



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

FEB 08 2016

REPLY TO THE ATTENTION OF: E-19J

Admiral Paul F. Zukunft
Commandant (CG-BRG-2)
U.S. Coast Guard Headquarters
Stop 7418
2703 Martin Luther King Jr. Avenue, SE
Washington, DC 20593-7418

**Re: Re-evaluation – Final Environmental Assessment for the Ambassador Bridge
Enhancement Project, Detroit, Wayne County, Michigan**

Dear Admiral Zukunft:

The U.S. Environmental Protection Agency has reviewed the above-mentioned Re-evaluation of the Final Environmental Assessment (2015 Re-evaluation EA) dated December 29, 2015. Our comments in this letter are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The U.S. Coast Guard has re-initiated the permit application review for the Ambassador Bridge Enhancement Project (ABEP), a 6-lane cable-stayed bridge over the Detroit River, just west of the existing Ambassador Bridge across the Detroit River between Detroit, Wayne County, Michigan, and Windsor, Ontario, Canada. The proposed bridge will provide six lanes of travel, three in each direction. One lane in each direction will be dedicated to low-risk commercial traffic participating in the FAST program operated by customs authorities of the United States and Canada. The other lanes will be open to general automobile and commercial traffic. Although the proposed new bridge is immediately adjacent to the existing Ambassador Bridge, it is not intended to expand the current capacity of the Ambassador Bridge. Rather, the proposed new bridge is intended to more efficiently and safely service the traffic now being handled at the existing Ambassador Bridge. Once the proposed companion bridge is operational, the existing Ambassador Bridge will be taken out of service, rehabilitated, maintained and used for redundancy, emergency traffic, and approved public events.

The applicant and owner of the existing Ambassador Bridge, the Detroit International Bridge Company (DIBC), has entered into an agreement with the City of Detroit allowing DIBC to construct the project as originally proposed and evaluated in the 2009 Coast Guard Final Environmental Assessment (Final EA) using portions of Riverside Park located in Detroit, Michigan.

In July, 2015, DIBC and the City of Detroit reached an agreement that will allow DIBC to build the bridge as originally proposed; the Coast Guard finds this agreement provides DIBC with

sufficient legal interest in the subject property to move forward with the bridge permit process. As a result, the bridge design reverted to the original design described in the 2009 Final EA.

The 2015 Re-evaluation EA was prepared to update the information provided in the 2009 Final EA. According to the contents of the 2015 Re-evaluation EA, there have been no substantial changes or significant circumstances related to environmental impacts of the proposed action since the Final EA was published in 2009. Pursuant to our review of the 2015 Re-evaluation EA, EPA has the following comments. We recommend our comments be considered as the Coast Guard develops conditions for the bridge permit.

AIR QUALITY

Conformity

The Coast Guard contacted EPA on September 29, 2015 to determine which, if any, parts of the 2012 supplemental air quality analysis needed to be updated. Coast Guard has evaluated the proposed project under general conformity for construction, which is the Coast Guard's only air quality responsibility. The Coast Guard concluded the project will have de minimus construction impacts. For this reason, a full general conformity determination for the ABEP is not necessary. EPA agrees with the Coast Guard's conclusion.

EPA's October 27, 2015 response to the Coast Guard outlined several steps that we expect DIBC to undertake to ensure that air quality information in the Southeast Michigan Council of Governments 2040 Regional Transportation Plan (2040 SEMCOG Plan) will be current. In order for the 2040 SEMCOG Plan to be updated, DIBC will need to work with SEMCOG to provide current information on ABEP, including travel activity and vehicle fleet information. A hot spot analysis was previously done and included in the 2009 Final EA. This analysis was acceptable to EPA. EPA did not ask the Coast Guard to perform a new hot spot analysis for the 2015 Re-evaluation EA. Based on the information that was provided in 2015 Re-evaluation EA, had a hot spot analysis been re-run, EPA would have expected the same outcome. This conclusion is based on several factors – lower traffic forecasts than were projected in the 2009 analysis and subsequent improvements in fleet emissions.

Diesel Emissions

Implementation of the preferred alternative will have short-term, temporary impacts to air quality. Potential adverse impacts can be minimized through keeping excavation areas properly wetted, planning truck routes to minimize disturbances to the surrounding community, and other standard best management practices.

