



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270-2102

December 14, 2021

Mr. Joshua Wayland
Surface Transportation Board
c/o VHB
940 Main Campus Dr.
Suite 500
Raleigh, North Carolina 27606

Attention: Environmental Filing, Docket No. FD 36500

Dear Mr. Wayland:

Regions 5, 6, and 7 of the U.S. Environmental Protection Agency (EPA) have reviewed the November 12, 2021, U.S. Department of Transportation (DOT), Surface Transportation Board (STB), Notice of Intent (NOI) to prepare a Draft Environmental Impact Statement (EIS) for the Canadian Pacific Railway Limited, Canadian Pacific Railway Company, and their U.S. rail carrier subsidiaries Soo Line Railroad Company; Central Maine & Quebec Railway U.S. Inc.; Dakota, Minnesota & Eastern Railroad Corporation; and Delaware & Hudson Railway Company, Inc. (collectively, CP) proposed acquisition of control and merger with the Kansas City Southern, The Kansas City Southern Railway Company, Gateway Eastern Railway Company, and The Texas Mexican Railway Company (collectively, KCS). The STB is the lead agency under NEPA, and CP and KCS are the project applicants.

The proposed acquisition has the potential to result in significant environmental impacts; therefore, STB's Office of Environmental Analysis (OEA) has determined that the preparation of an Environmental Impact Statement (EIS) is appropriate pursuant to the National Environmental Policy Act (NEPA). STB is now requesting comments on the scope of the Draft EIS. STB will use this Draft EIS in its decision-making process to assess the associated impacts on natural resources and the human environment and to determine whether this project is in the public's best interest.

To assist in the scoping process, we enclosed detailed scoping comments for STB's consideration. Our scoping comments are provided pursuant to NEPA, Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500 -1508) and Section 309 of the Clean Air Act. EPA is most interested in the following issues: environmental justice (EJ), climate change, alternative development, impacts to water and biological resources, wetlands, endangered species, invasive species management, habitat protection, air quality, cumulative impacts, and cultural/historic resource impacts.

EPA looks forward to continued involvement and cooperation in the EIS development for this project. Please send one hard copy of the Draft EIS and a web link to this office when completed and submitted for public comment. You may now electronically file your EIS using our *e-NEPA Electronic Filing* by linking to EPA's web site at <http://www.epa.gov/compliance/nepa/submiteis/index.html>.

If you have any questions, please contact Michael Jansky of my staff at (214) 665-7451 or by e-mail at jansky.michael@epa.gov.

Sincerely,

ROBERT
HOUSTON

Digitally signed by ROBERT HOUSTON
DN: c=US, o=U.S. Government,
ou=Environmental Protection Agency,
cn=ROBERT HOUSTON,
0.9.2342.19200300.100.1.1=#68001003655693
Date: 2021.12.14 18:36:08 -0600

Robert Houston
Staff Director
Office of Communities, Tribes and
Environmental Assessment

Enclosures:

Detailed Scoping Comments
Construction Emission Control Checklist

**DETAILED SCOPING COMMENTS
FOR THE
U.S. DEPARTMENT OF TRANSPORTATION (DOT)
SURFACE TRANSPORTATION BOARD (STB)
NOTICE OF INTENT (NOI)
TO PREPARE AN
ENVIRONMENTAL IMPACT STATEMENT (EIS)
FOR THE PROPOSED
CANADIAN PACIFIC RAILWAY
AND
KANSAS CITY SOUTHERN RAILWAY
MERGER**

BACKGROUND

The STB plans to assess the environmental impacts of the proposed Canadian Pacific (CP)-Kansas City Southern (KCS) merger. The STB's OEA on November 12, 2021, issued a NOI to prepare an EIS. STB determined the statement is necessary because the CP-KCS merger has the potential to result in "significant environmental impacts." The EIS will focus on how changes in rail operations and vehicular traffic on roadways and in intermodal facilities, as well as capital improvements, could impact the environment if CP and KCS were to combine. EPA offers the following detailed comments for consideration in the development of the Draft EIS.

