UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

AUG 1 8 2010

Mr. Greg Smith,
U.S. General Services Administration
Portfolio Management Division (9PTC)
880 Front Street, #4236
San Diego, CA 92101

Subject: EPA Comments on the Draft Environmental Impact Statement for Expansion and Reconfiguration of the Land Port of Entry (POE) in Downtown Calexico, Imperial County, California (CEQ # 20100223)

Dear Mr. Smith:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Expansion and Reconfiguration of the Land Port of Entry (POE) in Downtown Calexico, California, pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Based upon our review and the General Services Administration's (GSA) selection of Alternative B as the Preferred Alternative, we have rated the proposed action as *Environmental Concerns- Insufficient Information (EC-2)*. See attached "Summary of the EPA Rating System" for a description of the rating. The basis for the rating and our recommendations are summarized below and further detailed in our enclosed comments.

EPA appreciates that GSA selected Alternative B as the Preferred Alternative, which is the smaller POE facility footprint maintaining the natural channel of New River on the project site with only a bridged crossing of the New River. Of the two build alternatives, EPA believes Alternative B is likely to be the Least Environmentally Damaging Practicable Alternative (LEDPA) under Section 404 of the Clean Water Act (CWA) when compared to Alternative A, which would culvert the extent of New River as it crosses the POE project site and would result in much greater impacts. For Alternative B, EPA recommends that GSA look for opportunities to further avoid impacts with the bridged crossing, such as completely spanning the river. GSA should also provide details on any proposed in-water work or construction and identify measures to reduce impacts to New River and worker exposure to pollutants within the New River during construction. Should GSA change their Preferred Alternative after the public review process to Alternative A, EPA has critical concerns about significant impacts to waters of the United States associated with the covering of the New River for the project that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes or consideration of some other project alternative. These comments related to Alternative A are further discussed in the attached detailed comments.

EPA is aware of a separate, local effort to plan, design, and construct covering or piping to underground the New River, north from the International Border to Highway 98 in the City of Calexico as discussed in an April 2010 GSA report prepared for the House Transportation and Infrastructure Committee. The relationship of the Calexico POE project and this pursuit of a 3.5-mile culvert of the New River should be explained in the FEIS.

EPA is also concerned with possible increased vehicle emissions due to greater northbound throughput, the potential for induced demand, and the potential implementation of regular U.S. southbound inspections. The DEIS does not provide any current information on federal nonattainment status for Imperial County, does not address federal general conformity requirements, and does not assess project impacts to air quality from possible increased emissions of criteria pollutants, specifically, ozone precursors such as volatile organic compounds (VOC) or oxides of nitrogen (NOx), particulate matter with a diameter of 2.5 microns or less (PM2.5), and particulate matter with a diameter of 10 microns or less (PM10). EPA recommends the FEIS include analysis of operational impacts to air quality associated with northbound and southbound queuing at the POE, which is the main source of vehicle emissions for the project, and intersections near the POE facility. EPA is also concerned with air quality impacts associated with increased congestion on neighboring roads resulting from the project identified by GSA in the DEIS. EPA recommends that GSA identify a timeline for implementation of mitigation measures to address identified traffic impacts resulting from the project and discuss who the responsible parties would be for implementation. In addition, EPA recommends implementing measures to reduce congestion and vehicle emissions at the POE facility, and considering other strategies to reduce emissions, such as anti-idling measures.

The above-listed concerns, along with additional comments on climate change, environmental justice, green building, cross-border coordination, and the presidential permit process, are further discussed in the attachment. Thank you for the opportunity to comment on the DEIS. When the Final Environmental Impact Statement (FEIS) is published for public review, please send one hard copy and, if available, two CD-ROMs to the address above (mail code: CED-2). If you have any questions, please contact Connell Dunning, Transportation Team Lead, at 415-947-4161, or Susan Sturges, the lead reviewer for this project. You may reach Susan at 415-947-4188 or sturges.susan@epa.gov.

Sincerely,

For Connell Dunning

Kathleen M. Goforth, Manager
Environmental Review Office (CED-2)

Attachments: Summary of Rating Definitions
EPA's Detailed Comments
October 2009 New River Summary

cc: Therese O'Rourke, Los Angeles U.S. Army Corps of Engineers, San Diego Field Office
Sally Brown, U.S. Fish and Wildlife Service, Carlsbad Field Office
Jay Mirpour, Colorado River Basin Regional Water Quality Control Board Region 7
Pedro Orso-Delgado, Director, Caltrans District 11
Shawn Oliver, Federal Highway Administration

EPA DETAILED COMMENTS ON THE DEIS FOR EXPANSION AND RECONFIGURATION OF THE LAND PORT OF ENTRY IN DOWNTOWN CALEXICO, IMPERIAL COUNTY, CALIFORNIA, AUGUST 18, 2010

New River Improvement Project

EPA is aware of a local proposal to contain the New River in a 3.5-mile double box culvert from the U.S.-Mexico border to Highway (HW) 98 as a measure to address health risks posed by the river where it flows through developed areas of Calexico. In an amended house resolution dated November 5, 2009, the House Transportation and Infrastructure Committee directed GSA, in coordination and consultation with the U.S. Army Corps of Engineers, to submit a report exploring options to cover New River from the border to HW 98 to the Committee as a stipulation to receive additional appropriations for the Downtown Calexico Port of Entry (POE) project. As a result, GSA developed the April 2010 report entitled *Options for Covering the New River from the International Border to Highway 98 in the City of Calexico, California*[1].