Equipment used during construction of the proposed project will emit diesel emissions. The National Institute for Occupational Safety and Health has determined that diesel exhaust is a potential occupational carcinogen, based on a combination of chemical, genotoxicity, and carcinogenicity data. In addition, acute exposures to diesel exhaust have been linked to health problems, such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues.

Recommendations: Although every project is unique, common actions can reduce worker and community exposure to diesel exhaust as well as reduce air impacts. EPA strongly recommends that DIBC and its contractors implement the diesel emissions reductions strategies stated below, as applicable. These actions include the following:

- Deploy Best Available Control Technology (BACT) - Require BACT during construction and operation of projects, meeting the most stringent alternatives available, including but not limited to:
 - a) Soliciting bids that include use of energy and fuel-efficient fleets;
 - b) Soliciting preference construction bids that use BACT, particularly those seeking to deploy zero-emission technologies (see below for more specific guidance on equipment deployment);
 - c) Employing the use of alternative fueled vehicles;
 - d) Using lighting systems that are energy efficient, such as LED technology;
 - e) Using the minimum feasible amount of greenhouse gas (GHG)-emitting construction materials that is feasible;
 - f) Use of cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
 - g) Use of lighter-colored pavement where feasible;
 - h) Recycling construction debris to maximum extent feasible; and
 - i) Planting shade trees in or near construction projects where feasible.
- Electric Power during Construction - Ensure to the extent possible that construction activities utilize grid-based electricity and/or onsite renewable electricity generation, rather than diesel and/or gasoline powered generators.
- Definition of “clean truck”

EPA suggests defining the term “clean truck” in relation to current vehicle emissions standards. One option for defining this technology would be to compare it to the EPA exhaust emission standards for model year 2010 and newer heavy-duty on-highway engines, or the CARB optional low NOx emission standards for on-road heavy-duty engines.

<http://www3.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>
<http://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm>
- Voluntary Accelerated Vehicle Retirement (VAVR) - Given the significant contribution of vehicle emissions to the poor air quality conditions throughout the nation, vehicle owners should be strongly encouraged to retire legacy light and heavy-duty vehicles and replace them with technologies that meet, or exceed current emissions standards. EPA suggests the following mitigation measure be revised to read as follows:

Implement programs to encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates).

<http://www3.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>
<http://www.arb.ca.gov/msprog/levprog/levprog.htm>

Deploy Low Emission Technologies for Infrastructure Project Construction & Operation

- On-Highway Vehicles - On-highway vehicles servicing infrastructure sites should meet, or exceed the EPA exhaust emissions standards for model year 2010 and newer heavy-

duty on-highway compression-ignition engines (e.g., drayage trucks, long haul trucks, refuse haulers, shuttle buses, etc.).

<http://www3.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm>

- Nonroad Vehicles & Equipment - Nonroad vehicles & equipment servicing infrastructure sites should meet, or exceed the EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., nonroad trucks, construction equipment, cargo handlers, etc.).

<http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm>

<http://www.epa.gov/otaq/standards/nonroad/locomotives.htm>

- Marine Vessels – Marine vessels servicing infrastructure sites should meet, or exceed the latest EPA exhaust emissions standards for marine compression-ignition engines (i.e., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).

<http://www.epa.gov/otaq/standards/nonroad/marineci.htm>

- 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.
- Advanced Technology Demonstration & Deployment - Infrastructure project proponents should be encouraged to demonstrate and deploy heavy-duty technologies that exceed the latest EPA emission performance standards for the equipment categories that are relevant for a given project (e.g., plug-in hybrid-electric vehicles-PHEVs, battery-electric vehicles-BEVs, fuel cell electric vehicles-FCEVs, advanced technology locomotives and marine vessels, etc.).

NOISE

Section 3.11, Noise, indicates the Noise Abatement Criteria (NAC)¹ for land uses have changed since the 2009 analysis. While a current review of noise sensitive sites indicates there are no new noise sensitive sites that require modeling, one noise-sensitive site modeled as a business (referred to as B11) in the August 2008 noise study has since been converted to a multi-family residence. The NAC for this facility under the new regulations is 67 dB(A), whereas a business under the old regulations had a NAC of 72 dB(A). The predicted noise level in 2030 with the proposed project was 59.5 dB(A) at this location. The information in this section continues as follows: *“With a NAC of 57 dB(A), this property is not adversely impacted by the project, consistent with the original findings in the 2008 study. A noise barrier or other noise abatement measures are not warranted at this location. The change in land use does not affect the results of the 2008 analysis.”*

Recommendations: This quote appears to be in error. The NAC of 57 dB(A) should be changed to 67 dB(A), with that correction noted in an errata sheet for the 2015 Re-evaluation EA.

