be amended to read, "The new steam limit for #6 Power Boiler will go into effect upon Ecology's review and approval of this NOC."**

Public Participation

CHB would like to commend Ecology for holding an informational session where the public was invited to have a Q&A-style discussion with staff. The format of the meeting allowed the community to more fully understand the specifications and impacts of the project, express concerns, and ask questions. Additionally, we are appreciative that Ecology made available an in-person public hearing at the request of the community.

Please contact me if there are questions regarding my comments. Thank you for the opportunity to provide feedback on the WestRock Tacoma Steam Limit Project SEPA MDNS and NOC.

Sincerely,

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8. Commencement Bay Nearshore/Tideflats Superfund Site; St. Paul Waterway Problem Area Consent Decree (1991).