EPA understands the larger effort to culvert 3.5 miles of New River, commonly referred to as "New River Improvement Project", is outside of the scope of the POE proposal and will likely be led by another federal agency (such as the U.S. Army Corps of Engineers (Corps)) should that project move forward with federal funding and an associated environmental review process to comply with the National Environmental Policy Act. However, information from the Options report and the broader New River Improvement Project as it relates to the Calexico POE project should be summarized and included in FEIS. This is particularly important since GSA has carried forward an alternative in the Draft Environmental Impact Statement (DEIS) which includes culverting the New River for the extent of the POE project site. In addition, GSA should include this broader plan to culvert the New River as part of the cumulative impacts analysis in the FEIS if it is considered to be reasonably foreseeable.

Waters of the United States

Given the proximity of the New River and the description of build alternatives in the DEIS, this Project will involve the discharge of dredged or fill material into waters of the U.S. Discharges of dredged or fill material in waters of the U.S. require authorization by Corps under Section 404 of the Clean Water Act (CWA). The Federal Guidelines at 40 CFR Part 230 promulgated under CWA Section 404 (b)(1) provide substantive environmental criteria that must be met to permit such discharges into waters of the U.S. These criteria require a permitted discharge to: 1) be the least environmentally damaging practicable alternative (LEDPA); 2) avoid causing or contributing to a violation of a State water quality standard; 3) avoid jeopardizing a federally listed species or adversely modifying designated critical habitat for a federally listed species; 4) avoid causing or contributing to significant degradation of the waters of the U.S.; and 5) mitigate for unavoidable impacts to waters.

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[1] General Services Administration, "Options for Covering the New River from the International Border to Highway 98 in the City of Calexico, California", April 26, 2010.

GSA has selected Alternative B as their Preferred Alternative, which is the smaller POE facility footprint maintaining the natural channel of New River on the project site with only a bridged crossing of the New River. Of the two build alternatives, EPA believes Alternative B is likely to be the LEDPA when compared to the greater impacting Alternative A, which would culvert the New River as it crosses the POE project site. EPA has critical concerns about potential adverse impacts to waters of the United States associated with the culverting of the New River which could significantly affect the river's hydrogeological functions, including groundwater recharge and sediment transport, and hinder bi-national efforts to improve water quality in the New River. In addition, keeping the river open would allow maintenance of aquatic habitat and wildlife functions such as wildlife movement, rest and forage, and maintenance of native vegetation. According to the 404(b)(1) Guidelines, no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. Practicable alternatives that do not involve discharges in waters of the U.S. are presumed to be available and to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise. Should GSA decide to pursue the greater impacting Alternative A and the project results in significant impacts to the New River, then it likely will not comply with the 404(b)(1) Guidelines, particularly since GSA has already identified in this DEIS that the lesser impacting Alternative B meets the purpose and need of the project.

Avoidance, Minimization, and Compensatory Mitigation

To demonstrate compliance with the 404(b)(1) Guidelines, the DEIS should identify measures and modifications to first, avoid and then minimize impacts to water resources. For the proposed bridge construction associated with Alternative B, EPA recommends a design of the bridge for southbound vehicular traffic that avoids or minimizes discharges into the New River, such as a bridge crossing that completely spans the New River channel. Temporary and permanent impacts to waters of the U.S. for each alternative studied should be quantified; for example, acres of waters impacted, etc.

On April 10, 2008, EPA and the Corps issued revised regulations, "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule" (Mitigation Rule) (40 CFR 230), governing compensatory mitigation for authorized impacts to wetlands, streams, and other waters of the U.S. under Section 404 CWA. These regulations are designed to improve the effectiveness of compensatory mitigation to replace lost aquatic resource functions and area and include a mitigation hierarchy with an inherent preference for mitigation banks and in-lieu fee programs before the use of an on-site mitigation site.

Recommendations:

- Include discussion in the FEIS to reflect current regulations. The link to the final Mitigation Rule, which went into effect on June 9, 2008, can be found at http://www.epa.gov/EPA-WATER/2008/April/Day-10/w6918a.pdf. Ensure that all mitigation proposed for waters of the U.S. is in compliance with the Mitigation Rule.
- Discuss mitigation for temporary and unavoidable indirect impacts. Temporary impact mitigation should consider additional compensatory mitigation for temporal loss of functions as well as establishing numeric criteria and monitoring of the temporary impact

site to ensure that aquatic functions are fully restored. Indirect impact mitigation should consider opportunities to reduce any potential effects from shading and to compensate for possible wetland habitat fragmentation.

Flooding and Erosion Impacts -- Alternative A

The DEIS indicates that Alternative A would have negligible impacts to flooding with channelization of the New River (p. 4-7). EPA recommends including hydraulic and hydrologic analysis to support this statement in the FEIS. The DEIS also indicates that the project would have little or no impact on erosion rates because the proposed changes to the New River channel would reduce erosion in the vicinity, and impervious surfaces and engineered drainage systems at the facility would reduce erosion potential slightly as compared with the existing condition. However, the FEIS should address the potential for increased erosion immediately downstream of the channelized section.

