



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

August 7, 2008

Leslie Manderscheid
California Department of Transportation
District 12 Office
3337 Michelson Drive, Suite CN 380
Irvine, CA 92612-8894

Subject: Draft Environmental Impact Statement for Orange County Gateway Project, City of Placentia, California (CEQ# 20080250)

Dear Ms. Manderscheid:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the Orange County Gateway Project (Project), City of Placentia, California. Our review is 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. Our detailed comments are enclosed.

The City of Placentia will serve as the Lead Agency under the California Environmental Quality Act (CEQA), whereas the California Department of Transportation (Caltrans) will be the Lead Agency under NEPA. NEPA compliance for this Project has been delegated from the Federal Highway Administration (FHWA) to Caltrans pursuant to the *Memorandum of Understanding Between the FHWA and Caltrans Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program (June 2007)*.

We understand that there are a number of grade separation and railway improvement projects underway or under consideration in the Southern California region. EPA's enclosed detailed comments include a recommendation for a more comprehensive description of the complete corridor-wide, regional rail expansion and grade separations that are proposed. Through the enclosed detailed comments, EPA also provides specific recommendations regarding analyses and documentation to assist in assessing potential significant impacts from the proposed Project. Should it be determined, pursuant to addressing the attached comments, that significant impacts not identified in the DEIS would result from the Project, the Final EIS (FEIS) should discuss those impacts, and additional proposed mitigation in the FEIS may be warranted.

Specifically, EPA is concerned with: 1) the lack of analysis of cumulative impacts from reasonably foreseeable future actions, 2) the potential for induced traffic and circulation impacts, 3) lack of sufficient construction mitigation and air quality analysis, 4) potentially significant impacts to sensitive receptors at schools in the immediate vicinity of the Project, and 5) an insufficient analysis of impacts to jurisdictional waters. For these reasons, we have rated the DEIS as *Environmental Concerns – Insufficient Information* (EC-2). Please see the enclosed “Summary of EPA Rating Definitions.”

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact Tom Plenys, the lead reviewer for this Project, at Plenys.Thomas@epa.gov or (415) 972-3238, or me at (415) 972-3521.

Sincerely,

/S/ Susan Sturges for

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

Attachment: EPA’s Detailed Comments

CC: Michael McConaha, City of Placentia
Gene Fong, Federal Highway Administration
David Valenstein, Federal Railroad Administration

US EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE ORANGE COUNTY GATEWAY PROJECT, AUGUST 7, 2008

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DEIR) for the Orange County Gateway Project (Project), City of Placentia, California. EPA recommends that the Final Environmental Impact Statement (FEIS) provide additional analyses (including any necessary supporting documentation) and identify specific minimization or mitigation measures to support findings of minimal or no impacts for the following impact areas. (Specific recommendations are included in the following detailed comments.)

- Cumulative Impact Analysis, specifically related to future rail expansion
- Transportation, Circulation, and Traffic
- Air Quality (including impacts from construction and mobile source air toxics)
- Environmental Justice
- Jurisdictional Waters Assessment

Cumulative Impact Analysis and Future Railway Expansion

EPA understands and supports the inherent benefits associated with grade separation projects which can result in increased efficiencies and reduced emissions if executed appropriately. Given that the rail corridor under consideration for the Project is connected to a broader system in Southern California which continues to adapt to safety and efficiency concerns, EPA recommends that, as part of the cumulative impact analysis, the FEIS include a comprehensive summary of the proposed projects in their entirety to provide a better understanding of how this project fits into the greater regional setting of all future, related projects.

The cumulative impact analysis provided in the DEIS does not fully assess and quantify cumulative impacts associated with the Project, and does not link the Project's effects to the health of the affected resources. Cumulative impacts are defined in the Council on Environmental Quality's National Environmental Policy Act (NEPA) regulations as "the impact on the environment that results from the incremental impact of the action when added to the other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such actions" (40 CFR 1508.7). These actions include both transportation and non-transportation activities. The cumulative impact analysis should consider transportation and non-transportation projects such as large-scale industrial or commercial developments and approved urban and transportation planning projects that are reasonably foreseeable and identified within city and county planning documents.

