Comments on the US Army Corps of Engineers NEPA Draft Environmental Impact Statement for the Proposed Millennium Bulk Terminals – Longview; NWS-2010-1225.

I am Dr. Theodora Tsongas, an environmental health scientist with 39 years' experience in Federal (USEPA and USDOL/OSHA) and state governments (Colorado Department of Health and Oregon Health Division) and at universities, evaluating the health effects of exposure to environmental contaminants. I was Adjunct Associate Professor of Environmental Science at the University of Colorado and of Community Health at Portland State University, and Assistant Professor of Environmental Science at Washington State University. I am currently a member of the Environmental Health working group of Oregon Physicians for Social Responsibility and a member of the Multnomah County Local Emergency Planning Committee.

Coal train traffic to and from the proposed Millennium terminal would lead to increased diesel exhaust and coal dust pollution in communities along the tracks, threatening neighbors' health. It will also lead to more traffic congestion and safety hazards, as ambulances and fire engines risk being trapped at rail crossings behind mile-long trains separating them from emergencies. These impacts would be felt in Longview as well as communities all along the rail routes.

The US Army Corps of Engineers (USACE) improperly limits its consideration of the environmental impacts of the proposed Millennium terminal to 3 small, arbitrarily chosen study areas, thereby ignoring the fact that environmental quality is impacted by local, regional, and global factors. This includes air quality, water quality, and ecological support systems. None of these exists in isolation from upstream or downstream factors. Considering only a limited portion of a regional air-shed, for example, as is done by this draft EIS, ignores the true impacts of the proposed terminal and its associated and support activities on air quality.

The operation of this bulk terminal depends on and cannot function without the extraction, processing, and transport of coal from other states. By limiting the study area to exclude impacts outside the study area, the USACE, as the Lead Federal Agency administering this DEIS, is therefore not accomplishing a comprehensive review required by the National Environmental Policy Act.

In addition, coal exports would create pressure for new Montana and Wyoming mines, in a region where coal seams are aquifers and increased mining threatens the land, water, and climate. These impacts must be taken into account.

As the Lead Federal agency administering this DEIS, limiting the study area to a small area around the proposed terminal ignores the impacts of this project on communities in other states. The State of Washington cannot evaluate impacts on other states, but the USACE can. The DEIS is, therefore, incomplete.

The narrow study area ignores the project's impacts from 16 new coal trains per day through the Columbia River Gorge with adverse effects on safety and health of all residents, human and

non-human, and on air and water quality. These impacts do not exist in isolation and would not exist without this project. Ignoring them means that the DEIS is incomplete.

Within the narrow study area, health and safety risks are underestimated. For example, high frequency noise from squealing train wheels and brakes, crashing noises from couplers, and intermittent train whistles and horns, can occur 24/7, with no predictability or possibility of mitigation for those persons living nearby. Noise pollution such as this is not adequately considered in the draft EIS and can lead to sleep disturbances, stress, cardiovascular disease including hypertension, and mental health disorders. (Please also see the Comments of Dr. Alice Suter, incorporated by reference here.)

In its announcement for the publication of the DEIS, the USACE states that it will consider in its permitting decisions:

> "All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people."

And yet it does not. The general needs and welfare of the people, especially those with low income, are not adequately considered by this DEIS. Residents in areas adjacent to the proposed terminal would suffer disproportionately and be the least able to do anything about it. The adverse effects would be economic as well as on health and wellbeing. This is an environmental justice issue that must be addressed by the EIS.

In its analysis of Tribal Resources that may be impacted by the proposed terminal, (4.5-15) the DEIS states that construction and operation of the terminal would have significant adverse impacts on terrestrial and aquatic wildlife due to noise, loss of habitat, dredging operations, and the generation of coal dust. Fish, as aquatic wildlife, would also be adversely impacted. However, the DEIS (4.5.5.1) contradicts itself by stating that there would be no measurable impact on tribal fishing. This does not make any sense. How can the loss of fish not have an impact on tribal fishing?

The DEIS (ES-16) estimates that there will be more rail accidents: one every two years within the study area on the BNSF Spur and Reynolds Lead, and this is after track improvements have been made. Will there be even more frequent accidents before track improvements are made? Will any of these accidents result in derailments or fires? How will the public, especially nearby residents, be protected? The DEIS predicted risk of accidents is quite high. Then will the increase in rail traffic and miles traveled along the entire rail corridor from mines to port result in increased risks of accidents for all the communities along the way. Will any of those accidents result in derailments, spills, or fires? Who will respond? How are these risks to be mitigated?

Regarding rail traffic causing delays at at-grade railroad crossings (ES-17), "average" delays are used to describe risk, when it would not matter what the average delay would have been, if an emergency vehicle happens to be delayed many more minutes than the average, causing a life threatening situation. The use of averages here is not useful in understanding the potential impacts of this project. Moreover, this raises significant concerns that the DEIS appears to be written throughout in ways that minimize the estimated impacts of this project. This is just one example, but it shows the bias in favor of the applicant. This is not appropriate and needs to be corrected in the final EIS.

