

US EPA ARCHIVE DOCUMENT



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

75 Hawthorne Street  
San Francisco, CA 94105

October 22, 2007

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

Subject: Final Environmental Impact Statement for the Interstate 5 Corridor Improvement Project, from State Route 91 to Interstate 605, Los Angeles and Orange Counties, California (CEQ# 20070389)

Dear Mr. Kosinski:

The Environmental Protection Agency (EPA) has reviewed the above-referenced document 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. Our detailed comments are enclosed.

EPA reviewed the Draft Environmental Impact Statement (DEIS), and provided comments to the Federal Highway Administration (FHWA) on February 23, 2007. We rated the DEIS as Environmental Concerns-Insufficient Information (EC-2) due to concerns about the potential of project segmentation, the lack of analysis for mobile source air toxics (MSATs) hotspots, and the inconsistent reporting of potential environmental justice impacts. While some of our concerns have been resolved, we remain concerned about the air quality impacts of the project as presented in the Final EIS (FEIS).

California Department of Transportation (Caltrans), FHWA, and EPA met to discuss MSATs at the Caltrans District 7 Office on February 7, 2007. EPA appreciates FHWA and Caltrans for meeting to discuss MSAT impacts associated with the project and we look forward to continuing the dialogue on MSATs. However, the absence of a quantitative MSAT analysis continues to be a concern to EPA because the project is a potentially large expansion of an already major freeway that is in close proximity to a number of residences and other sensitive receptors, such as schools and hospitals. EPA is aware of future planned expansions along the Interstate 5 corridor, so it is important to establish an appropriate level of analysis at this stage of project analysis.

EPA continues to recommend that Caltrans quantify the construction and operational emissions for MSATs, 2) conduct dispersion modeling of the most significant MSATs, and 3) identify hotspots and appropriate avoidance, minimization, and/or mitigation opportunities. EPA continues to be concerned that the project's impacts associated with particulate matter may be underestimated and that additional disclosure and mitigation measures to reduce these impacts

should be included in the Record of Decision (ROD). Finally, we recommend that the ROD clarify how these additional analyses or mitigation measures may affect environmental justice communities in the project area. EPA's detailed comments supporting these recommendations are enclosed.

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 me at 415-972-3846 or Susan Sturges of my staff at 415-947-4188 or [sturges.susan@epa.gov](mailto:sturges.susan@epa.gov).

Sincerely,

/s/ Connell Dunning for

Nova Blazej, Manager  
Environmental Review Office

Attachments:  
EPA's Detailed Comments

cc: Jinous Saleh, California Department of Transportation  
Garrett Damrath, California Department of Transportation  
Jean Mazur, Federal Highway Administration  
Steve Healow, Federal Highway Administration

## **Air Quality**

### *Mobile Source Air Toxics*

An analysis of changes in ambient concentration, i.e. dispersion modeling, in the Final Environmental Impact Statement (FEIS) remains necessary for the project sponsors and the public to properly understand the potential mobile source air toxics (MSAT) impacts, choose between alternatives, and inform mitigation. This is important given that the project is an expansion of an already major freeway in close proximity to a number of residences and sensitive receptors, and has potential for major MSAT impacts. The response to EPA's recommendations for air toxics analyses (EPA-3 to EPA-13, pages 264 -267) and the corresponding additional information and qualitative analysis in the FEIS do not sufficiently address EPA's concerns regarding MSAT impacts.

In particular, the response to our recommendation for dispersion modeling (EPA-5, pages 263 and 264), does not accurately describe current dispersion modeling science. Caltrans' studies (e.g. "A Survey of Air Quality Dispersion Models for Project-Level Conformity Analysis," June 19, 2006) and the recent American Association of State Highway and Transportation Officials (AASHTO) report ("*Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process*" 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)) describe both the application and appropriateness for dispersion modeling in the context of transportation projects under California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). As discussed during our meeting with you on February 7, 2007, the assertion in the FEIS that quantitative modeling guidance is necessary for performing a dispersion analysis of MSATs does not have merit. CALINE models have been used extensively to perform dispersion of both gaseous and particulate matter pollutants and there are numerous examples in both the scientific literature and by government agencies for how this analysis could be performed. Also, Caltrans has vast experience using CALINE to model carbon monoxide (CO). Since all of the primary MSATs, besides diesel particulate matter, are gases that would behave identically to CO in the near-roadway environment, Caltrans has sufficient expertise to perform dispersion modeling of MSATs.

#### *Recommendation:*

EPA continues to recommend that Caltrans conduct dispersion modeling of the most significant MSATs, as discussed in our February 23, 2007 Draft EIS (DEIS) comment letter, in order to better understand MSAT impacts associated with the alternatives, identify hotspots, and inform design and mitigation measures to reduce MSAT impacts. Include the results of the dispersion modeling in the Record of Decision (ROD).

The response about design and mitigation opportunities (EPA-8, page 265), does not address the point raised in EPA's original recommendation. While MSAT emissions will be substantially decreased in the future as a result of both EPA and California Air Resources Board (CARB) rules, the project has a significant potential to exacerbate MSAT impacts and shift

where they occur. For example, while MSAT emissions may decrease by 50%, expanding a roadway and moving it closer to residences by 100 or more feet may double or quadruple MSAT impacts near the roadway, since concentrations drop off exponentially. Therefore, design changes to avoid these hotspot impacts, which is within the control of the project sponsors, may have major benefits beyond what is already accomplished by the EPA and CARB rules.