The FEIS should follow the guidance developed by Caltrans, FHWA and EPA for cumulative impact analysis. The FEIS and all future environmental analyses related to additional grade separations and railway improvements in the region (e.g. the Third Main Track Project) should provide a comprehensive description of the associated elements of all foreseeable future

actions. Specifically, the FEIS should disclose to the public the cumulative impacts that will result, when considered with the all future grade separations and the proposed additional rail tracks that are in the Project vicinity. "Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR Part 1508.7). Even if impacts are considered insignificant from the grade crossings, the FEIS must address whether there are "collectively significant actions" when multiple, reasonably foreseeable projects are considered together. Incorporating this thorough analysis as part of this Project will help provide the context necessary to evaluate project related impacts into the future.

Because the DEIS only considers impacts due to the Orangethorpe Corridor grade separations and not rail impacts associated with the addition of future tracks or other Burlington Northern Santa Fe (BNSF) future facility improvements, EPA requests clarification about the larger scope of the project and how additional tracks may be accommodated in the future.

As the DEIS describes on page 1-8, "the existing railroad network, the rail yards near downtown Los Angeles, and the main lines east of downtown Los Angeles, including the Orangethorpe Corridor, currently do not have the capacity to handle the projected freight volumes at the ports in the future". The Project segment of the existing BNSF rail corridor consists of two railroad tracks and is one of the major freight lines to and from the ports of Los Angeles and Long Beach (at pages 2-4 and 2-5). Further, as the DEIS describes on page 2-6, BNSF has already initiated construction of a third track, west of the Project site, from the Hobart railyard, near downtown Los Angeles, to Fullerton. A three-track alignment currently exists east of the Project site in Yorba Linda, heading eastward. Since this Project is situated between these two segments and current capacity is insufficient to meet future freight volumes, it appears reasonably foreseeable that a third track would be added in this corridor to meet future rail growth needs. This larger project would introduce increased freight traffic, and associated diesel emissions, to an area that is designated as non-attainment for several criteria pollutants. For these reasons, EPA has environmental concerns related to the air quality impacts of this reasonably foreseeable, larger project.

The recently completed (September 2007) Los Angeles to San Diego (LOSSAN) Programmatic Final EIS/EIR proposes to add a fourth track to a portion of the Alameda Corridor East in the vicinity of the Project area. It is our understanding that that the fourth track is in addition to the Third Main Track project that will be built along the route to the west of the Project area. Because both a third track, and a fourth track according to the LOSSAN EIS/EIR, are reasonably foreseeable projects located within the vicinity of the subject EIS, these projects should be described, and analyzed, as a part of a comprehensive cumulative impact assessment. The FEIS should describe the LOSSAN project as well as the local project segments of the California High Speed Rail project and their potential connection to, and impact on, rail traffic and future development in the Orangethorpe Corridor.

Logically, future plans to alter this corridor should be coordinated to ensure a comprehensive assessment of project improvements, potential resource impacts, and mitigation strategies that may result. The FEIS should assess the future plans for this rail corridor and clarify in detail how this grade separation project will be built to accommodate more than the

existing two tracks and the projected doubling in freight volumes. If the two existing tracks can accommodate future freight volumes, the FEIS should further clarify why the “Narrower Trench” was dropped from further consideration (at 2-37).

Finally, the air quality benefits of an electrified rail corridor have been discussed in the region. The FEIS should identify if the grade separation improvements that are proposed are being constructed in a way that can accommodate a future electrified rail system. While there are not yet plans for electrification, efficient grade separations should not be constructed in a way that limits future electrification.