DETAILED COMMENTS

Statement of Purpose and Need

The Draft EIS should clearly identify the underlying purpose and need to which the STB is responding in proposing the alternatives (40 CFR 1502.13). The purpose of the proposed action is typically the specific objectives of the activity, while the need for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity. The purpose and need should be a clear, objective statement of the rationale for the proposed project.

Project Description

The NOI explains that the proposed project would make capital improvements within the existing right-of-way, including adding or extending 24 sidings, adding four miles of double track, and adding five miles of facility working track. In addition, operational changes would alter rail traffic on portions of the combined rail network. Rail yards and intermodal facilities would experience an increase in activity.

Recommendations for the Draft EIS:

- Clarify whether any activity, including staging, would take place outside of the existing right-of-way.

- Provide descriptions and maps for all project features, including any permanent or temporary access roads, staging areas, and changes to infrastructure.
- For all changes to sidings and new double track areas, disclose: (a) the mileage of new track and (b) the proximity of tracks to residences, schools, parks, and other populated places.
- Evaluate locations where train traffic is expected to increase significantly as a result of the railroad merger. Describe impacts associated with increased rail traffic in those locations, such as increased congestion at highway/rail and rail/rail grade crossings, emergency vehicle access at those locations, noise/vibration, air quality, and spill risks. Consider mitigation measures, such as installing grade separations, to address these issues.
- Describe the extent to which activity would increase at maintenance and multimodal facilities and measures to minimize associated environmental impacts.
- Discuss potential indirect impacts that would result from this project. Consider environmental impacts associated with any induced changes to vehicle traffic patterns, increased jobs at maintenance and multimodal facilities, and development patterns.

Alternatives Analysis

NEPA requires evaluation of reasonable alternatives, including those that may not be within the jurisdiction of the lead agency (40 CFR Section 1502.14(c)). A robust range of alternatives will include options for avoiding significant environmental impacts. The Draft EIS should provide a clear discussion of the reasons for the elimination of alternatives which are not evaluated in detail.

The environmental impacts of the proposal and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of wetlands impacted, tons per year of emissions produced).

Recommendations for the Draft EIS:

- Briefly describe any alternatives that were considered but dismissed prior to the Draft EIS, and explain why they were not carried forward.
- Describe and fully analyze a reasonable range of alternatives in the Draft EIS. Develop reasonable alternatives that consider different placements of track sidings, double tracked portions, and other new infrastructure components. Locate infrastructure components with the goal of avoiding or minimizing impacts to natural and community resources.

- For each alternative, describe and assess all components, including, but not limited to, staging areas, access roads, sidings, double tracks, rail spurs, power stations, and storage/maintenance yards.

Stormwater Considerations

The Draft EIS should describe the original (natural) drainage patterns in the project locale, as well as the drainage patterns of the area during project operations. Also, the Draft EIS should identify whether any components of the proposed project are within a 50 or 100-year floodplain. The Draft EIS should note that, under the Federal Clean Water Act (CWA), any construction project disturbing a land area of one or more acres requires a construction stormwater discharge permit.

Surface Water and Groundwater Quality

The Draft EIS should fully discuss potential direct, indirect, and cumulative impacts from the proposed project to surface and groundwater quality.

Recommendations for the Draft EIS:

- Identify all water bodies that are listed as impaired under CWA Section 303(d) and could be directly or indirectly impacted by this project. Describe each water body's specific impairments, the causes of the impairments, and whether a Total Daily Maximum Load (TMDL) plan is in place.
- Analyze project impacts on impaired waters and TMDLs and commit to any necessary mitigation measures to avoid further impairment or delay of timely remediation.
- Evaluate potential direct or indirect impacts to public and private drinking water supply intakes and wells from project construction and operation and identify any wellhead protection areas and protective measures as needed.
- Discuss plans for managing stormwater and complying with the National Pollution Discharge Elimination System under CWA Section 402.

