



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

April 15, 2011

Ron Kosinski  
California Department of Transportation, District 7  
100 South Main Street, Suite 100  
Los Angeles, CA 90012

Subject: Scoping Comments for the 710 North of Alhambra Project, Los Angeles  
County, California

Dear Mr. Kosinski:

The U.S. Environmental Protection Agency (EPA) has reviewed the Notice of Intent published in the Federal Register March 9, 2011, requesting comments on the California Department of Transportation (Caltrans) proposal to prepare a Draft Environmental Impact Statement (DEIS) for the 710 North of Alhambra Project. Our comments are provided 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. We recognize that the state of California has assumed responsibilities under NEPA for this project pursuant to the *Memorandum of Understanding Between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the surface Transportation Project Delivery Pilot Program*.

**Purpose and Need and Range of Alternatives**

Section 6002 of Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that the lead agency provide an opportunity for involvement by Participating Agencies in defining the Purpose and Need and in determining the Range of Alternatives for a project as early as practicable during the environmental review process. We note that EPA will be a Participating Agency for this project, as defined by SAFETEA-LU. We look forward to providing feedback once a draft Purpose and Need Statement and subsequent draft Range of Alternatives are provided to Participating Agencies for comments under SAFETEA-LU coordination. At this time, EPA provides the following general comments on Purpose and Need and Range of Alternatives:

*Purpose and Need*

The Purpose and Need should focus on the underlying problems to address and the reasons a project is considered and should not be written in a way that prescribes a particular solution. In particular, the Purpose and Need statement should not be written so as to exclude

alternatives which might be less impactful to the environment or public health that would accomplish the underlying mobility/accessibility the project seeks to provide. It is critical that the Purpose and Need not prescribe or imply a predetermined solution such as an expansion of a freeway. Freeway capacity enhancements may be an included component of the potential solution to the problems identified in a Purpose and Need; however, the Purpose and Need should allow for the analysis of a full scope of alternatives, including other modes of transportation

### *Range of Alternatives*

The DEIS should explore and objectively evaluate a range of reasonable alternatives, including the no action alternative, and briefly discuss the reasons for eliminating some alternatives from further evaluation (40 CFR 1502.14). The alternatives should explore opportunities to avoid or minimize adverse environmental impacts while fulfilling the project purpose. While we understand that the proposed project has a long history, including previously completed environmental analyses spanning many years, Caltrans ultimately must ensure that a proper evaluation of all alternatives is conducted if the analyses will be used to meet obligations under NEPA. EPA recommends that the DEIS present the environmental impacts of a reasonable range of alternatives considered (including the locally preferred alternative(s) and the No-Build Alternative) in comparative form, sharply defining the issues and providing a clear basis for choice among options for the decision maker and the public (40 CFR 1502.14).

EPA recommends that the DEIS include a summary of the screening methodology that was used to determine the Range of Alternatives for inclusion in the DEIS. The methodology summary should include information about which criteria and measures were used at each screening level and how they were integrated in a comprehensive evaluation. The DEIS should also include a description of alternatives that were considered but withdrawn with a summary of why they were eliminated. The DEIS should identify opportunities for the alternatives to avoid or minimize adverse environmental and community impacts while fulfilling the project purpose. This may include alignment shifts, buffers, localized design modifications, changes in construction practices, tunneling, or spanned crossings of sensitive biological resources.

### **Impacts of Increased Vehicle Travel**

The project proposes to increase motor vehicle capacity. Any analysis of emissions of greenhouse gases (GHGs) or other air pollution, noise, and other impacts to human health and the environment that increase with increased vehicle miles traveled should be based upon travel demand modeling which takes into account the increased demand for vehicle travel caused by this increased capacity. Because the additional vehicle travel that results from this induced demand will distribute itself throughout the regional roadway network, it is important to use a travel demand model that will capture the increased vehicle load on other highways and city streets anywhere that increase is significant. The DEIS should describe how any traffic estimates were developed and how these traffic estimates relate to regional transportation estimates. Any supporting documents on which the conclusions of the project's impacts to air quality are based, such as traffic data and other air analyses, should be included in an appendix to the DEIS.

