

Comments on Draft Health Impact Assessment for Millennium Terminal Proposal

Washington Department of Ecology Comments

January 11, 2018

Air Quality – General Comment

Ecology recognizes that the Health Impact Assessment (HIA) builds on findings of the environmental impact statement (EIS) for the Millennium Bulk Terminals (Millennium) proposal, and adds useful perspective to the baseline health status of communities impacted by the Millennium proposal. For example, the HIA identifies higher rates of hospitalizations and death related to lung and cardiovascular diseases in some of the neighborhoods potentially impacted by air pollution from the Millennium proposal. The HIA builds on the EIS findings related to quantified increased exposure to and risk from air pollutants in areas impacted by Millennium, including along the railroad routes in Cowlitz County. The HIA also determines that because communities in the affected neighborhoods in Cowlitz County already experience higher rates of disease, they would be at even greater risk of experiencing adverse health outcomes related to air pollution exposures.

The following excerpts of the HIA provide particularly relevant supplemental information about health impacts that goes beyond the EIS findings for air quality:

“Cancer is a long term health effect of diesel exhaust exposure that was studied further in the FEIS. They used air pollution models to estimate the increased cancer risk in different areas. We took that analysis and used driver’s license data to make an educated guess about how many people live in the different risk areas. At the highest exposures there is a 50 per million increase in cancer risk, but very few people will be exposed at this level. A larger portion of the community will be exposed to levels of diesel particulate matter that will increase risk by 30 or 10 cancers per million.” (Page 9).

“Based on the maximum annual average of emissions by source in the FEIS, 1.82 tons of diesel particulate matter and 15.63 tons of coal dust would be emitted during operations. While it is estimated that more tons per year of coal dust would be emitted than diesel particulate matter, it is likely that diesel particulate matter would have a higher health impact because it is more harmful. There would also be a small increase in the risk of developing cancer in an area surrounding the project area and near the rail lines.” (Page 11).

“Diesel particulate matter has been designated in Washington State as a cancer-causing toxic air pollutant.” (Page 11).

“Health data shows that the people of Cowlitz County and some neighborhoods that would have air pollution impacts from the study (area) already experience rates of death and hospitalization for some diseases related to air pollution, especially lung and cardiovascular diseases, that are higher than the state average.” (Page 11).

“We combined the mortality data and hospitalization data from 2011 to 2015 for conditions related (to) particulate matter, coal dust and DPM. When possible, we included data for the St. Helens, Highlands and Lexington neighborhoods of Longview...Our findings suggest that the death rate for combined chronic lower respiratory diseases, diabetes and combined trachea, bronchus and lung cancer are higher in Cowlitz County than the state average. The Cowlitz Country (County) death rate for heart disease, and the neighborhood death rates for these health effects are less conclusive, but are generally higher than the state average. This suggests that Cowlitz County and neighborhoods expected to be impacted by the diesel particulate matter and coal dust from the proposed project are already experiencing higher than average health effects for diseases that research suggests would increase with elevations in pollution.” (Page 43).

“It seems likely that diesel particulate matter emissions from activities related to the export terminal would contribute to increases in heart and lung disease and mortality in particular. In addition, there would be a small level of increased risk of developing cancer in an area surrounding the project area and within 2 miles of the rail lines that would increase closer to the rail line and project area.” (Conclusion: Page 44- 45).

“Health data from 2011-2015 indicates that the people of Cowlitz County and some neighborhoods that would have air pollution impacts from the study (area) already experience rates of death and hospitalization for some diseases related to air pollution, especially respiratory diseases, that are higher than the state average. This indicates that the population (of) Cowlitz County and affected neighborhoods would be at even greater risk of experiencing health effects than other parts of Washington.” (Conclusion: Page 45).

Air Quality – Specific Comments

Page 11: 4th paragraph - is there a missing word?

Health data shows that the people of Cowlitz County and some neighborhoods that would have air pollution impacts from the study [area](#) already experience rates of death and hospitalization for some diseases related to air pollution, especially lung and cardiovascular diseases, that are higher than the state average.

Page 43: Last paragraph – typo

The Cowlitz ~~Country~~ County death rate for heart disease, and the neighborhood death rates for these health effects are less conclusive, but are generally higher than the state average.

Page 44: 4th paragraph – Request adding clarifying language

We request additional clarification of paragraph 4, to indicate that although federal ambient air quality standards or state regulatory thresholds for stationary sources would not be exceeded, there would be increased health impacts from the combined increase of diesel emissions from stationary and mobile sources. To improve clarity and reduce confusion, Ecology is requesting that the following underlined language be added to the HIA:

“Modeled air pollution emissions from the FEIS indicate that the coal export terminal would not result in air pollution levels that would exceed federal ambient air quality standards or state toxic air pollutant regulations. While state toxic air pollutant regulations generally apply only to stationary sources of air pollution, the EIS and HIA evaluated both stationary and mobile emissions. This is because the potential health impacts and increased risks from diesel engine emissions are the same for stationary and mobile sources. When stationary and mobile air pollution sources are combined, emission of diesel particulate matter would exceed approvability criteria established in state toxic air pollutant regulations. ~~However~~ Therefore, Maintaining air pollution at levels below national ambient air quality standards or state toxic air pollutant regulation does not ensure there would be no adverse cancer and non-cancer health impacts from air pollution generated by the coal export terminal.”

Page 45: 2nd paragraph – are there missing words in the first and second sentences?

“Health data from 2011-2015 indicates that the people of Cowlitz County and some neighborhoods that would have air pollution impacts from the study area already experience rates of death and hospitalization for some diseases related to air pollution, especially respiratory diseases, that are higher than the state average.”

“This indicates that the population of Cowlitz County and affected neighborhoods would be at even greater risk of experiencing health effects than other parts of Washington.”

Water Quality – Specific comments

Page 26 – Question 14 – Request adding clarifying language

Question 14 seems to be primarily about the effect of drinking water on personal health. We recommend emphasizing that “drinking water” is the focus of the study question, as opposed to a broader focus on water quality impacts (such as turbidity, erosion, temperature, pH, toxics, etc.). We recommend the following underlined title modification:

“Will there be health effects related to changes in drinking water quality?”

Page 26 – second paragraph in Question 14 – is there a missing word?

...tap into the deep aquifer.

Page 26 – third paragraph in Question 14 – request adding clarifying language

Question 14 is about drinking water. The third paragraph of Question 14 briefly states that water quality would be harmed by terminal construction and operations. This brief reference, however, seems to be referring not to drinking water quality—but to broader water quality impacts such as impacts from changes in turbidity, erosion, temperatures, pH, spills, coal dust deposition, dredging, or other construction or operation activities that would create and discharge pollutants that would harm water quality. To improve clarity and reduce confusion, Ecology is requesting that the following underlined language be added to the HIA:

“The FEIS recommends ways to protect Columbia River water quality from harm by terminal construction and operations. It identifies that the project would impact water quality and cause numerous significant adverse effects to surface water. Impacts would occur from construction and maintenance activities, clearing and grading, dredging, dredge disposal, piling removal, pile driving, dock construction, demolition, coal spills from rail unloading and vessel loading, airborne coal dust from stockpiles or open conveyor belts, stormwater runoff, untreated wastewater discharges, fuel spills, discharges of hazardous chemicals during cleanup, ballast water, spills from vessels, and spills from trains. The FEIS assumes that these impacts would be avoided, minimized, and/or mitigated if local, state, and federal agencies require compliance with water quality regulations and require full implementation of the recommendations. It concludes that following these recommendations, as well as protections required by permits and other applicable laws, will avoid significant negative impacts on ~~surface~~ water quality.”