¹ 23 CFR 772: *Procedures for Abatement of Highway Traffic Noise and Construction Noise* (effective July 13, 2011)

CONSTRUCTION AND STAGING

Section 3.7.4, Stormwater of the 2009 Final EA indicates “*Construction and operation of the Proposed Project will impact stormwater flow within the Project Area. Construction activities such as construction and worker vehicle parking areas, material storage areas, soil staging areas, and excavation areas will likely disturb areas located in the Project Area and temporarily increase the amount of impervious surfaces within the Project Area. These activities have a potential to create soil erosion and can impact water quality in the Detroit River.*”

Section 3.7, Surface Water Resources of 2015 Re-evaluation EA indicates, “*The impacts identified in Final EA indicated that the project would not have adverse impacts to surface water resources including hydrology, floodplains, water quality, stormwater, wetlands, and wild and scenic rivers. After the initial Part 301 Inland Lakes and Streams permit expired, DIBC received a new Part 301 permit from the Michigan Department of Environmental Quality (MDEQ) Water Resources Division in April 2013. This permit, which remains valid until April 2018, can be found in Attachment B. There is no change in status.*”

Recommendations: Compliance with the MDEQ Part 301 permit should prevent erosion and sedimentation and manage stormwater to protect surface water quality. EPA recommends that DIBC and its contractors develop a spill management plan to prevent and address accidental fuel spills.

CABLE LIGHTING AND AVIAN IMPACTS

The 2015 Re-evaluation EA indicates that occasional collisions with the bridge structure and resultant mortality of some avian species may occur. The Michigan Department of Natural Resources (MDNR) has not expressed concern over avian collisions with the new bridge and did not recommend mitigation measures. The 2015 Re-evaluation EA did not indicate any additional risk to migratory birds.

In Section 4.9 of 2009 Final EA, Terrestrial Ecosystems, the use of cables larger than 4-inches (0.1 m) in diameter will minimize bird impacts. According to the 2009 Final EA, cables of this size are more visible to avian species than small diameter cables. Although the new bridge will be higher than the existing one, the profile will follow the existing bridge to a great extent. Based on comments received from the U.S. Fish and Wildlife Service (USFWS), an additional review concerning lighting and avian collisions was conducted. Low intensity white strobe lights (one flash every three seconds) were found to be preferable for lighting of tall structures and buildings. The 2009 Final EA indicated that DIBC will use this type of strobe lighting at the **tops of the towers** pending any change needed based on final design criteria. No red or yellow steady lights, which can disorient avian species, will be used on the bridge. If colored lighting is used to illuminate the cables, DIBC will use lower intensity, lower wavelength lighting of blue, turquoise or green, pending final design criteria. These wavelengths tend to minimize disruption of magnetic orientation in several avian species.

Recommendations: EPA recommends DIBC take steps to minimize avian impacts to the greatest extent feasible, including the use of strobe lighting or colored lighting (shielded lights)

on the cables, as well as the tops of towers to minimize daytime as well as nighttime collisions. All bridge lighting should be compliant with Federal Aviation Administration requirements.

COMMUNITY OUTREACH AND ENVIRONMENTAL JUSTICE

On the American side, ABEP is located in the Mexicantown neighborhood of Detroit, a community with a large population of non-English speakers. ABEP is likely to affect residents, motorists, and traffic patterns adjacent to the construction sites on both sides of the border.

Recommendations: EPA recommends that DIBC develop and implement a public outreach program prior to and during construction, focused on the construction timetable, altered traffic patterns, facility closures, and related project impacts, with special attention to linguistically-isolated populations. Such a public outreach program may include posting information on community websites, in addition to the DIBC's project website; maintaining prominent signage; providing information to neighborhood groups and neighborhood commercial establishments; and working with local community leaders, the City of Detroit, the Michigan Department of Transportation, the City of Windsor, and the Ontario Ministry of Transportation.

We appreciate the opportunity to review the 2015 Re-evaluation EA, and provide input on this project. Please send one copy of additional NEPA documentation for this project to me at the above address. If you have any questions concerning these comments, please contact Kathleen Kowal of my staff at (312) 353-5206 or via email at kowal.kathleen@epa.gov.

Sincerely,



Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

cc: Shelly Sugarman, USCG, Bridge Permits and Policy Division
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