Recommendations:

- Conduct a thorough cumulative impact assessment for the FEIS. EPA recommends the use of the June 2005 *Guidance for Preparers of Indirect and Cumulative Impacts Analysis* developed jointly by Caltrans, FHWA, and EPA [http://www.dot.ca.gov/ser/cumulative_guidance/purpose.htm]. The guidance will assist in identifying cumulative impacts and preparing an analysis that is sound and well documented. The FEIS should specifically address each of the following eight steps for areas where impacts may occur cumulatively. EPA is particularly concerned about air quality impacts.
 - 1) Identify resources to consider in the impact analysis.
 - 2) Define the study area for each resource.
 - 3) Describe the current health and historical context for each resource.
 - 4) Identify direct and indirect impacts of the proposed project that might contribute to a cumulative impact.
 - 5) Identify other reasonably foreseeable actions that affect each resource.
 - 6) Assess potential cumulative impacts.
 - 7) Report the results.
 - 8) Assess the need for mitigation.
- Specifically, for Step #5, EPA recommends that other reasonably foreseeable actions analyzed in the cumulative impacts analysis include:
 - 1) the addition of a third rail track by BNSF that will occur concurrently or directly following this, and other, grade crossings,

2) a future fourth rail track anticipated to be constructed on the Alameda Corridor East as described in the Programmatic Final EIS for the Los Angeles to San Diego (LOSSAN) rail (prepared by Federal Railroad Administration and Caltrans; September 2007), and

3) future freight related improvements or railway expansion associated with the California High Speed Rail Project in the vicinity of the Project.

- The FEIS should include a description of the proposed timing of the construction of additional tracks and any future plans for additional tracks.
- The FEIS should explicitly describe whether this Project will accommodate a third track as well as a future fourth track and whether two tracks could meet future freight volumes. If the project is intended to accommodate more than the existing two tracks, the FEIS should also clarify how future rail improvements will be analyzed and whether federal funding and future NEPA compliance is anticipated.
- The FEIS should clarify whether the proposed grade separations are being built to accommodate a future electrified rail system.

Transportation, Circulation, and Traffic Impacts

The DEIS indicates that the project will have long-term beneficial impacts to transportation due to the elimination of vehicle delays from train crossings (at page S-12). While we commend Caltrans for including a traffic analysis in section 3.6 and incorporating the *Traffic Impact Analysis* conducted by LSA Associates, the analysis provided in the DEIS does not appear to fully evaluate traffic impacts associated with the proposed modifications and the seven or eight anticipated grade separations. Specifically, the FEIS should include a table that summarizes anticipated future traffic volumes for the major crossings and intersections in the Project area under the Project alternatives. While the DEIS does provide tabular summaries of the Level of Service, delays and volume/capacity ratios for various intersections, the traffic analysis does not appear to consider the potential for increased volumes of traffic after the Project is completed due to the construction of unimpeded thoroughfares under the various alternatives.

Recommendations:

- The FEIS should provide a tabular summary of traffic volumes at the major crossings and intersections in future years under the three Project alternatives, especially if local and regional traffic volumes are expected to increase.
- If traffic volumes are anticipated to increase, include additional mitigation measures (striping, traffic calming, etc.) to reduce traffic impacts.

The DEIS does not appear to indicate whether the major at-grade crossings currently accommodate freight truck traffic. The FEIS should include a discussion of the potential truck traffic in the area and the potential for truck traffic to increase or shift patterns due to the Project.

Recommendations:

- The FEIS should analyze the potential for an increase in freight truck traffic projected regionally and the role grade separations will play in the future in light of the proposed Project.
- Include additional mitigation measures to reduce truck traffic impacts if necessary.

Further, it is not apparent that the traffic analysis considered potential increased traffic flows resulting from the elimination of the seven or eight at-grade crossings. The traffic analysis should explicitly clarify whether diversion from other thoroughfares to the new, and potentially expanded, thoroughfares is expected. The FEIS should also clearly state whether any of the crossings will result in expanded thoroughfares under each of the alternatives, and discuss the potential increase in traffic volumes that may result.

