

Handout @ 9/17/13
TREE Mtg.
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RESPONSE TO GOVERNOR INSLEE'S QUESTIONS

Q1. Will shipping coal through GPT have any net impact on Green House Gases (GHG)?

- 2010 Total world coal reserves – 826 billion tons (EIA)
- 2010 Total coal production – 8.1 billion tons (EIA)
- 2010 Total coal consumption – 7.6 billion tons (EIA)
- At 2010 consumption rates, the world has 108 years of coal reserves
- In 2010 500 million more tons were produced than consumed.
- "The U. S. is an infra-marginal coal producer, but the world price is set by the marginal producers which is likely to remain between \$90-%110 per metric ton. As a result, U.S production will merely replace higher cost production with no minimal or no effect on world coal prices. Neither net world coal combustion nor GHG emissions will change as a result of an expansion of U.S. coal exports. (Energy Policy Research Foundation Report page 13).
- "By importing U.S. coal, China is not changing the amount of coal that it burns," said Richard Morse, director of research on coal and carbon markets at Stanford University. "I understand why on an emotional level people don't like it. But if you actually understand the economics, and you understand how climate change works, it's a nonissue." (St. Louis Post-Dispatch, October 22, 2010)

SUMMARY

World reserves and annual production outstrip annual consumption. Coal shipped through the Gateway Pacific Terminal would only displace coal already supplied by other countries and would not increase the overall amount of coal burned or the resulting GHGs.

Q2. Will coal dust from trains have any negative health impacts?

- BNSF has been shipping coal through Washington State for decades and no complaint about coal dust has ever been received by the Puget Sound Clean Air Agency, The NW Clean Air Agency nor the Spokane Clean Air Agency.
- The Campbell County, Wyoming Chamber of Commerce (home to 14 mines, 25% of the PRB's coal production and 5 times the number of coal trains that would travel to and from GPT) reports the County's incidence of with coal dust, Childhood Asthma, Chronic Bronchitis and Emphysema are at below the U.S. norm – Campbell County Chamber of Commerce, 2011.
- “The dust for the most part isn't a significant or measurable percentage of pm 2.5, which we have most concern with”, Missoula City-Council Environmental Health Director Jim Carlson (Missouliaian – June 16, 2012)
- “For starters, claiming that finding a piece of coal on the ground or in the water leads in a direct line to a health or environmental risk violates one of the basic tenets of toxicology and risk assessment — the mere presence of a substance does not indicate harm.

There are other factors that need to be taken into account, the main one being exposure.

“Just because a piece of coal is found in the water or coal dust is found near a rail track does not mean humans are exposed to it. Coal is not a substance that breaks down easily. Coal is relatively innocuous. Simply moving it by trains or trucks or barges does not equate to a risk to the environment or human health.” – Roger O. McClellan, expert in toxicology and human health-risk analysis, and former chairman of the National Research Council Committee on Toxicology, past Chairman of the EPA's Clean Air Scientific Advisory Committee, and a member of the Institute of Medicine – Seattle Times, May 9, 2013.

SUMMARY

Although coal dust has never been an issue in the northwest prior to announcement of proposed export facilities, BNSF Railway petitioned and won approval from the Surface Transportation Board for treatment of loaded coal cars with an approved topping agent to reduce possible dust leakage by at least 85 percent even close in to the mine loading points.

Q3. If GPT is not built will PRB coal trains continue to Canada to export the coal?

Background:

- Currently, PRB coal is moving through Canadian port terminals because the U.S. has too few coal-handling facilities on its West Coast.¹
- B.C. export expansion is part of a \$22 billion effort to expand port, rail, road, and airport facilities, joining together infrastructure, labor, and service reliability.²
- British Columbia exports are vital to the province's economy:
 - Exports of B.C. coal totaled \$7.1 billion in 2011, representing 22% of total exports from British Columbia.³
 - Coal supports over 26,000 jobs in B.C.³
 - The estimated average annual wage for workers directly employed by coal companies was \$95,175 in 2011, which is twice the average annual provincial wage.³
 - Coal exports are a major contributor to B.C.'s export activity, making up 21.8% of total provincial exports in 2011.³

