

September 24, 2020

Rich Doenges re: NWIW SSEIS  
Washington Department of Ecology  
Southwest Regional Office  
P.O. Box 47775  
Olympia, WA 98504-7775  
*submitted via Department of Ecology Online Public Comment Form*

RE: Draft Second Supplemental Environmental Impact Statement for the proposed Kalama Manufacturing and Marine Export Facility

Dear Mr. Doenges:

Thank you for the opportunity to comment on the draft Second Supplemental Environmental Impact Statement (SEIS) regarding the proposed Northwest Innovation Works (NWIW) project at the Port of Kalama.

I urge the Washington Department of Ecology (DOE) to reject the proposal to build and operate the world's largest fracked gas-to-methanol refinery by denying the Shoreline Conditional Use Permit and any associated permits for the following reasons.

NWIW has sought to mislead regulators and the public regarding the purpose and impact of the refinery, falsely claiming that this project would solely produce methanol for plastics. This new SEIS demonstrates some important improvements in evaluating the true climate impacts of this proposed methanol refinery, including addressing the likelihood that methanol produced will be used as transportation fuel in China, not just for the production of plastics.

Burned as fuel, the Kalama plant's methanol would add between two and five million tons of carbon pollution per year. China just announced yesterday, however, that it will cut its net carbon emissions to zero by 2060. China is using this plant to transfer its emissions to other countries.

The SEIS has made some necessary adjustments in the methane leakage rates, but the estimated rates still are too low given the widespread under-reporting of leaks. Even given the unreasonable assumptions regarding the single-sourcing of natural gas from British Columbia, as well as the unrealistically low leakage estimates for that source, the SEIS confirms that NWIW's proposed facility would be enormously polluting. The proposed plant would use up to 320 million cubic feet of fracked gas per day, more than all of Washington's gas-fired power plants combined.

Methane is a potent greenhouse gas, trapping 86 times more heat in the atmosphere than carbon dioxide. Nearly 20 percent of the Earth's warming can be attributed to methane. DOE concluded the methanol refinery would emit 4.6 million tons of greenhouse gases every year for 40 years.

It would become one of Washington's largest source of climate pollution at the same time we are trying to reduce emissions statewide. It would make our climate problems worse.

The evaluation of potential mitigation and displacement contained in this SEIS is misleading in its reliance on speculative, unproven and unenforceable assumptions. This displacement assumption is a major flaw in the SEIS. If China has sufficient petroleum imports, the low price of oil will negatively affect coal-to-methanol plant production. Global oil prices are likely to remain low. This means there will be little need for coal-based methanol in the plastics process.

The document is filled with generalities and unsupported statements. It is dangerous to presume this SEIS can accurately predict global fuel markets, technology developments, consumer behavior, or climate regulations for the coming four decades. Improved technologies are creating a growing commercial market for a variety of alternatives to traditional plastics. Growth in bioplastics will be fueled by a number of factors, including consumer demand for environmentally-sustainable products, the development of bio-based feed stocks for commodity plastics and increasing restrictions on the use of non-degradable plastic products, particularly plastic bags. Further, bioplastics manufacturing usually requires lower temperatures, further bringing down production costs and energy usage.

The SEIS assumes no new climate regulations, no changes in the world economy, no new technologies and no new developments in trade policy for the next 40 years. This is not realistic; we cannot predict the future.

The air quality analysis is particularly weak. Methane is emitted during the production and transport of natural gas. Methane in the air absorbs the sun's heat, warming the atmosphere and creating one of the most basic forms of air pollution. Haze is caused when sunlight encounters tiny pollution particles in the air, which reduce the clarity and color of what we see, especially during humid conditions. Haze degrades visibility over our public lands. Hazy days don't just block the view; they mean the air contains particulate matter that can compromise human health.

The Clean Air Act gives special air quality and visibility protection to national parks larger than 6,000 acres and national wilderness areas larger than 5,000 acres that were in existence when it was amended in 1977. These "Class I" areas include Mount Rainier, Olympic and North Cascades National Parks and Mount Adams and Goat Rocks Wildernesses in western Washington.

All other federal areas are "Class II" allowing for a moderate amount of air quality deterioration. Because air pollution is often regional in nature, reductions in pollution to improve visibility in Class I parks and wildernesses will also improve visibility in all other parks and wildernesses in the surrounding area. Class I areas are managed by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and several Native American Tribes.

