



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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September 23, 2015

Mr. Ken Blodgett
Surface Transportation Board
Attn: Office of Environmental Analysis
395 E Street SW
Washington DC 20423

RE: Tongue River Railroad draft EIS Comments for Docket No. 30186

Dear Mr. Blodgett:

Thank you for the opportunity to comment on the federal Surface Transportation Board's (STB's) draft Environmental Impact Statement(EIS) for the proposed Tongue River Railroad Company (TRRC) rail construction and operation in southeast Montana. The Department of Ecology (EIS) provided comments during the scoping process (Docket No. FD 30186) and is pleased to offer the following comments on the draft EIS.

In Ecology's January 4, 2013 scoping comment letter, we expressed concern that no federal EIS at that time had assessed the impacts of coal exports through Washington State. This remains of particular interest given the two coal export project proposals and one in Oregon that are currently in environmental review and litigation respectively.

Specifically, in Ecology's scoping comments we asked the STB to expand the analyses to assess downstream impacts to Washington for the following:

- Traffic impacts from increased train traffic, including delays to emergency vehicles because of extended closures of train crossings;
- Potential impacts on other commodities exported via rail, commuter rail, and Amtrak service;
- Overall rail line capacity;
- Spill prevention and response requirements for potential train derailments, especially since coal trains are expected to traverse the Columbia River Gorge National Scenic Area and Puget Sound;
- Fugitive coal dust; and
- Emissions from locomotives, including particulate matter and greenhouse gases.

Generally, we believe the STB's Office of Environmental Analysis (OEA) conducted a thorough assessment of the TRRC proposal. In particular, Ecology supports STB's methodology to assess indirect and cumulative impacts upstream and downstream of the project, an approach that is generally consistent with draft Council on Environmental Quality (CEQ) guidance. We commend the STB for taking such an important step and hope that other federal agencies will use your approach for assessing and disclosing potential cumulative impacts. Ecology also found the STB's analysis of scenarios that include the potential construction of coal export terminals in the Pacific Northwest informative, including the life-cycle analysis of the greenhouse gas emissions and the rail impact analysis.

Rail

Ecology believes OEA conducted a thorough analysis of rail impacts in the draft EIS. Scenarios show that if all of the proposed coal terminals are built in the Pacific Northwest there will be a substantial increase in train traffic that will occur in Washington.¹ Overall, the draft EIS asserts the potential increase in volume is so great that BNSF Railway may restructure its entire operation west of Spokane, Washington. The analysis goes on to show that this increase will not be caused wholly by the proposed TRRC proposal, but rather all rail traffic originating in the larger Powder River basin coming from existing and induced coal mines.

The burdens likely placed on Washington's rail system raise significant concern for the impact to other commodities moved by rail and the transportation impacts to our communities. Separate from the STB's evaluation of the rail impacts of the TRRC proposal, Ecology is studying this matter with local government partners in two environmental reviews currently being evaluated for two coal export facilities proposed in Washington. As Ecology proceeds with this work, we would appreciate the opportunity to engage with the STB and obtain input and expertise. Since the railroads in Washington are regulated in part by the STB, we believe the STB has the jurisdiction and responsibility to address the cumulative impacts associated with this dramatic increase. Further, we would expect the STB to take action as necessary to ensure that impacts are avoided, minimized, or otherwise mitigated. The U.S. Government Accountability Office's September 2014 report is a good resource to identify potential actions.²

Coal Dust

The draft EIS describes the coal dust impacts expected from the construction and operation of the rail line. Coal dust emissions and impacts on ambient air quality were estimated using the U.S. EPA's AERMOD dispersion model, which integrates expected emissions, terrain, and meteorological data to approximate the increase in ambient total suspended particulate concentrations. Increases to ambient coarse and fine particulate matter (PM₁₀ and PM_{2.5}, respectively) were estimated based on established relationships to TSP from prior studies.

¹ Appendix C, Coal Production and Markets, Table 9-7, C.9-12.

² Freight Transportation: Developing National Strategy Would Benefit from Added Focus on Community Congestion Impacts; GAO-14-740: Published: Sep 19, 2014.

While AERMOD is a well-established and widely-used dispersion model, the accuracy of its results is limited by the quality of the model inputs. In the case of coal dust, available data on coal dust emissions from rail transport of coal is extremely sparse. Much of the existing emissions data were developed in the laboratory setting or other countries (e.g., Australia, Portugal), and their applicability to the Western U.S. is unknown. Without sampling results in environments similar to the action area, there is a great deal of uncertainty to the emission factors used as model inputs. Further sampling is needed both to refine the emission factors used as modeling inputs and to verify model results against monitored concentrations. Ecology is undertaking such field work to help inform the two coal terminal EISs being conducted in Washington State.

Given the large uncertainties in fugitive coal dust emissions and particle size distribution, environmental impacts assessments based strictly on modeling should be interpreted with caution until better sampling data are available.

Greenhouse Gas Emissions

EPA declared greenhouse gases as a threat to public health and the environment in 2009 and set greenhouse gas emission thresholds in May 2010. Ecology therefore commends the STB for following CEQ's draft guidance to assess potential greenhouse gas impacts, including indirect and cumulative, caused by the project.³ Ecology encourages other federal agencies to follow the STB's environmental review approach and include assessment of potential greenhouse gas impacts as appropriate.