Stormwater

The DEIS indicates the project will involve draining stormwater generated on the project site directly to the New River (pgs. 4-6 and 4-8). New River is listed as an impaired waterway under Section 303(d) of the CWA. The sources of the impairment are multi-faceted, are primarily from out of state sources, and include trash, pesticides, sediment/siltation, and many other high priority pollutants from industrial point sources and agricultural return flows.

Impacts from the construction and operation of the POE facility may add to current water quality problems. The DEIS should identify methods to limit the further impairment of these waters and address mitigation as appropriate. The analysis in the DEIS does not specifically discuss how stormwater discharges from the project would affect water quality in the New River. Although the DEIS indicates the project would require mitigation measures to lessen impacts associated with soil disturbance including the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, Stormwater Pollution Prevention Plan and submittal of a Notice of Intent to the EPA prior to construction, it is unclear how stormwater will be managed to prevent further impairment to New River and what specific mitigation measures will be implemented. The DEIS should address techniques proposed for minimizing surface water contamination due to increased runoff from additional impervious surfaces and construction activities.

Recommendations:

Because the project is adjacent to the New River, an already impaired waterbody, the water quality analysis in the FEIS should include estimates of increases in stormwater runoff locations and volume, and locations for specific design features to minimize discharges and dissipate energy. The FEIS should include the following:

- Identify specific locations where runoff is expected and indicate where specific design features for stormwater management will be placed (bioswales, etc.). These options should be presented as a part of the FEIS process and not deferred until a later stage.
- Include stormwater performance standards for both construction site sediment control and post-construction project design standards in the FEIS and ROD.

- Provide information regarding the placement, selection, and performance of any proposed Best Management Practices (BMPs) in the FEIS.
- Commit to design, install, and maintain BMPs to control total suspended solids (TSS) carried in runoff post-construction of the project.
- Commit to employ BMPs to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to the pre-development conditions.

In-water Work Associated with Bridge Construction

Alternative B implies there would be no health safety impacts or adverse impacts to New River, since New River would not be rerouted or culverted. This does not take into account any possible in-water work that may be required as a result of bridge construction. EPA recommends including information in the FEIS that describes how work will be performed to construct the bridged crossing, including whether this would include any in-water work construction. If adverse impacts are expected from these in-water work activities or could result in worker exposure to pollutants from the New River, include mitigation measures to address these concerns.

Recent New River and Water Quality Data

The DEIS included information on New River and water quality data which does not reflect recent bi-national efforts to improve water quality in the New River. The FEIS should include the latest water quality data and infrastructure information. EPA highlights the following on New River:

- A new wastewater treatment plant and pumping station have recently gone on-line in Mexicali, which together are collecting 18 million gallons per day of sewage, pumping it 15 miles southward to an area known as "Las Arenitas", treating it, and discharging it to a tributary to the Rio Hardy, which feeds the lower Colorado River Delta in Mexico. This wastewater used to flow untreated to the New River.
- The New River at the border is now achieving the annual average water quality standard for dissolved oxygen is now achieving standard of 5 mg/l. During summer months, the dissolved oxygen (DO) levels sometimes drop below the standard, but are still about ten times better than they were before the Las Arenitas treatment plant went on-line.
- Bacteria levels at the border are 10 to 100 times less than before Las Arenitas wastewater treatment plant (WWTP) went on-line; however, they are still out of compliance with standards.
- Mexicali has 95% coverage for wastewater, and is currently constructing another wastewater treatment to address future growth.
- No odors have been detected from New River at the border since the Las Arenitas WWTP went on-line (source: Regional Water Quality Control Board monthly observational data, http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/new_river/dataindex.shtml)
- The Federal Occupational Health determined in 2007 that the New River "doesn't pose a threat unless river is entered or water is consumed."
- EPA has invested $41 million to improve wastewater services in Mexicali, thereby improving water quality in the New River and is helping to fund a series of

constructed wetlands at Las Arenitas to further improve the quality of the wastewater being discharged to the Rio Hardy.

- Mexicali's wastewater infrastructure suffered minimal damage from the earthquake, and only 60,000 gallons of untreated sewage was released from Mexicali during the 40 minute period that one of the pump stations lost electricity. Unfortunately, the City of Calexcio's wastewater suffered more significant damage and discharged between 400,000 to 600,000 gallons of untreated sewage to the New River.

Recommendations:

EPA recommends updates to the following sections:

- Section 3.3.1 (p.3-7): The information provided on the New River is very outdated. The Las Arenitas WWTP has been in operation nearly three years. As a result, the water quality in the New River has improved drastically and the New River is no longer considered "the most polluted river in the U.S." Please refer to the attachment providing additional information on the New River update the FEIS accordingly.

- Section 3.3.1.2 (p.3-8): The New River water quality data referenced in the DEIS is five years old. More recent data should be included in the FEIS and any conclusions based on outdated information should be revised if appropriate.

- Section 3.7 (p.3-22): The DEIS states, "... the current level of pollution in the New River, which includes trash, odors, and high levels of coliform and total dissolved solids (TDS), has prevented the river from being considered a significant scenic or recreational feature for the city." As mentioned above, according to data collected by the Regional Water Quality Control Board, odors have not been detected in the New River since 2007. The FEIS should update this section to reflect this. EPA also recommends discussing how TDS affect the visual aspects of the river in the FEIS.

