Kenneth Zirinsky

Re: Kalama Manufacturing and Marine Export Facility Second Supplemental EIS (SSEIS)

I am a retired physician and I live in Tacoma, WA. I would like to address the potential effects of the chemicals utilized and produced by the Kalama manufacturing facility on the health of the local community and urge you to deny the proposal to build and operate the methanol manufacturing facility by rejecting the Shoreline Conditional Use Permit.

Please note that I was unable to find text in any section of the SSEIS that addressed the direct health effects (toxicity) of methanol and other organic chemicals naturally present in the natural gas used to produce methanol.

Toxic effects of methanol include blindness, seizures, and kidney failure. (1,2)

Once in the body, methanol is metabolized into formaldehyde. (3)

The toxic effects of formaldehyde include cancer of the nasal passages and lung cancer. (4)

Benzene is a natural constituent of natural gas (5) and natural gas will be utilized to produce methanol at the Kalama manufacturing facility.

Long-term exposure to benzene can cause blood cancers such as leukemia. (6)

In summary, I urge you to consider the toxic effects of acute accidental and chronic long-term low level exposure to methanol and natural gas and to deny the proposal to build and operate the Kalama methanol manufacturing facility by rejecting the Shoreline Conditional Use Permit.

References:

- 1. https://www.epa.gov/sites/production/files/2016-09/documents/methanol.pdf
- 2. https://www.cdc.gov/niosh/ershdb/emergencyresponsecard_29750029.html#:~:text=INGESTION EXPOSURE:,consciousness including coma, and seizure.
- 3. https://pubmed.ncbi.nlm.nih.gov/20021153/
- 4. https://www.epa.gov/sites/production/files/2016-09/documents/formaldehyde.pdf
- https://echa.europa.eu/documents/10162/13641/annex_1_rac_opinion_adopted_rimv_en.pdf/3c44ffe7-61c4-440e-befb-e9a08d38362d#:~:text=Benzene is a volatile liquid that exists as a natural,motor fuels and natural gas.
- 6. https://www.acmt.net/cgi/page.cgi/_zine.html/Ask_A_Toxicologist/What_are_the_effects_of_exposure_to_benzene_