B.C. Terminal Summaries & Expansion Plans:

- B.C. terminals are investing more than \$400 million in upgrading coal exporting capacity over the next few years. If all five terminals follow through with their expansion plans, they would have a combined coal exporting capacity of more than 80 million tons annually. *Here's how the numbers break down:*

TABLE 1: Summary of Current & Future British Columbia Coal Export Capacity

Terminal	Confirmed Current Capacity Expansion	Potential Additional Capacity Expansion	Total Capacity After Expansions
Westshore Terminal, Tsawwassen	4 million tons	N/A	33 million tons
Ridley Terminal, Prince Rupert	12 million tons	36 million tons ²	24-60 million tons
Neptune Terminal, Vancouver	8.5 million tons	N/A	18.5 million tons
Fraser Surrey Docks, Vancouver	4 million tons	4 million tons	4-8 million tons*
Pacific Coal Terminal, Port Moody	1 million tons	2.5 million tons**	1-3.5 million tons
Total Capacity Post-Expansion			80.5-123 MT

*Fraser Surrey Docks Terminal is a new facility being built to ship U.S. coal transported by rail from Wyoming.

**Pacific Coast Terminal has historically been a sulfur export facility, but the decline of sulfur exports and strong demand for coal exports has led to a shift in the terminal's product mix.

- In the lower mainland alone, exporting capacity could reach 49 million metric tons per year (if Neptune and Westshore carry out expansion projects, and permits are issued to Fraser Surrey Docks).
- According to Dennis Horgan, vice president and general manager of Westshore terminal, "With all of these projects going on in a couple years' time we'll be at 70 million. But even then it still isn't enough...Going forward, there's going to be a lot of business for all of us."⁴

- In 2011, all exported Powder River Basin (PRB) coal went through British Columbia because there are no other coal exporting terminals on the West Coast (8 million mt PRB coal went through B.C.).⁵

1) Ridley Terminal (Prince Rupert)

- Plans to double coal export capacity from its current capacity of 12 million tons to anywhere from 24 million to 33 million tons annually by 2015.⁶
- If Ridley elects to use an additional 100 acres at the facility, it could export 60 million mt/year⁷
- According to George Dorsey, president of Ridley Terminals Inc., “Area A gives us the capacity to double the facility from 24 million mt to 50 million mt and beyond. There’s so much space, it’s infinitely expandable.” (“Area A” is the 100-acre area available at the terminal)⁴
- Exported 8.6 million mt of coal in 2011, including some from the Powder River Basin (the terminal is located 2,200 miles away from the PRB, creating a long and expensive haul for producers).⁷
- According to the former Executive Director of the Port of Bellingham, Charlie Sheldon: “I have personally spoken with the manager of the Ridley Coal Terminal in Prince Rupert, Canada, a 150-acre facility able to handle 20 million tons a year. The facility lies adjacent to hundreds of undeveloped acres and can easily be expanded to handle over 100 million tons a year itself. All of this is to say that so long as the market exists the trains will run, either to Canada or Cherry Point.”⁸
- The Canadian government is considering selling the terminal⁷
- At least 2.75 million short tons will be U.S. coal (for Arch coal)⁹
- Exports: metallurgical and thermal coal, potash, petroleum coke, and iron ore pellets¹⁰
- B.C. government plans to provide \$15 million toward the \$90 million expansion plan for the Ridley Terminal.¹¹ The investment is part of a \$300 million infrastructure project that would increase the port’s capacity to ship to Asian markets *six fold*.¹²
- “Coal as well as potash is at record levels out of Ridley.” –Dave Byng, chief operating officer for the BC Ministry of Transportation and Infrastructure¹³
- Ridley’s expansion is bringing the surrounding community economic prosperity. According to the Vancouver Sun, “All of this development has injected new economic vitality into the city, which is just now emerging from more than a decade of despair brought on by the collapse of both the forestry and fishing industries....’It has changed the community economically,’ Krusel [Prince Rupert Port Authority CEO] said. ‘It has given the community hope and the vision that we are now an international port.’”¹⁴

