

Written Comments on Millennium Bulk Terminal at LONGVIEW, WA  
2JUN16/Rev.2/Craig Brown/Richland, Wash.

The state of Washington has a flawed process in assessing approval of the Millennium Bulk Terminal for two main reasons; 1) Washington state has an obligation to assess and assure the safe transport of legal goods through its borders, and no legal or moral right to try to kill any transport due to end-use (CO2 emissions). 2) The potential harm to the state of Washington implied in the Draft EIS from CO2 from burning Powder River and Uinta Basin coal in China will be non-existent because; a) the amount of CO2 released from all the coal shipped and used to generate electricity over 20 years is trivially small and b) the premise that we can reasonably know what the climate and weather will be like in Washington state 30 years in the future (know enough to do something today to change it) is no more than wishful thinking and has no basis in either science or reality. Hence, *CO2 emissions from the end-use of coal shipped through Washington terminals should have no relevance in the state of Washington decision.*

**1. Washington state has an obligation to assess and assure the safe transport of legal goods through its borders, and no legal or moral right to try to kill any transport based on end use (CO2 emissions).**

China (and Japan) need affordable, abundant, on-demand electricity today. The coal leaving Washington ports (44 million metric tons (MT)/year) will produce 93 billion kWh of such electricity over 20 years. This is enough electricity for 15 million people [NOTE 1]. It will improve their lives immensely. This is a terrible precedent to set, i.e., having a few state politicians in Olympia start making interstate and global commerce decisions based on their own biases of how the rest of the world should be functioning. What if Canada, Idaho, Oregon and foreign ports stopped all shipments of oil/gasoline to Washington because of its end-use CO2 emissions? How hypocritical can the state be? This position by the state of Washington will undoubtedly harm relations with our overseas trading partners.

**2. The potential harm to the state of Washington implied in the Draft EIS from CO2 from burning Powder River and Uinta Basin coal in China will be non-existent.**

It is stated in Section 5.8.2 (Climate Change), "Studies have found, ...that climate change could result in changes in precipitation, temperature, and storm intensity and could increase risks of damage from flooding, drought, heat waves, winds, and storm surge." This statement is based on 30 independent climate models (CMIP5), "... which assure increased robustness as to level of uncertainty in the direction and magnitude of future climate trends." The IPCC admits that these climate models overestimate [most by a factor of two] the sensitivity of CO2 to warming for the period from 1998 to 2012<sup>1</sup>. How can the Washington Department of Ecology justify using these models to assign future climate and weather harm to the state of Washington when the models prior 20 years are so far off? (*It can't, and to do so is only misleading the state's decision makers and the public.*)

Beyond this, from Table 5.8-5 (page 5.8-14) of the Draft EIS for SEPA report it is projected that CO2e from Powder River Basin coal combustion in Asia could be as much as 27,047,892 MT (metric tons) per year. This is about .09% of the current annual CO2 increase rate in the atmosphere of about 2 ppm. Hence, burning this coal would increase the annual rate from 2 ppm to 2.0018 ppm. (So in 30 years if the total CO2 is 450 ppm, burning this coal would cause it to be 450.1 ppm.), which is obviously insignificant [NOTE 2]. *This will have absolutely no impact on the climate, weather, or bordering seas of the state of Washington.* Just to be clear, the residents of the state of Washington need to be told that any action by the state to stop the burning of coal shipped through the Longview or other Washington State terminals will not reduce droughts, reduce flooding, increase the future snowpack in the Cascade Mountains or reduce the acidity of Puget Sound.

In conclusion, coal to be shipped through Longview will provide 15 million people with low-cost, abundant, on-demand electricity for 20 years. If you look at the numbers, the impact of CO2 emissions from this generated electricity will have no scientifically discernable impact on either Washington state climate and weather.

Thanks for the opportunity to comment.

NOTE 1: Calculation-- 44,000,000 MT coal shipped each year x 20years x (2,115kWh/MT)/6,000kWh/yr for a family of 4 = electricity for 15.3 million people for 20 years.

NOTE 2: Calculation-- (27,047,892 MT CO2 produced each year burning shipped coal / 30,000,000,000 MT produced globally each year) = .0009 or .09% increase in annual CO2 release rate—(2 ppm/yr x .0009) = 2.0018 ppm/yr.

<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), AR5, Evaluation of Climate Models, pages 769-772, [https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5\\_Chapter09\\_FINAL.pdf](https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_Chapter09_FINAL.pdf), 2014.

Summary of Written Comments  
Presented at Pasco Hearing (June 2, 2016) Page 1 of 1

Summary of Written Comments on Millennium Bulk Terminal at LONGVIEW, WA  
2JUN16/Rev.3/Craig Brown/Richland, Wash.

In my opinion the state of Washington has a flawed process in assessing approval of this shipping terminal for two main reasons;

**2. REASON 1---The potential harm to the state implied in the EIS by CO2 from burning Powder River Basin coal in the Far East will be non-existent. 2 POINTS:**

1. The EIS states that based on 30 independent climate models (CMIP5) the state of Washington could suffer, "... increase risks of damage from flooding, drought, heat waves, winds, and storm surge, etc." The latest IPCC report (AR5) readily admits that essentially all of the climate models overestimate the sensitivity of CO2 to warming at least for the period from 1998 to 2012. (Most by over a factor of two.) How can the Washington Department of Ecology justify using the results from these models to assign climate and weather harm to the state of Washington 30 years into the future when the models for the previous 20 years are already off the rails? Having spent a good portion of my career benchmarking sophisticated and complex computer models (nuclear), to me the statement in the EIS that using "...*multimodel ensemble data of 30 independent models.....assures increased robustness and [reduced] uncertainty...*" is pure gibberish.
2. The CO2e added to the atmosphere from burning this coal in China would increase the current addition rate of 2 ppm/yr by .09%. or from 2ppm/yr. to 2.0018 ppm/yr. (So in 30 years if the total CO2 is 450 ppm, burning this coal would cause it to be 450.1 ppm.) This increase is obviously insignificant. *This will have absolutely no impact on the climate, weather, or bordering seas of the state of Washington.* Just to be clear, the residents of the state of Washington need to know that any action by the state to stop the burning of coal shipped through the Longview or other Washington State terminals will not reduce droughts, reduce flooding, increase the future snowpack in the Cascade Mountains or reduce the acidity of Puget Sound.

**1. REASON 2--The states has a legitimate right to assess and assure the safe transport of legal goods through its borders. It has no right to try to kill any transport based on end use (namely, CO2 emissions). 3 POINTS:**

1. The coal leaving Washington ports will produce 93 billion kWh of electricity over 20 years. This is enough electricity for over 15 million people. China has over a billion people living on less than \$2/day.
2. This is a terrible precedent to set, i.e., having a few state politicians in Olympia start making interstate and global commerce decisions based on their own world view of how the rest of the world should live. What if Canada, Idaho, Oregon and foreign ports stopped all shipments of oil/gasoline to Washington because of its end-use CO2 emissions? How hypocritical is that?
3. This position by the state will undoubtedly harm relations with our overseas trading partners.

In conclusion, the state of Washington has neither a valid right nor scientific basis to deny a terminal use permit based on CO2 emissions of end-use coal shipments.

Thanks for the opportunity to comment.