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January 26, 2021

Ref: 8ORA-N

Joshua Wayland, PhD.
Surface Transportation Board
c/o ICF
9300 Lee Highway
Fairfax, Virginia 22031
Attn: Environmental filing, Docket No. FD 36284

Dear Dr. Wayland:

The U.S. Environmental Protection Agency Region 8 has reviewed STB's Draft Environmental Impact Statement (EIS) for the Uinta Basin Railway Project (CEQ No. 20200210). STB is preparing this project to analyze the impacts of the Seven County Infrastructure Coalition's (Coalition) proposal to construct and operate a rail line connecting the Uinta Basin, in Utah, to the national rail network. In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and pursuant to Section 309 of the Clean Air Act (CAA), the EPA provides the following comments on the Draft EIS.

The STB has identified the Whitmore Park Alternative as the preliminary preferred alternative. This alternative proposes to develop an approximate 88-mile line from terminus points in Myton and Leland Bench, Utah to the national rail network near Kyune, Utah. The new railway is proposed primarily as an alternative competitive means to move crude oil from out of the Uinta Basin. The project is not expected to replace existing truck traffic and is likely to facilitate further oil and gas development in the Uinta Basin, currently an ozone nonattainment area.

Our focus in scoping and through cooperating agency work has been on understanding the project's impacts to air quality, water quality, aquatic resources, and environmental justice as well as seeking opportunities to reduce those impacts. We are pleased that the Draft EIS includes these resources in the scope of analysis. The Draft EIS outlines the significant project impacts to water quality and aquatic resources. Further, the Draft EIS outlines the major impacts to environmental justice communities, specifically Tribal communities. Beyond our primary concerns, the Draft EIS analyzes and identifies significant impacts to noise, endangered and special status species, land use and recreation and socioeconomics, specifically impacts to private landowners. Evaluation and identification of these project impacts will aid the STB to provide recommendations to the Coalition to develop adequate mitigation measures to avoid or minimize impacts of the project, should the STB approve the project.

The Draft EIS includes an air quality assessment that contains significant technical issues that make it difficult to understand the potential impacts to air quality. This letter identifies some outstanding comments that are important to reiterate as well as new comments on the technical documentation released at the time of the Draft EIS issuance, especially for air quality modeling and impacts analysis. Our enclosed detailed comments outline specific areas where the STB can provide additional information or make changes to enhance the Final EIS. This information will be beneficial to resource agencies, the public and decision makers.

We note that the STB has worked extensively with EPA as well as other state and federal agencies to develop this Draft EIS. We value the collaborative approach and commend you for your efforts to engage with stakeholders early and often throughout the development of the Draft EIS. We appreciate the opportunity to participate in the review of this project and are committed to continue working with you as you prepare the Final EIS. If you have any questions or comments, please contact me at (303) 312-6704, or Matt Hubner of my staff at (303) 312-6500 or hubner.matt@epa.gov.

Sincerely,

Philip S. Strobel
Director, NEPA Branch
Office of the Regional Administrator

Enclosure

Detailed Comments for Uinta Basin Railway Draft EIS

Air Quality

The EPA offers the following comments and recommendations for improving the air quality assessment consistent with those shared early in the NEPA process. This letter also includes comments based on the new information presented in the Draft EIS and supplemental documents. The concerns outlined below reduce the reliability of the modeled air quality impact projections and the EIS's impact conclusions. We recommend updating the model runs using the recommendations provided below to improve the quality and usefulness of the air quality modeling analysis.

We recommend including a monitoring and adaptive management plan in the Final EIS and Record of Decision. Addressing the modeling issues and reassessment of impacts in the Final EIS would inform STB on the level and scope of adaptive management and monitoring necessary to ensure protection for tribal and environmental justice communities along the rail line. Adaptive management would be based on a short-term air quality monitoring program in the most likely affected residential areas and provide adaptive actions to ensure human health is protected for any affected individuals. We offer our assistance in designing an effective monitoring strategy. If the model is not updated for the Final EIS, we also offer recommendations below for identifying in Chapters 3 and 4 the technical issues and limitations associated with the air quality assessment to inform decision makers and stakeholders about the potential uncertainty in the air quality impact projections.