If emissions are analyzed as for a restricted lanes alternative (e.g. HOT, HOV, Freight-only) then the DEIS should include verification or guarantee that the lanes will remain restricted in perpetuity. A change in this restriction would change the impacts of the project. Additionally, EPA strongly recommends incorporation of a zero tailpipe emissions alternatives and technology for this project.

### **Impacts from Proposed Tunneling**

Tunneling alternatives would require extensive earthmoving and result in large amounts of material being transported through urban areas. The DEIS should disclose an approximate amount of material to be removed per mile of tunnel and where material could be disposed or stored. The DEIS should describe the tunneling methodology proposed, amount and type of material removal, the routes needed to haul and remove fill, and the need for any exploratory drilling. In addition, equipment and planned locations for staging tunnel operations should be included.

The location at which excavated materials would be deposited should be named and impacts of the deposits should be discussed. Impacts resulting from the need to excavate and transport deposits, including localized pollutants such as mobile source air toxics, regional air pollutants, traffic, and noise, should be estimated and mitigated to the extent feasible. Further, routes should be chosen to haul deposits that minimize localized air quality and noise impacts to residents.

The DEIS should identify how construction and operation of any alternatives that include tunneling will affect groundwater and hydrological function. Specifically, any long-term maintenance needs regarding dewatering and required dredging should be addressed in the DEIS. A discussion of the methods available to reduce impacts (aerial, tunnel boring, cut-and-cover, etc.) along with associated estimates of impacts to water resources should be incorporated into the DEIS.

### **Potential Displacement of Residences and Businesses**

The DEIS should commit to specific mitigation measures to minimize the impacts of displacement and relocation on all populations from all alternatives analyzed. Mitigation measures should be presented along with a description of the responsible party, timing for implementation, and length of time anticipated for complete implementation. Caltrans should also conduct interviews with all potential displacees to determine relocation needs and should confirm that those who have special needs will be accommodated with a plan for assistance as needed. To mitigate community character and cohesion impacts to communities, EPA recommends conducting public workshops and working directly with affected populations to identify effective and creative ways to minimize or mitigate these impacts.

### **Near Roadway and Public Health Impacts**

Due to the high level of diesel traffic and potential proximity of the Project to residences and other sensitive receptors, EPA is particularly concerned about the level of analysis for

mobile source air toxics (MSATs) impacts. Many studies have measured elevated concentrations of pollutants, which are emitted directly by motor vehicles, near large roadways. These elevated concentrations generally occur within approximately 200 meters of the road, although the distance varies 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 effects. Several peer reviewed 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, near roadway environments present an elevated cancer risk, including childhood leukemia. For additional information on MSATs, please see EPA's MSAT website at <http://www.epa.gov/otaq/toxics.htm>.

Building a new roadway in the immediate vicinity of residential neighborhoods could result in localized MSAT impacts in the project area to nearby receptors. In the DEIS, an estimate of potential MSAT impacts and near roadway receptors should be presented. EPA believes an MSAT analysis should be undertaken for this project because 1) the project represents the addition of a major thoroughfare; 2) the proposed project may be in close proximity to sensitive receptors; 3) the project could have significant health impacts on any low-income and minority communities along the corridor; 4) there is an increasing public awareness of air quality impacts associated with transportation projects; and, 5) there are heavy traffic increases projected in this corridor.

Our primary recommendations for future analyses and for incorporation into the DEIS are to provide a MSAT analysis that includes at a minimum: 1) quantifying the construction and operational emissions for MSATs, 2) identifying hotspots (i.e. localized impacts) with a discussion of the related toxicity weighting of potential MSAT impacts, 3) dispersion modeling, 4) risk assessment, and 5) committing to appropriate avoidance, minimization, and/or mitigation opportunities.

