CHAPTER 3 COMMENTS AND RESPONSES TO COMMENTS ON THE DEA/EIR FROM FEDERAL AGENCIES

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United States Environmental Protection Agency

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

July 12, 2006

Mr. Leland W. Dong
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814

Subject: Draft Environmental Assessment for the State Route 24 Caldecott Improvement Project, Alameda and Contra Costa Counties, California

Dear Mr. Dong:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Assessment (Draft EA) for the State Route (SR) 24 Caldecott Improvement Project, Alameda and Contra Costa Counties, 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.

The Draft EA addresses the environmental impacts of the proposed construction of a fourth bore of the Caldecott Tunnels on SR 24. EPA is concerned with the lack of analysis of impacts and mitigation to offset those impacts associated with the removal, transport, and placement of up to 375,000 cubic yards of excavated materials for the construction of a new tunnel. These concerns are further discussed in the attachment, as well as additional comments addressing the following: 1) purpose and need, 2) range of alternatives, 3) air quality, 4) mitigation, 5) growth and traffic volumes, and 6) hazardous materials and waste.

EPA appreciates the opportunity to comment on the Draft EA. When the Final Environmental Assessment (Final EA) and Finding of No Significant Impact (FONSI) are released for public review, please send two copies to the address above (mail code: CED-2). If you have any questions, please contact me or Susan Sturges, the lead reviewer for this project. Susan can be reached at 415-947-4188 or sturges.susan@epa.gov.

Sincerely,

Connell Dunning

for Duane James, Manager
Environmental Review Office

Attachment: EPA's Detailed Comments

cc: Sheryl Dorado, California Department of Transportation District 4

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Thank you for your comments. We will forward to you two (2) copies of the Final Environmental Assessment/Environmental Impact Report and the Finding of No Significant Impact (FONSI) upon their completion. Specific answers follow your attachment.

EPA DETAILED COMMENTS ON THE STATE ROUTE 24 CALDECOTT IMPROVEMENT PROJECT, ALAMEDA AND CONTRA COSTA COUNTIES, CALIFORNIA, JULY 12, 2006

Purpose and Need

The U.S. Environmental Protection Agency (EPA) recognizes that the purpose and need statement in the Draft Environmental Assessment (Draft EA) is more clearly defined than the project purpose and need identified in the November 2002 Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the project. A primary need focuses on the diminished freeway capacity at the Caldecott Tunnels where the eight-lane corridor reduces to six lanes, with only two lanes available in the reverse-commute direction. However, the purpose statement does not differentiate between reverse-commute and commute delay reduction or mobility improvements. General statements such as "…reduces delays within the vicinity of the tunnels, through the year 2032" and "improves mobility for the traveling public and emergency crews…" (p. 5) appear to imply that alternatives to alleviate congestion in the commute direction may also be considered, which exceeds the intended scope of the project. The identified Draft EA build alternatives do not provide solutions that alleviate commute direction congestion.

Recommendation:

In the Final Environmental Assessment (Final EA), clarify the scope of the proposed project and update the purpose statement regarding reverse-commute congestion relief. 1

Range of Alternatives

EPA commends Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) for eliminating earlier, more damaging alternatives, including the southern bore alternatives which would have resulted in greater environmental impacts, and the four-lane bore alternatives which would have exceeded the intended scope of the project. The Draft EA carries forward two tunnel alternatives, a two-lane bore (Alternative 2N) and a three-lane bore (Alternative 3N), both north of the existing tunnel facilities. Alternative 2N includes two westbound through lanes, providing equal bi-directional capacity as the rest of the corridor with eight continuous lanes. Alternative 3N would provide three westbound through lanes, with the third lane comprised of a continuous auxiliary lane from Camino Pablo Road to State Route (SR) 13, for a total of nine lanes within the Caldecott Tunnel vicinity.

