



Regional Planning Partnership

March 18, 2009

PM₁₀ Qualitative Analysis for I-80 Pavement Rehabilitation & Ramp Metering Project

Issue: Would the pavement rehabilitation with ramp metering project on I-80 from Sacramento River to Longview Drive create a significant enough impact from particulate matter (PM₁₀) emissions to find it to be a “project of air quality concern” (POAQC) which would require a qualitative hot spot analysis under Federal guidance.

Recommendation: That the Partnership, in its air quality conformity consultation role and using the criteria discussed below, make the finding that the pavement rehabilitation with ramp metering project on I-80 from Sacramento River to Longview Drive does not require a qualitative PM₁₀ hot spot analysis (i.e., the project is not a project of air quality concern).

Discussion: Projects in Sacramento County a non-attainment area for PM₁₀- that are non-exempt from regional emissions analysis may require a qualitative hot spot analysis if they meet certain criteria associated with specific types of projects. The guidance issued by EPA and FHWA requires qualitative hot spot analysis for the five following types of projects:

- I. New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;
- II. Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- III. New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- IV. Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- V. Projects in or affecting locations, areas, or categories of sites which are identified in the PM_{2.5} or PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project in question proposes making technology improvements and pavement rehabilitation on I-80; it's an independent project that will later be incorporated with the HOV project.

This project does not meet any of the criteria for a Project of Air Quality Concern as described in the EPA Final Rule of 3/10/2006 and the EPA Guidance of 3/29/2006.

Robert Nguyen of the California Department of Transportation (Caltrans) will be at the partnership meeting to discuss this item and answer questions.

JPC:ef
Attachment

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PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

MTIP ID# <i>(required)</i> CAL20378					
Project Description <i>(clearly describe project)</i> The Sac 80 Rehabilitation project, EA 03-0a931, proposes to construct the following: <ul style="list-style-type: none"> ○ Completely replace the existing number two and three lanes with Jointed Plane Concrete Pavement (JPCP) along I-80 in both directions between the Sacramento River BOH and Winters Street. The number 3 lane is to be paved at 14 feet wide where feasible. ○ The cross slope of the number 2 and number 3 lanes may be corrected to 2% where feasible. The outside shoulder to be replaced at full depth at these locations. ○ Replace all concrete pavement of the number 1 lane between Northgate Boulevard and Norwood Avenue. ○ Replace various concrete slabs in the number 1 lane in addition between Northgate Boulevard and Norwood Avenue. ○ Diamond groove/grind all lanes. ○ Ramp metering at West El Camino Avenue Interchange. ○ Ramp metering at Northgate Boulevard and Norwood Avenue westbound on-ramps. ○ Replace various signs at Reed Avenue. 					
Type of Project <i>(use Table 1 on instruction sheet)</i> Pavement rehabilitation and on ramp metering on existing state highway					
County Sacramento	Narrative Location/Route & Postmile: In Sacramento from Sacramento River Bridge and Overhead to 0.3 miles west of Norwood Avenue overcrossing. I-80: PM M0.3/M5.8 Caltrans Projects – EA# 03-0A931				
Lead Agency: Caltrans					
Contact Person Robert Nguyen	Phone# (916) 274-0653	Fax# 916-274-0684	Email robert_nguyen@dot.ca.gov		
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 X PM10 X					
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>					
X	Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
Scheduled Date of Federal Action: March 2007					
Current Programming Dates <i>as appropriate</i>					
	PE/Environmental	ENG	ROW	CON	
Start	5/15/2007	7/15/2008	2/15/2010	2/15/2012	
End	5/15/2009	5/1/2011	10/1/2011	11/1/2015	
Project Purpose and Need (Summary): <i>(attach additional sheets as necessary)</i> The purpose of the Sac 80 Rehabilitation project is: <ul style="list-style-type: none"> ○ Address the deteriorated condition of the concrete pavement. There are many slabs with 1st and 3rd stage cracking in the number 3 lane and various locations in the number 2 lane. The outside shoulder is spalling and separating from the mainline roadway. Roadway rehabilitation is necessary as frequent maintenance is not adequate. The rehabilitation strategy will extend the service life of the pavement and reduce maintenance. ○ Provide additional safety benefits. 					

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

<p>Surrounding Land Use/Traffic Generators <i>(especially effect on diesel traffic)</i> The project is located in an urbanized area of Sacramento. Land uses include residential, commercial, office, retail, industrial, institutional, recreational, and park/open space. Major adjacent land uses include McClellan Air Park, commercial uses between Truxel Road and Northgate Blvd., access to ARCO Arena, and various retail at the Truxel Road interchange.</p>			
<p>Opening Year: Build and No Build LOS- AM 2-Hr, % and # trucks, truck AM 2-Hr of proposed facility</p>			
2014	LOS	AM 2-Hr	Truck AM 2-Hr, % and #
Build	E	26,200	6.1% - 1,600
No-Build	E/F	22,500	6.1% - 1,375
<p>RTP Horizon Year / Design Year: Build and No Build LOS, AM 2-Hr, % and # trucks, truck AM 2-Hr of proposed facility</p>			
2034	LOS	AM 2-Hr	Truck AM 2-Hr, % and #
Build	F	30,300	6.3% - 1,910
No-Build	F	27,800	6.3% - 1,750
<p>Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT NA</p>			
<p>RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT N/A</p>			
<p>Describe potential traffic redistribution effects of congestion relief <i>(impact on other facilities)</i> N/A</p>			
<p>Comments/Explanation/Details <i>(attach additional sheets as necessary)</i></p>			