These analyses are 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](http://epa.gov/ttn/fera/data/risk/vol_3/Appendix_B_April_2006.pdf)).

EPA would be happy to work with Caltrans to evaluate the appropriate level of MSAT analysis for this project.

These recommendations, and the recommendations included in the report for AASHTO referenced above, differ substantially from the recently released September 30, 2009 FHWA Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents. While there are positive elements to this guidance, especially the acknowledgement of potential MSAT concerns, EPA continues to disagree with major elements of this approach nationally.

### Public Health Impacts

Through our coordination with Caltrans on the expansion of 710 south of the proposed project area, EPA has requested that Caltrans share the proposed strategy and methodology for the “focused assessment of public health considerations” that will address the expectations raised by the public and agencies for a robust assessment of health impacts that will result from the southerly expansion. We understand that a Health Impact Assessment (HIA) is being completed by partner agencies for the expansion of 710 south of the 710 North of Alhambra Project. HIAs look at health holistically, considering not only bio-physical health effects, but also broader social, economic, and environmental influences. HIAs also explicitly focus on health benefits and the distribution of health impacts within a population. HIAs strive to anticipate potential impacts for decision-makers and to deliver a set of concrete recommendations targeted at minimizing health risks and maximizing benefits.<sup>1</sup>

We encourage Caltrans to refer to the October 2010 publication, “A Guide for Health Impact Assessment”, which was published for the California Department of Health (<http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/HIA%20Guide%20FINAL%2010-19-10.pdf>). We recommend that Caltrans coordinate analyses for both NEPA documents (710 Expansion and 710 North of Alhambra Project) and incorporate information produced from the I-710 HIA into decision-making.

### **Noise Impacts**

The DEIS should include an assessment of noise impacts and should identify proposed mitigation (for example, construction of new noise barriers along segments of the proposed project). EPA encourages mitigation of noise impacts, particularly in areas where residences would be impacted.

### **Air Quality Impacts**

#### Regional Air Quality

The project is located in the South Coast Air Basin. The area is a federally designated Extreme nonattainment area for the 1997 8-hour ozone National Ambient Air Quality Standard

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<sup>1</sup> Bhatia, Rajiv and Wernham, Aaron. Integrating Human Health into Environmental Impact Assessment: An Unrealized Opportunity for Environmental Health and Justice. Environmental Health Perspectives. Available online April 16, 2008.

(NAAQS), and nonattainment for the 2006 and 1997 PM 2.5 standards and the PM-10 standard. [40 CFR Part 81]. The area is also a maintenance area for carbon monoxide (CO) and nitrogen dioxide (NO<sub>2</sub>). Because of the area's air quality status, the DEIS should specifically identify measures to reduce emissions of particulates and ozone precursors, including nitrogen oxides (NO<sub>x</sub>), resulting from the project.