The Draft EA indicates that Alternative 3N provides the greatest congestion relief during both peak and off-peak hours. The Draft EA further details that Alternative 3N allows the possibility of constructing a High Occupancy Vehicle (HOV) lane from west of Interstate 680 to west of the tunnels, above State Route 13 northbound, for a total HOV lane length of 9 miles (p. 26). Although the EPA is generally supportive of HOV lanes, the Draft EA does not demonstrate that Alternative 3N provides enough operational benefit over Alternative 2N without other SR 24 improvements, including an HOV lane, to justify additional environment effects associated with a larger bore, greater footprint, and additional capacity. Traffic analysis in the Draft EA states that westbound p.m. peak period traffic experiences almost no congestion with Alternative 2N, relieving reverse-commute congestion with only two lanes. During the westbound a.m. peak period, both alternatives still maintain bottlenecks, including one at the

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Caldecott Tunnel approach. According to the Executive Summary, "the new bore is not expected to bring peak direction relief since the corridor capacity would remain unchanged in the peak direction. Even Alternative 3N, with the additional auxiliary lane, is not expected to substantially improve corridor capacity without other corridor improvements"(p. xx). The Draft EA also lacks details on how the five lanes associated with Alternative 3N will merge back to four and whether or not this merge will create additional congestion.

Recommendations:

Provide a description of how the five lanes associated with Alternative 3N will merge to four and the effects the Alternative 3N auxiliary lane will have on SR 13 capacity. 2

If Alternative 3N is selected, the Final EA should demonstrate benefits of this alternative with respect to the purpose and need for this project. If the benefits are realized with a proposed HOV lane for the corridor, then this should be disclosed and evaluated accordingly. 3

Spoil Disposal

The Draft EA discloses that approximately 296,000 cubic yards (Alternative 2N) to 375,000 cubic yards (Alternative 3N) of excavated material will be generated by the project and require disposal. The Draft EA lists potential disposal sites, but does not analyze the environmental effects associated with spoil disposal at each of the sites and states that the contractor is responsible for obtaining clearances for disposal sites and that sensitive resources will be evaluated prior to the location use. The Draft EA also fails to disclose the effects associated with the large number of trucks necessary to haul the spoils to disposal sites, which may generate increased noise and air quality and traffic impacts.

Recommendations:

Include in the Final EA an analysis of the environmental impacts associated with the disposal of excavated material at each potential disposal site. Clarify the timeline for additional environmental approvals required for disposal (Section 106 consultation, Clean Water Act Section 404 permit, Endangered Species Act Section 7 consultation, etc.). 4

Provide an estimate of the number of truck trips required to haul material to disposal sites and identify the impacts to air quality, noise, and community disruption from the trips. Commit to specific mitigation measures to reduce estimated impacts. 5

Air Quality

The San Francisco Bay Area is currently classified as a nonattainment area for the federal 8-hour ozone standard and for the State 1-hour ozone standard. The area is currently in attainment of the federal standards for particulate matter under ten microns (PM10) and particulate matter under 2.5 microns (PM2.5), but is not in attainment for the State standards for PM10 or PM2.5. The area is a maintenance area for carbon monoxide (CO).

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Recommendation:

As noted in the Draft EA, if Alternative 3N is selected, a regional analysis will need to be performed by Metropolitan Transportation Commission (MTC) to demonstrate conformity with the State Implementation Plan (SIP). This alternative selection will also require amendments to the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP). This should be accomplished before the National Environmental Policy Act (NEPA) process is completed, per 40 CFR Part 93.107. 6

The Draft EA addresses air quality impacts of the operation of the project, but does not provide sufficient information regarding construction impacts. It acknowledges that trucks and construction equipment will generate hydrocarbons and nitrogen oxides (precursors to ozone and particulate matter), carbon monoxide, and particulate matter, but does not quantify the amounts that will be emitted. In order to determine whether the construction phase of this project will have a significant impact, the analysis should include estimates of all criteria pollutant and precursor emissions as well as diesel particulate matter (DPM). Measures to mitigate the impacts should be included as appropriate. 7

Recommendations:

- Specify the duration and concentration of air emissions by pollutant and location for each phase of project construction. Disclose the available information about the health risks associated with emissions and how the construction phase of the proposed project will affect current emission levels.
- Disclose any projected exceedances of federal air quality standards, even if temporary, and include appropriate mitigation measures.
- Include a detailed construction emissions mitigation plan to control PM10 from ground disturbance for each phase of project construction and adopt this plan in the Final EA.
- Include mitigation measures that detail how diesel emissions will be minimized for each phase of project construction. For example, require contractors to keep the equipment fine-tuned or use alternative fueled vehicles; use low sulfur fuel (diesel with 15 parts per million or less); reduce use, trips, and unnecessary idling from heavy equipment; lease newer and cleaner equipment (1996 or newer); and periodically inspect construction sites to ensure construction equipment is properly maintained at all times. Adopt this plan in the Final EA.
- Identify sensitive receptors in the project area, such as children, elderly, infirm, and recreational users, 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 as well as away from fresh air intakes to buildings and air conditioners. If there are no sensitive receptors, make an affirmative statement to that effect.