Recommendations:

- The FEIS should clarify whether diversion from other thoroughfares to the new, and potentially expanded, thoroughfares is expected.
- Include a localized air quality analysis pursuant to this added information.
- Consider any alternatives that would maintain the crossings at their current number of lanes and whether or not these alternatives would meet traffic needs in the area.
- Include a discussion on whether traffic flows will be impeded at the locations where any expanded crossings would revert back to the original number of lanes and include additional mitigation measures, if warranted.

The results of these additional assessments are important for informing the design of the project, understanding environmental impacts to air quality, and ensuring that sufficient mitigation reduces environmental impacts into the future. Currently, the conclusion that the project will benefit transportation is not supported by sufficient documentation in the DEIS. Specifically, the grade separation and roadway expansion may lead to more efficient traffic flows at the crossings, but lead to significantly increased traffic flows and to bottlenecks and idling further up the road. EPA recommends that Caltrans analyze the potential impacts and incorporate results into the FEIS.

Recommendations:

- Prior to determining the final design of traffic flows and number of lanes, a completed traffic analysis identifying potential bottlenecks, impacted wait times, need for any additional roads, and modifications to existing roads is needed. The FEIS should summarize the results of these studies and demonstrate that there will be no significant impacts to traffic, circulation, and air quality from the proposed Project.

- To the extent that the results of these traffic analyses affect decision-making for project design, and, ultimately, require additional mitigation measures, these changes should be incorporated in the FEIS for this Project.

Air Quality

Air Quality Analysis

The DEIS reports that the project will have no long-term impacts and a temporary short-term adverse impact to air quality but does not comprehensively assess the Project's operational and construction direct, indirect, or cumulative impacts to air quality. The FEIS should include a complete description of potential impacts and ways to reduce those impacts. In particular, EPA has concerns regarding: 1) the minimal mitigation measures to curb particulate matter (PM) and nitrogen oxides (NOx) emissions from construction equipment, 2) the absence of a thorough discussion of the air quality impacts to sensitive receptors such as the *Parque de los Ninos* and the El Camino Real Continuation High School, 3) the apparent lack of an air quality impact assessment from fill and excavation transport, and 4) the need for a staging area plan which minimizes exposures to sensitive receptors and residents.

Emissions from diesel construction equipment, locomotives, haul trucks and other vehicles associated with this Project include PM, sulfur oxides, volatile organic compounds (VOCs), and NOx. VOCs and NOx are precursors to ozone. In November 2006, EPA revised the National Ambient Air Quality Standard (NAAQS) for fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}). The City of Placentia is currently within a non-attainment area for PM_{2.5}, PM₁₀, ozone and carbon monoxide. These pollutants should be analyzed and the reasonably foreseeable, larger project's contribution assessed, in the FEIS.

Recommendations:

- Provide PM_{2.5} data in the FEIS and assess the project's contribution to PM_{2.5} emissions. PM_{2.5} data is available on-line at: http://www.epa.gov/ttn/naaqs/pm/pm25_2006_techinfo.html.
- Provide PM₁₀, ozone and carbon monoxide data in the FEIS and assess the Project's contribution to local and regional levels of these pollutants.

The DEIS states that there is no approved carbon monoxide (CO) attainment nor maintenance plan for the project area (at 3.13-19). This statement is inaccurate. The project is located in a maintenance area for CO, with an approved maintenance plan (72 FR 26718). The FEIS should correct this statement and include any appropriate adjustments to the CO hotspot analysis.

Recommendation:

- The FEIS should accurately reflect the status of the CO maintenance plan, and the CO hot spot analysis should be adjusted appropriately.

