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

April 14, 2008

Mr. Ron Kosinski
California Department of Transportation
100 South Main Street
Los Angeles, California 90012-3606

Subject: Final Environmental Impact Statement for the Interstate 405 Sepulveda Pass Widening Project, from Interstate 10 to U.S. 101, Los Angeles County, California (CEQ #20080081)

Dear Mr. Kosinski:

The U.S. Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the Interstate 405 (I-405) Sepulveda Pass Widening Project, from Interstate 10 (I-10) to U.S. 101, Los Angeles County, California. Our comments are provided under 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.

EPA reviewed the Draft Environmental Impact Statement (DEIS), and provided comments to the Federal Highway Administration (FHWA) on September 20, 2007. We rated the DEIS as Environmental Concerns-Insufficient Information (EC-2) due to concerns that the DEIS may not have accurately disclosed additional impacts from project revisions that occurred after the publishing of the original DEIS. EPA also expressed concerns about increased impervious surfaces and construction emissions and runoff. In addition, EPA recommended that the discussion on dispersion modeling and exposure and health effects for mobile source air toxics be updated to reflect the findings of recent studies and reports.

While some of our concerns have been resolved, we remain concerned about the water quality and air quality impacts of the project as presented in the Final EIS (FEIS). EPA continues to recommend that Caltrans 1) provide additional information regarding the placement, selection, and performance standards of the Best Management Practices (BMPs) in the Record of Decision (ROD) to support the conclusion that the project will not cause or contribute to further impairment of downstream waterbodies, and 2) consider additional noise and air quality impacts to the Salvation Army Westwood Transitional Village outdoor toddler play area that would be adjacent to the proposed northbound I-405 Wilshire off-ramp. We also recommend that Caltrans' commitment to incorporate EPA's recommended construction mitigation measures as discussed in page 401 of the FEIS Response to Comments to Agencies be included in the ROD. We further recommend that Caltrans update the information presented on mobile source air toxics.

We appreciate the opportunity to review this FEIS. When the ROD is signed, please send one copy to the address above (mail code: CED-2). If you have any questions, please contact Connell Dunning, Transportation Team Lead, at 415-941-4161, or Susan Sturges, the lead reviewer for this project. You may reach Susan at 415-947-4188 or sturges.susan@epa.gov.

Sincerely,

/s/ Connell Dunning for

Nova Blazej, Manager
Environmental Review Office

Attachments:
EPA's Detailed Comments

cc: Carlos Montez, California Department of Transportation
Steve Healow, Federal Highway Administration
Paul Edelman, Santa Monica Mountains Conservancy
Mark Cohen, U.S. Army Corps of Engineers

Water Quality

Although the Final Environmental Impact Statement (FEIS) mentions that a Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared prior to starting construction activities, very little information is contained in the document to support the conclusion that, "The proposed project would not further impair the 303(d) listed water bodies" (Section 3.10.3). Section 3.10.4 mentions that a Storm Water Data Report was completed for the project that includes treatment Best Management Practices (BMP)s to prevent sediment and other pollutants from entering the storm drain system. Although Figure 3.10-1 contains a few proposed Storm Water Treatment locations, it is unclear how these BMPs will meet water quality criteria for the downstream waterbodies. EPA continues to recommend the following:

- Provide more information in the Record of Decision (ROD) to support the conclusion that the project will not cause or contribute to further impairment of downstream waterbodies.
- Include storm water performance standards for both construction site sediment control and post-construction project design standards in the ROD.
- Provide more information in the ROD regarding the placement, selection, and performance of the BMPs mentioned in Section 3.10.4 (Avoidance, Minimization and Mitigation Measures) of the FEIS.
- Design, install, and maintain BMPs to control total suspended solids (TSS) carried in runoff post-construction of the project.
- Employ BMPs to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to the pre-development conditions for the 2-year, 24-hour design storm event.
- Design, install, and maintain BMPs to infiltrate sufficient runoff volume such that post-development infiltration volume should be at least 90 percent of the predevelopment infiltration volume. That is, no more than 10-percent decrease in infiltration would be allowed.

Air Quality

Construction Mitigation Measures

The FEIS Response to Comments acknowledges that Caltrans will require the contractor to adhere to the construction mitigation measures recommended below by EPA. EPA recommends that this commitment and the measures below be captured in the ROD.

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 EPA certification 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.
- Prohibit any tampering with engines and require continuing adherence to manufacturers recommendations
- If practicable, lease newer and cleaner equipment meeting the most stringent of applicable Federal or State Standards (see table: http://arb.ca.gov/msprog/ordiesel/documents/Off-Road%20Diesel%20Stds.xls). In general, only Tier 2 or newer engines should be employed in the construction phase, given the scale of the construction project and the high background levels of pollutants in the area.
- 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 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.)
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification. Use low sulfur fuel (diesel with 15 parts per million or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintain 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 away from fresh air intakes to buildings and air conditioners.

Air Toxics
Dispersion Modeling

The discussion of limitations in the dispersion models in the FEIS has been updated from previous information presented in the February 2006 FHWA MSAT interim guidance, but still does not reflect current available science. While the CALINE and CAL3QHC were developed and validated a number of years ago, as stated in the FEIS, they continue to undergo validation. A number of recent studies have determined that CALINE, especially CALINE4, accurately predicts ambient concentrations in near-roadway environments for both gaseous and particulate pollutants (see, for example, Gramatnev *et al*., Atmospheric Environment, volume 37, pages 465-474, 2003; Zhang *et al*., Atmospheric Environment, volume 39, pages 4155-4166, 2005). The joint University of California Davis - Caltrans report, entitled "A Survey of Air Quality Dispersion Models for Project-Level Conformity Analysis" (June 19, 2006), concluded that available models are appropriate for modeling project-level dispersion of on-road and construction emissions, contradicting the language in the FEIS.