*Recommendations:*

- **Ambient Conditions:** The DEIS should include a detailed discussion of ambient air conditions (i.e., baseline or existing conditions), the area's attainment or nonattainment status for all NAAQS, and potential air quality impacts (including cumulative and indirect impacts) from the construction and operation of the project for each fully evaluated alternative. The DEIS should include estimates of all criteria pollutant emissions and diesel particulate matter (DPM). EPA also recommends that the DEIS disclose the available information about the health risks associated with construction and truck emissions and how the proposed project will affect current emission levels.
- **Relevant Requirements:** The DEIS should describe any applicable local, state, or federal requirements. The DEIS should describe applicable requirements for Federal Actions that require Federal Transit Administration (FTA) or Federal Highway Administration (FHWA) funding or approval and are subject to the Transportation Conformity requirements in 40 CFR part 93, subpart A and for Federal Actions that are subject to the General Conformity requirements in 40 CFR part 93, subpart B.
- **Conformity:** The DEIS should ensure that the emissions from both the construction and the operational phases of the project conform to the approved State Implementation Plan and do not cause or contribute to violations of the NAAQS. To meet the transportation conformity requirements, the DEIS should demonstrate that the project is included in a conforming transportation plan and transportation improvement program.
- **PM and CO Project-Level Hotspot Analyses:** Project-level hot spot analyses for PM<sub>10</sub>, PM<sub>2.5</sub>, and carbon monoxide (CO) are required for the portion of the project that will be funded or approved by FHWA or FTA. The DEIS should ensure the PM<sub>2.5</sub> and PM<sub>10</sub> project-level hotspot analyses are performed following EPA's March 2006 or December 2010 procedures if the project is deemed, via interagency consultation, to be a Project of Air Quality Concern. Note that there is a NEPA policy memo (February 8, 2011, "Using the MOVES and EMFAC Models in NEPA Evaluations" which describes how the transition period from the 2006 to the 2010 guidance applies to NEPA. The NEPA policy memo can be found at the following web site:  
<http://www.epa.gov/compliance/resources/policies/nepa/>
- **Construction:** The responsible agency should include a Construction Emissions Mitigation Plan in the DEIS and adopt this plan in the Record of Decision (ROD). In addition to all applicable local, state, or federal requirements, EPA recommends that the following mitigation measures be included in the Construction Emissions Mitigation Plan in order to reduce impacts associated with emissions of particulate matter (PM) and other toxics from construction-related activities, including the following:

*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:*

- 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 (diesel or retrofitted diesel) equipment meeting the most stringent of applicable Federal<sup>2</sup> or State Standards<sup>3</sup>. 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<sup>4</sup>. Lacking availability of non-road construction equipment that meets Tier 4 engine standards, Caltrans 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:*

- Identify all commitments to reduce construction emissions and update 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

<sup>2</sup> EPA's website for nonroad mobile sources is <http://www.epa.gov/nonroad/>.

<sup>3</sup> For ARB emissions standards, see: <http://www.arb.ca.gov/msprog/offroad/offroad.htm>.

<sup>4</sup> 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).

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 fuel sources such as natural gas and electric power.

- 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.

### *Greenhouse Gas Emissions Mitigation and Sustainable Communities Strategies*

The State of California has increased its focus on greenhouse gas emissions reduction in recent years. 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. 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<sup>5</sup>. 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. In addition, 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, provide more transportation options, and lower transportation costs while protecting the environment in communities nationwide.

EPA strongly recommends that the DEIS estimate the cumulative contributions to greenhouse gas emissions that will result from implementation of the project. Changes in vehicle travel volumes resulting from adding vehicle capacity must be considered in order to create reasonable estimates of greenhouse gas emissions; an analysis that assumes a fixed amount of vehicle travel once additional lane capacity is provided will not produce realistic greenhouse gas emissions estimates.

Because the changes in travel patterns will be complex and geographically extensive, we strongly recommend utilizing the best available regional travel demand model to determine changes in vehicle travel. We also strongly recommend using the best available modeling to determine emissions from the travel patterns that would result from each alternative.

Where vehicle efficiency changes due to changes in vehicle speed are analyzed, permeation of electric-drive (e.g. hybrid, plug in hybrid, and battery electric) vehicles into the overall vehicle fleet should be considered. Electric-drive vehicles peak in efficiency at considerably lower speeds. Therefore, while congestion reduction leading to higher vehicle

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



speeds may lower emissions per vehicle mile traveled from conventional vehicles, it will tend to increase emissions associated with electric-drive vehicles. As a result, in later years of the analysis when a high rate of electric-drive vehicles have permeated the fleet, the project's effect of increasing vehicle speeds may increase, rather than decrease, emissions.

