

Comments on the Millennium Bulk Terminal Proposal Draft EIS

Please accept my testimony on the on the draft EIS for the Millennium Bulk Terminal proposal. My interest is two-fold. I served on a City Club of Portland research study, "Air Quality Regulation in the Portland Metropolitan Area" for 14 months.¹ As a research committee member I studied the adverse health effects of air toxics emitted by industrial processes, the use of chemical agents and combustion engines. In addition my qualifications include 33 years professional experience as an academic researcher in energy conversion and diesel combustion.

Secondly, I am an active recreationalist who, for example during the last year, hiked eight days in the Columbia Gorge and kayaked eleven days on the Lower Columbia River. During these visits to the Columbia River and Gorge I have experienced reduced visibility, waiting for long freight trains at railroad crossings, the noise of freight trains and air toxic emissions from diesel locomotives. I have learned from the communications to members of the Columbia Riverkeeper, Friends of the Columbia Gorge, the Oregon Ocean Paddling Society and Portland Audubon Society of their concerns with the deleterious effects of the proposed coal terminal project in Longview, WA.

The primary air quality health issues with the proposed Millennium Bulk Terminal are due to coal dust emitted from railway coal cars and loading operations and emissions from diesel locomotives travelling through the Columbia Gorge or on a northern route to Longview. It is estimated that at full capacity this project will add about 3,000 round trip coal car train trips per year. Each uncovered coal car may lose more than 500 lb. of coal dust per trip from Idaho to Longview; thus resulting in 400 tons per day of coal dust emitted to the environment from the proposed coal trains to this terminal. The effectiveness of the proposed mitigating open coal rail car spraying operations should be based upon measurements of full scale tests performed under actual transport conditions including a range of weather conditions. Detailed plans for coal car spraying including concentration, duration, frequency, location of spraying stations should be provided.

Using the above travel frequency estimates the coal train locomotive engines are calculated to contribute 200 Tons/year of PM_{2.5} (fine particulate matter 2.5μ diameter or less which easily penetrates human lungs.) To provide a perspective the 2008 DEQ Portland Area Diesel PM_{2.5} Inventory predicts 37.46 Tons/year from rail sources. The annual sum of rail contributions from the proposed Millennium Bulk Terminal Project is equivalent to 25% of the DEQ Portland Area Diesel PM_{2.5} Inventory from all sources. These projections raise a huge red flag warning of the potential of the proposed project to affect air quality and health along the train routes in Oregon and Washington.

¹ City Club of Portland Bulletin, Vol. 95, No. 35, April 26, 2013.

It is particularly important for WDE to require the applicant to submit a detailed air quality analysis. The analysis should include estimates of the effects of coal dust emitted from rail cars considering the effectiveness and toxicity of mitigating spray operations and particulate, CO and NOx emissions from diesel locomotives, emissions from the loading operations, and the contribution to Washington ambient air from the combustion products of the exported coal burned in Asia and returned to Washington back across the Pacific Ocean by natural atmospheric processes.

Aside from the air quality aspects at issue here increased coal train traffic will cause congestion at rail crossings and increase the possibility of derailments such as the recent one in Mosier, OR leading to water contamination by toxic metals, polyaromatic HC's from spilled coal and possible fires. The applicant should address the coal train safety issues and emergency recovery operations. Residents of the Northwestern United States can expect increased intercontinental air pollution from combustion of the large amount of coal exported to Asia.

In my opinion the coal dust emitted from the coal rail cars enroute and due to unloading/loading operations in Longview is a serious enough problem by itself to preclude approval of the proposed Millennium Bulk Terminal Project by the Washington Department of Ecology. Air toxic emissions from the increased diesel locomotive operations through populous areas of Washington is also a serious issue. The adverse health effects of coal dust are well known and documented. An economic analysis accounting for incurred healthcare costs, time lost from sickness, increased maintenance costs to local communities, local infrastructure investments required for the project, forgiven property tax revenues and delays due to increased train frequency would greatly outweigh benefits from new jobs.

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