Waters of the United States and Compliance with Section 404 CWA

The impacts from the construction, operation and maintenance of the proposed merger may result in impacts to aquatic resources that require permit authorization under Section 404 of the CWA for the placement of dredged or fill material. As such, the Draft EIS should include a thorough evaluation that demonstrates planning efforts to avoid, minimize, and compensate for stream and wetland losses associated with the construction, operation, and maintenance of the proposed project. This evaluation is necessary to demonstrate the project's compliance with the Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA. Impacts to aquatic resources and wetlands should include direct, indirect (i.e., secondary) and cumulative effects reasonably associated with the proposed project. Along with the CWA 404 (b)(1)

analysis, all unavoidable direct and indirect impacts would need to be compensated. We recommend that an aquatic resource and wetland mitigation plan, consistent with the 2008 Final Rule for Compensatory Mitigation for Losses of Aquatic Resources, be included within Draft EIS.

Specific to the existing documentation, please ensure stream and wetland impacts are consistently identified and quantified throughout the project documentation. If portions of the current evaluation of stream and wetland impacts is based upon a desktop analysis, the EPA recommends a field-based assessment of the project impacts to be included as soon as possible and be available with the Draft EIS. For the evaluation of alternatives, providing a clear comparative analysis of project alternatives with all associated wetland impacts (preferably in a tabular form with supporting map of alternatives) would be beneficial. The alternatives evaluation should include a thorough discussion of avoidance and minimization measures.

The mitigation plan should include all components as required by the 2008 Mitigation Rule and compensate for unavoidable impacts to aquatic resources, including the conversion of wetland resources along with any temporal losses that may result from project construction. The mitigation plan should incorporate an analysis of lost stream and wetland functions along with the stream and wetland functions to be enhanced, restored, or created. The proposed mitigation should be in the same watershed as the proposed impacts and should be of the same type to ensure adequate compensation is provided for the types and quantities of aquatic resources impacted by the project. Please provide the draft mitigation plan in the Draft EIS. Providing this material for public review allows for the optimum analysis of the entire range of significant potential environmental impacts by the U.S. Army Corps of Engineers (USACE), the EPA, and other interested stakeholders.

Recommendations for the Draft EIS:

- As discussed above, align NEPA and CWA section 404 processes to ensure that this Draft EIS will fulfill future NEPA requirements for permitting actions.
- Quantify waters within the project area and adjacent areas using USACE preliminary or approved jurisdictional determinations. Include clear maps and describe water quality, functions, and values.
- Identify all waters with special designations, such as Outstanding State and National Resource Waters, and those waters located within state and federally-owned lands. Take additional steps to avoid and minimize impacts to these waters.

Biological Resources, Habitat and Wildlife

Section 7 of the Endangered Species Act (ESA) directs all Federal agencies to ensure that any action they authorize, fund, or carry-out does not jeopardize the continued existence of a threatened or endangered species or proposed or designated critical habitat. Implementing regulations found at 50 CFR Part 402 specify how Federal agencies are to fulfill their ESA Section 7 consultation requirements. The Draft EIS should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area, including any areas. The Draft EIS should identify which species or critical habitat might be directly, indirectly, or cumulatively affected by each

alternative and describe possible mitigation for each of the species. EPA recommends that the STB consult with the U.S. Fish and Wildlife Service (FWS) under Section 7 of the ESA. We also recommend that the STB coordinate across field offices and with USFWS and the appropriate State Wildlife and Fisheries Department (SWD) to ensure that current and consistent surveying, monitoring, and reporting protocols are applied in protection and mitigation efforts.

Recommendations for the Draft EIS:

- Use the FWS “Information for Planning and Conservation” tool to obtain a list of trust resources in the project area, which would include species that are listed as threatened or endangered under ESA, candidate species for listing, critical habitat, and migratory birds protected under the Migratory Bird Treaty Act.¹
- Once the list is obtained, determine whether the proposed action may affect trust resources. If trust resources may be affected, engage in consultation with FWS. Document all coordination and formal consultation in the Draft EIS with the goal of aligning NEPA and ESA Section 7 consultation processes.
- Describe the presence of ESA-listed threatened and endangered species, candidate species, migratory birds, and critical habits in the project area. Describe the extent and nature of potential direct, indirect, and cumulative project impacts.
- Consult with the FWS and regional and local wildlife experts to explore specific locations and design features for any necessary wildlife crossings. Include findings in the Draft EIS.
- Coordinate with state Departments of Natural Resources (DNRs) to determine if any state-listed species could be impacted by the proposed project, and document coordination in the Draft EIS.
- Consult with FWS and state wildlife agencies under the Fish and Wildlife Coordination Act (FWCA),² which requires consultation when federal actions would result in the control or modification of a natural stream or body of water. This includes discharges of fill material. Discuss requirements of FWCA, interagency coordination, and measures to protect wildlife.