Air Quality Modeling Configuration and Input Assumptions

Modeled Emission Rates (Appendix M, Modeling Protocol, Section 3.1.2 and Table 3): This section notes that modeled emission rates were based on average fleet emissions. We continue to recommend using an emission rate for a typical train rather than the fleet average. While fleet average emission factors are useful to project total pollutants over large areas and long time periods, the use of fleet average emission factors for short term, near-field modeling will not capture impacts from a train that could be operating and be a lower tier (and higher emission rate) than the future year fleet average.

We also note that non-standard unitized emission rates were used in the AERMOD input files relative to the values provided in Table 3. It is difficult to discern the modeled emission rates and whether representative emission rates were used in the modeling. The available information does not clearly explain the basis for calculating the emission rate based on the emission factor; the basis for using unitized emission rates and the approach for post-processing the model results relative to actual the emission rates. The standard method is to use unitized emission rates of 1 gram per second in the AERMOD input files and then adjusting the predicted concentrations by the actual emission rates. It is not technically accurate to apply unitized emission rates in model simulations that assume variable background concentrations and NO_2 chemistry, which are being assumed in the NO_2 model simulations. Unitized emission rates should not be used under these circumstances because the modeled predictions are dependent on the actual emissions and background concentrations for each time step. Unless additional information is provided to explain the unitization of the modeled emission rates and the methods used to relate the model results to the actual emissions, we recommend updating the modeling to use the actual emission rates for typical trains for all model simulations.

Application of Emission Rate Factors in AERMOD Input Files: Based on our review of the available AERMOD input files, we found that emission rate factors for individual sources were included in all the model simulations, except for the Bear Claw $PM_{2.5}$ model simulations. We recommend providing information to explain the various emission rate factors used in the model simulations. We also recommend providing information to explain the basis for excluding the emission rate factors in the Bear Claw $PM_{2.5}$ simulation or updating the model simulation to include the appropriate emission rate factors.

Release Parameters Specified in AERMOD Input Files (Appendix M, Modeling Protocol, Table 2): It appears that incorrect release parameters are used in some of the model simulations based on our review of the available AERMOD input files,. In particular, the daytime release height for the $PM_{2.5}$ Bear Claw model simulation does not align with Table 2. Further, the daytime (N8) initial sigma-z for the $PM_{2.5}$ and NO_2 Switchbacks model simulations do not align with Table 2. We recommend providing information to explain why the values do not align with Table 2 or updating the model simulations to include the appropriate values.

Vertical Dispersion Assumptions (Appendix M, Modeling Protocol, Section 3.1.2): The vertical dispersion assumptions (i.e., release height, plume rise, and sigma-z) attempt to follow a methodology outlined in another railway project (i.e., "CARB 2004 Report"). While the methodology outlined in the CARB 2004 Report appears to be adequate, the values presented in Table 2 of this section do not appear to align with the proposed methods and CARB 2004 Report. Further, some values in Table 2 (i.e., Notch 5 and Notch 8) do not appear to be representative for typical conditions and may be too high, which will equate to the concentrations being too dispersive, generating under-predictions. We recommend adding information to this section to address the following bullets and to verify the values included in Table 2 and the model input files. The additional information will assist in understanding the representativeness and accuracy of the values and ensure that the assumptions will not cause under-predictions. Alternatively, we recommend using methods and values that are more consistent with the CARB 2004 Report to represent the vertical dispersion assumptions. Note that future plume rise calculations should be based on AERSCREEN instead of SCREEN because AERSCREEN has replaced SCREEN and is the most accurate and preferred screening tool in the modeling community. Our specific recommendations are as follows:

- Table 2 footnotes indicate that the stack's physical heights were accounted for in the calculations. However, the CARB 2004 Report did not account for the stack's physical heights for plume rise (see CARB 2004, Appendix G, Table G:1, Footnote 5). We recommend following the methods used in the CARB 2004 Report and exclude the stack's physical heights.
- The plume rise calculated by the model in the CARB 2004 Report was adjusted to a defined function (i.e., equation) for wind speeds greater than 4.0 m/s for the Stability F Class. If the adjustment is being applied too frequently because most wind speeds are greater than 4.0 m/s, then the Stability F Class may not be representative, and another Stability Class may need to be considered for this project. We recommend outlining the adjusted values for Stability F and explaining how this Stability Class is representative for this project. Alternatively, we recommend selecting another Stability Class for the nighttime stack parameters.
- The CARB 2004 Report outlines plume rise values that generally range from about 0.6 m to 2 m for Stability D (i.e., daytime values) and 9 m to 10.3 m for Stability F (i.e., nighttime values) (see Table G:1 in the CARB 2004 Report). Further, the plume rise values in the CARB 2004 report generally decrease with increasing notch (i.e., notch 1 to notch 3) for Stability D and generally increase with notch for Stability F (see Table G:1 in the CARB 2004 Report). Table 2 in the protocol does not illustrate the same correlations and expected values, where plume rise appears to increase with notch for daytime values (i.e., Stability D) and the daytime values may be over-estimated by a factor of two or more. To address this issue, we recommend providing the details

of the calculations used to determine the vertical dispersion values to ensure that the values for plume rise, sigma-z, and release height are representative and accurate for all notches and period of day.

- Plume rise generally increases over time, but the approach proposed in this protocol assumes instantaneous plume rise. We recommend adding information to this section to clarify why this approach is appropriate and will not generate under-predictions due to the plume being too dispersive at the emission point. If possible, it would be helpful to explain or provide information that identifies the distance associated to the maximum plume height and where that distance relates to key receptor points in the modeling domain.

<u>Turbulent Mixing Assumption (Appendix M, Modeling Protocol, Section 3.1.2):</u> Modeled emission sources were assumed to have a width of nine meters, which is the width of the train plus three meters on either side, to allow for turbulent mixing from a moving train. Turbulent mixing and the additional six meters are not appropriate assumptions for this situation. For instance, turbulent mixing is commonly assumed and accounted for when modeling vehicles because the emissions are released below the vehicle (i.e., from tailpipes) and the emissions from one vehicle are likely to mix with or cross the pathway of emissions from another vehicle. In this case, the emissions are released vertically from the top of a train and the likelihood of emission pathways from trains mixing is low. Turbulent mixing may double-count the dispersion characteristics for these types of sources because plume rise is being considered in the stack parameter assumptions. We continue to recommend excluding the turbulent mixing assumptions for this project.

<u>Ozone Hourly Dataset for OLM (Appendix M, Modeling Protocol, Section 3.1.2):</u> EPA's Tier 3 Ozone Limiting Method (OLM) was used for the NO_2 model simulations. The OLM option requires the use of hourly ozone concentrations that is concurrent with the meteorological time period. Ozone data is a key model input for the OLM option to ensure that the chemistry is treated properly in the model. This project used ozone monitoring data collected at the Roosevelt, Utah monitoring station between 2014 through 2019. We identified issues with the ozone dataset that question the representativeness of the Roosevelt monitoring station. We found that the ozone datasets were missing approximately 20% of the data points and the monitoring station is about 13 kilometers and 80 kilometers from the Myton site and Bear Claw/Switchbacks sites, respectively.

We are aware of two other stations with hourly ozone data that are more representative, closer to the sites and with more complete datasets relative to the Roosevelt monitoring station. These stations also cover the necessary time periods of the meteorological datasets. The other ozone monitoring stations include the Myton and Price monitoring sites, where the Myton ozone dataset could be used for the simulation covering the Myton site and the Price ozone dataset could be used for the simulations covering the Bear Claw and Switchbacks sites. We continue to recommend running the model with the hourly ozone datasets collected at the Myton and Price monitoring sites during the time periods of the meteorological datasets, and we can provide STB with the Myton and Price ozone datasets, if needed.

