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Issue #1: Timing of the proposed action, and reliance on Asian energy demands.

The port is designed for a minimum 30 year operation. The construction will begin 2018 and is proposed to be completed and in full operation by 2028. Assuming the 30 year minimum, the port will be active at least until 2058 – 42 years from today. The amount of coal being moved through this terminal, 1,680 vessels per year in order for the port to be considered fully operational, signifies that the Asian economy will continue to rely on fossil fuels by the year 2058 for a large amount of their energy needs. This large amount of coal being exported from America largely to Asia is driven solely on a market based economy. If the Asian energy market ceases to rely on fossil fuels, this proposed port will be forced to shut down as the demand for these traditional sources of energy has collapsed.

“The Applicant states further development of western U.S. coalfields and the growth of Asian market demand for U.S. coal is expected to continue, and existing West Coast terminals are unavailable to support this need” (Washington State Department of Ecology SEPA, p. 4). The key word here is *expected*. It is also interesting that the Applicant frames this proposed action as if it is our duty as Americans to supply Asia with coal, when in fact we are not obligated to participate in the shipment of fossil fuels to any region. China and India are two of the world’s top three fossil fuel consumers, and both of these consumers are backed by Asian economic growth (U.S. Energy Information Administration, 2016). Overall energy consumption of China is expected to remain stable in the country’s 13th Five Year plan, which is valid until 2020, but the sources of this energy are expected to shift. Coal as China’s primary source of energy is expected to be balanced with renewable energy, or energy sources often seen as a

bridge to renewable energy sources including natural gas and nuclear power, as well as hydropower, solar power and wind energy. These alternate sources of energy are predicted to accumulate to jump three percentage points in the overall Chinese energy consumption by just 2020, with this rise alternate sources of energy account for 15% of China's 26.6% total world energy consumption. Coal dependence is expected to drop from 5 percentage points in just five years. (Boqiang, 2016).

China's increasing commitment to producing renewable energy has been credited for the leveling off of coal consumption in 2012/2013 as well as the actual decrease of coal consumption in 2014 and 2015. Since 2013 China has overtaken the European Union as the world's largest producer and investor in renewable energy. China was the largest world producer of wind energy in 2015, and has been manufacturing solar panels at capacity since 2007. In 2013 China emerged as a world leader and pioneer in green energy solutions, and the Chinese production of green energy continues to increase as the Chinese national reliance on coal has continued to decrease since 2013 (Mathews, 2016). This downward trend of reliance on fossil fuels in the year 2020 may be an indicator that by the year 2028, when the port construction is completed, or 2058, the minimum 30 year operational goal, the Chinese market may have a drastically decreased reliance on fossil fuels.

Issue #2: **Coal Dust**

Coal dust is widely known to be produced during the coal excavation (mining), transportation, and shipping of coal. Coal dust at the proposed port is planned to be suppressed by the use of "water sprayers, enclosed conveyor belts, enclosed rail unloading building, enclosed loading spouts, and dust suppression system for coal stockpiles" (Washington State

Department of Ecology SEPA, p. 23). These methods for suppression are included in the operational guidelines for the port as well as the proposed constructed areas for the port. The applicant claims that these measures will almost effectively neutralize coal dust and will therefore coal dust generate at the port not pose a risk to air quality, water quality or human health (Washington State Department of Ecology).

Coal dust produced along the railroad as a part of coal transport will not regulated, nor will it be considered an environmental impact of the proposed project. Coal dust off trains passing through neighboring communities therefore will not be analyzed in the EIS. The only acknowledgement of the coal dust produced outside of the actual port itself is the mention of how coal dust will affect, or rather not affect according to the applicant, the immediate surrounding environment. This immediate ecosystem specifically on land is all contained within a one mile radius of the port. Just this designated one mile area around the port is considered a part of the “broader study area”. A brief analysis of coal dust and the effect on fish concluded that coal dust will not have a significant effect on fish, and that cleanup efforts will be immediately utilized in case of a spill on the river. Coal dust production produced accompanying the railroad transportation of coal is not discussed (Washington State Department of Ecology).

Several prominent studies have worked to raise awareness regarding the effects of coal dust exposure on human health. In one comparative study of people living in similar communities, only one community was regularly exposed to coal dust and the other community was not, this study provides evidence for the idea that people are more likely to die at a younger age when regularly exposed to coal dust than if they are not regularly exposed to coal dust. Coal dust has also been linked to women who are exposed regularly to coal dust having a 26% higher

chance of having underweight infants at the time of birth than women who were not exposed. Exposure to coal dust also significantly increases risk of high blood pressure, respiratory disorders, kidney disease, as well as having significantly greater chance of having leukemia, lung, bladder, or colon cancers (Ferber, 2013).

Coal dust can also have massive effects on the environment. Coal dust from uncovered transport trains can settle on the nearby vegetation and can effect photosynthesis, making this process less efficient, or even close to impossible. Rainwater hitting uncovered rail cars can leach out heavy metals into local storm water systems, polluting streams, rivers and eventually the ocean. The Environmental Protection Agency has known about the harmful effects of coal dust on the environment since the 1970s, when an EPA report revealed the toxic implications of coal use. Although the adverse effects of coal have been known since the 1970s there are still relatively few scientific studies which provide evidence for the harmful effects of the dust on the environment (Ahearn, 2013).

The environmental impacts and human health risks associated with an increase in local coal dust production wafting off of the transport trains crossing state lines and meandering through local communities needs to be further examined in this EIS in order to accurately grasp the effect this port will have on the surrounding communities, including Portland and Clark County.

Write a brief statement of your overall opinion of the project, and which of the 3 alternatives you favor.

I feel this project is not only environmentally risky, but it poses a great risk to human health throughout the states which will be affected. This port depends nearly exclusively on the Asian demand for a coal market supply from 2028-2058. This grandiose assumption of coal demands well into the future completely ignores the current and projected Asian energy consumption trends. These trends provide evidence that coal use is in fact decreasing as renewable energy production and use is increasing in China, the second largest consumer of coal worldwide.

This EIS fails to address the effect of coal dust on local communities, ecology, habitats, and the environment effected by their uncovered coal trains. Coal dust suppression specifically at the port will not address the issue of vast coal dust increases on a whole.

The “No Action” alternative is the most favorable alternative. This alternative eliminates the risks this port poses to environmental and human health, as well as greatly reduces CO2 emissions from the port. The emissions created during the ten year port construction, railroad transportation of vast quantities of coal, transportation of coal to Asia would be eliminated under the no action alternative. The no action alternative is the only environmentally responsible alternative which is sustainable for local communities as well as ecology and wildlife habit.

References

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