Invasive Species

Human actions are the primary means of invasive species introductions. Railway construction causes disturbance of right-of-way (ROW) soils and vegetation through the movement of people and vehicles along the ROW, access roads, and lay down areas. These activities can contribute to the spread of invasive species.

Executive Order 13112, *Invasive Species* (February 3, 1999), mandates that federal agencies take actions to prevent the introduction of invasive species, provide for their control, and minimize the economic,

¹ FWS Information for Planning and Conservation (IPaC) tool is available at: <https://ecos.fws.gov/ipac/>

² The Fish and Wildlife Coordination Act is available at 16 U.S.C. 661-666c; Public Law 85-624

ecological, and human health impacts that invasive species cause. Executive Order 13112 also calls for the restoration of native plants and tree species. If the proposed project will entail new landscaping, the Draft EIS should describe how the project will meet the requirements of Executive Order 13112.

In addition, we encourage alternative management practices that limit herbicide use (as a last resort), focusing instead on other methods to limit invasive species vegetation and decrease fire risk. Possible alternatives include mowing and weed control fabric, which may need a layer of soil to prevent degradation due to ultraviolet light.

Air Quality

The Draft EIS should discuss the existing, or baseline, ambient air conditions in the vicinity of the project. This includes identification of applicable National Ambient Air Quality Standards (NAAQS), non-NAAQS pollutants, and criteria pollutant nonattainment areas. The project must be evaluated for cumulative and indirect air quality impacts, with potential impacts from temporary, long-term, or cumulative degradation of air quality also addressed. This evaluation should estimate and quantify project-related criteria and hazardous air pollutant (air toxics) emissions, identify specific emissions sources, and consider any expected air quality/visibility impacts to any Class I Federal Areas identified in 40 CFR Part 81, Subpart D. Such discussions should describe and estimate air emissions from potential construction and maintenance activities and proposed mitigation measures as part of a construction emissions mitigation plan..

The proposed project would result in temporary fugitive dust and diesel exhaust emissions from construction activities, such as material hauling and use of heavy machinery. Long-term direct emissions sources include operating additional trains and increased activity at maintenance and intermodal facilities. Long-term indirect operational emissions sources include, but are not limited to, any induced growth in nearby supporting facilities. In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Diesel exhaust can also lead to other serious health conditions and can worsen heart and lung disease, especially in vulnerable populations, such as children and the elderly. Temporary and long-term emissions and potential health impacts should be fully evaluated and considered in developing alignment locations and protective measures for this project.

EPA's General Conformity Regulations ensure that federal actions comply with the NAAQS. To meet this Clean Air Act requirement, a federal agency must demonstrate that every action that it undertakes, approves, permits, or supports in areas that do not meet or previously have not met air quality standards will conform to the appropriate state implementation plan. Further, projects funded or approved by the STB in areas that do not meet or previously have not met the NAAQS are subject to Transportation Conformity Regulations.³ Potential elements of this project that could require funding or approval include, but are not limited to, the modification of existing grade crossings, road networks, or transit infrastructure. To comply with EPA's Transportation Conformity Regulations, such elements would need to be included in a conforming transportation plan and a transportation improvement program.