Air Quality

National Ambient Air Quality Standards (NAAQS)

The project is located in Imperial County, which is a designated nonattainment area for 8-hour ozone, particulate matter with a diameter of 2.5 microns or less (PM2.5), and particulate matter with a diameter of 10 microns or less (PM10) National Ambient Air Quality Standard (NAAQS). The FEIS should include current information on these federal criteria pollutants as they relate to the project, and a general conformity applicability analysis should be conducted as part of or concurrent with the FEIS. Because of the area's nonattainment status, it is important to reduce emissions of ozone precursors and particulate matter resulting from the project (see related comments below).

Conformity to the State Implementation Plan (SIP)

The FEIS should ensure that the emissions from both the construction and the operational phases of the project conform to the approved SIP and do not cause or contribute to violations of the NAAQS. EPA's general conformity regulation (40 CFR part 93, subpart B) establishes criteria and procedures demonstrating and assuring conformity of all Federal actions not covered by the transportation conformity regulation. GSA should perform an applicability determination

taking into account both direct and indirect emissions for all phases of the action. For the applicability determination, the emissions impacts caused by the proposed action should be calculated and compared against the de minimis criteria. If the emissions caused by the proposed action would exceed the applicable de minimis criteria, then, unless the proposed action is otherwise presumed to conform or otherwise be exempt [see 40 CFR 93.153(c)(2), (3), and (4)], then GSA must make an affirmative conformity determination on the basis of the criteria listed in 40 CFR 93.158. Note, however, that for general conformity purposes, air pollutants emitted outside the United States do not need to be included in the applicability analysis because they are not emitted in a U.S. nonattainment or maintenance area.

Impact Assessment

The DEIS includes very minimal air quality analysis associated with the proposed expansion of the Calexico POE. EPA provides the following recommendations for air quality assessment in the FEIS:

Recommendations:

Construction-Phase Emissions. The FEIS should provide sufficient detail to allow review of the construction-phase emissions estimates of carbon monoxide (CO), volatile organic compounds (VOC) and oxides of nitrogen (NOx). EPA's AP-42, *Compilation of Air Pollutant Emission Factors*, or emission factors used by the California Air Resources Board (ARB) are appropriate tools to estimate fugitive dust emission.

Operational-Phase Emissions. The FEIS should quantify any operational-phase emissions impacts to neighboring roadways resulting from the proposed action. Identify if additional mitigation measures are required to reduce impacts related to increased emissions.

Increased Southbound Inspections. The DEIS indicates that GSA and U.S. Customs and Border Protection (CBP) agreed that southbound inspections should be treated as if they were permanent (p. 2-2). For clarity, although the current POE does not implement regular southbound inspection, the FEIS should identify if southbound vehicular inspections would be increased or occur regularly as part of any possible enhanced security operations at the Calexico POE. Implementing regular southbound inspections would likely increase idling vehicle emissions as vehicles wait to cross the border. Proposed southbound inspections to be performed by the U.S. and Mexico and their impacts to local roadways, freeways, and air quality, should be analyzed as they relate to this project.

Area Source Analysis. In addition to analysis of operational impacts to air quality at intersections near the POE facility, the FEIS should assess the main vehicle emissions resulting from the project from vehicles queued for inspection. Use an area source model, such as AERMOD, to assess vehicle emissions from cars waiting to cross the border (including implementation of any increased southbound inspections). Vehicle idling emissions from traffic queuing at intersections and traffic queuing to cross the border might also be modeled together as an area source.

Hot-Spot Analysis. The FEIS should address whether any hotspot analyses should be conducted for PM (PM-10 or PM2.5) and/or CO.

Vehicle Emission Factors. The analysis in the DEIS used MOBILE6.2 to determine vehicle emission factors. For the State of California, EMFAC2007 is used to calculate emission rates from all motor vehicles, such as passenger cars to heavy-duty trucks, operating on highways, freeways and local roads in California. To obtain the most accurate information for projects in California, EPA recommends the use of EMFAC2007.

Air Modeling Calculations. Appendix D Air Modeling Calculations of the CD-ROM version of the DEIS is actually an appendix on Traffic Queuing Calculations. EPA recommends including the appropriate related air analysis in the FEIS.

Mitigation Measures

Traffic Mitigation Measures. The DEIS identifies several impacts to local roadways that will occur as a result of project implementation. The accompanying November 2009 Calexico West Traffic Impact Study (Appendix B) includes several recommendations to reduce those impacts, but they are not included as a part of the project. Since unmitigated traffic impacts would likely increase vehicle emissions, EPA is concerned the resulting air quality impacts will be unaddressed.

Recommendation:

- Identify the responsible parties for implementation of the mitigation measures to reduce impacts to local roadways and freeway segments and a timeline for implementation of the measures.

Anti-idling Measures. A major source of PM10 emissions is from idling vehicles waiting to cross the border in both the northbound and southbound directions. Anti-idling measures could be appropriate mitigation of these idling emissions. GSA should consider implementing anti-idling measures that are currently being used at other POE locations, such as batching of vehicles crossing the border or measures to allow vehicles to turn their engines off, thereby reducing PM10 emissions.

Recommendation:

- In the FEIS, commit to additional mitigation measures that are appropriate for this project and commit to these measures in the ROD. Consider anti-idling measures as mitigation of PM10 emissions and identify which anti-idling measures can be implemented at this POE facility. Highlight what design changes are necessary to implement anti-idling measures.

