



July 21, 2017

Washington Department of Ecology
PO Box 47600 Olympia, Washington 98504

Subject: Section 401 Water Quality Certification
Millennium Bulk Terminals Longview LLC
Coal Export Terminal

Ms Loree Randall,

Thank you for this opportunity to comment on the proposed Millennium Bulk Terminals - Longview 401 Water Quality Certification. FOGH (Friends of Grays Harbor) is a broad-based 100% volunteer tax-exempt 501(c)(3) citizens group made up of crabbers, fishers, oyster growers and caring citizens. The mission of FOGH is to foster and promote the economic, biological, and social uniqueness of Washington's estuaries and ocean coastal environments. The goal of FOGH is to protect the natural environment, human health and safety in Grays Harbor and vicinity through science, advocacy, law, activism and empowerment. We oppose locating any coal or other fossil fuel terminals in the State of Washington.

FOGH is deeply concerned about the significant adverse environmental impacts of the proposed project.

SIGNIFICANT AND UNAVOIDABLE GREENHOUSE GAS EMISSIONS, TOXIC MERCURY EMISSIONS, INCREASING CLIMATE CHANGE, AND OCEAN ACIDIFICATION:

Global climate change and ocean acidification resulting from the project's greenhouse gas (GHG) emissions and toxic mercury emissions were raised in scoping comments by the Friends, FRIENDS and FOGH as critically important issues. The climate change and ocean acidification impacts on our two states from extracting, transporting, and burning coal are severe, unavoidable, and indisputable. Terrestrial, marine, and freshwater ecosystems and the human communities that rely on them are all deeply affected by climate change. Scientists have confirmed that global warming is accelerating and impacts on fish and wildlife will likewise be more severe than previously thought. Smith S.J., J Edmonds et al. March 2015. Near-term acceleration in the rate of temperature change. *Nature Climate Change* 5, 333–336. Available at <http://www.nature.com/nclimate/journal/v5/n4/full/nclimate2552.html>.

Rising sea levels threaten shorelines and refuge species including migrating shorebirds. A warming Arctic is already resulting in phenological asynchronies between interacting species protected by the refuges that threatens their survival. For example, van Gils, J.A., S.Lisovski et al. May, 2016. Body shrinkage due to Arctic warming reduces red knot fitness in tropical wintering range. *Science*, Vol. 352, Issue 6287, pp. 819-821. Available at <http://science.sciencemag.org/content/352/6287/819>.

Increasing numbers and intensities of wildfires associated with a warmer and drier climate and drought conditions are destroying wildlife and their habitat in Alaska and Washington.

Warmer oceans threaten fish (including Pacific salmon species and marine mammals that thrive on salmon including Washington State's iconic Southern Resident Orca whales) and fisheries. Species' extinction rates are expected to increase and even accelerate. Urban, M. C. May 2015. Report: Accelerating extinction risk from climate change. *Science*, Vol. 348, Issue 6234, pp. 571-573. Available at: <http://science.sciencemag.org/content/348/6234/571.full>.

Ocean acidification is also a grave consequence of increasing anthropogenic CO₂ in the atmosphere. Marine waters in Washington and Alaska are becoming more acidic undermining marine biodiversity and commercial fishing enterprises by hampering the ability of calcareous invertebrates such as shellfish, oysters, and prey species to build shells. Mercury, a potent neurotoxin, released into the air from coal-fired power plants in Asia travels across the Pacific to Alaska and Washington States by the atmosphere and oceans. Mercury converts to methylmercury in aquatic environments and enters the marine food web and the food chain.

Alaska and Washington's oceans and coastlines are the site of important National Wildlife Refuges including the Alaska Maritime National Wildlife Refuge, Grays Harbor National Wildlife Refuge, and the Washington Maritime National Wildlife Refuge Complex. Significantly, the vessel study area does not take into account the entire vessel route to and from Asia along Washington State's and Alaska's coastal oceans and coastlines and including through the Aleutian Islands of Alaska. The Aleutian Islands are included in the Alaska Maritime National Wildlife Refuge. The North Pacific Great Circle Route traveled by vessels to Asia passes through the Aleutian Islands in two places. The seas around the Aleutian Islands are known to be some of the most dangerous for shipping in the United States, due to marine conditions including extreme weather and rough seas. These waters have a long history of marine casualties and resulting environmental harm.

Washington State is currently respected as a leader in the development of clean energy and fuel transportation policies. Approval of permits for this fossil fuel project would be counter to the work the state has done to address greenhouse gas emissions that are contributing to severe changes to the climate and acidification of oceans. Among other things, in light of the present climate crisis, it is inconceivable that agency decision makers would fail to perform their duties as trustees of the Public Trust protecting the air, atmosphere, water, wildlife, communities, and economies in this matter.

Based on the information cited above and the importance of water quality to the survival of humans, fish and wildlife we implore Ecology to deny this 401 Water Quality Certification.

Sincerely,



Arthur (R.D.) Grunbaum
President

