



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

February 2, 2009

Reply To  
Attn Of: ETPA-088

Ref: 05-063-STB

Mr. David Navecky  
STB Finance Docket No. 34658  
Surface Transportation Board  
395 E Street S.W.  
Washington, DC 20423-0001

Dear Mr. Navecky:

The U.S. Environmental Protection Agency (EPA) Region 10, has reviewed the draft Environmental Impact Statement (EIS) for the proposed project to **Construct and Operate a Rail Line Between North Pole, Alaska and Delta Junction, Alaska** (CEQ No. 080524) in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures we also evaluate the document's adequacy in meeting NEPA requirements.

The draft EIS was prepared to provide the Surface Transportation Board (STB) with information to evaluate a proposal from the Alaska Railroad Corporation (ARRC) to construct and operate approximately 80 miles of new rail line, and associated support infrastructure, in the area south of North Pole, Alaska. The draft EIS divided the proposed project into various common, connector, and alternative segments and contains alternatives that reflect each of these identified segments. The proposed action represent the ARRC's preferred routes. The STB has not identified any preferred alternatives in the draft EIS.

EPA commends the STB for its approach in establishing segments and associated alternatives for evaluation; a thorough discussion of mitigation measures; tribal involvement and consultation efforts; the inclusion of greenhouse gas emissions analysis; and finally, the sponsorship of a public transportation project. Based on our review, we have rated the proposed action EC-2 (Environmental Concerns, Insufficient Information). This rating and a summary of our comments will be published in the *Federal Register*. A summary of the rating system we used in conducting our review of the draft EIS is enclosed for your reference.

EPA has concerns regarding impacts to water quality, open water habitats, wetlands, stream channels, and riparian areas. We are also concerned about ecological connectivity from rail line and road construction and operation, as well as river crossings as proposed. We believe that there is insufficient information regarding the purpose and need for the project, as well as

impacts related to potential material sites and construction camps and staging areas. The draft EIS also does not reflect the recent EPA decision to designate a portion of the Fairbanks North Star Borough as non-attainment for PM 2.5 or the delegation of the National Pollution Discharge Elimination System (NPDES) program to the State of Alaska. Finally, EPA questions the need for a maintenance road to run the length of the line given that ARRC rail line is operated and maintained without such a road in other areas. We encourage STB to continue to refine segment alternatives for the final EIS in order to minimize these impacts in final preferred route development.

EPA appreciates the opportunity to provide comments on the STB Northern Rail Extension draft EIS. If you have any questions regarding our comments, please contact me at (206) 553-1601. Please also feel free to contact Jennifer Curtis of my staff in the Alaska Operations Office in Anchorage at (907) 271-6324 or [curtis.jennifer@epa.gov](mailto:curtis.jennifer@epa.gov).

Sincerely,

/s/

Christine B. Reichgott, Manager  
NEPA Review Unit

Enclosures

**ENCLOSURE 1****USEPA DETAILED COMMENTS ON THE SURFACE TRANSPORTATION BOARD NORTHERN RAIL EXTENSION DRAFT ENVIRONMENTAL IMPACT STATEMENT****Purpose and Need**

In our January 13, 2006, scoping comments, EPA advised the STB that the EIS should include a clear and concise statement of the underlying purpose and need for the proposed action, and clearly reflect the construction and operation of the extension to support all known public, private, and government interests. We also recommended an overall cost-benefit analysis for the project be completed. The draft EIS does include such a statement, but does not provide any data to support the project utility and need identified, such as estimated number of passenger and freight trips per day, or discussion of the interest of the US Army and US Air Force, or private industry (tourism, agriculture, mining and petrochemical) to utilize the proposed service. It also does not include a discussion of the economic benefit or comparability with the current highway travel.