³ Information on Transportation Conformity is available at: <https://www3.epa.gov/otaq/stateresources/transconf/>

Recommendations for the Draft EIS:

- Discuss the air quality benefits described in the NOI, which stated that Applicants found that the proposed project would result in 60,000 fewer truck trips on highways annually. Provide context for how the calculation was developed and the associated miles traveled.
- Provide a detailed discussion of existing air quality conditions and criteria pollutant maintenance and nonattainment areas in the project study areas.
- Include an analysis of direct, indirect, and cumulative air quality impacts (positive and negative) from each alternative. Include estimates of all criteria pollutant emissions and any anticipated exceedances of NAAQS.
- Identify potential hotspot impacts, especially where idling locomotives, maintenance yards, storage yards, or new multi-modal centers are proposed, if applicable.
- Analyze health risks associated with construction and operational air emissions from the proposed project to nearby sensitive receptors. Discuss siting decisions and protective measures to avoid, minimize, or mitigate human exposure to harmful emissions.
- Use the most current EPA-approved model to estimate emissions and present all methods and assumptions for analyses.
- Discuss general and transportation conformity requirements and their applicability to the proposed project. If applicable, include a draft General Conformity Determination with related mitigation commitments.
- Commit to require construction contractors to use measures from the enclosed Construction Emission Control Checklist when applicable.
- Specify how impacts to sensitive receptors, such as children, elderly, and the infirm will be minimized. For example, commit to locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Recommend that the project proponent and other companies that would operate trains on the proposed railroad system use electric switching locomotives, or other low emission locomotive technologies, whenever possible to reduce air emissions during operations. If that is deemed infeasible at this time, discuss a strategy to move toward cleaner technologies.
- When schools, medical facilities, and other places where people gather are within 500 feet from the project, especially where idling is expected, consider whether vegetative barriers may reduce exposure to air pollution. If this option is pursued, we recommend working with

EPA as careful design of the barrier is key to reducing exposure.⁴ Elevation changes, gaps between trees, and length of the barrier all must be considered.

Climate Change, Resilience and Adaptation

Many of the proposed action areas may be vulnerable to the impacts of climate change, including but not limited to, sea level rise, changes in local hydrologic conditions, increased precipitation, more severe drought, etc. EPA recommends that the description of the affected environment include an analysis of projected future changes, including future climate scenarios, that may affect the proposed action. The U.S. Global Change Research Program's Fourth National Climate Assessment (NCA) provides a starting place for analyzing changing climate conditions in the project area.⁵ The NCA provides an in-depth look at climate change impacts on the U.S. now and in the future. Considering findings for each geographic region of the proposed project can help STB and the Applicants to incorporate resiliency measured into the proposed project.

As stated in Executive Order 14008: *Tackling the Climate Crisis at Home and Abroad*, "The United States and the world face a profound climate crisis. We have a narrow moment to pursue action...to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents." The proposed project would release greenhouse gas (GHG) emissions from both construction and operations. As described below, opportunities are available to reduce GHG emissions. EPA also recognizes that a well-planned rail system using best practices to minimize air pollution has the potential the benefit air quality by reducing emissions from trucks.

In addition, EPA recommends using the 2016 Council on Environmental Quality Final guidance on consideration of GHG emissions and the effects of climate change (issued Aug. 1, 2016; withdrawn Apr. 5, 2017; under review Feb. 19, 2021, for revision and update) as a resource for addressing, as appropriate, greenhouse gas emissions, disclosing climate change impacts associated with any of the reasonable alternatives considered, including the "no action" alternative, and considering practicable mitigation to reduce potential greenhouse gas emissions.

Recommendations for the Draft EIS:

- Use the 2016 CEQ Final guidance on consideration of GHG emissions and the effects of climate change (issued Aug. 1, 2016; withdrawn Apr. 5, 2017; under review Feb. 19, 2021, for revision and update) as a resource for addressing GHGs and disclosing climate change impacts associated with each alternative.
- Quantify the GHG emissions from project alternatives to inform decision-making. Consider modifications to alternatives to reduce GHG emissions.