Construction Mitigation Measures. EPA recommends the following measures in the FEIS and ROD to reduce the impacts resulting from future construction associated with this project.

Recommendations:

In light of the serious health impacts associated with vehicle and diesel exhaust exposure, we recommend that the best available control measures for these pollutants be

implemented at all times and recommend that a Construction Emissions Mitigation Plan is incorporated into the FEIS and committed to in the ROD. We recommend that the following measures be incorporated into a Construction Emissions Mitigation Plan, where feasible and appropriate, in order to reduce impacts associated with fugitive dust and vehicle emissions, diesel exhaust, and mobile source air toxics from construction-related activities:

Fugitive Dust Source Controls:

- 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.

Mobile and Stationary Source Controls:

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. The California Air Resources Board has a number of mobile source anti-idling requirements which could be employed. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal[2] or State Standards[3]. In general, commit to the best available emissions control technology. Tier 4 engines should be used for project construction equipment to the maximum extent feasible[4]. Lacking availability of non-road construction equipment that meets Tier 4 engine standards, GSA should commit to using the best available emissions control technologies on all equipment.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative controls:

- Specify the means by which impacts to sensitive receptors, such as children, elderly, infirm and others identified in the FEIS, will be minimized. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

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[2] EPA's website for nonroad mobile sources is http://www.epa.gov/nonroad/.

[3] For ARB emissions standards, see: http://www.arb.ca.gov/msprog/offroad/offroad.htm.

[4] Diesel engines < 25 hp rated power started phasing in Tier 4 Model Years in 2008. Larger Tier 4 diesel engines will be phased in depending on the rated power (e.g., 25 hp - <75 hp: 2013; 75 hp - < 175 hp: 2012-2013; 175 hp - < 750 hp: 2011 - 2013; and ≥ 750 hp 2011- 2015).

- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) Meet EPA diesel fuel requirements for off-road and on-highway, and, where appropriate, use alternative fuels such as natural gas and electric.

Mobile Source Air Toxics (MSAT)

Many studies have measured elevated concentrations of pollutants emitted directly by motor vehicles near large roadways. These elevated concentrations generally occur within approximately 200 meters of the road, although the distance may vary depending on traffic and environmental conditions. Pollutants measured with elevated concentrations include benzene, polycyclic aromatic hydrocarbons, carbon monoxide, nitrogen dioxide, black carbon, and coarse, fine, and ultrafine particles. For a thorough review of near-roadway monitoring studies, see Section 3.1.3 of EPA's "Regulatory Impact Analysis: Control of Hazardous Air Pollutants from Mobile Sources" (February 2007, http://www.epa.gov/otaq/regs/toxics/fr-ria-sections.htm).

A large number of recent studies have examined the association between living near major roads and different adverse health endpoints. Several well-conducted epidemiologic studies have shown associations with cardiovascular effects, premature adult mortality, and adverse birth outcomes, including low birth weight and size. Traffic-related pollutants have been repeatedly associated with increased prevalence of asthma-related respiratory symptoms in children. Also, based on toxicological and occupational epidemiologic literature, several of the mobile source air toxics (MSAT), including benzene, 1,3-butadiene, and diesel exhaust, are classified as known and likely human carcinogens. Thus, cancer risk, including childhood leukemia, is a potential concern in near roadway environments. For additional information on MSATs, please see EPA's MSAT website http://www.epa.gov/otaq/toxics.htm.

Changes in traffic density resulting from the project may lead to an increase in MSAT impacts at some locations (e.g., neighboring intersections, local roads, and freeways) and potentially a decrease in MSAT impacts in other locations. The net result of this change may be either unacceptable or beneficial, and is especially dependent on the relative locations of sensitive receptors, but is difficult to determine without further analysis of changes in ambient concentration as a result of each alternative.

EPA recommends using the March 2007 report entitled "Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process" conducted for the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on the Environment and funded by the Transportation Research Board as a resource to identify the appropriate level of analysis to include in the FEIS. Given the significant concerns about adverse health effects from mobile source pollutants and the project's potential to increase emissions at neighboring intersections, local roads, and highways that may

be in close proximity to residential communities and sensitive receptors, EPA recommends performing analysis of potential MSAT impacts to identify if MSAT hotspots are a concern for the project, and if so, to inform avoidance, minimization, and mitigation options.

Recommendations:

- Assess whether the project will result in potential MSAT hotspots at neighboring intersections, local roads, and freeways. This analysis is further described in the March 2007 AASHTO report. Procedures for toxicity-weighting, which EPA has found to be especially useful for the targeting of mitigation, are described in EPA's Air Toxics Risk Assessment Reference Library (Volume 3, Appendix B, beginning on page B-4, http://epa.gov/ttn/fera/data/risk/vol_3/Appendix_B_April_2006.pdf).

- If MSAT hotspots are identified, discuss and commit to mitigation measures to reduce these impacts in the FEIS and ROD.

Greenhouse Gas Emissions and Sustainable Communities Strategies

The State of California has increased its focus on potential climate change and impacts of increasing greenhouse gas emissions. Specifically, the Global Warming Solutions Act of 2006 and Executive Order S-3-05 recognize the impact that climate change can have within California and provide direction for future reductions of greenhouse gases. In fact, the Natural Resources Agency recently adopted Amendments to the California Environmental Quality Act (CEQA) Guidelines for greenhouse gas emissions on December 30, 2009, which became effective on March 18, 2010[5]. Senate Bill 375 (SB 375) is aimed at curbing sprawl and reducing vehicle miles traveled in an effort to cut greenhouse gas emissions. SB 375 requires Metropolitan Planning Organizations (MPOs) to develop a "sustainable communities strategy" (SCS), which demonstrates how the region will meet greenhouse gas emissions reduction targets set by CARB.