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Mitigation

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"). The Draft EA broadly indicates mitigation will be implemented to meet the goals of the Resource Management Plan for the Caldecott Wildlife Corridor and for impacts to wetlands, other waters, and the Alameda Whipsnake and its habitat. However, the Draft EA does not describe functions and values that the project may affect, what specific mitigation actions and onsite/offsite opportunities are proposed to offset those impacts, and how the mitigation will compensate for the lost functions and values.

Recommendation:

Consistent with CEQ's guidance, present all reasonable mitigation features in the Final EA. Describe the effects the project will have on specific functions and values and how the proposed mitigation will offset those impacts. 8

Growth and Traffic Volumes

Traffic in the SR 24 corridor is expected to grow in the future and result in increased delays through the tunnel, particularly in the reverse-commute direction. The project enhances the accessibility of commuters to jobs in the project corridor and may have the potential to affect regional truck usage of the corridor if congestion is relieved in the reverse-commute direction. The Draft EA indicates the project would not in itself induce unplanned growth in the area, but does not describe how the project may affect the rate of this growth.

Recommendation:

Describe how improved accessibility may affect the rate of growth of the area and any proposed measures to minimize and manage the rate of growth and mitigate impacts associated with rapid growth. Discuss the potential increase of regional truck use of the corridor in the reverse-commute direction and the effects of the increased truck traffic. 9 10

Hazardous Materials and Waste

The Draft EA does not address the use of hazardous materials in construction and operation. A hazardous materials management plan addressing both the construction and operation can provide specific protocols required for contractors and can also potentially reduce the volume and/or toxicity of waste requiring subsequent management as hazardous waste under the Resource Conservation and Recovery Act (RCRA).

Recommendation:

Address potential impacts due to the use of hazardous materials in construction and operation, and the expected types and volumes of hazardous materials. Address the applicability of Federal hazardous waste requirements that are approved by EPA under RCRA. 11

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1-It is true that the primary benefit of the project will be in the reverse commute direction (for details see Section 2.1.5.2, Traffic and Transportation/Pedestrian and Bicycle Facilities, Impacts in the Draft Environmental Assessment/Environmental Impact Report (DEA/EIR)). However, the total traffic delay, considering both eastbound and westbound trips, will still be much less with the construction of the Preferred Alternative than with the No-Build Alternative. We believe the Preferred Alternative does meet the Purpose and Need of the Project as stated in the DEA/EIR.

2-3–Alternative 2N has been identified as the Preferred Alternative; please see the "Preferred Alternative" essay in Chapter 1.

4- The disposal of excavated material will be determined by the contractor. The contractor will be able to explore potential uses for the excavated material and disposal sites. The contractor will be required to adhere to all state and federal regulations in disposal or use of the excavated material.

It is expected that the material resulting from the tunnel excavation will be free of anthropogenic contamination since it has never been previously exposed, thereby making it a very likely candidate for unrestricted reuse at other developments in need of imported fill. There is a chance that a small percentage of the excavation spoils will be impacted by the naturally occurring hydrocarbons (e.g., tar) observed in the geologic formations during the boring of the earlier tunnels. The excavation spoils will be screened for the presence of hydrocarbons and other chemicals (e.g., metals) to fully characterize the spoils' constituents and determine suitability for types of reuse.

Whether the spoils are reused as imported fill or disposed of at a landfill, the material will be handled in accordance with all applicable laws and regulations promulgated by federal, state, and local agencies. For example, landfill waste characterization will be governed by Title 22 of the California Code of Regulations and the federal parameters defined under the Resource, Conservation and Recovery Act (RCRA); additionally, reuse as imported fill should satisfy guidelines established by, amongst others, the State Water Resources Control Board acting through its regional water quality control boards.

