



May 2, 2011

Via Electronic Mail and U.S.P.S.

David Navecky
Surface Transportation Board
395 E Street, SW
Washington, DC 20423
Attention: Environmental Filing
Docket No. FD 35095
naveckyd@stb.dot.gov

Re: Sierra Club Comments on Alaska Railroad Port MacKenzie Rail Line Extension

Dear Mr. Navecky:

The Sierra Club and Cook Inletkeeper have reviewed the draft and final Environmental Impact Statement (EIS) for the proposed Port MacKenzie Rail Extension project and provide the following comments.

The Sierra Club is a nationwide non-profit membership organization with over 600,000 members nationwide, and almost 1,500 members in Alaska. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the Earth; to practicing and promoting the responsible use of the Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The organization educates the public about the impacts of coal mining, transport, and consumption and advocates for policies that encourage cleaner sources of energy. The Sierra Club's concerns encompass the exploration, enjoyment and protection of the air and waters in Alaska, and many Sierra Club members visit and use the lands that would be affected by this project for recreational and aesthetic purposes such as hiking, dog sledding and nature study and enjoyment.

Cook Inletkeeper, formed in 1995, is a community-based nonprofit organization that combines advocacy, education and science. The organization's mission is to protect Alaska's Cook Inlet watershed and the life it sustains. Inletkeeper monitors the Cook Inlet, educates the public, and focuses advocacy efforts on stewardship and encouraging citizen participation. The Cook Inlet watershed is a spectacular ecosystem covering 47,000 square miles of Southcentral Alaska. The

watershed is home to most Alaskans and extends from Mt. McKinley in the north to the Gulf of Alaska along the south central coast of Alaska. The Cook Inlet watershed would be impacted by the proposed Port MacKenzie rail project.

The National Environmental Policy Act (NEPA) is our “basic national charter for the protection of the environment.” 40 C.F.R. § 1500.1. To accomplish these purposes, NEPA requires all agencies of the federal government to prepare a “detailed statement” that discusses the environmental impacts of, and reasonable alternatives to, all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). The EIS must “provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. For the reasons stated below, the EIS is legally and technically flawed. Accordingly, the Sierra Club and Cook Inletkeeper request that the Surface Transportation Board conclude the Port MacKenzie rail project will cause significant and irreparable environmental harm and reject the proposed action.

Although NEPA does not require a particular substantive outcome, it does require federal agencies to take a “hard look” at the environmental impacts of proposed agency actions. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); 42 U.S.C. § 4331 *et seq.* To take a “hard look” under NEPA, agencies must consider the relevant factors and the important aspects of their actions. *See Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999). If an agency approves a major federal action without taking a hard look at its impacts, a court must set aside the agency action as arbitrary and capricious. *See Robertson*, 490 U.S. at 350; 5 U.S.C. § 706. One of NEPA’s fundamental purposes is to demonstrate that the agency has properly considered the environmental consequences of its actions and given the public an opportunity to respond to the agency’s disclosures. *See Robertson*, 490 U.S. at 349 (explaining that NEPA “guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision”).

The environmental review for the proposed Port MacKenzie rail project falls far short of the standard NEPA and federal courts have held is required for an EIS in terms of analyzing impacts to water resources, fish and aquatic species, and wetlands. Additionally, the EIS failed to analyze cumulative and indirect climate impacts from greenhouse gas emissions and indirect air and water quality impacts, as explained in detail below.