The State of California is also a 2009 recipient of EPA's Smart Growth Implementation Assistance (SGIA). The State of California requested assistance in developing a local government sustainable community framework to provide guidance to local jurisdictions in determining which combination of greenhouse gas emission reduction strategies, smart growth practices, and sustainability policies are best for their communities. At the Federal level under the Partnership for Sustainable Communities, EPA, the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation are working together to help improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. The U.S. Department of Housing and Urban Development and the U.S. Department of Transportation will assist EPA in implementing the SGIA for the State of California.

Recommendations:

EPA recommends that, as practicable, the FEIS identify the cumulative contributions to greenhouse gas emissions that will result from implementation of the project. We recommend that the FEIS include the results of the GSA Carbon Footprint tool that can

[5] Amendments to the CEQA Guidelines for greenhouse gas emissions are available on-line at: http://ceres.ca.gov/ceqa/guidelines/.

be used to compile GHG emissions inventory, evaluate energy efficiency measures, and promote sustainable decision-making. (http://www.fedcenter.gov/Articles/index.cfm?id=15069&pge_prg_id=27752&pge_id=3649).

In addition, we recommend that the FEIS discuss the potential impacts of climate change on the project and describe how the project meets the intent of statewide and national sustainability initiatives and goals to develop sustainable communities. Finally, the FEIS should identify if there are specific mitigation measures needed to 1) protect the project from the effects of climate change, 2) reduce the project's adverse air quality effects, and/or 3) promote pollution prevention and environmental stewardship.

Coordination with the Proposed Mexicali POE Facility Improvements

The DEIS identifies that Mexico also plans to improve their POE facility south of the border in Mexicali. As the changes of the proposed Calexico project require connections to the proposed Mexicali POE in Mexico, EPA recommends including information in the FEIS available to date on the proposed Mexicali POE project. The Calexico POE design and completed implementation appear to be dependent on the completion and operation of the proposed Mexicali POE; therefore, coordination of the design and timing for construction and operation of both projects is critical.

Recommendations:

- Include the latest information available on the proposed design of the Mexicali POE and the timeline for its planning, construction, and operation in the FEIS.

- Describe any specific design features of the Mexicali POE that will require modifications to the proposed Calexico POE facilities as it was identified in the DEIS. If the specific design of the Mexicali facility is not yet known upon publication of the FEIS for Calexico, identify the process that will be used for incorporating necessary design changes to Calexico in the future. For example, if the proposed Mexicali facility includes elements that do not integrate with the Calexico facility as proposed, identify how GSA will reanalyze and potentially redesign the proposed features at Calexico.

- Develop a contingency plan for possible delays with the proposed Mexicali POE. Describe implications of the Calexico POE remaining in earlier construction phases for an extended time should the proposed Mexicali POE not be constructed in a timely manner. Include in the FEIS specific measures to reduce impacts during a possible delay.

Environmental Justice

The DEIS identifies that the Calexico community has a high minority population (97.6 percent, compared to 20.2 percent in Imperial County) with 25.7 percent of the population considered low-income in Calexico and 21.5 percent of the population considered low-income in Imperial County, which are substantially greater than the state as a whole at 13.3 percent (p. 3-39). The DEIS broadly states that no environmental justice impacts are anticipated. EPA is

concerned that without a comparison of project impacts to a "reference community" (the population that will benefit from the proposed project), environment justice impacts may not be sufficiently assessed.

Recommendations:
EPA recommends the FEIS: 1) define the reference community; 2) compare impacts of the affected community to the reference community; and 3) identify and commit to specific avoidance, minimization, and mitigation measures to reduce potential environmental justice impacts.

Green Building and Energy Efficiency

The DEIS does not discuss whether the project incorporates green building or energy efficiency into its design. In addition to complying with the requirements of the Energy Independence and Security Act, the Project is subject to Executive Order (EO) 13423, which sets goals in the areas of energy efficiency, renewable energy, water consumption intensity, acquisition, management of toxic and hazardous chemicals, waste prevention, solid waste diversion and recycling, sustainable buildings, vehicle fleet management, and electronics stewardship. The CEQ issued EO implementing instructions on March 30, 2007. These instructions should be considered mandatory, and agencies are expected to implement them as part of complying with the EO. The EO implementing instructions can be found on the Office of the Federal Environmental Executive's Web site at http://www.ofee.gov or the FedCenter Web site at http://www.fedcenter.gov/programs/compliance/.

The FEIS should also provide an "integrated strategy towards sustainability", as required by EO 13514 (issued October 5, 2009 and available at http://edocket.access.gpo.gov/2009/pdf/E9-24518.pdf). EO 13514 expands upon the energy reduction and environmental performance requirements for Federal agencies identified in EO 13423.). EO 13514 requires that Federal agencies increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high performance sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which Federal facilities are located; and inform Federal employees about and involve them in the achievement of these goals.

Recommendations:

- Pursue the construction of a minimum Gold rated U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) building.