*If data regarding the interest of residents, the military, or private industry to utilize the proposed service exists, or an economic analysis of comparable passenger and freight costs is available, EPA recommends that this information be included in the final EIS in order to support the purpose and need. In addition, if information concerning closure or inaccessibility of the Richardson Highway is available, this should be included to support the explanation of a needed road travel alternative. If this information is currently not available, EPA recommends that surveys or other data collection efforts be conducted to obtain this information, and the results included in the final EIS.*

**Agency Preferred Alternative(s)**

EPA recognizes that the STB did not identify a preferred alternative for each of the project segments, and that this is standard practice for many agencies or projects. As such, EPA reviewed and evaluated each of the proposed alternatives for each segment, focusing on ARRC's preferred segments, which were identified in the draft EIS as the Proposed Action. Overall, EPA believes that the ARRC preferred routes represent the alternatives which cause the least impact to a variety of environmental resources, and supports the selection of these alternatives by STB as its preferred alternative(s). There are, however, adjustments that can be made within each ARRC preferred alternative to provide better protection or further minimize impacts to various resources, particularly impacts to water quality, open water habitats, wetlands, stream channels, and riparian areas. One such adjustment is the consideration of full span bridges for stream, river and wetland crossings. Another is reducing the footprint of the road, or eliminating road segments as possible, as well as construction camps and staging areas.

*EPA recommends that any preferred alternative identified by the STB in the final EIS be further refined to further reduce project impacts, particularly to water quality, surface waterbodies and wetlands. This refinement will also help to ensure compliance with Clean Water Act (CWA) 404(b)(1) guidelines. When preferred alternatives are*

*identified, EPA encourages the designation and complete description of material sites, construction camps, and staging areas, and a thorough analysis of the anticipated impacts associated with each of these locations.*

### **Salcha Alternative Segment 1 Option 1**

In general, EPA supports the selection of Option 1 for the Salcha Alternative Segment 1 due to what appears to be the need for the placement of less fill than Option 2. The angle or approach of the proposed levee, however, does not appear to be consistent with the upstream hydrology of the Tanana River, and appears to be designed in such a manner that will require continual maintenance and dredging.

*EPA recommends that the STB further explain the design of the levee or, if not practical, reconsider the design of the levee to ensure that it aligns with the hydrological dynamics of the Tanana River in order to avoid or reduce regular maintenance and repair.*

### **Road Construction**

The draft EIS indicates that ARRC is interested in constructing a road paralleling the entire length of the rail line extension, said to be constructed before and for the purpose of aiding in the construction and maintenance of the rail line (page 2-22). The document does not, however, explain that other sections of rail line throughout the state do not require such a road, and that maintenance can be performed from the rail line itself via hi-rail equipment.

*If this project area is unique and necessitates the construction of a maintenance road, EPA recommends that this should be fully explained in the final EIS. Additionally, if the road is intended to serve other purposes (e.g., military training activities), this should also be disclosed fully in the final EIS.*

### **Air Quality**

A small portion of the Fairbanks North Star Borough, including the City of Fairbanks and the City of North Pole, has recently been designated as a PM 2.5 non-attainment area. The designation is based on the 2005-2007 data from the Fairbanks PM 2.5 monitor. Based on EPA's analysis, local heating emissions from woodstoves, distillate oil, industrial sources and mobile emissions contribute to primary and secondarily formed PM 2.5 that violate the standard during stable weather events associated with extremely strong temperature inversions. Currently the draft EIS does not contain discussion regarding this designation or its potential impact on the project.

*EPA recommends that STB work with EPA and the Alaska Department of Environmental Conservation (ADEC) to determine what effect this recent designation may have on this project, and to revise the air quality analysis in the final EIS as needed.*

### **Spill Response**

The STB has determined that the potential for hazardous material spills from leaks, derailment or collisions is low, and the occurrence is infrequent, and thus will have

low impacts. Past ARRC fuel spills have demonstrated, however, that when a major spill does occur, such as the December 1999, Gold Creek spill, response is often slowed or complicated by remoteness of the site, as well as limitations in spill response resource availability, and the resulting impacts can be substantial. Given that ARRC trains contain up to 125 cars, and fuel tanker cars contain up to 23,000 gallons of fuel per car, a worst case scenario derailment or collision could result in hundreds of thousands of gallons of product being released into the environment, which could immediately contaminate a major surface water body.