1. The FEIS Failed to Adequately Examine Impacts to Water Resources.

The EIS fails to take the requisite “hard look” at impacts to water resources. The EIS notes in several places that the Board intends to comply with state and federal permits. The EIS does not, however, provide enough information to determine whether any of the project alternatives can comply with the federal Clean Water Act (CWA). There is no question that the rail extension will require dredging and filling hundreds of acres of wetlands, even under the environmentally preferred alternative identified in the EIS. EIS at S-20. Section 404 of the CWA prohibits the dredging or filling of wetlands without first receiving a § 404(b) permit from the U.S. Army Corps of Engineers. 33 U.S.C. § 1344. The Corps has adopted stringent guidelines that place

various obligations on the permittee before receiving a 404 permit. For instance, a 404 permit may not be issued if there is a practicable alternative that would have less adverse impacts on aquatic resources. 40 C.F.R. § 230.10-12; *see Bering Strait Citizens for Responsible Resource Dev. v. U.S. Army Corps of Engineers*, 524 F.3d 938, 946 (9th Cir. 2008) (discussing the 404 permitting process). Additionally, under the 404 Guidelines, a permit may not be issued unless the project proponent takes appropriate and practicable steps to minimize the impacts of the discharge on the aquatic ecosystem. 40 C.F.R. § 230.10(d). Even then, if the project is not water-dependant (i.e., involves operation and construction of a rail line) there is a strong presumption that practicable alternatives exist with fewer aquatic impacts, and the permit cannot be issued unless this presumption is overcome. 40 C.F.R. § 230.10(a)(3).

Both the draft and final EIS failed to provide enough information to make a reasonable determination as to whether discharges of fill material associated with the proposed project can comply with the Corps' CWA § 404 Guidelines described above. As described more fully below, the EIS fails to provide adequate information about the impacts to water resources, wetlands, and fish species to determine whether any of the proposed alternatives could be considered the least practicable alternative. Thus, the EIS fails to meet NEPA's informational purpose to "provide full and fair discussion of significant environmental impacts" and fails to inform the public and decision makers about potential alternatives to avoid or minimize environmental impacts. 40 C.F.R. § 1502.1. As the U.S. Environmental Protection Agency (EPA) summarized in its comments on the draft EIS, the proponent has not provided sufficient information to determine whether a less harmful practicable alternative exists. Far from correcting this omission in the final draft, the final EIS simply dismisses EPA's concern by noting that such information "will be developed as the subsequent permit process takes place." EIS at 23-68.

2. The FEIS Failed to Adequately Examine Impacts to Fish and Other Aquatic Resources.

Each of the proposed alternatives, aside from the "no project" alternative, would result in significant impacts to wetlands, surface waters, and the anadromous salmon that rely on these waters. As noted by the National Marine Fisheries Service (NMFS) in its comments on the draft EIS, the proposed rail line would cut through areas designated as "essential fish habitat" for anadromous salmon. Despite acknowledging these impacts, neither the draft nor final EIS provides enough information to determine the full extent of the impacts on fish. To appropriately analyze the impacts to fish species, the agency first must collect better data on the extent to which fish will be present at the proposed ten to eighteen stream crossings. As NMFS commented, the project proponent conducted extremely limited fisheries studies that cannot serve as the basis for any sound estimates of the project's impacts to fish. One-week surveys like the ones prepared for the EIS do not provide enough data for scientifically defensible conclusions about fish impacts. The EIS's reliance on such a limited sphere of data blatantly disregards the NEPA "hard look doctrine."

3. The FEIS Failed to Adequately Examine Impacts to Wetlands.

The surveys the project proponent used to assess the quantity, function, and quality of the wetlands that the project will impact are similarly flawed. Although the EIS goes to some length cataloguing the ways in which construction of a rail line could impact surface waters and wetlands, the studies conducted to determine how much of these waters and wetlands will actually be impacted are inadequate. The EIS notes that impacts to wetlands and surface waters could result from several aspects of the proposed project, including clearing and grading, excavation work, and construction of roads, bridges, and culverts. Final EIS (FEIS) at S-17. Although the EIS does estimate the total acres of wetlands impacted by the project, as noted by NMFS in its comments, the rapid assessment and aerial survey methods used to prepare the EIS are likely to significantly underestimate the amount of wetlands impacted by the project. NMFS recommended the project proponent undertake thorough wetlands surveys and functional assessments in order to accurately determine the amount, function, and quality of wetlands that will be lost as a result of the project. The final EIS dismisses NFMS' comment by baldly asserting, without any support, that the level of detail that NFMS suggested would be necessary to determine actual impacts to wetlands is not required under NEPA. FEIS at 23-107.