2) The Westshore Terminal (Tsawwassen)

- \$40 million expansion plan in the works that will increase coal exporting capacity from 29 million tons per year to 33 million tons per year by 2012.⁶
- Largest coal terminal in Canada¹⁵
- Opened in 1970; started exporting US Coal in 1988¹⁵
- Exported almost 25 million tons of coal in 2010, of which 5 million was U.S. coal.³
- Exported 27 million tons of coal in 2011¹⁶.
- Currently, 41% of Westshore’s volume is thermal, mostly subbituminous coal from the Powder River Basin (PRB)—though some of it is Montana bituminous as well.⁴
- In 2011, Westshore handled more than 8 million mt of U.S. coal, up from 5.6 million mt the year before. “Thermal coal was roughly 10% of our volume. Then just in the last few years it has steadily crept up from 18% to 26%, 33%, and now 41%,” said Horgan.⁴

- Demand is for coal in Asia is growing so significantly, that Westshore has been forced to turn down customers.⁴
 - According to Denis Horgan: “Of course Peabody and almost every other American company who doesn’t have space here would like to do a lot of business through this terminal. We signed 10-year contracts with two of our existing U.S. customers through 2022. It seemed like a good time to do it and they wanted to lock in capacity. The problem is we can’t even handle our existing customers’ needs, let alone others who wish to contract with us.”⁴
 - Westshore partially determines how to parcel out the terminal’s capacity by seniority. “We have our traditional Canadian customers and then the U.S. guys came knocking on the door. Cloud Peak Energy and the Spring Creek mine are the ones in the U.S. that have shipped here on and off for the last decade. We don’t stand and do an auction and sell to the biggest bidder. We’re in it for the long term,” said Horgan.⁴
 - “We’re no sooner finished with one expansion and it wasn’t enough already. And now this one isn’t enough. Nothing would be enough. Even if we did 50 million mt tomorrow, we still couldn’t satisfy the current need,” said Horgan.⁴

3) Neptune Bulk Terminals (Vancouver)

- As of December 2012, Neptune Terminals is proposing a \$120 million project that would increase capacity from 12 million tons to 18.5 million tons per year.¹⁶
- This is an upgrade from their May 2011 announcement that they were investing \$63.5 million in new equipment that will increase coal handling capacity from 8 million metric tons per year to 12.5 million tons per year by 2012.¹⁸
- Neptune Terminal exports high-quality metallurgical coal from Alberta and southeast British Columbia used in steel-making. There’s high demand for this type of coal in Japan, Korea, and China.¹
- Neptune Terminal also ships coal, potash, and vegetable oil
- In the first half of 2012, coal shipments increased by 10% in Port Metro Vancouver—this is a record amount for both coal and container cargo in Vancouver.²¹
- Port Metro Vancouver is the second largest exporter of coal in North America. They have been shipping coal for over 40 years; coal accounts for 25% of their business.

4) Fraser Surrey Docks (Vancouver)

- A direct transfer coal facility was proposed by Fraser Surrey Docks in October 2012 at the Southwest end of the existing terminal to handle up to four million metric tons of coal per year.²¹ The current permit review will examine 4 million tons per year, although according to Fraser Surrey Docks, there is potential to increase volumes up to eight million metric tons of coal per year over the longer term.²¹
- Coal will be transferred by BNSF trains, then loaded onto 8,000 DWT barges. Tugs will take the barges to the mouth of the Fraser River to Texada Island where it will be stored before transferring to a deep sea vessel for overseas exports.²¹
- If approved, this terminal will make Port Metro Vancouver the largest coal exporting port in North America.¹⁶
- The terminal will ship U.S. coal brought by rail from Wyoming.¹⁶

5) Pacific Coal Terminal (PCT - Port Moody)