In the near-roadway environment, the major mobile source air toxics (MSATs) will behave similarly to carbon monoxide: both are treated as inert gases for the purposes of dispersion. In fact, one of the most reactive MSATs, formaldehyde, has an atmospheric half-life very similar to carbon monoxide: 4-10 hours for formaldehyde compared to 4-6 hours for carbon monoxide under typical conditions. Since the majority of impacts are expected to occur within 1000 feet of the roadway or closer (for a summary of supporting studies, see Section 3.1.3 of EPA's "Draft Regulatory Impact Analysis: Control of Hazardous Air Pollutants from Mobile Sources," February 2006, http://www.epa.gov/oms/regs/toxics/ria-sections.htm), pollutants are dispersed within a few minutes under average wind speeds. Neither MSATs nor carbon monoxide undergo significant reactions in a few minutes, and thus both can be accurately treated as inert gases for the purposes of dispersion, as is standard practice for carbon monoxide.

Based on these recent studies and reports, CALINE4 would be an appropriate tool for dispersion analysis of MSATs, if desired. The March 2007 report, entitled "Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process" (http://www.trb.org/NotesDocs/25-25(18)_FR.pdf), prepared for the American Association of State Highway and Transportation Officials (AASHTO), identifies CALINE4 as the "Best Available Air Quality Modeling Tool for use in Analyzing MSATs under NEPA" for purposes of both roadway widening and high occupancy vehicle (HOV) lane addition.

Furthermore, the discussion in the FEIS references a lack of adequate monitoring data as a limitation. While air toxics monitoring data is frequently limited, Southern California is one of the most studied areas of the country. There are numerous sources of both monitored and modeled ambient air toxics concentrations in Southern California, including several fixed site air

toxics monitors operated by South Coast Air Quality Management District (SCAQMD) and California Air Resources Board, EPA's National Air Toxics Assessment (NATA, http://www.epa.gov/ttn/atw/nata1999/), and SCAQMD's Multiple Air Toxics Exposure Study (MATES, http://www.aqmd.gov/matesiidf/matestoc.htm and http://www.aqmd.gov/prdas/matesIII/matesIII.html). Thus it would be straightforward to determine MSAT background concentrations, providing context for any potential dispersion analysis.

Recommendation:

EPA continues to recommend the following updates regarding information provided in the MSATs Section be included in the ROD:

- Update the language on "Information that is Unavailable or Incomplete," beginning on page 200, as noted above.
- Revise the discussion of uncertainties in "Dispersion" to include an updated discussion of the use of CALINE4 in situations similar to the proposed project, referencing more recent studies and the report prepared for AASHTO.
- Revise the discussion to more accurately reflect dispersion of MSATs and carbon monoxide. Specifically, the ROD should remove implications that dispersion of MSATs would differ from dispersion of carbon monoxide.

EPA also recommends that the concern about establishing project-specific MSAT background concentrations be amended to note that Caltrans could work with EPA and SCAQMD to determine relevant background concentrations. EPA is not recommending that Caltrans perform a dispersion analysis of air toxics. We do, however, acknowledge that this analysis is possible.

<u>Exposure Levels and Health Effects</u>

Both EPA and California Office of Environmental Health Hazard Assessment (OEHHA) have long standing experience and published, peer-reviewed guidance for evaluating long-term health effects, including cancer risk. The concerns raised about estimating exposure over a 70-year lifetime have been addressed extensively by our agencies. Recently, EPA has published an Air Toxics Risk Assessment Reference Library (http://www.epa.gov/ttn/fera/risk_atra_main.html) that addresses the precise concerns raised in this section of the FEIS – namely how to develop appropriate exposure scenarios in a risk assessment. Similarly, California OEHHA has hot spot risk assessment guidance published in support of California's Air Toxics "Hot Spots" Information and Assessment Act of 1987 (a.k.a. AB2588, http://www.oehha.ca.gov/air/hot_spots/pdf/HRAguidefinal.pdf). While we agree with the statement in the FEIS that there are always uncertainties associated with risk assessments, for this project most uncertainties would be consistent across alternatives, and thus such an analysis would still be sufficient for distinguishing between the impacts among scenarios and informing mitigation.

Recommendation:

The ROD should include a revision of the discussion of uncertainties in "Exposure Levels and Health Effects" to include a discussion of possible exposure scenarios typically used by EPA and California OEHHA in air toxics risk assessments. EPA is not recommending that Caltrans perform a human health risk assessment. We do, however, acknowledge that such an assessment is possible.

Environmental Justice

Census tract 7011 in the project area contains the Salvation Army Westwood Transitional Village, which provides transitional housing for homeless families and veteran families with long term supportive needs. EPA commends Caltrans for meeting with the Salvation Army Westwood Transitional Village, including the Bessie Pregerson Child Development Center, to identify their concerns with the project; however, EPA continues to recommend that Caltrans further minimize potential impacts of the project:

- To compensate for additional noise and air quality impacts to the Salvation Army Westwood Transitional Village outdoor toddler play area that would be adjacent to the proposed northbound I-405 Wilshire off-ramp, assess options to relocate the outdoor play area further away from these near-roadway impacts and include these options in the ROD. Identify in the ROD what additional measures will be implemented to further reduce impacts.