⁴ See EPA's Recommendations for Constructing Roadside Vegetation Barriers to Improve Near-Road Air Quality <https://www.epa.gov/air-research/recommendations-constructing-roadside-vegetation-barriers-improve-near-road-air-quality>

⁵ USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II* [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018. <https://nca2018.globalchange.gov/>

- Discuss reasonably foreseeable effects that changes in the climate may have on the study area and the proposed project. While this will vary by geographic region, the Midwest, for example, is expected to see increasing frequency and severity of storm events and flooding. Such considerations could inform the development of resiliency and adaption measures.
- Consider resiliency and adaptation measures or plans to ensure that the proposed infrastructure would maintain structural integrity and safe operating conditions under changing climate conditions. For example, consider anticipated frequencies of severe precipitation events when sizing stormwater control features, bridges, and culverts. See EPA's Adaptation Resource Center⁶ for assistance.
- Discuss opportunities and commit to measures to reduce short and long-term releases of GHG emissions from implementation of the proposed project, such as applicable measures from the enclosed Construction Emission Control Checklist.

Hazardous Materials/Hazardous Waste/Solid Waste

The Draft EIS should address potential direct, indirect, and cumulative impacts of hazardous waste from construction and operation of the proposed transmission line and other facilities. The document should identify projected hazardous waste types and volumes and expected storage, disposal, and management plans. It should address the applicability of state and federal hazardous waste requirements.

Appropriate mitigation should be evaluated, including measures to minimize the generation of hazardous waste (i.e., hazardous waste minimization). Alternate industrial processes using less toxic materials should be evaluated as mitigation since such processes could reduce the volume or toxicity of hazardous materials requiring management and disposal as hazardous waste.

Hazardous Substances and Emergency Response

The proposed project could result in releases of hazardous substances through accidental spills during construction and, if rail cars carry hazardous substances, through accidents during operation of the railroad. Comprehensive, upfront planning and preparedness are needed to avoid such incidents and establish response contingencies. EPA has engaged in response planning and training with Class I railroads for the purposes of: (1) better understanding the nature of commodity flows, (2) providing joint training to state and local response agencies, and (3) ensuring that railroad spill response plans, as required by the U.S. Department of Transportation (USDOT), are consistent with both the Oil and Hazardous Substances National Contingency Plan and the applicable EPA Regional Contingency Plans for spills of oil and hazardous substances.

Recommendations for the Draft EIS:

- Disclose hazardous substances that would be used during project construction.
- Discuss plans to avoid accidental releases during construction and respond to any accidental releases.

⁶ EPA's Climate Adaptation Resource Center, available at: <https://www.epa.gov/arc-x>

- Disclose hazardous substances that freight trains could carry along the proposed merged rail network. To the extent that information is available, describe all elements of commodity flow, such as material description, volume, frequency, types of containers, shippers, and carriers.
- Discuss plans and controls designed to avoid accidents during operations and to respond to any accidental releases.
- Evaluate potential public health and safety impacts associated with an accidental release of oil and other hazardous substances during project construction and operations.
- Discuss how STB and/or the railroads would coordinate with communities, states, EPA, Federal Railroad Administration, and USDOT to develop integrated spill response plans, including Geographic Response Plans. Such plans are needed to prepare to respond to incidents involving the transport of oil and hazardous substances on the merged rail network. Include a discussion of training and exercises involving all the above parties.
- Consult with the appropriate EPA Region for assistance with emergency preparedness and contingency planning.

Indirect Impacts

Per CEQ regulations at CFR 1508.8(b), the indirect effects analysis "may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." We recommend the Draft EIS consider available information about the extent to which construction activity might be stimulated by the construction of additional track sidings and parallel track construction and expanded train traffic utilization and the potential environmental effects associated with that activity as result of the merger.

Cumulative Impacts

The cumulative impacts analysis should identify how resources, ecosystems, and communities in the vicinity of the project have already been, or will be, affected by past, present, or future activities in the project area. These resources should be characterized in terms of their response to change and capacity to withstand stresses. Trends data should be used to establish a baseline for the affected resources, to evaluate the significance of historical degradation, and to predict the environmental effects of the project components.

For the cumulative impacts assessment, we recommend the Draft EIS focus on resources of concern or resources that are "at risk" and/or are significantly impacted by the proposed project before mitigation. For this project, the STB should conduct a thorough assessment of the cumulative impacts, especially in the context of the other developments occurring and proposed in the area, including pending and proposed projects.