Importantly, the STB makes several pertinent observations about the nature of greenhouse gases throughout the draft EIS, such as the following:

- "A life-cycle approach is particularly important because the influence of the proposed rail line extends beyond the project area. Tongue River coal would displace coal and natural gas in domestic and international markets," as discussed in Appendix C, *Coal Production and Markets*.
- "A life-cycle analysis provides a comprehensive perspective on emissions, from production, through use, to disposal. A life-cycle perspective is particularly appropriate for a cumulative impacts analysis of GHG emissions, which have the same effect on climate change regardless of where emissions occur." (Appendix F-1)⁴
- "Life-cycle GHG emissions differ from other environmental impacts in that they would contribute to global climate change regardless of the emissions source or geographic location where they are emitted."⁵

³ *Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews* (Council on Environmental Quality 2014): "...emissions from activities that have a reasonably close causal relationship to the Federal action, such as those that may occur as a predicate for the agency action (often referred to as upstream emissions) and as a consequence of the agency action (often referred to as downstream emissions) should be accounted for in the NEPA analysis (40 CFR § 1508.8)."

⁴ Appendix F, Life-Cycle Greenhouse Gas Emissions, F-1.

⁵ Chapter 5, Greenhouse Gases and Climate Change, 5.2-4.

With regard to the draft EIS analysis, OEA found that “in all but one of the six scenarios examined, enough additional Tongue River coal would be mined and combusted so that, regardless of the GHG intensity of competing coals, there would be a net increase in GHG emissions.”⁶

More specifically, the analysis shows that “across all production and export scenarios, accumulated net emissions from the proposed rail line would range from a slight reduction of 1.7 MMTCO_{2e} to an increase of 81 MMTCO_{2e} for the northern alternatives, and an increase of 8.6 MMTCO_{2e} to 75 MMTCO_{2e} for the southern alternatives.”⁷

Given the OEA’s observations about GHGs and given the findings described in the draft EIS, Ecology does not agree how STB can characterize these indirect GHG impacts as “minor.” According to the draft EIS: “On an annual basis over 20 years, the low end of the net life-cycle GHG emissions estimated by OEA is a GHG reduction, equivalent to taking approximately 17,600 vehicles off the road. The high end of the estimate is equivalent to the annual GHG emissions from 855,000 vehicles on the road...,”⁸ adding nearly a million vehicles annually to our roads is not “minor.”

The OEA analysis also shows the “total U.S. and Pacific Basin CO₂ emissions from the incremental consumption of Tongue River coal averaged over 2018 to 2037 would range from an increase of 0.41 to 4.94 million metric tons per year and would average an increase of 1.95 million metric tons of CO₂ per year.”⁹ This 1.95 MMTCO_{2e} greenhouse gases increase is the equivalent of adding 410,526 vehicles annually to our roads.

While federal agencies do not have a consistent method to define “minor,” the amounts of carbon emissions described in the draft EIS exceed current reporting and regulatory thresholds. EISs are designed to assess the range of potential impacts, but typically take a conservative approach to ensure that all impacts are considered, minimized, and, where feasible, mitigated. Thus, the final EIS should include further assessment and recommend feasible mitigation for the full range of impacts disclosed.

Despite the draft EIS findings, OEA limited its mitigation measures to avoid or minimize emissions of GHGs solely from construction of the proposed rail line. This is contrary to the draft CEQ guidance, which states that, “All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs of these agencies.”¹⁰

⁶ Chapter 5, Greenhouse Gases and Climate Change, 5.2-30

⁷ Chapter 5, Greenhouse Gases and Climate Change, 5.2-33.

⁸ Chapter 5, Greenhouse Gases and Climate Change, 5.2-33.

⁹ Coal Production and Markets C1-24.

¹⁰ Council on Environmental Quality, Executive Office of the President, Memorandum to Agencies: Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations, 46 Fed. Reg. 18026 (March 23, 1981) As amended; FAQ 19b.

Mr. Ken Blodgett
September 23, 2015
5 of 5

The draft EIS describes several mitigation measures to reduce impacts of greenhouse gases and climate change, such as alternative fuels, electrifying trains, and the feasibility of installing solar and wind technologies.¹¹ To address the indirect effects identified in the draft EIS, STB could recommend in the final EIS the purchase of carbon offsets on the voluntary market or other mitigation measures.

In summary, Ecology believes the STB's OEA has completed a thorough draft EIS of the TRRC proposal. However, we believe additional analysis on rail, dust, and greenhouse gases would provide the public with a more complete understanding of the potential TRRC project impacts. We also are interested in working with the STB on addressing future impacts associated with projected rail capacity in Washington State, regardless of how coal traffic and/or terminal expansion affects such growth.

For questions or more information about Ecology's comments, please contact our lead planner for each of the proposed coal terminals: Alice Kelly, lead for the Gateway Pacific Terminal, can be reached at (425) 649-7128 or alice.kelly@ecy.wa.gov, Diane Butorac, lead for the Millennium Bulk Terminal Longview terminal, can be reached at (360) 407-6594 or diane.butorac@ecy.wa.gov.

Sincerely,

A handwritten signature in black ink, reading "Maia D. Bellon", followed by a long horizontal line extending to the right.

Maia D. Bellon
Director

¹¹ Greenhouse Gases and Climate Change, OEA's Preliminary Recommended Mitigation, Greenhouse Gases, 19-6 – 19-7.