*Recommendations:*

- Estimate net greenhouse gas (GHG) emissions from all project alternatives
- When estimating GHGs resulting from the project, include an estimate of vehicle travel increase due to the project, and the emissions from that increased travel.
- Analyze emissions from vehicle travel over the full geographical extent over which the project affects vehicle travel; ideally this would be the regional level for a project of this size and scope.
- When estimating GHG emissions due to changes in vehicle speeds, consider permeation of electric vehicles into the fleet and their different emissions versus speed profile over the full life of the project.
- Identify design elements intended to reduce GHG emissions and disclose estimated reductions.

*Climate Change Adaptation*

We recommend that the DEIS discuss the potential impacts of climate change on the project. For example, the DEIS should discuss design features that will allow the proposed infrastructure to withstand an increase in extreme precipitation events, and drought tolerant landscaping should be used to prepare for water shortages. We suggest the DEIS discuss adaptation to climate change in context, by describing how the project meets the intent of statewide and national sustainability initiatives and goals to develop sustainable communities.

**Aquatic Resources and Hydrology Impacts**

*Existing On-site Groundwater Contamination*

The location of the proposed Caltrans project is within the San Gabriel Valley Area Superfund Site (Area 3), a large area of ground water contamination underlying portions of the cities of Alhambra, Rosemead, San Gabriel, San Marino, South Pasadena, and Temple City, and unincorporated Los Angeles County. EPA completed a remedial investigation to evaluate the nature and extent of contamination ground water in 2009. The findings of this investigation, including the locations and types of contamination within Area 3, are summarized in the document "Remedial Investigation, San Gabriel Valley Area 3 Superfund Site" (June 2009) previously provided to Caltrans. The complete report also is posted on EPA's Web site at <http://www.epa.gov/region9/sangabriel> under the site summary for Area 3. EPA recommends that Caltrans consider the information presented in the remedial investigation report, including the data regarding hydrogeology and areas of contamination, in developing the DEIS for the project.

EPA currently is preparing a feasibility study to evaluate options for ground water cleanup in Area 3. We expect to complete the feasibility study report and identify a cleanup

remedy in 2012. Implementation of the ground water cleanup in Area 3 will occur several years in the future. For more information, please contact Lisa Hanusiak of EPA Region 9 Superfund Division at 415-972-3152.

### *Aquatic Resources Impacts*

The DEIS should identify if the project will involve the discharge of dredged or fill material into jurisdictional wetlands and waterways and should impacts to water quality or hydrology (i.e. dewatering requirements due to tunneling alternatives). Discharges of dredged or fill material into waters of the U.S. require authorization by the U.S. Army Corps of Engineers (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. Should the project have greater than 5 acres of permanent impacts to waters of the United States, project coordination will commence pursuant to the April 2006 *National Environmental Policy Act and Clean Water Action Section 404 Integration Process for Federal Aid Surface Transportation Projects in California Memorandum of Understanding* (NEPA/404 MOU). The NEPA/404 MOU includes specific agreement points to assist in developing the EIS and involves active participation in meetings and document reviews. We encourage Caltrans to contact the NEPA/404 signatory agencies once more information about the potential impact to waters of the United States is available so that the agreement points can be addressed as early as possible in the EIS process.

### *Avoidance, Minimization and/or Mitigation Measures*

To demonstrate compliance with CWA Guidelines, the DEIS should identify measures and modifications to avoid and minimize impacts to water resources. Temporary and permanent impacts to waters of the U.S. for each alternative studied should be quantified; for example, acres of waters impacted, etc. For each alternative, the DEIS should report these numbers in table form for each impacted water and wetland feature.

#### *Recommendations:*

- Identify if the project will affect waters of the United States.
- Include a summary of the projects impacts to hydrology, including long term water management needs associated with tunneling.
- Discuss mitigation for temporary and unavoidable permanent 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. 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>.
- Include the classification of waters and the geographic extent of waters and adjacent riparian areas.
- Characterize the functional condition of waters and adjacent riparian areas.
- Describe the extent and nature of stream channel alteration, riverine corridor continuity, and buffered tributaries.
- Characterize the hydrologic linkage to any impaired water body.
- Analyze the potential water quality impact and potential effects to designated uses.