Regarding the use of large quantities of water for fire and dust suppression at the proposed coal export terminal, it is stated that rainwater collection and the wells on site will suffice to supply this water. What happens if there is a dry summer without rain (2-3 dry months are not unusual in this area): will fire suppression be compromised? Will dust suppression be compromised? If so, the risks of fires and/or exposure to air pollutants would go up dramatically. Will Longview's domestic water supply be even partially diverted for terminal operations? Will this be a fallback position?

When we think of the large quantities of water to be used at the terminal, we think of the runoff. It is stated with insufficient detail that best management practices will be employed to prevent coal, coal dust, and toxic materials from reaching the Columbia River, or from getting into the air. How is it possible for those practices to be evaluated for their effectiveness if we do not know what they are, specifically? How can the impacts of this project be assessed properly if we do not know what the plan is for accomplishing its work without damaging the environment? This must be addressed in the final EIS.

Shipping 48.5 million short tons of coal per year through our communities, and on our waterways, would harm public health and safety.

"Coal could enter water as either coal dust or as the result of a coal spill. Coal dust and coal dust constituents would be associated with transport, stockpiling, transfer, unloading, and loading of coal. The proposed export terminal would employ dust suppression systems throughout the facility. The potential risk for exposure to toxic chemicals contained in coal would be low because they tend to be bound to the matrix structure and not easily leached. Coal dust particles would likely be transported downriver by river flow and either carried out to sea or distributed over a sufficiently broad area that a measurable increase in concentrations of toxic chemicals in the Columbia River would be unlikely." (ES-14)

There are several inaccuracies in these statements: The DEIS suggests that the toxic chemicals contained in coal are not easily leached. However, they are easily leached from coal dust as the matrix is broken down. So, the potential risk for exposure to toxic chemicals contained in coal is NOT low. Further, the DEIS assumes that coal dust particles entering the Columbia River would be transported downriver by river flow and carried out to sea or distributed over a broad area, so that concentrations of toxic chemicals in the Columbia River would not increase. This is just incorrect and ignores the adverse impacts of the coal dust and toxic chemicals on organisms in the river, and the food chain, before the particles get downriver. The solution to

pollution is NOT dilution. We have learned that the hard way. The DEIS minimizes the true impacts of this proposed project by making unfounded and unscientific assertions about the fate and transport of environmental contaminants.

Millennium's project would cause unacceptable harm to water quality, aquatic life, fishing, and other important uses of the Columbia River, and it would push off the costs of polluted air, traffic congestion, and decreased property values on rail towns all along the export route from the Powder River Basin coal mines in Montana and Wyoming.

Regarding air quality, the only real data we have is from a monitoring station very near to Interstate 5 (at Kelso) and this is used as a "background" level to compare with estimated concentrations of air pollutants near the terminal. The levels of air pollutants near an interstate highway and near a busy interchange will likely be higher than the real background in the study area. Therefore, the estimates of potential increases in air pollutants from this potential project are underestimates and are biased toward the null. This is not appropriate and must be corrected.

Increased emissions of coal and diesel pollutants (from construction and operation of the terminal, from service vehicles, train engines, generators, and marine vehicles) will likely push current outdoor air concentrations above state, federal, and international air quality standards. The U.S. EPA and the World Health Organization (WHO) have determined there is no clear safe level of PM2.5 exposure and effects have been clearly documented below the standards. These potential impacts on the health of communities and working populations at or near this proposed terminal must be thoroughly considered in the EIS.

The combustion of coal exported from the proposed terminal will contribute to global climate change, resulting in additional adverse health risks to Longview, Cowlitz County, and Washington and US residents. As climate change continues to progress, it will cause significant impacts on health including increased heat and ground level ozone-related mortality and morbidity, displacement and economic insecurity due to storm surges, and sea level rise, and flooding, increased respiratory and cardiovascular illnesses caused by air pollution from more frequent wildfires, food insecurity resulting in worsened nutrition, and migration of disease vectors into the Region as environmental conditions change. These risks must be considered in the EIS as they are minimized in the DEIS.

Finally, in the analysis of economic impacts (4.2) no consideration is given to the economic situation relating to the failing coal industry. If this project is approved, and the demand for coal goes down, as it should if we are all to survive, will this site become derelict and be a blight on the community? The potential for a failing industry should be included in the analysis of the economic benefits and costs of this project and included in the EIS.

This DEIS is incomplete, limited, and inadequate, but it still gives us clues to the many dangers the Millennium Bulk Terminal proposed project presents to the people of Longview and the Region. The health and environmental risks of this project outweigh any short or long term

benefits. This proposed project is not in the public interest. Please deny all permits for this project.

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