- Comply with EO 13514 and EO 13423 and associated implementing policies and guidance documents, including - -
  - *Guidance on High Performance Federal Buildings,* http://www.wbdg.org/references/sustainable_eo.php

- *Recommendations on Sustainable Siting for Federal Facilities,* http://www.fedcenter.gov/Documents/index.cfm?id=15263&pge_prg_id=27834&pge_id=3649

- *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (EISA), http://www.fedcenter.gov/Bookmarks/index.cfm?id=14130&pge_prg_id=27834&pge_id=3649

See *http://www.fedcenter.gov/programs/eo13514/#regs* and *http://www.fedcenter.gov/programs/eo13423/* for a complete list of policy and guidance documents.

- Identify specific sustainable design concepts and measures that will be incorporated into the project design and commit to these concepts and measures in the FEIS and ROD.

- Encourage a partnership between the U.S. and Mexico construction teams with the U.S. and Mexican Green Building Councils to make the new stations on both sides of the border healthier and to take advantage of economies of scale.

- Encourage the facilities to provide environmental education on features associated with the green POE projects.

- Encourage the facilities to provide environmental education on features associated with the green POE projects.

Presidential Permit

The DEIS does not discuss whether GSA is coordinating with the U.S. Department of State (State Department) and whether the project requires a Presidential Permit.

Recommendation:

- Identify in the FEIS: 1) if required, when the Presidential Permit application will be submitted to State Department, and 2) whether this EIS will be used by the State Department when evaluating the Presidential Permit application, or if the State Department will develop a separate NEPA analysis for the border crossing. EPA will review the Presidential Permit application through an interagency review process lead by the State Department, and may have additional comments on the border crossing at that time.

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

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

"EC" (Environmental Concerns)

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

"EO" (Environmental Objections)

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

"EU" (Environmentally Unsatisfactory)

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

ADEQUACY OF THE IMPACT STATEMENT

Category "1" (Adequate)

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

Category "2" (Insufficient Information)

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

Category "3" (Inadequate)

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

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

City of Mexicali Wastewater Infrastructure Projects benefiting the New River
October 2009

BACKGROUND

The New River originates 20 river miles south of the border, and after crossing the border, travels 65 river miles northward through Calexico and the Imperial Valley of California before emptying into the Salton Sea. This transboundary river has been recognized as significantly polluted since the later 1940s. Solutions to New River contamination from untreated sewage originating in Mexico have been the topic of four International Treaty Minutes dating from 1980 to 1995.

Up until two years ago, New River water quality was most severely impacted by untreated wastewater flows from the City of Mexicali, Baja California. Approximately 15 million gallons per day (mgd) (675 liters per second (lps)) of untreated wastewater from the Mexicali II area of the City of Mexicali flowed into the New River, which is listed by the State of California for numerous water quality impairments. The untreated wastewater, which made up about 10% of the New River flow at the U.S.-Mexico border, posed serious public health and environmental threats both in Mexico and in the U.S.

EPA INVOLVEMENT

EPA contributed $6 million for planning activities for infrastructure solutions resulting in the Immediate Works project, Mexicali I and Mexicali II projects.

Immediate Works Project: Joint efforts between EPA and Mexico to improve wastewater collection and treatment for the City of Mexicali began in 1996 with the Immediate Works project. This project addressed critical deficiencies in existing facilities including repairs to major collector lines near the border, renovations of several pump stations and dredging wastewater treatment plant lagoons. EPA contributed $4.2 million to the Immediate Works project costing over $7.6 million. Mexico provided the remaining $3.4 million.

Mexicali I Project: The subsequent Mexicali I Project consisted of nineteen component projects to improve the collection and treatment of wastewater in the fully developed Mexicali I area. The Mexicali I area consists of the older north-central part of the city, including the city center, and covers a service area of over 400,000 users. New and rehabilitated collectors and pumping stations were completed in 2004, resulting in wastewater collection services to more than 46 colonias. Pumping Station 8, necessary to convey wastewater from the Mexicali II area to the Zaragoza wastewater treatment plant (WWTP), was completed in 2006. The final component of Mexicali 1 Project, completed in 2007, was the Zaragoza WWTP rehabilitation and upgrade. This component increased its capacity of the plant to 30 mgd, eliminated odors, and brought the plant into compliance with Mexican discharge standards. The Zaragoza WWTP currently receives 21 mgd of flow from de Mexicali I (North Central) and Mexicali III (West) collection systems. EPA, through the Border Environment Infrastructure Fund (BEIF), contributed $20.6 million to the total project cost of $55 million.

Mexicali II Project: Under the Mexicali II project, Comisión Estatal de Servicios Públicos de Mexicali (CESPM), the State of Baja's public water and wastewater utility for Mexicali, built an upgraded pumping station, a 27 km force-main, and a new wastewater treatment plant sized to treat flows of 20 mgd (880 lps), which will provide service up to the year 2014. The wastewater treatment plant is sited in an uninhabited area 16 miles (26 kilometers (km)) south of Mexicali known as "Las Arenitas." Instead of flowing into the New River and into the United States, the treated wastewater now enters a series of

agricultural canals, and travel 28 miles (46 km) southward before reaching the Rio Hardy, which is a tributary to the Colorado River Delta in Baja, Mexico.

