Charlotte Persons

Essay for The Evergreen State College Admissions

Coal Export Terminals in Washington: Seeing the Long-Term Picture

It is daunting to consider the kinds of change that will be necessary to slow global warming by reducing the emission of greenhouse gases. Bill McKibben describes a number of ways to “manage our descent” from growth and expansion based on a fossil fuel economy (99). These include encouraging farms to purchase little fertilizer and pesticides and localized energy grids that tap into wind and solar power. Freeman, Perce, and Dodd call for businesses to reform themselves to be focused on sustainable development without coercion from government regulations or policies (351). John Urry also proposes that capitalism will need to change to a new “resource capitalism” that puts value on conserving resources and people, but with the support of government policies (119).

To make a meaningful dent in the amount of global emissions created by the United States and other first-world nations, we need to make sweeping changes in our systems of agriculture, transportation, and energy. However, government actions to accomplish these huge changes must be incremental so that citizens will support them. Remarkably, one such step can be taken right here in Washington State by denying the permits to build the coal export terminals proposed for Longview and Bellingham. Denying these permits will have some indirect effect on greenhouse gas emissions. More importantly, this denial may broaden Washington State government strategies used to reduce greenhouse gases, and in turn the policies of other states.

Carbon is the most harmful greenhouse gas, and burning coal creates more carbon than any other fossil fuel (“Air”). In addition, burning coal causes more harmful byproducts than burning any other fossil fuel -- sulfur that causes acid rain, and mercury and other poisons (Kirby). So why is coal used to generate most of the electricity in the United States? Compared to oil and natural gas, coal used to be the cheapest fuel in the United States, and there is a huge domestic supply. However, the recent widespread use of fracking in the United States means that burning natural gas to generate electricity is now cheaper than burning coal. In the last five years many coal-fired electricity plants in the Midwest and East have been converted to natural gas. Both the drop in domestic demand for coal and its domestic price is expected to continue because of the abundance of natural gas and new federal regulations that will phase out the most polluting coal-fired plants.

Because of the changing American market, coal companies want to export coal to Asia, where demand and price are still high. For the Powder River mines in Montana and Wyoming the least expensive route is to ship coal by rail to ports on the West Coast. Currently there are only two coal export terminals on the West Coast, in Stockton, California, and Vancouver, B.C.; they are at capacity and cannot be expanded. To increase coal export from the Powder River mines, four years ago seven new coal export terminals were proposed in Oregon, Washington, and British Columbia. Because of various problems, the number has dwindled to three: Fraser Surrey Docks in Vancouver, British Columbia; Millennium Bulk Terminals in Longview, Washington; and Gateway Pacific at Cherry Point near Bellingham, Washington.

However, residents and elected representatives have raised concerns about all three terminals in Canada (Stuek) and the United States. For both terminals proposed in Washington, thousands of people turned out for public hearings on the scope of the Environmental Impact Statements (EIS). Residents sent over 163,000 comments, mostly negative, to the Department of Ecology (DE) on the Bellingham proposal, and over 200,000 comments on the Longview proposal (Le). Citizens have many legitimate concerns about local effects of the coal: they fear coal dust blown from coal trains or on-site storage piles and loading operations will damage human health; they worry that accumulation of spilled coal and coal dust on the surface or bottom of river and marine habitats will weaken or kill endangered salmon and other marine wildlife; they see the possibility of both rail congestion and long waits for vehicles at rail junctions (“Big”); and they are afraid of industrial accidents and fires at the terminal sites, such as those that have recently plagued Port Westshore, the forty-three-year-old coal terminal in Tsawassen, British Columbia (Hamilton and Crawford).

Besides protecting human health and wildlife habitat, blocking the export of the coal that would go through these terminals will have an indirect effect on global carbon emissions. The TransAlta coal-fired plant in Centralia produces about one-third of the carbon emissions of the state of Washington. TransAlta uses 5 million tons of coal each year (“Coal-burning”); the annual amount to be exported through the proposed Millennium export terminal in Longview would be 44 million tons (Millennium). The proposal for Gateway Pacific near Bellingham is to export 48 million tons of coal per year (Gateway). Of course preventing the export of this amount of coal will not decrease world-wide carbon emissions by exactly that amount because Asian companies will find other sources of coal, at least in the short term. However, taking this much coal off the international market will affect the prices that Asian companies pay for coal and will encourage them to find other fuel sources, such as natural gas or renewable energy sources.

At the end of the EIS process in two years, the building and operating permits may be denied because of any of the potential problems described above. Common sense leads people to believe that exposure to coal dust will cause health problems for humans and wildlife, especially because of the well-known toll that black lung disease and cancer takes on coal miners. Unfortunately, there are few studies of the effect of coal dust on humans who do not work in mines or loading operations (Jenkins; Fernandez-Navarro), even fewer studies on the effects of coal on marine life in salt or fresh waters (Ahrens and Morrisey; Ahearn “Coal”; “Groups”), and only one study, finished in 2013 and still unpublished in professional journals, on coal particulate pollution from coal trains (Ahearn “Research”). More scientific studies may be discovered or be completed in the next two years. Even better, DE might invoke the “precautionary principle” and deny the permits because it is wiser to err on the side of caution when human health and endangered species’ habitat are at stake.