<u>Locomotive In-Stack Ratios for OLM (Appendix M, Modeling Protocol, Section 3.1.2):</u> It is not clear whether the in-stack ratio of 0.05 for line-haul locomotives is representative because data have not been provided to support the value. In addition to ozone data, the in-stack ratio of NO_2/NOx emissions is the other key model input to ensure that OLM is used properly. We continue to recommend providing the details of any test data that supports the proposed in-stack ratio. If data cannot be provided, and a future

year fleet average emission profile is assumed, we recommend an in-stack ratio between 0.10 and 0.15[1]. Otherwise, we recommend using EPA's default value of 0.5 for the NO_2/NOx in-stack ratio.

Configuration for OLM (Appendix M, Modeling Protocol, Section 3.1.2): Based on our review of the available AERMOD input files, "OLMGROUP ALL" was not specified in the 1-hour NO_2 model simulations that used the OLM option. EPA's air quality modeling guidance specifies that "OLMGROUP ALL" should be used to better account for competition of ozone or ozone available for conversion of NO to NO_2.[2] We recommend updating the model simulations to incorporate OLMGROUP ALL to align with EPA's air quality modeling guidance.

We also found that the Switchbacks NO_2 model simulation did not use the OLM option but used the ARM2 option to treat NO_2 Chemistry. This is not consistent with the Modeling Protocol. We recommend adding information to accurately explain the configuration options used in the model simulations for transparency and accuracy.

Use of Non-Default Configuration Options: Based on our review of the available AERMOD input files, the FASTAREA or FASTALL options were specified for all the model simulations. The FASTAREA and FASTALL options are non-default options and should only be used as a screening tool to develop final model scenarios. One significant risk for using these non-default options is that the concentrations will be generally under-predicted because the parameterization skips receptors that could have predicted concentrations to reduce computational time. Another significant risk for using these keywords is that there will be concerns for receptors that are close to or above the National Ambient Air Quality Standards (NAAQS). In particular, the receptors with concentrations close to the NAAQS could be above the NAAQS and the receptors above the NAAQS could be even higher if the FASTAREA or FASTALL options are not used in the model simulations. Therefore, we recommend updating the model simulations to exclude FASTAREA and FASTALL.

Inclusion of Sources Not Outlined in the Modeling Protocol: Based on our review of the available AERMOD input files, the Myton Wells Draw and Myton Whitmore Park model simulations for NO_2 included AREAPOLY sources. It is not clear what these sources represent or whether these sources should be included in the simulations, especially when the Modeling Protocol notes that all sources were defined as AREA sources. We recommend providing information to explain what these sources represent and information that supports the input assumptions used for these sources. Otherwise, updated model simulations that exclude these sources should be completed to ensure that these sources do not interfere with the predicted results.

Background Concentrations (Appendix M, Modeling Protocol, Section 3.1.6): This section notes that variable background concentrations will be used for the 1-hour NO_2 model simulations. Based on our review of the AERMOD input files, variable background concentrations were not incorporated into the 1-hour NO_2 model simulations. We recommend updating the 1-hour NO_2 model simulations to incorporate the variable background concentrations or explaining in the Modeling Protocol and Table 3.7-11 included in Chapter 3 of the Draft EIS that variable background concentrations were not incorporated into the 1-hour NO_2 model simulations. Please note that if updated model simulations are

[1] See discussion of how NO_x ratios vary by engine design at DieselNet Technology Guide (accessed on 11/23/2020): https://dieselnet.com/tech/emi_gas.php

[2] See EPA's AERMOD Users Guide and the March 1, 2011 and September 30, 2014 Clarification Memorandums: https://www.epa.gov/scram/air-quality-models-clarification-memos-dispersion-models

completed with variable background concentrations then separate annual NO_2 simulations will be needed to ensure that the variable background concentrations are not used for these simulations.