Additionally, the EIS drastically underestimates the impacts to wetlands by limiting the evaluation of wetlands impacted to the rail line footprint, even though the EIS acknowledges that impacts to wetlands will occur outside the rail footprint. FEIS at 4.5-10. Rather than undertake the "hard look" required by NEPA, the EIS does not even attempt to assess these impacts, instead dismissing the concern as too difficult to determine, noting: "[i]mpacts outside the rail line footprint cannot be quantitatively assessed." *Id.* The EIS then states that such impacts depend on various factors, including the type of wetland crossed, the effectiveness of the drainage structures, and proposed avoidance and mitigation measures." *Id.* As noted above, however, although proper wetlands surveys could easily determine each of these factors, proper surveys have not been done, and, as a result, there has been no quantitative analysis of the project's impacts to wetlands that lie just beyond the rail line footprint. Given that there are at least hundreds of acres of wetlands within the footprint, the EIS's failure to evaluate the impacts to wetlands adjacent to the project represents a major flaw in the Board's environmental analysis.

Additionally, the EIS fails to meet NEPA requirements by putting off a determination of wetlands mitigation. FEIS at 4.5-27. Under the EIS, the proposed compensatory mitigation measures for loss of wetlands have not been determined, but could include utilizing a "wetland bank" or creating new wetlands. *Id.* Simply stating that compensatory mitigation would be addressed later fails to comply with NEPA regulations, which require that environmental information must be available to citizens and public officials before decisions are made and before actions are taken. 40 C.F.R. § 1500.1(b).

4. The FEIS Failed to Consider All Environmental Impacts From the Proposed Project, Including Cumulative and Indirect Climate Impacts From Greenhouse Gas Emissions.

NEPA requires the consideration of all direct and indirect impacts stemming from a proposed project. The Council for Environmental Quality (CEQ), which implements NEPA at the federal

level, has issued draft federal guidance on how to evaluate the effects of greenhouse gas (GHG) emissions under NEPA.¹ The Federal Guidance confirms that both direct and indirect GHG emissions should be evaluated in the context of “cumulative effects” in an EIS if significant. *Id.* at 5 (“Analysis of emissions sources should take account of all phases and elements of the proposed action over its expected life, subject to reasonable limits on feasibility and practicality.”) Under the Federal Guidance, NEPA documents should put direct and indirect GHG emissions associated with a project in the context of the “aggregate effects of past, present, and reasonably foreseeable future actions” related to climate. *Id.* at 9-10. As the guidance confirms, the duty to evaluate all climate related impacts is not new. Rather, climate is an important factor to be considered within NEPA’s existing framework. *Id.* at 11. Furthermore, CEQ notes that agencies must take particular care to consider the impacts of climate change on populations particularly vulnerable to climate change, such as many Tribal and Alaska Native communities.²

Several cases confirm that NEPA requires evaluation of climate-related impacts even where those impacts are indirectly related to the project under review. In a case with circumstances analogous to the Port MacKenzie rail project, *Mid-States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520 (8th Cir. 2003), the Eighth Circuit Court of Appeals invalidated an EIS for a rail construction project intended to supply coal from the Powder River Basin to power plants because it failed to analyze the emissions of burning the coal that would be transported by the rail project. When the nature of the project’s impact is foreseeable, even if the full extent is not, the agency must still analyze such impacts. *Id.* at 549. The court found that it was reasonably foreseeable that the project was going to increase the country’s long-term demand for coal and, consequently, the adverse impacts of coal burning, both of which should have been considered in the EIS. *Id.*