When greenhouse gasses are combined with wildfire smoke, as happened recently across Washington and Oregon, that air pollution also makes people more susceptible to complications from COVID-19. The Centers for Disease Control and Prevention warns on its website that wildfire smoke irritates the lungs, causes inflammation, impacts the immune system and makes people more prone to lung infections such as the virus that causes COVID-19. Air pollution

disproportionately affects already vulnerable people including those with chronic illness (e.g. heart or lung disease), children, older adults, low-income communities, and communities of color.

The SEIS assumes that air quality will improve in the future, despite the NWIW plant emissions, due to the expectation that the Environmental Protection Agency (EPA) will issue new, more stringent, air quality standards for methanol and tanker emissions. This assumption is unrealistic when the EPA has instead been relaxing standards. In 2016, Columbia University scientists showed that climate change has doubled the area of the western U.S. affected by forest fires over the past three decades. “Climate is really running the show in terms of what burns,” one of that study’s authors said. “We should be getting ready for bigger fire years than those familiar to previous generations.” The SEIS should anticipate more times of hazardous air quality exacerbated by both the cumulative climate impacts of the emissions from the proposed project and the day-to-day unavoidable impacts of the proposed project’s emissions when combined with other hazardous air events like wildfire smoke.

The SEIS provides too little detail on the actual mitigation that would be accomplished within the “voluntary” mitigation framework, and this mitigation fails to address the full impacts of NWIW’s emissions that will occur both “upstream” during gas extraction in Canada and transport to Kalama and “downstream” after the methanol is manufactured and transported to China.

The “upstream” impacts include the industrialization of rural landscapes, abandoned and leaking wells, cumulative impacts to aquifers, mining of groundwater, loss of agricultural land and impacts to poor and indigenous communities. Abandoned gas wells deteriorate over time, the steel piping and cement corrode, and methane leaks into the air. There are an estimated 29 million abandoned gas wells globally. There is not any regulatory requirement to monitor emissions from abandoned wells. The oil and gas industry fought fiercely against the Obama administration’s efforts to start regulating methane emissions. A 2016 rule requiring operators to measure methane releases at active wells and invest in technology to prevent leaks was overturned by the Trump administration at the beginning of August 2020.

The only way to keep the well from leaking is to fill it up. Plugging a well costs \$20,000 to \$145,000, according to estimates by the U.S. Government Accountability Office. Plugging does not last forever, however. Scientists and engineers debate how long cement can survive in the harsh environment of the Earth’s interior. Estimates typically are between 50 and 100 years so eventually the wells will leak methane again.

Another issue is how much greenhouse gases will be emitted by refining a fossil fuel with electricity. Greenhouse gases from purchased electrical power are significant and should not be under-estimated. I am concerned that the large load of electricity for this facility will be permitted a share of the currently limited clean power sources in Washington. We are not conserving electricity and investing in clean power generation just to power a dirty fossil fuel facility to send our resources to China. Removal of the Snake River dams to save salmon should be higher priority than this project.

The mitigation framework is too vague for DOE to conclude that this project's impacts will be mitigated, and the urgency of climate change demands that mitigation should be the last option, after all other impacts are reduced in order to address unavoidable impacts, not simply to maintain the status quo.

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change. Last month the IPCC published a statement on the 30<sup>th</sup> anniversary of the First Assessment Report, which was a robust, rigorous, exhaustive and transparent assessment of the state of knowledge of climate change. From the First to the Fifth Assessment Report, there has been substantial progress in understanding of climate science. "The main message from the Fifth Assessment Report is that the scientific case for urgent action on climate change is clearer than ever. We have very little time before the window of opportunity to stay within 2°C closes forever but we still have that opportunity. The choice is within our hands. The Fifth Assessment Report provides a framework to support good decisions and better integrates adaptation, mitigation, development and equity."

This refinery would commit Washington state to decades of fossil fuel consumption and air pollution, contribute substantially to climate change, use vast amounts of fresh water and expose citizens of the Pacific Northwest to health and safety risks – all for a Chinese-backed company to make profits at our expense.

It is unacceptable for Washington state to issue permits for such an enormously polluting methanol manufacturing facility based on speculative analysis and unsubstantiated hope of theoretical emission reductions. It is profoundly inconsistent with achieving Washington's climate goals. This massive polluter should not be built anywhere. DOE should dismiss this proposal and deny state permits.

Sincerely,

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