Analyses used to Assess Potential Air Quality Impacts

Analytical Methods used to Post-Process Dispersion Model Results: The Table 3.7-11 footnotes state that 3-year average combinations of predicted modeled results were used to represent the predicted air quality impacts. This approach does not align with EPA's guidance when two or five years of model results are used in the air quality modeling. To be consistent with EPA's *Guideline on Air Quality Models* and additional guidance,[3,4,5] all of the model results disclosed in this table should have been based on an average across the years modeled for each alternative while maintaining the form of the standards. The predicted model results should have been based on a 2-year average for the Myton Alternatives, while a 5-year average should have been used for the Switchbacks and Bear Claw Alternatives. We recommend correcting these issues in the Final EIS to align with EPA guidance or at a minimum identify them as a deviation from EPA's air quality modeling guidance for the stakeholders and decision makers' benefit.

Model Results Presented in Table 3.7-11 of the Draft EIS**:** We are unable to verify the results presented in this table based on the available information. We cannot connect the model results provided in the AERMOD output files, the supplemental EXCEL spreadsheet ("Uinta AERMOD PM2.5_NOx Conc Calcs.xlsx"), and the model results presented in Table 3.7-11. It appears that the difficulty in connecting the model results among these documents may be an issue with the use of unitized emission rates and averaging approach used to post-process the model output files. The "Project" model results presented in this table for the $PM_{2.5}$ simulations do not appear correct because the values are extremely small. This could be due to the technical issues related to the release parameters outlined above.

We identified potential errors in the supplemental EXCEL spreadsheet ("Uinta AERMOD PM2.5_NOx Conc Calcs.xlsx") used to generate the values presented in Table 3.7-11. The model concentrations included in the EXCEL spreadsheet do not align with the AERMOD output files for the Annual $PM_{2.5}$ Myton – Wells Draw simulation, the Annual and 24-hour $PM_{2.5}$ Bear Claw simulations, and the Annual and 1-hour NO_2 Switchbacks simulations. We recommend providing additional information that explains the post-processing methods and supports the assumed release parameters. This information will help verify the values presented in this table and to determine the revisions necessary to improve the modeling analysis.

Analysis based on Maximum Air Quality Impacts**:** Throughout Chapter 3 of the Draft EIS (e.g., pages 3.7-23, 3.7-25) and Appendix M (Modeling Protocol: section 1.1, section 1.2, section 3.1.4, section 3.2), it is stated that the design of the analysis is to identify maximum air quality impacts and focus the model simulation on areas with the maximum concentrations. While this is valid, NEPA air quality analysis and model results are also used to identify any receptors within the project area that exceed the NAAQS, which may not directly connect to the maximum impact or single model result. For instance, it is important to assess the individual receptor locations and the associated predicted concentrations to understand all the receptors that have predicted concentrations above the NAAQS. In many projects with elevated emissions, there may be more than one receptor that has predicted concentration

[3] 40 CFR Part 51, Appendix W to Part 51 - Guideline on Air Quality Models (January 2017)
[4] Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard (March 1, 2011)
[5] Modeling Procedures for Demonstrating Compliance with $PM_{2.5}$ NAAQS (March 23, 2010)

exceeding the NAAQS. Providing this additional information will help inform decision-makers on the spatial extent of potential unhealthy air pollution levels (i.e., distances from the sources that could have unhealthy levels of air pollution) and whether additional management actions are warranted for the project. We continue to recommend distinguishing and explaining these two types of analyses (i.e., maximum design value vs. exceedances) throughout the Draft EIS because they could have different meanings and provide different types of information to inform project development decisions. We also recommend adding details to these sections to summarize the receptors or areas within the model domain with predicted exceedances.