General and Transportation Conformity

On May 8, 2008, the Southern California Association of Governments adopted the 2008 Regional Transportation Plan (RTP). The 2008 RTP includes the motor vehicle emissions budgets in the 2007 South Coast State Implementation Plan for 8-hour ozone and PM_{2.5} that EPA found adequate for transportation conformity purposes on May 6, 2008. EPA recommends that the FEIS describe whether the project is included in the most recently conforming 2008 RTP. In addition, since the RTP covers only the onroad portion of the Project's emissions, the FEIS should evaluate the general conformity applicability for the other emissions associated with this Project (i.e., construction, rail emissions, etc.).

Recommendations:

- The FEIS should describe whether the Project is included in the most recently conforming 2008 RTP.
- The FEIS should evaluate the general conformity applicability for the other emissions associated with the Federal action (i.e., construction, rail emissions, etc.) and include a discussion to this effect.

Mobile Source Air Toxics

While we recognize the discussion of mobile source air toxics (MSATs) in Section 3.13, the DEIS does not include an analysis of Project's impacts due to MSATs. A large number of recent studies have examined the association between living near major roads and various 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 MSATs, 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>. MSAT analysis is further described in 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 ([http://www.trb.org/NotesDocs/25-25\(18\)_FR.pdf](http://www.trb.org/NotesDocs/25-25(18)_FR.pdf)). 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).

These recommendations, and the recommendations included in the report for AASHTO referenced above, differ substantially from the FHWA interim guidance (February 2006) on MSAT analysis for transportation projects under NEPA. While there are positive elements to this guidance, especially the willingness to acknowledge potential MSAT concerns, EPA continues to disagree with major elements of this approach nationally. The analysis of potential MSAT impacts is especially important in California, where the awareness of air toxics impacts, the knowledge of background conditions, and the familiarity with tools to assess potential impacts are very high.

Recommendations:

- In the FEIS, identify homes and sensitive receptors located within at least 200 meters from possible alternatives where there would be increases in truck and construction traffic/idling, increased roadway and rail traffic, construction activities, and staging area activity, and compare these numbers between alternatives. If the project would result in high average daily traffic (10,000 average daily traffic (ADT), for example), then the FEIS should at least identify the total tons per year anticipated for the six most significant MSATs, namely diesel particulate matter (DPM), acrolein, acetaldehyde, formaldehyde, benzene, and 1,3-butadiene, for each alternative.
- Include an assessment of diesel emissions and provide plans for improving air quality through reducing diesel emissions. EPA is available to work with Caltrans to evaluate the appropriate level of air quality analysis for this project.
- Identify design alternatives and options to further minimize MSAT impacts including indoor air quality improvements for all sensitive receptors within the project area such as the *Parque de los Ninos* and the El Camino Real Continuation High School.

Construction Mitigation Measures

EPA commends Caltrans for incorporating mitigation strategies to reduce or minimize air pollutant, paving, and fugitive dust emissions. However, in addition to idling restrictions, proper maintenance of equipment and the selection of construction equipment based on low emission factors, this Project should incorporate more stringent emission controls for PM and ozone precursors for construction-related activity.

As previously mentioned, this project is in a non-attainment area for PM_{2.5}, PM₁₀ and ozone. Further, there are sensitive receptors in the area of the construction activities, which are anticipated to last, in some cases, over a year at the various crossings. There are additional mitigation measures that can be considered and applied to reduce emissions. Under NEPA, “all relevant, reasonable mitigation measures that could improve the project are to be identified. Mitigation measures must be considered even for impacts that by themselves would not be considered significant” (see Council on Environmental Quality (CEQ), 1981, “Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations”). All applicable state and local requirements and the additional and/or revised measures listed below should be incorporated into a Construction Emissions Mitigation Plan, with the Construction Mitigation Plan included in the FEIS and the Record of Decision (ROD). By including this in the ROD,

Caltrans can commit to emissions reductions measures. The following mitigation measures should be included in the Construction Emissions Mitigation Plan in order to reduce impacts associated with emissions of PM and other toxics from construction-related activities:

Recommendations:

Due to the serious nature of the PM₁₀ and PM_{2.5} conditions in the South Coast Air Basin, EPA recommends that the best available control measures (BACM) for these pollutants be implemented at all times and that the FEIS and ROD incorporate the Construction Emissions Mitigation Plan. At a minimum, these measures should be incorporated into the ROD. We recommend that all applicable requirements under the South Coast Air Quality Management District (SCAQMD) Rules and the following additional measures be incorporated into a Construction Emissions Mitigation Plan.

