

Millenium Bulk Terminal DEIS
Comments regarding Fire Hazards
November 18, 2016

As a public health nurse who spent over 25 years conducting accident prevention research, I'm concerned about several health and safety issues with this proposed project. One area that hasn't been adequately addressed in this DEIS is the issue of fires and how these may cause burn injuries and respiratory problems for individuals in and near the terminal as well as people living in communities along the rail route.

As I'm sure you know, this project will be dealing with a hazardous type of coal. Powder River Basin coal is notorious for the hazards it presents regarding fires and explosions.^{1, 2, 3, 4, 5} This was a conclusion by NIOSH following an investigation into the deaths of two firefighters. They were killed in an explosion when trying to put out a fire of PRB coal.^{6, 7}

Self-combustion of coal presents a fire risk⁸ and this is an even greater problem with PRB coal which is twice as likely to self-combust than other types of coal.^{6, 9} It will not only smolder and catch fire while in storage piles at power plants and coal terminals, but has been known to be delivered to a power plant with the rail car or barge partially on fire.^{1, 10, 11}

No place in the coal dust section of the DEIS are fires mentioned. PRB coal dust is also a fire hazard.^{9, 12} Fire protection engineers have warned that coal dust can result in an explosion on a PRB coal conveyor. Sparks from machinery and heat from conveyor belts have caused major coal dust fires and explosions^{4, 13, 14} The potential for fires along the entire rail route is also a concern. BNSF has stated that coal dust deposits have caused fires in areas where coal dust has accumulated.¹⁵ And a fire department in Wyoming has found that coal fires along railroad tracks account for at least 50% of the department's summer call volume.¹⁶

Operators familiar with the unique requirements of burning PRB coal will tell you that it's not a case of "if" you will have a PRB coal fire, it's "when."¹⁷

The potential negative impacts of this project to human health and safety of employees, emergency personnel and residents of Longview are too great!
I recommend that you deny construction of this coal export terminal and select the "No ACTION ALTERNATIVE."

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1. de Place, Eric. "COAL TRAINS MEAN COAL DUST—PERIOD and trackside communities should worry." Sightline Institute.. May 4, 2016 . <http://www.sightline.org/2016/05/04/coal-trains-mean-coal-dust-period>.
2. Khambekar, J and RA Bamum, RA. "PRB Coal-Material Handling Challenges and Solutions" Power Engineering 117:3 3/1/2013. <http://www.power-eng.com/articles/print/volume-117/issue-3/features/prb-coal-material-handling-challenges-and-solutions.html>

3. Doubery EB. Fire Protection Guidelines for Handling and Storing PRB Coal. June 3, 2013
<http://www.powermag.com/fire-protection-guidelines-for-handling-and-storing-prb-coal/>
4. Smoker, K and Albinger, R. "Mitigation of Fires in Coal Handling Facilities: Continuous Monitoring of Carbon Dioxide"
<http://www.conspec-controls.com/resources/presentation-asme-prevention-of-fires-monitoring-co.asp>
5. Hossfeld R and Hatt, R. "PRB Coal Degradation – Causes and Cures"
https://www.researchgate.net/publication/228972594_PRB_COAL_DEGRADATION-CAUSES_AND_CURES
6. Barbara Ellis, PhD. "Coal Fires: A Major Possibility Along the Gorge" March 22, 2013.
<http://www.thegorge.com/coal-fires-major-possibility-gorge/>
7. Two Volunteer Fire Fighters Die After an Explosion While Attempting to Extinguish a Fire in a Coal Storage Silo – South Dakota Summary of a NIOSH fire fighter fatality investigation. September 14, 2012. <http://www.cdc.gov/niosh/fire/reports/face201122.html>
8. US Department of Energy Environmental Safety and Health Bulletin. "The Fire Below: Spontaneous Combustion in Coal." DOE/EH-0320 Issue No 93-4. May 1993.
http://www.coaltrainfacts.org/docs/EH-93-4-The-Fire-Below_-_Spontaneous-Combustion-in-Coal.pdf
9. Merritt, D and Rahm, R. "Managing silo, bunker and dust-collector fires" Power. Nov/Dec 2000. Pp. 53-60.
<http://archive.prbcoals.com/pdf/PRBCoalInformation/12%20COAL%20FIRE%2000.pdf>
10. "Seward Coal Terminal." Ground Truth Trekking. September 22, 2014.
<http://www.groundtruthtrekking.org/Issues/AlaskaCoal/SewardCoalPort.html>
11. "Train car full of coal found smoldering near Chouteau." Fox23. Oct 21, 2014 - 9:10 PM
<http://www.fox23.com/news/local/train-car-full-coal-found-smoldering-near-chouteau/109119614>
12. Block, S. "Coal-Fired Power Plants: Additional Hazards Require Additional Solutions." F.E. Moran Special Hazards Systems (The Moran Group)
<http://www.femoranshs.com/prb-coal-hazard-article>
13. VandenHeuvel, Brett and de Place, Eric. "Coal Export: A History of Failure for Western Ports." Aug 2011. Columbia Riverkeeper and Sightline Institute.
<http://www.communitywisebellingham.org/wp-content/uploads/2012/03/BNSF-Customers-What-I-Can-Ship-Coal-Coal-Dust-FAQs.pdf>
14. "Coal Dust Fire at Wyoming Mine Burns Three Miners." Casper Star Tribune, September 12, 2013 http://trib.com/business/energy/coal-dust-fire-at-wyoming-mine-burns-three-miners/article_2c0eca2c-847e-5f8e-8818-08c54aeca4bd.html
15. BNSF Railway Statement on STB Coal Dust Decision Coal Dust Frequently Asked Questions" [coal/coal-dust.html](http://www.bnsf.com/customers/what-can-i-ship)
16. West Antelope II Coal Lease Application: Environmental Impact ...Volume 1 p 3.152
https://books.google.com/books?id=UxEyAQAAMAAJ&pg=PA152&lpg=PA152&dq=train+smoldering+coal&source=bl&ots=rptspJ_bA6&sig=U03V5eJPFoizotLj_e-yZGDai1s&hl=en&sa=X&ved=0ahUKewj4-c-zv
17. de Place, E. "COAL'S SPONTANEOUS COMBUSTION PROBLEM- Coal fires are a given, but what are the risks?" April 11, 2014. Sightline Institute.
<http://www.sightline.org/2012/04/11/coals-spontaneous-combustion-problem/>