- PCT has agreed with Teck Resources Limited to handle periodic coal shipments through its terminal for up to two years. PCT will load 80,000 tons per month of coal, the equivalent of one ship per month moored for two to three days.²²
- Pacific Coast Terminal has historically been a sulfur export facility, but the decline of sulfur exports and strong demand for coal exports has led to a shift in the terminal's product mix.²²
- Infrastructure already exists to enable the export of American coal through Canada, and companies like BNSF have long carried PRB coal through Washington state to export terminals in B.C.
- The currently proposed expansions to Canadian Ports could conservatively handle over 30 million tons of additional capacity, potential capacity expansion could handle over 80 million tons of additional capacity (see Table below).
- Waning overseas markets for Canadian metallurgical coal could mean even more Canadian capacity open to American thermal coal exporters. Demand for metallurgical coal produced in Canada has decreased dramatically in response to increased production of metallurgical coal in Asia. Overseas demand for thermal coal produced in the U.S. remains high.
(<http://online.wsj.com/article/SB10001424127887324049504578543543118958174.html>)
- The trend data is clear. In a recent report from Port Metro Vancouver indicates that American coal exports had increased by 56 percent, while exports of Canadian coal from B.C. and Alberta had decreased by 12 percent (<http://www.cbc.ca/news/canada/british-columbia/story/2013/05/10/bc-port-metro-vancouver-coal.html>)
- Canadian political support for exports is also high. British Columbia Premier Christy Clark was recently reelected, after running on a pro-export, pro-resource development platform against an anti-port development opponent.

SUMMARY

PRB coal is currently being exported through both Westshore and Ridley Terminals in BC. PRB coal has a demand for more export terminal capacity. The BC terminals are expanding to add 27.5 million tons of additional capacity and could add an additional 53 million tons of capacity in addition to the 27.5 million tons. Teck Coal, the owner of the expanding Neptune terminal, has a contract to ship 16-19 million tons per year through Westshore terminal until 2021. When Teck's Neptune Terminal expansion is complete there is a high likelihood Teck will consolidate its coal handling at its Neptune Terminal opening Westshore capacity for PRB coal. The BC government is making a push to expand their export business in an effort to generate jobs and tax revenues. If the demand for terminal capacity exists, after the current round of BC terminal expansions, additional expansions projects will be forthcoming.

Sources:

1. *North Shore News*, "North Vancouver exports soar on coal boom." December 19, 2010
2. *Canada's Pacific Gateway website* <http://www.pacificgateway.gov.bc.ca/index.htm>
3. Coal Association of Canada New reports shows importance of coal in British Columbia (fact sheet) February 15, 2013
4. *Coal Age* While Canadian terminals expand export capacities, many U.S. producers are still going to be short of space March 20, 2012
5. *RBN Energy LLC* Westward Ho! Head 'um up and move that coal out to Asia September 4, 2012
6. *Platts*: British Columbia export terminal can more than double capacity: official September 19, 2011
7. *Platts* Canadian government considering sale of Ridley Terminals: CEO March 16, 2012
8. Charlie Sheldon letter to the Seattle City Council May 20, 2012
9. *Reuters* FACTBOX: Proposed, existing capacity for U.S. coal exports June 9, 2011
10. *CN North America's Railroad website* "Bulk Terminals" 2012
11. *The Vancouver Sun* "Premier Christy Clark kicks off jobs week with \$15 million for northwestern port" September 19, 2011
12. *The Vancouver Sun* "Ridley Island terminal expansion key to development" September 20, 2011
13. *Port Strategy* Joined-up Thinking February 10, 2012
14. *Vancouver Sun* Port's growth returns prosperity to Prince Rupert September 22, 2012
15. The Westshore Terminal website www.westshore.com
16. *The Vancouver Sun* Thermal coal terminal proposed for Fraser River November 23, 2012
17. BIAWC "GPT White Paper" October 27, 2011
18. Neptune Terminals Press Release Neptune Terminals investing \$63.5 million in North Vancouver May 18, 2011
19. The Neptune Terminal website www.neptuneterminals.com
20. *Vancouver Sun* Port posts higher volumes despite global slowdown August 17, 2012
21. Port Metro Vancouver Fraser Surrey Docks Direct Transfer Coal Facility October 11, 2012
22. Pacific Coast Terminals CO. LTD Questions and Answers