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.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at California Air Resources Board (CARB) and/or EPA certification, where applicable, levels 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. CARB has a number of mobile source anti-idling requirements. 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 or State Standards. In general, only Tier 2 or newer engines should be employed in the construction phase.
- 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:

- Identify all commitments to reduce construction emissions and incorporate these reductions into the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- 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 CARB diesel fuel requirement for off-road and on-highway (i.e., 15 ppm), and where appropriate use alternative fuels such as natural gas and electric.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

Additionally, EPA is concerned about the selection of the staging areas and the potential impacts that may result to sensitive receptors. In light of the proximity of the *Parque de los Ninos*, the El Camino Real Continuation High School and other elementary schools, we are particularly concerned about the impacts to these areas resulting from the proposed Project.

Recommendation:

- The FEIS should describe the specific location for all staging areas to be used, and confirm that these locations would result in the least environmental impacts and disruption to sensitive receptors.

Finally, if specific mitigation measures are used for purposes of determining total emission levels, a firm commitment to implementing the mitigation measures should be included in the FEIS.

Recommendation:

- The FEIS should identify and commit to specific mitigation measures or specific emission reduction target levels not only for fugitive dust emissions, but also for exhaust emissions.

Air Quality Impacts Associated with Transporting Fill Material

EPA is concerned that the air quality analysis in the DEIS does not include emissions associated with the multiple trucking trips needed to remove and transport fill from the project site (e.g. 2.1 million cubic yards of excess excavation material is identified under Alternative B), nor does the DEIS appear to include an estimate of the number of necessary truck trips, distance traveled and corresponding air emissions in section 3.13.

Recommendations:

- The FEIS should describe the methods, equipment to be used and location of final disposal for this material.
- Include a revised air quality analysis and updated emissions comparison to SCAQMD significance thresholds to account for the emissions from the truckloads required to transport fill, as well as additional fugitive dust associated with the new fill site.
- Commit to additional minimization measures for these emissions.
- Provide a quantification of (1) the additional air quality impacts associated specifically with the trucking of the fill and (2) the air quality benefits expected to be achieved by specific mitigation measures. If prior analysis of emissions and mitigation strategies has been conducted, update the FEIS to reflect this.

Greenhouse Gases

EPA recommends that, as practicable, the FEIS should identify the cumulative contributions or benefits to greenhouse gas emissions (GHGs) that will result from implementation of the Project. In addition, we recommend that the FEIS discuss the potential impacts of climate change on the Project as well as any mitigation measures that could reduce the Project's impact.

Recommendations:

- Identify the cumulative contributions or benefits to GHGs that will result from implementation of the Project and discuss the potential impacts of climate change on the Project.
- Identify 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 or environmental stewardship.

Environmental Justice

The Environmental Justice analysis does not evaluate localized impacts from diesel emissions to minority or low-income communities in the immediate vicinity of the Project railway that could result from increased locomotive traffic of the reasonably foreseeable, larger

project. The FEIS should identify a range of potential impacts associated with the various Project alternatives and should provide appropriate mitigation measures for any adverse impacts.