If DE denies permits to the proposed export terminals for any reason, environmentalists in Washington State will rejoice. However, they will be even more overjoyed if the DE uses an until-now unprecedented reason to deny the permits-- the greenhouse gases that will be emitted when the exported coal is burned in Asia. This is a real possibility because the DE announced that the EIS for the project in Bellingham will take this into consideration, and is expected to do the same for the EIS for the project in Longview. Denying a permit for this reason would be a big change in government policy in Washington State, and in fact any state. This basis for denial would probably be challenged in the courts, but if it stood up to those challenges Washington State could use emissions created by burning fuel offshore as a reason to deny permits to export terminals for other fossil fuels, such as natural gas and oil. This policy might also be adopted by other states like Oregon whose citizens support reduction of greenhouse gases.

While a recent poll showed that a majority of residents in Washington and Oregon are now opposed to building the proposed coal export terminals “Big”, there are still supporters. Because the region is still recovering from the 2008 recession, industrial development of any kind is attractive. For example, supporters in Longview want the two hundred permanent jobs and two million dollars in taxes promised by Millennium Bulk Terminals (Corvin). Environmentalists must keep working to convince people, especially unions, that our region can attract more safe, non-polluting projects like the methanol export terminals proposed last week for Kalama and Clatskanie (Wagner), and that there are clear long-term benefits to everyone of denying the permits for the coal export terminals, both for our local environment and the climate our children will inherit.

Works Cited

Ahearn, Ashley. “Coal Dust’s Environmental Impacts.” *OPB.* 12 March 2013. Web. 17 November 2013.

Ahearn, Ashley. “Research shows coal dust escapes from trains.” *Portland Tribune*. 12 November 2013. Web. 17 November 2013.

Ahrens, Michael and Donald Morrissey. “Biological effects of unburnt coal in the marine environment.” *Oceanography and Marine Biology*. 2005, vol. 43; 69-122. 17 November 2013. Web. 17 November 2013.

“Air Emissions”. *Clean Energy*. U.S. Environmental Protection Agency. 25 September 2013. Web. 3 February 2014.

“Big crowd attends final hearing for proposed Longview coal terminal”. *Yakima Herald.* 20 October 2013. Web. 3 February 2014.

“Coal-burning power plant in Centralia tops Washington's list of biggest greenhouse gas emitters, EPA says.” *Oregon.live.com.* 28 December 2013. Web. 3 February 2014.

Corvin, Aaron. “Coal may bring new life to Longview plant Millennium Bulk Terminals-Longview envisions turning former aluminum smelter into coal terminal, bringing jobs and tax revenue; foes say benefits overstated, environmental threats many.” *The Columbian*. 6 October 2013. Web. 2 February 2014.

Fernández-Navarro, Pablo, et al. "Proximity To Mining Industry And Cancer Mortality." *Science Of The Total Environment* 435-436.(2012): 66-73. *Academic Search Complete*. 11 Nov. 2013. Web. 2 February 2014.

Freeman, Edward R., Jessica Perce and Richard Dodd. “Shades of Green: Business, Ethics, and the Environment”. *The Business of Consumption; Environmental Ethics and the Global Economy*. Laura Westra and Patricia Werhane, eds. Boulder: Rowman and Littlefield Publishers, 1998.

*Gateway Pacific Terminal at Cherry Point Proposal*. Washington Department of Ecology. N.D. Web. 2 February 2014.

Jenkins, Wiley D., et al. "Population Cancer Risks Associated With Coal Mining: A Systematic Review." *Plos ONE* 8.8 (2013): 1-12. *Academic Search Complete*. Web. 11 Nov. 2013.

Kirby, David. “Made in China: Our Toxic, Imported Air Pollution.” *Discover.* 18 March 2011. Web. 17 November 2013.

Hamilton, Gordon and Tiffany Crawford. “Ship crashes into dock at Westshore Terminals, spilling coal into water.” 9 December 2012. *The Vancouver Sun.* Web. 17 November 2013.

Le, Phuong. “Thousands weigh in on plan for coal terminal in Longview.” *The Seattle Times*. 1 February 2014. Web. 1 February 2014.

McKibben, Bill. *Eaarth; Making a Life on a Tough Planet*. New York: Times Books, 2010.

*Millenium Bulk Terminals- Longview EIS*. Cowlitz County, Washington, Washington Department of Ecology, and U.S. Army Corps of Engineers. 2013. Web. 3 February 2013.

Shannon, Brad. “State EIS on Cherry Point Coal-Exports Facility to Consider ‘End Use’ Coal Burning in China as well as Regional Rail Impacts”. *The Olympian*. 31 July 2013. Web. 1 February 2014.

Stuek, Wendy. “Activists plan to ramp up coal-terminal battle.” *The Globe and Mail*, Vancouver. 1 January 2014. Web. 3 February 2014.

Urry, John. *Climate Change and Society*. Cambridge: Polity Press, 2011.

Wagner, Bill. “China-backed company envisions major methanol export plants at Kalama, Clatskanie.” *The Daily News*, Longview. 22 January 2014. Web. 3 February 2014.