*EPA requests that STB reconsider the assumption that a hazardous material spill will result in low impacts given that low frequency and probability does not affect magnitude of the impact should such a spill occur.*

### **Potential Impacts to Chena Slough**

The Chena Slough is a Category 5 CWA Section 303(d) waterbody (AK Id. No. 40506-002) listed for non-attainment of the petroleum hydrocarbons, oil and grease sediment standards for petroleum products and sediment in 1994. Project components of the North Common Segment appear to be within the Chena Slough watershed. ADEC records indicate nonpoint source problems result from surface water run-off, road construction, site clearing, and de-watering activities from gravel operations. According to the Alaska's Final 2008 Integrated Water Quality Monitoring and Assessment Report published by ADEC on April 1, 2008, the State is currently reviewing water quality assessment data collected in 2005 and 2007 to determine if a Total Maximum Daily Load Limit (TMDL) is needed on this waterbody. This information is currently not included in the draft EIS.

*EPA recommends that STB include information concerning the 303(d) listing of the Chena Slough if the project has the potential to contribute to the pollutant loading of the slough. EPA also recommends that STB and ARRC work closely with ADEC if a TMDL is developed in order to meet the pollutant limits during construction and operation.*

### **NPDES Program Delegation**

On October 31, 2008, EPA approved the State of Alaska's National Pollutant Discharge Elimination System (NPDES) Program application. The State's program is called the Alaska Pollutant Discharge Elimination System (APDES) Program. Authority over the federal permitting and compliance and enforcement programs is being transferred to ADEC over three years, beginning at program approval. EPA will retain oversight of the program. Given the project schedule, EPA anticipates that all program components, including domestic wastewater and stormwater, will be delegated to the State before project construction begins. The draft EIS does not currently reflect this recent change to NPDES program administration and oversight.

*EPA recommends that the final EIS reflect the change in permitting authority for point source and stormwater discharges where appropriate.*

**Consideration of Climate Change Impacts**

EPA appreciates the STB's consideration of the greenhouse gas emissions and subsequent analysis of the project's potential contribution to climate change. EPA believes, however, that the draft EIS does not adequately consider the effects of climate change on the project, particularly given the anticipated rates of change to permafrost thaw as well as water quantity and availability. Given that the current estimates of permafrost temperature change is approximately 2°C, and the depth of thaw has increased in many areas in Interior Alaska, this could have significant impacts on project design, maintenance and route development. There currently exists several reports and resources through entities such as the Intergovernmental Panel on Climate Change (IPCC) and the Arctic Impact Climate Assessment initiative that discuss the range of changes that are anticipated for permafrost and water availability in interior Alaska.

*EPA recommends that the STB consider direct, indirect and cumulative impacts to the project due to climate change, particularly impacts due to the anticipated loss of permafrost and changes in water availability, and discuss these impacts in the final EIS. EPA also recommends that potential project adaptation measures be proposed in the final EIS as needed.*

**Compensatory Mitigation for Losses of Aquatic Resources; Final Rule**

The "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule" (commonly referred to as the Final Mitigation Rule), was published in the Federal Register on April 10, 2008 and became effective on June 9, 2008. The regulations establish performance standards and criteria for the use of permittee-responsible compensatory mitigation, mitigation banks, and in-lieu programs to improve the quality and success of compensatory mitigation projects for activities authorized by Department of the Army permits. The draft EIS currently includes a statement that compensatory mitigation for unavoidable impacts to wetlands shall be implemented as part of the U.S. Army Corps of Engineers Section 404 permit.

*EPA notes that compensatory mitigation is not restricted to just wetlands, but to all waters of the U.S., and recommends that the final EIS acknowledge compliance with this Final Mitigation Rule.*

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\*  
Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.