Recommendations:

- If a potential environmental justice issue is identified, the FEIS should clearly state whether, in light of all of the facts and circumstances, a disproportionately high and adverse human health or environmental impact on minority or low-income populations is likely to result from the Project alternative, or from constructing any other alternatives proposed for analysis. This statement should be supported by sufficient information for the public to understand the rationale for the conclusion.
- Briefly summarize the findings, discuss whether or not there are environmental justice implications associated with any of the potential impacts of the Project, and provide references to other relevant sections of the document that describe the specific impacts in greater detail (such as the noise and air quality sections).
- Propose appropriate mitigation if disproportionately high and adverse human health or environmental impacts on minority populations or low-income populations are likely to result from the proposed action or any of the alternatives.

Jurisdictional Waters

Section 3.17.1.1 states that jurisdictional waters of the United States are those with “a direct connection to interstate commerce”. This statement mischaracterizes the extent of Federal jurisdiction. For example, wetlands adjacent to traditionally navigable waters are jurisdictional. “Adjacent”, in the context of the Clean Water Act means “bordering, contiguous, or neighboring”. A direct connection is not necessary, and the FEIS should be updated to appropriately account for this.

Recommendation:

- This section should be updated to reflect the entire scope of Federal jurisdiction of waters. A good reference document that summarizes jurisdiction after the Rapanos decision can be found at <http://www.epa.gov/owow/wetlands/pdf/RapanosGuidance6507.pdf>.

Section 3.17.1.2 reviews the methodology used to determine impacts. However, the section appears unduly truncated (one sentence long). Impacts to waters typically require an assessment of the current functions and values of the aquatic resources before the construction of the project. This provides the basis for modifying the project to avoid and minimize impacts to resources. Site assessment methods such as the Hydrogeomorphic method can be used to assess sites.

Recommendation:

- The methodology should be clearly delineated and involve a functional assessment of aquatic resources. We recommend reviewing the U.S. Army Corps of Engineers (Corps) Final Mitigation Guidelines and Monitoring Requirements, issued in April 2004, for more information about functional assessments.

Section 3.17.3.1 reviews impacts to waters for each Alternative. While the DEIS discloses proposed permanent fill to waters of the United States from a numeric perspective, it does not sufficiently describe the activities proposed relevant to these waters and what functions would be affected with each alternative. Additionally, from a functional perspective, it is unclear what the differences are between the alternatives.

Recommendation:

- The FEIS should disclose for each Alternative:
 - (1) the name of the crossing,
 - (2) the aquatic resource type (concrete channel, earthen channel, riprap),
 - (3) the type of activity proposed (viaduct, etc..),
 - (4) the acreage of waters impacted,
 - (5) the effect to aquatic resource function from the proposed activity. This should be summarized both in the text and in a table format for reader clarity.

Section 3.17.4.1 defers avoidance and mitigation of aquatic resources to the permit process. EPA disagrees with this approach. The DEIS is an appropriate vehicle for the project proponent to demonstrate compliance with future permit requirements, and EPA advocates that the avoidance and minimization be addressed to the extent practicable in the DEIS.

Recommendation:

- The FEIS should include a summary of avoidance and minimization measures for impacts to waters of the United States. This should include a summary of what types of crossing structures are available that will avoid impacts to aquatic resources. This will be particularly important for proposed impacts to soft bottomed waterways (i.e. turning soft bottom into concrete).

The Mitigation Measures Section 3.17.4.2 reviews proposed mitigation measures for impacts to waters. On March 31, 2008, EPA and the Corps issued new regulations ("Mitigation Rule") governing compensatory mitigation to promote no net loss of aquatic resources by improving restoration and protection policies, increasing the effective use of mitigation banks, and strengthening the requirements for the use of in-lieu fee mitigation. These new compensatory mitigation standards emphasize best available science, promote innovation, and focus on results. This rule follows the recommendations of the National Research Council by establishing equivalent, effective standards for all forms of wetland replacement projects under the Clean

Water Act. We emphasize that mitigation for impacts to waters of the United States proposed in the FEIS must be consistent with the new rule.

Recommendation:

- The section should be updated to reflect the new mitigation rule and how the requirements of the new rule will be met by the proposed Project.