Similarly, in *Border Plant Working Group v. Department of Energy*, 260 F. Supp. 2d 997 (S.D. Cal. 2003), a federal district court invalidated a decision to approve transmission lines that would connect proposed power plants in Mexico to the U.S. power grid because indirect effects were not considered. The court found that the decision violated NEPA because decision-makers failed to consider the impacts of the operation of the Mexican power plants—including impacts on air quality and climate—that were closely linked to the transmission lines. The court found that the operation of the power plants were an “indirect effect” of the transmission line project because the two were causally linked. *Id.*

There is no analysis in the draft or final EIS of the reasonably foreseeable cumulative and indirect impacts of the Port MacKenzie rail project, which would cause additional mining and other resource extraction in the interior part of the state, and a subsequent increase in coal burning and export. All of these activities would serve as significant sources of greenhouse gas emissions. The draft and final EIS for the Port MacKenzie rail project does address some climate

¹ Available at: http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf.

² See *id.* at 8 “Tribal and Alaska Native communities that maintain their close relationship with the cycles of nature have observed the changes that are already underway, including the melting of permafrost in Alaska, disappearance of important species of trees, shifting migration patterns of elk and fish, and the drying of lakes and rivers. These effects affect the survival for both their livelihood and their culture.”

issues in Section 8 and 16.5.6 but the analysis is limited to the rail line's construction and operation-related emissions.

Further, the EIS does acknowledge such indirect consequences of the project—increased mining, increased exports and higher coal fired power plant emissions—even while failing to analyze the associated emissions. On page 1-4 of the final EIS, the STB recognizes that impacts related to mining are reasonably foreseeable: “[t]he Applicant believes that by creating a rail connection with Port MacKenzie, the proposed project would make the development of existing natural resources in Interior Alaska, including the coal, limestone, timber, and metallic mineral resources along the existing ARRC main line corridor, more economically feasible.” Given that Alaska possesses roughly half the known coal reserves in the U.S., such increased coal mining is not inconsequential and should have been analyzed in the EIS.

It is widely acknowledged that the rail project would encourage the increased export and burning of coal in South America, Japan, China and other Asian countries by providing a link from Alaska's interior to the port, as discussed in a cost-benefit report about the Port MacKenzie rail line expansion.³ Indeed, the Port MacKenzie Master Plan from February 1, 2011, notes that “[d]ue to the design of this relatively high speed freight rail extension, and the inherent transportation cost savings, the amount of coal transported over the extension during the second five years could be up to four million tons [of coal] (Metz, 2007a).” (emphasis added)⁴ Test coal shipments have already occurred at Port MacKenzie in anticipation of gaining rail access that would make regular coal exports from Port MacKenzie economically feasible.⁵ There is no analysis of the impact of burning 4 million tons of coal each year in Asian or South American countries in the draft or final EIS. The lack of analysis of these significant greenhouse gas impacts in the draft or final EIS disregards NEPA's requirement to provide analysis of reasonably foreseeable direct and indirect impacts.

Additionally, due to the increased traffic and industry that the rail line is expected to bring to Port MacKenzie, there are plans to build a power plant, which may create an additional 1 million tons of coal demand per year.⁶ In the cumulative impacts section, the FEIS notes that the “Matanuska Electric Association coal-fired power plant is not being considered until at least 2012 (Carter, 2008) and is therefore not considered reasonably foreseeable” without providing any additional analysis. FEIS O-2. Given that these plans are tied to the construction of the rail line—and relate to the coal that would be transported by the rail line—the emissions from such a plant should have been analyzed in the FEIS rather than ignored.

As written, the EIS fails to analyze the impact of at least five million tons of coal each year that would be exported and/or used in a power plant as facilitated by the rail line. This amounts to

³ Available at: http://www.iser.uaa.alaska.edu/publications/PMK_RailExtension.pdf.

⁴ Port MacKenzie Master Plan Update, February 1, 2011, at p. 11, accessed: http://www.matsugov.us/docman/doc_view/3226-port-mackenzie-master-plan-updatefinal?tmpl=component&format=raw.