- Address techniques proposed for minimizing surface water contamination due to increased runoff from additional impervious surfaces.

## **Integration with Existing Facilities**

The DEIS should explore the extent to which proposed alternatives will integrate with existing transportation facilities. The document should discuss how the project will impact existing vehicle lanes, bicycle lanes and pedestrian paths due to project construction or operation. All potential alternatives should identify the opportunities available to better connect all modes of transportation, including heavy rail, light rail, bus rapid transit, standard bus service, and pedestrian and bicycle facilities. Measures to minimize or mitigate impacts to vehicle lanes, bicycle lanes, and pedestrian paths should be addressed in the DEIS.

## **Green Design and Construction**

### *Green Infrastructure*

EPA encourages Caltrans to implement “green infrastructure,” such as bioretention areas, vegetated swales, porous pavement, and filter strips in any onsite stormwater management features. These features can serve as both stormwater treatment and visual enhancements. More detailed information on these forms of “green infrastructure” can be found at [http://cfpub.epa.gov/npdes/home.cfm?program\\_id=298](http://cfpub.epa.gov/npdes/home.cfm?program_id=298).

### *Industrial Materials Reuse and Recycling*

For the construction of new infrastructure, EPA recommends industrial materials recycling, or the reusing or recycling of byproduct materials generated from industrial processes. Nonhazardous industrial materials, such as coal ash, foundry sand, construction and demolition materials, slags, and gypsum, are valuable products of industrial processes. Industrial materials recycling preserves natural resources by decreasing the demand for virgin materials, conserves energy and reduces greenhouse gas emissions by decreasing the demand for products made from energy intensive manufacturing processes, and saves money by decreasing disposal costs for the generator and decreasing materials costs for end users. EPA recommends that, for any new construction proposed, the DEIS identify how industrial materials recycling can be incorporated into project design. More information can be found at: <http://www.epa.gov/epawaste/conservation/rrr/imr/index.htm>.

## **Environmental Justice and Community Outreach**

EPA is concerned that the project may result in disproportionately high and adverse impacts to low-income and minority populations throughout the project area and along adjoining corridors where traffic is affected by the project, especially portion of the I-710 immediately to the south. Executive Order 12898 addresses Environmental Justice in minority and low-income populations, and the Council on Environmental Quality (CEQ) has developed guidance concerning how to address Environmental Justice in the environmental review process (<http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf>). Future environmental justice analyses for this project and the DEIS should include 1) a description of the area of potential impact used for the analysis; 2) the source of the demographic information; 3) a determination as to whether direct, indirect, or cumulative impacts from the proposed alternatives may disproportionately and

adversely affect low-income or minority populations in the surrounding area. The DEIS should provide appropriate mitigation measures for any adverse impacts.

Caltrans should also document the public involvement methods used to communicate with potential environmental justice communities within the project area and provide an analysis of results achieved by reaching out to these populations. These methods include any newsletters and summary meeting notes that are made available, outreach to tenants in addition to landowners, and/or holding meetings during the evening or weekends when more of the working public would be able to participate. Assessment of the project's impacts should reflect consultation with affected populations. EPA has developed a model plan for public participation that may assist Caltrans in this effort. *The Model Plan for Public Participation*, EPA OECA, February 2000, is available at:

[http://www.epa.gov/compliance/resources/publications/ej/model\\_public\\_part\\_plan.pdf](http://www.epa.gov/compliance/resources/publications/ej/model_public_part_plan.pdf).

Community involvement activities supporting the project should include opportunities for incorporating public input, especially in Environmental Justice communities, into the facility area design process to promote context sensitive design. In addition, the DEIS should demonstrate compliance with Title VI of the Civil Rights Act of 1964 which, in part, would include analyses for service equity and fare equity.