<u>Potential Air Quality Modeling for Additional Criteria Pollutants (Appendix M, Modeling Protocol, Section 3.1.3):</u> This section states that 1-hour NO_2 and 24-hour $PM_{2.5}$ concentrations are likely to be the highest as a percentage of the NAAQS among all criteria pollutants and averaging periods. Because 1-hour NO_2 and 24-hour $PM_{2.5}$ concentrations are likely to be highest as a percentage of the NAAQS among all criteria pollutants, the Draft EIS assumes that if concentrations of 1-hour NO_2 and 24-hour $PM_{2.5}$ are less than the NAAQS, then concentrations of carbon monoxide (CO), PM_{10}, and sulfur dioxide (SO_2) also would be less than the NAAQS. Therefore, concentrations of CO, PM_{10}, and SO_2 would not be modeled for this project. Given the technical issues of the air quality modeling and potential predicted exceedances reported in the Draft EIS for NO_2 and potentially incorrect $PM_{2.5}$ values, we recommend re-visiting whether there is need for modeling additional pollutants after the updated modeling has been provided to the technical workgroup for review prior to the issuance of the Final EIS

Air Quality Conclusions included in Key Chapters of the Draft EIS

<u>Potential Air Quality Impacts Resulting from the Project Operations:</u> Throughout Chapter 3 of the Draft EIS (e.g, pages 3.7-22, 3.7-25), it is assumed that if the modeled concentrations of NO_2 and $PM_{2.5}$ were less than the NAAQS, then concentrations of CO, PM_{10}, and SO_2 for operations also would be less than the NAAQS. The Draft EIS also assumed that if the modeled concentrations of NO_2 and $PM_{2.5}$ were less than the NAAQS, then there would be no other anticipated NAAQS exceedances in the study area due to operation of the proposed rail line. Based on the current results of the air quality modeling, the Draft EIS generally concludes that the project will not generate adverse air quality impacts even though exceedances are predicted by the air quality model. Given the technical issues identified in the air quality modeling, it is not clear whether these conclusions are accurate. Revisions to these conclusions may be needed to address our technical concerns. If the Final EIS does not include updates to the air quality modeling, we recommend adding qualifiers to these sections to explain the technical issues with the air quality modeling analysis and the uncertainty in the model results and predicted impacts.

<u>Support Needed for Modeling Statements (Chapter 3, Page 306 and 487):</u> We recommend reviewing and revising or deleting the statements highlighted below. We are unaware of studies that support them, and we are aware of studies that could contradict these conclusions**.**

- <u>"In addition, a number of studies have found that the AERMOD model may over-predict maximum 1-hour NO_2 concentration by between 1.7 and 2 times the observed concentration." (Page 306):</u> The references included in footnote 11 are not properly documented in order to obtain the associated articles for review. We cannot find the Brode 2014 and Owen 2014 references. We agree that EPA is working on understanding AERMOD's ability to predict 1-hour NO_2 impacts, but we do not agree that the references provided for our review support that AERMOD may over-predict 1-hour NO_2 concentrations by up to two times the observed concentrations. In general, these studies were designed to show that the available NO_2 Tiering options provide conservative results to support their use in AERMOD. These studies also generally show that with additional research and more representative input data, the NO_2 Tiering options could provide reasonable options for treating NO_2 chemistry in AERMOD over AERMOD's default setting that excludes chemistry. Note that this project used a NO_2 Tiering option to better represent NO_2 chemistry in AERMOD. It should also be noted that these studies show several points, and possibly more points, where AERMOD under-predicts the NO_2 concentrations relative to the observations. However, additional analyses or analytical methods that were not included in these studies are needed to sufficiently evaluate the model performance. We are not aware of any current studies that are applicable to this project and properly evaluate AERMOD performance to support the magnitude of uncertainty in AERMOD's ability to predict 1-hour NO_2 concentrations. Therefore, we recommend removing this statement and associated discussions from the Draft EIS.