*Recommendation:*

EPA recommends that the ROD identify and include design and mitigation measures for operational impacts of MSATs, as recommended in EPA's DEIS comment letter.

While EPA has not recommended a human-health risk assessment for this project, the response about uncertainties in risk estimates (EPA-11, page 267) in the FEIS continues to be misleading. While there are substantial uncertainties in all risk estimates, the uncertainties would be mostly consistent between analyses of project alternatives. Therefore, a human-health risk assessment would still be useful for relative comparisons, in this case comparing between project alternatives, including the no-build, and identifying areas where mitigation is necessary and most effective.

*Particulate Matter*

The revised PM<sub>2.5</sub> 24-hour National Ambient Air Quality Standard (NAAQS) of 35 µg/m<sup>3</sup>, which was effective December 18, 2006 (See 71 FR 6114), should be addressed in the FEIS with respect to both current and expected future air quality in the project's vicinity (EPA-18, page 269). Specifically, Table 3.13-7 could be updated to reflect the revised PM<sub>2.5</sub> 24-hour NAAQS of 35 µg/m<sup>3</sup>. If the revised PM<sub>2.5</sub> were considered in this table, it would demonstrate exceedances of this NAAQS at both the Pampas Lane and North Main Street monitoring sites for 2001-2006. This information underscores the need to reduce the project's contribution to PM<sub>2.5</sub> concentrations in the project's vicinity.

*Recommendation:*

Provide the above information in the ROD along with mitigation measures that would specifically reduce the project's impact on ambient PM<sub>2.5</sub> concentrations.

The response to EPA's comment #19 in the FEIS (page 269) clarifies that the PM<sub>10</sub> project-level hot spot analysis was performed using the 2005 PM<sub>10</sub> protocol, but does not explain why the hot spot methodology does not need to be updated to be consistent with the March 2006 guidelines.

*Recommendation:*

Provide more specific clarification in the ROD that the appropriate analysis has been conducted to ensure that the PM<sub>10</sub> transportation conformity requirements have been met.

EPA notes that six years of air quality data have been provided in the FEIS, as requested. However, EPA does not agree with the conclusions of the FEIS that "the additional data show that the trends previously shown using 3 years of data were representative of long-term trends." (EPA-20, page 269) Specifically, as noted in EPA's DEIS comment, and as evidenced in revised Tables 3-13.4 and 3-13.5, PM<sub>10</sub> concentrations at the Pampas Lane and North Main Street

monitoring sites do not appear to be decreasing. Given this, EPA is concerned that the impacts of the project may be underestimated.

*Recommendation:*

Ensure in the ROD that adequate mitigation measures will be implemented to reduce any adverse future air quality impacts of the proposed project.

Regarding the response to EPA's DEIS comment to consider the analysis in the South Coast PM<sub>2.5</sub> attainment plan (EPA-20, page 270), EPA notes that the South Coast PM<sub>2.5</sub> attainment plan was adopted on September 27, 2007 by the California Air Resources Board (ARB) and is expected to be submitted to EPA in the near future. The technical assumptions regarding the significance of road dust in the PM<sub>2.5</sub> inventory have been final since the plan was adopted by the South Coast Air Quality Management District board on June 1, 2007. The plan identifies road dust as a significant portion (approximately 20%) of the inventory. However, EPA has not officially made a finding of significance for fugitive dust from paved and unpaved roads for PM<sub>2.5</sub> for conformity purposes. The technical information and conclusions in the South Coast PM<sub>2.5</sub> attainment plan represent the most current knowledge about PM<sub>2.5</sub> in South Coast.

*Recommendation:*

Include in the ROD any new information or changes, including the PM<sub>2.5</sub> significance finding, for PM<sub>2.5</sub> of the South Coast PM<sub>2.5</sub> attainment plan to ensure that the most current assumptions are used regarding the impacts of paved and unpaved road dust.

*Construction Mitigation Measures*

EPA is concerned that all construction equipment may not incorporate best available control measures (BACM) technologies, as stated in the response to EPA's recommendations for additional construction mitigation measures (EPA-26, page 270). Regarding the BACM measures, the FEIS states that the measures will be required "where feasible" (page 178) rather than requiring that the BACM measures be implemented.

*Recommendation:*

Commit to implementation of the BACM measures listed in EPA's DEIS comment letter in the ROD.

**Environmental Justice**

EPA commends Caltrans' inclusion of the additional environmental justice analysis in the FEIS and the discussion of key issues where environmental justice is potentially a concern. In response to EPA's recommendation to conduct interviews with all potential displaces who have special needs to ensure that issues are fully identified and a plan for assistance is prepared due to relocation (EPA comment #34, page 277), the FEIS indicates that displacement of a significant number of populations with special needs were not identified in the corridor study during preparation of the DEIS and that interviews were not required. EPA recommends that Caltrans include in the ROD the following clarifications to ensure that the environmental justice analysis

- 1) discloses how special needs of affected populations were assessed for relocation impacts, and
- 2) captures any potential changes to the air quality assessment and mitigation.

*Recommendations:*

- Include revised analysis and mitigation measures accordingly in the ROD that may reduce impacts to environmental justice communities, as a result from additional analyses and mitigation measures recommended to address MSATs and construction emissions.
- Clarify in the ROD the process used to confirm that populations with special needs do not exist in the project area in absence of interviews.