5- Regarding truck traffic, please see the "Traffic" section in the "Construction Impacts" essay in Chapter 1. Regarding Air Quality, the Environmental Protection Agency (EPA) Transportation Conformity Regulations require a quantified microscale analysis for PM10s, however no methodologies are available yet to address the microscale impacts of PM10s. Should methods become available through an announcement in the Federal Register before approval of the Final Environmental Assessment/Environmental Impact Report (FEA/EIR), a quantitative analysis will be done. Qualitatively, in regards to particulates, this project would not be a project of air quality concern because the numbers of heavy-duty trucks using the facility will not be increased substantially by the project, and actual non-truck vehicle emissions of particulates are believed to be small. The California Air Resources Board through its Diesel Risk Program will promulgate a number of control measures, which will be implemented during the construction phase. In addition, the Bay Area Air Quality Management District (BAAQMD) feasible control measures for particulates will be implemented to the extent feasible. For other concerns, please see the essay on 'Construction Impacts" in Chapter 1.

6- Commented noted. Alternative 2N has been identified as the Preferred Alternative.

7- The project will implement, to the extent possible, control measures specified in the BAAQMD California Environmental Quality Act (CEQA) guidelines (1999) that will make pollutant emissions from construction activities less than significant. Hence quantification of construction emissions is not required. The California Air Resources Board through its Diesel Risk Program will set a number of control measures that will be implemented during the construction phase of the project. This program will provide reduction of risks to public health through the reduction of construction emissions. Construction equipment and staging areas will be kept away from sensitive receptors to the extent feasible. See also the essay titled "Construction Impacts" in Chapter 1.

8- Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures, in the FEA/EIR lists the appropriate mitigations for the Project. These are also summarized in the Summary.

As described in the environmental document, comprehensive technical studies addressing impacts to wetlands, other waters, and the Alameda whipsnake and its habitat have been completed.

Caltrans has initiated consultation with the United States Army Corps of Engineers (USACE), and as noted in the EA/EIR, mitigation requirements for both temporary and permanent impacts to wetlands and other waters will be determined through this consultation. Permanent impacts to wetlands will be compensated through purchase of wetland mitigation credits at an appropriate mitigation bank approved by the USACE prior to the start of construction.

As noted in Table 2.3.5-2 (Special-status Species Impacts for Build Alternatives), no Alameda whipsnake (AW) were observed during surveys of the project area. Additionally, impacts specific to Alameda whipsnake and California red-legged frog were analyzed, and formal Section 7 Consultation with the United States Fish and Wildlife Service (USFWS) was completed. The USFWS issued a No-Jeopardy Biological Opinion and Incidental Take Statement on August 8, 2007, and subsequently issued an amendment to the Biological Opinion on August 17, 2007. Measures committed to in the Biological Opinion will be incorporated into the project design. Mitigation for tree impacts resulting from the proposed project is addressed in the Comprehensive Conceptual Mitigation Plan developed during design For more information regarding adjacent local ordinances, please see the essay on "Methodologies Used for the Impact Assessments/Local Ordinances" in Chapter 1.

9- The effects on growth rates of development in the corridor are expected to be slight, similar to effects on overall growth. Section 2.1.2, Growth, has been revised in the FEA/EIR to clarify that the conclusions on growth also apply to growth rates. Please also refer to response #2 in the essay on "Traffic Modeling/Forecasting" in Chapter 1.

10- Regarding truck use in the corridor, please refer to response #4 in the essay on "Traffic Modeling/Forecasting" in Chapter 1.

11- The contractor is required to prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) for approval by the Department. The SWPPP shall include State Water Resources Control Board's Best Management Practices (BMPs) to address any, or all, of the following to the Maximum Extent Practicable (MEP): soil stabilization, sediment control, tracking control, wind erosion control, non-stormwater management, and waste management and materials pollution control. Hazardous Waste, Solid Waste, Liquid Waste, and Contaminated Soil Management Construction Site BMPs shall also be required. In general, the contractor would dictate the choice of methods of construction and materials used; thus, it is not possible for the Department to list all such items in the EA/EIR. Department site inspections would ensure adequate implementation of those BMPs identified within the SWPPP. Further, a sampling and analysis plan shall be prepared as part of the SWPPP to verify and ensure that no materials or wastes may be released from the construction site, effectively monitoring and protecting downstream water resources. These BMPs address operations during the construction phase of the project.