A cumulative impacts assessment is also required under Section 404. Cumulative impacts are defined in 40 CFR 230.11(g)(1) as “the changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual discharges of dredged or fill material. Although the impact of a discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems.”

Coordination with Tribal Governments

Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (November 6, 2000), was issued in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Indian tribes. If applicable, the Draft EIS should describe the process and outcome of government-to-government consultation between the STB and with each of the tribal governments with current or historical ties to the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.

National Historic Preservation Act and Executive Order 13007

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act (NHPA). Historic properties under the NHPA are properties that are included in the National Register of Historic Places or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, consult with the appropriate State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), Indian tribes, or any other interested party. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed and mitigated. Section 106 of the NHPA requires that Federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800. The Draft EIS should address the existence of cultural and historic resources, including Indian sacred sites, in the project areas, and address compliance with Section 106 of the NHPA. The Draft EIS should provide a summary of all coordination with Tribes, the SHPO/THPO, or any other party; and identify all NHPA listed or eligible sites, and the development of a Cultural Resource Management Plan.

Environmental Justice and Impacted Communities

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994) and the Interagency Memorandum of Understanding on EJ (August 4, 2011) direct federal agencies to identify and address disproportionately high and adverse human health or environmental effects on minority and low-income populations, allowing those populations a meaningful opportunity to participate in the decision-making process. Guidance⁷ by CEQ clarifies the terms low-income and minority population (which includes Native Americans) and describes the factors to consider when evaluating disproportionately high and adverse human health effects.

⁷ Environmental Justice Guidance under the National Environmental Policy Act, Appendix A (Guidance for Federal Agencies on Key Terms in Executive Order 12898), CEQ, December 10, 1997.

The STB should evaluate EJ populations within at least one-mile radius of the proposed project boundaries. The NOI explained that certain parts of the rail corridor would experience increases in train traffic, which would result noise and air pollution. In addition, new sidings and double track may require property acquisition and displacement of goods and services, altering local character, among other impacts. Strong upfront planning, in close collaboration with affected communities, is key to identifying siting locations and project designs that minimize impacts and protect residents' quality of life and protect vulnerable communities.

Recommendations for the Draft EIS:

- Include a detailed community outreach strategy aimed at gaining local input from impacted communities along the corridor, and specify targeted activities to reach low income and minority communities. Describe actions to date and future plans, including the use of public input to inform project development.
- Describe baseline conditions and potential impacts to communities along the rail corridor, including unincorporated communities.
- Identify low income and minority populations that may be impacted by the proposed project. Compare percentages of low income and minority residents in the project area to an appropriate reference community to determine whether the project could have disproportionately high and adverse effects. Include maps and summary tables.
- For communities with EJ concerns, consider the impacts of the proposed project along with other environmental burdens faced by the community (i.e., nearby sources of pollution, known contaminated sites, etc.). Use the cumulative environmental burdens to inform decision-making about project actions (e.g., siding and double track siting, traffic volumes, idling policies, etc.) in these areas.
- Consider increases in use of existing intermodal yards and associated impacts (noise, air quality, traffic, etc.) on communities, especially communities with EJ concerns. For example, from a high-level assessment, it appears that the three CP intermodal yards in EPA's Region 5 (Detroit, Schiller Park, and Bensenville) are adjacent to minority communities.
- Consider the "Promising Practices for EJ Methodologies in NEPA Reviews" report. Discuss its applicability to this project and any best practices utilized from the report.
- Use EPA's "EJSCREEN" tool⁸ to screen for potential impacts to communities living with or vulnerable to EJ concern.

⁸ EPA's EJSCREEN Environmental Justice and Mapping Tool is available at: <https://www.epa.gov/ejscreen>

- Provide specific measures to avoid, minimize, and mitigate any anticipated adverse impacts to communities (e.g., siding and double track siting, traffic volumes, idling policies, adoption of EPA's air quality recommendations, etc.).