⁵ Anchorage Daily News, June 10, 2010, <http://www.adn.com/2010/06/07/1311540/usibelli-tests-coal-loading-at.html>. See also Mat Su Valley Frontiersman,

http://frontiersman.com/articles/2010/06/06/local_news/doc4c0b2a29ceef0037406795.txt. For the test shipment, the coal was trucked from a Usabelli mine in Healy because the rail capacity does not yet exist.

⁶ Port MacKenzie Master Plan Update, February 1, 2011, at p. 11.

roughly ten million tons of CO₂ that were not accounted for in the EIS, which represents about a fourth of the entire state of Alaska's annual CO₂ emissions as of 2007.⁷ Additionally, there was no analysis of the impact from such emissions on populations particularly vulnerable to climate change, such as many Tribal and Alaska Native communities.

5. The FEIS Failed to Consider the Project's Indirect Impacts on Air and Water Quality.

The indirect impacts of the increased mining, export, and burning of coal that the draft and final EIS failed to consider extend beyond greenhouse gas emissions. Mining causes a broad array of environmental harms through contamination of air, surface and groundwater. Transportation of coal over long distances also has significant environmental impacts, including the fossil fuel consumption of moving large volumes of material over long distances via boat as well as the diesel pollution from the rail line.

Burning the coal exported abroad also poses a significant risk of mercury pollution, which comes from coal-fired power plants. In Alaska, the major source of mercury pollution is coal-fired power plants in Asia that travels to Alaska via the air and ocean currents.⁸ Mercury can cause adverse health effects, including learning and developmental disorders, cardiovascular disease, and immune suppression. The state of Alaska issued a fish consumption advisory because mercury is already a severe problem in the state.⁹ Consequently, the EIS should have analyzed mercury impacts from coal that this rail project would facilitate.

Moreover, data shows that open coal train cars—the type of rail car commonly used to transport coal—lose huge volumes of coal dust during transportation, which is a significant air and water quality issue.¹⁰ Coal dust is a ballast safety issue and has been linked to train derailments, as discussed in a recent proceeding before this agency where the STB found coal dust to be “a pernicious ballast foulant.”¹¹ The draft and final EIS address some dust impacts on vegetation near the rail line from construction, but neither document examines the serious impacts known to be caused by coal dust from the rail transportation of coal, another reasonably foreseeable indirect impact which was not analyzed in the EIS.

For the foregoing reasons, the Sierra Club and Cook Inletkeeper respectfully urge the Surface Transportation Board to conclude that the Port MacKenzie rail project will cause significant, irreparable environmental harm and reject the proposed project. In the alternative, we request

⁷ Table 8-6 on page 8-9 of the FEIS estimates 3,141 metric tons of CO₂ during rail construction and 2,606 metric tons of CO₂ during rail operation. Alaska's 2007 CO₂ emissions can be found in EPA 2009, State CO₂ Emissions from fossil fuel combustion, 1990-2007, available:

http://www.epa.gov/statelocalclimate/documents/pdf/CO2FFC_2007.pdf

⁸ Physicians for Social Responsibility, <http://www.psr.org/news-events/events/mercury-pollution-in-alaska.html>.

⁹ Available at: <http://www.hss.state.ak.us/press/2007/pdf/pr101507fish-consumption-facts.pdf>.

¹⁰ According to Burlington Northern Santa Fe (“BNSF”) studies, 500 to 2,000 lbs of coal can be lost in the form of dust for each rail car. In other studies, again according to BNSF, as much as three percent of the coal in each car (around 3600 lbs per car) can be lost in the form of dust.

¹¹ See Decision, March 2, 2011, Arkansas Electric Cooperative Association—Petition for Declaratory Order, Surface Transportation Board, Docket No. FD 35305. See also

that the Surface Transportation Board withdraw the FEIS and produce a supplemental EIS for public review and comment to address the deficiencies in the current FEIS.

Respectfully Submitted,



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