*Recommendations:*

- Define the potential environmental justice concerns, which is the first step in an environmental justice analysis. Include a discussion of any environmental justice issues raised during the scoping meetings. Also briefly discuss the key issues where environmental justice is potentially a concern, such as relocation, air quality, noise, vibration, access to property, pedestrian safety, etc.
- Define the reference community, which, combined with defining the affected community, is the second analysis step. This is a critical step since the definitions are used to analyze whether there are disproportionately high and adverse human health or environmental impacts by comparing the impacts to the affected population with the impacts to the reference community. For this project, the reference population could be defined as Los Angeles County, or potentially, a greater area of Southern California. The DEIS should briefly summarize the affected community and reference community.
- Thirdly, determine whether there are disproportionately high and adverse impacts, as detailed in the above-cited CEQ's "Environmental Justice: Guidance Under the National Environmental Policy Act" by considering the following three factors to the extent practicable for each of the identified potential environmental justice concerns:
  - (a) Whether the health effects, which may be measured in risks and rates, are *significant* (in the context of NEPA), or above generally accepted norms. Adverse health effects may include bodily impairment, infirmity, illness, or death;
  - (b) Whether the risk or rate of hazard exposure by a minority population or low-income population to an environmental hazard is significant (in the context of) and appreciably exceeds, or is likely to appreciably exceed, the

- risk or rate to the general population or other appropriate comparison group; and
- (c) Whether health effects occur in a minority population or low-income population affected by cumulative or multiple adverse exposures from environmental hazards.
- Accurately disclose whether or not the project will result in a disproportionate and adverse impact on minority or low-income populations. Ensure this conclusion is reported consistently throughout the DEIS. If a potential environmental justice issue has been identified, the DEIS 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 populations or low-income populations is likely to result from the proposed action and any alternatives. This statement should be supported by sufficient information for the public to understand the rationale for the conclusion.
- Briefly summarize the findings, provide a reference to other relevant sections of the document which describe the specific impacts in greater detail (such as the noise and air quality sections), and comment on whether or not there is an environmental justice impact for those potential environmental justice concerns which are discussed in detail in other sections of the document.
- 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 and any alternatives.
- Describe involvement of affected community in proposing mitigation measures.

### **Cumulative Impact Analysis**

Cumulative impacts are defined in CEQ's 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 non-transportation projects such as large-scale developments and approved urban planning projects that are reasonably foreseeable and are identified within city and county planning documents.

The cumulative impact analysis should describe the "identifiable present effects" to various resources attributed to past actions. The purpose of considering past actions is to determine the current health of resources. This information forms the baseline for assessing potential cumulative impacts and can be used to develop cooperative strategies for resource protection (CEQ's Forty Most Frequently Asked Questions #19). In particular, the DEIS should identify the impacts of proposed projects on other segments of I-710 and connecting highways that have undergone or will undergo environmental review.

The DEIS should include a thorough cumulative impact assessment. The analysis should include a complete list of reasonably foreseeable actions, including non-transportation projects. EPA recommends the use of published cumulative impact guidance released by Caltrans. This

guidance can be found at: [http://www.dot.ca.gov/ser/cumulative\\_guidance/purpose.htm](http://www.dot.ca.gov/ser/cumulative_guidance/purpose.htm). The eight steps included in this guidance are provided below.

Steps for Cumulative Impacts Analysis:

- 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.*

EPA appreciates the opportunity to provide scoping comments. When Caltrans initiates the Participating Agency requirements pursuant to SAFETEA-LU, please contact me at 415-947-4121 or [ganson.chris@epa.gov](mailto:ganson.chris@epa.gov). When the Draft EIS is released for public review, please send one hard copy and one disc copy to the address above (mail code CED-2).

Sincerely,

  
For  
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Environmental Review Office

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