Children's Health and Safety:

Executive Order 13045 on children's health and safety directs each Federal agency to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and to ensure that its policies, programs, activities, and standards address these risks. Children can be particularly vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed and they generally eat more food, drink more water, and have higher inhalation rates relative to their size. There may be opportunities to develop the proposed project in a way that increases protections for children's health.

Recommendations for the Draft EIS:

- Evaluate potential direct, indirect, and cumulative impacts from the proposed project on children's health.
- Commit to specific measures to protect children's health from project impacts. Site staging areas, material hauling truck routes, and other sources of air emissions away from places where children congregate to the extent possible. Require strict implementation of applicable measures from the enclosed Construction Emissions Control Checklist in these areas.
- Require construction contractors to establish material hauling routes away from places where children live, learn, and play, to the extent feasible. Consider homes, schools, daycare centers, and playgrounds. In addition to local air quality benefits, careful routing may protect children from vehicle-pedestrian accidents.

Noise and Vibration Impacts:

Potential noise and vibration impacts to human health and welfare and wildlife activity are particularly important for this project because of the increases in the number of trains that may use the tracks each day and increases in activity and maintenance and intermodal facilities. Under NEPA, noise and vibration impacts should be fully disclosed in the Draft EIS and used to inform siting decisions and protective measures. EPA's website explains that there are direct links between noise and health.⁹ Upfront assessment of noise impacts could inform alternative selection and mitigation measures, if needed.

Recommendations for the Draft EIS:

- Identify residential, commercial, community, and wildlife receptors that could be impacted by noise and vibration from the proposed project and fully analyze potential impacts.

⁹ <https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution>

- Commit to specific measures to avoid or minimize impacts. For noise impacts, consider siting of sidings, idling policies, gate crossings and horn policies, among other opportunities to protect communities from noise and vibration.
- Address nocturnal and diurnal impacts to wildlife activities, such as foraging, predator avoidance, and nesting that may be affected by new noise and vibration introduced to natural habitats.

U.S. Environmental Protection Agency **Construction Emission Control Checklist**

Diesel emissions and fugitive dust from project construction may pose environmental and human health risks and should be minimized. In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Acute exposures can lead to other health problems, such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues. Longer term exposure may worsen heart and lung disease.¹⁰ We recommend STB and the project proponent consider the following protective measures and commit to applicable measures in the subsequent NEPA document.

Mobile and Stationary Source Diesel Controls

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment in order to meet the following standards.

- On-Highway Vehicles: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).¹¹
- Non-road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).¹²
- Locomotives: Locomotives servicing infrastructure sites should meet, or exceed, the EPA Tier 4 exhaust emissions standards for line-haul and switch locomotive engines where possible.
- Marine Vessels: Marine vessels hauling materials for infrastructure project should meet, or exceed, the latest EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).¹³
- Low Emission Equipment Exemptions: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.

¹⁰ Carcinogenicity of diesel-engine and gasoline-engine exhausts and some nitroarenes. *The Lancet*. June 15, 2012

¹¹ <http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>

¹² <https://www.epa.gov/emission-standards-reference-guide/epa-emission-standards-nonroad-engines-and-vehicles>

¹³ <https://www.epa.gov/emission-standards-reference-guide/all-epa-emission-standards>

Consider requiring the following best practices through the construction contracting or oversight process:

- Establish and enforce a clear anti-idling policy for the construction site.
- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engine. Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Where possible, retrofit older-tier or Tier 0 nonroad engines with an exhaust filtration device before it enters the construction site to capture diesel particulate matter.
- Replace the engines of older vehicles and/or equipment with diesel or alternatively fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.), or with zero emissions electric systems. Retire older vehicles, given the significant contribution of vehicle emissions to the poor air quality conditions. Implement programs to encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates) and replace them with newer vehicles that meet or exceed the latest EPA exhaust emissions standards, or with zero emissions electric vehicles and/or equipment.

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Occupational Health

- Reduce exposure through work practices and training, such as maintaining filtration devices and training diesel-equipment operators to perform routine inspections.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.

- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Use respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the type of work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a National Institute for Occupational Safety and Health (NIOSH) approval number.