- <u>"The CMAQ photochemical modeling system was used, primarily because of its ability to replicate observed wintertime ozone formation and timing in the Basin." (Page 487):</u> We are not aware of studies that demonstrate CMAQ's ability to replicate wintertime ozone. In fact, the ARMS Modeling Project and Monument Butte EIS used or referenced for this project show that CMAQ has challenges in predicting ozone and wintertime ozone in the project area. Therefore, we recommend removing this statement and associated discussions from the EIS.

<u>Water Quality and Aquatic Resources</u>

Wetlands and Clean Water Act (CWA) Section 404

We appreciate STB's work to address many of our concerns identified in scoping and preliminary reviews of the Draft EIS. As the Draft EIS notes on page S-7, the preferred alternative is likely to result in significant impacts to wetlands and aquatic resources. Because STB expects the preferred alternative, if approved, to result in significant impacts to these resources, we offer the following recommendations:

<u>Study area:</u> We recommend that the Final EIS would benefit from an analysis within a 300 ft. buffer from the projected edge of disturbance rather than a 500 ft. buffer from the rail centerline. This would be more appropriate for mitigation and avoidance and impact disclosure given the projected impact footprint takes up nearly the entire 500 ft. buffer in some locations. For example, in some areas, the right of way (ROW) for temporary and permanent impacts is wider, and, in such cases, the 1000 ft. wide study area does not extend 300 ft. beyond the edge of the impact footprint. In these areas, we continue to recommend the study corridor be widened so it captures all aquatic resources extending 300 ft. from the edge of the ROW and fill slopes. Additionally, we recommend increasing the study area in the Final EIS where there may be potential for additional minimization through alignment adjustments.

<u>Alternatives screening and the Least Environmentally Damaging Practicable Alternative (LEDPA)</u>: The STB and (primarily) the Coalition, as the applicant, are currently working with the U.S. Army Corps of Engineers (Corps) to obtain the necessary CWA Section 404 permits necessary for the project. EPA and the Corps have shared authority under Section 404, and we are pleased that the Coalition and STB are working with the Corps concurrently during the NEPA process on 404 permitting. We would, however, recommend for future projects integrating the full planning, information and analysis requirements of Section 404 permitting within the NEPA document consistent with the intent of One Federal Decision. In this case, we recommend that the STB consider completing Section 404 permitting work prior to making a decision to authorize a specific alternative. Unlike NEPA, CWA Section 404 requires that the project select the LEDPA. We have previously commented that some of the screened-out alternatives in the NEPA document may be considered practicable under Section 404 and we recommend working with

the Corps to make practicability determinations. We provide these recommendations with the intent that STB can make a timely decision with all Section 404 analyses completed versus making an authorization decision based on the Final EIS alone. We understand that the STB considers the Draft EIS sufficient for Section 404, but if the Corps identifies Section 404 permitting issues after authorization, it could result in further delays for the Coalition. We therefore recommend STB continue working with Corps to ensure all 404 permitting conditions have been met prior to authorization.

Water Quality

We appreciate the efforts made by STB to identify the impacts of this project on waterbodies within the project area. Our review of the Draft EIS indicates that most of our comments from scoping and preliminary draft EIS development were adequately addressed. Because the Draft EIS concludes the preferred alternative would likely result in significant impacts to water quality, we reiterate our recommendation that the STB and Coalition work to avoid or minimize impacts to surface waterbodies and groundwater adjacent to or in the vicinity of the preferred alternative during construction and operational phases of the preferred alternative, should the project be authorized. We also recommend that both STB and the Coalition work to develop robust mitigation to achieve the objectives above, but also to offset any unavoidable impacts resulting from the project.

Environmental Justice

Management of Empty Tanker Cars

Oil prices and demand can fluctuate significantly over time. During periods of lower demand and production, we anticipate that unused tanker cars may need to be stored on sidings in the project area. In other oil and gas basins, EPA has been contacted by concerned citizens in tribal communities about the potential for sidelined tanker cars leaking or venting in proximity to dwellings, waterbodies, or other sensitive locations. We recommend that the Final EIS identify specific siding locations that avoid impacts to tribal or environmental justice communities and to sensitive resources.