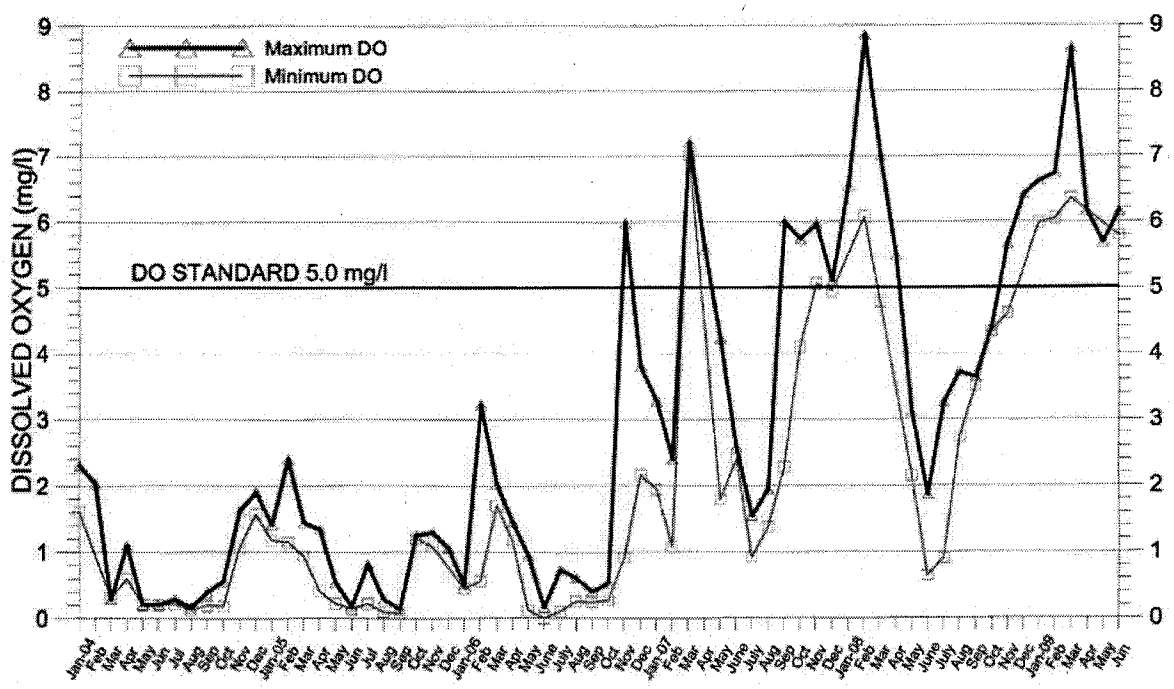
The Mexicali II project cost $30 million. EPA's BEIF contribution of $10 million was matched by Mexico in addition to a $4 million Japanese Bank loan to CESPM. Construction on this project began in mid-2005. The WWTP is now fully operational, although it is still undergoing some enhancements designed to improve the effluent quality. CESPM is actively implementing a wastewater pretreatment program as a requirement of their BEIF grant. The pretreatment program will help protect the wastewater infrastructure and further improve water quality in the New River. Over 235,000 users are benefiting from the new wastewater treatment services and, as a result, 15 mgd of untreated sewage into the New River has been eliminated.

Technical Assistance and Monitoring: A Binational Technical Advisory Committee (TAC) was formed to oversee the planning process of Mexicali projects and has continued to meet every two months to monitor progress on all projects. This forum provides an opportunity to discuss relevant issues as they arise and to ensure that projects are progressing on schedule. The TAC consists of representatives from the EPA, the Border Environment Cooperation Committed, the North American Development Bank, the California Regional Water Quality Control Board, the California State Water Resources Control Board, the International Boundary and Water Commission (Mexican and U.S.-side), CESPM, the Baja State Secretary of the Environment, and the Mexican Federal Water Commission ("CONAGUA").

CONCLUSION

EPA has contributed $41 million for planning and construction of Mexicali projects totaling $98 million in construction cost. The sewer collection and wastewater treatment systems for the Mexicali I and II areas have drastically improved the environmental conditions of the New River and Salton Sea, as well as reduce public health risks in the U.S. and Mexico associated with raw sewage. These projects are benefiting an estimated 635,000 people and over 40 mgd of untreated sewage is being removed from the New River. Water quality sampling at the border by the California Regional Water Quality Control Board provide evidence of the benefits: the 12-month average measurement of dissolved oxygen in the river jumped from just above 1 mg/l to above 5 mg/l, which is EPA's water quality criterion for warm water (see chart below).

However, sampling also reveals that while the levels of indicator bacteria "fecal coliform" have dropped substantially, the river water is still not safe for full body contact or human consumption. As with other Mexican border communities, continued illicit wastewater discharges in Mexicali require additional work beyond infrastructure. EPA believes that the most cost-effective and expeditious way to further improve water quality in the New River is by treating and/or preventing pollution at its source in Mexicali and continues to work with the TAC to address these illicit sources.

Effluent water quality data from both the wastewater treatment plants in Mexicali and water quality from the Rio Hardy can be downloaded from http://www.cespm.gob.mx/publicacionesresultado.php?claveTemaPDF=15. Water quality in the New River at the International Border can be viewed at http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/new_river/dataindex.shtml.

Water Quality Monitoring Program
IBWC Minute No. 264
NEW RIVER AT INTERNATIONAL BOUNDARY
DISSOLVED OXYGEN
January 2004 - June 2009