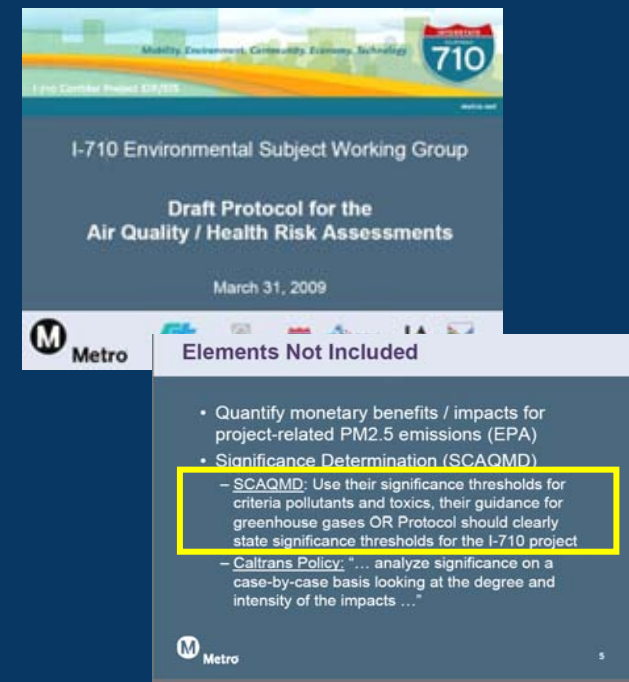


# AQMD Comments to Cal Trans on Air Quality/HRA Protocol February 2009

- AQMD provided written comments AQ/HRA Protocol
  - Need for Significance Thresholds
  - Quantification of Construction Impacts
  - Quantification of Localized Impacts for Criteria Pollutants
- Cal Trans response to AQMD comments on Significance Thresholds
  - Element Not Included
  - Cal Trans Policy, "...analyze significance on a case-by-case basis looking at the degree and intensity of impacts."



# OPR Thresholds of Significance

- Advantages to establishing significance thresholds
  - “...significance determinations will be made on a consistent and objective basis.”
  - “...promotes consistency, efficiency, and predictability...”
  - “...clear differentiation of whether or not the project may result in a significant environmental effect.”
  - “...some assurance that a comprehensive review has been made.”
  - “...provides a rational basis for significance determinations.”
  - “...encourage project proponents to incorporate mitigation into the design of the project...”



- Does not give assurance of consistency
- Disclosure needed of location of benefits and adversely affected receptors
- Comparing total benefited to adversely affected receptors is averaging impacts
- Does not address EJ issues
- Use of AQMD Thresholds will address this issue

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I-710 Corridor Project EIR/EIS

Environmental Subject Working Group  
September 14, 2009

FINDINGS WORKSHEET

2035 Project Alternatives (including the 2035 No Build Alternative) and the CEQA

Caltrans' legal stance on determining significance thresholds.

**Summary of ESWG Discussion to Date**  
 ESWG members have advocated for the adoption of SCAQMD significance thresholds for the I-710 Corridor Project EIR/EIS for the following reasons:

- The credibility of study conclusions is dependent on the pre-determination of significance thresholds.
- The entire I-710 study area lies within the South Coast Air Basin, so SCAQMD standards are relevant to the project.

**ESWG Recommendations:**

- Adopt SCAQMD's air quality significance thresholds for the evaluation of alternatives in the I-710 Corridor Project EIR/EIS or establish an alternative threshold based on CEQA Guidelines.
- Adopt significance thresholds before completion of draft AQ/HRA results.
- As to significance thresholds:

Caltrans statewide policy dictates that significance thresholds are determined on a case-by-case basis.

Per Caltrans policy, the number of benefited receptors will be compared to the number of adversely affected receptors to provide an overall determination of project impacts.

# Draft Environmental Impact Report (DEIR/S) Schuyler Heim Bridge Replacement and SR-47 Expressway Project (August 2007), Pages 4-2 and 4-3

analysis is included as part of the project-level conformity analysis. Because the  $PM_{10}$  hot spot analysis for the proposed project was completed prior to the release of the new guidance, it was completed in accordance with the previous guidance (EPA, 2006). Therefore,  $PM_{10}$  hot spots were addressed following the *Technical Report: Particulate Matter and Transportation Project Analysis Protocol (PM<sub>10</sub> protocol)* (UCD, Caltrans, FHWA, 2005).

Another indirect impact from the operation of the replacement Schuyler Heim Bridge is the effect associated with reconfiguration of the bridge. For alternatives where the existing lift-span of the Schuyler Heim Bridge would be replaced with a fixed span, detours and delays for marine vessels that would no longer pass under the bridge may result in increased emissions. However, the replacement of the lift-span would reduce emissions from automobiles and trucks that would not be waiting for the span to be lowered. Emission changes due to marine vessel detours during project operation are addressed in this report.

In addition to the criteria air pollutants for which there are NAAQS, EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries). MSATs are a subset of the 188 air toxics defined by the CAA. The MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. As required by EPA and FHWA, MSAT analysis is performed and included in this report.

The air quality impacts of the project alternatives were analyzed for 3 different study years, 2011, 2015, and 2030. The year 2011 represents the earliest foreseeable year that construction of the Schuyler Heim Bridge Replacement and SR-47 Expressway Project would be completed and operation would begin. The year 2015 represents the year when construction of the flyover is complete. The year 2030 represents the design year for the project and also the year for which the RTP was forecast and determined to conform.

## 4.2 Significance Criteria

### 4.2.1 Construction

Air quality impacts resulting from construction were deemed significant if daily emission estimates were above the significance thresholds for construction emissions provided in the SCAQMD CEQA Air Quality Handbook (SCAQMD, 2006). The construction emission thresholds are provided below.

- 75 pounds per day ROG
- 100 pounds per day  $NO_x$
- 550 pounds per day CO
- 150 pounds per day  $PM_{10}$
- 55 pounds per day  $PM_{2.5}$
- 150 pounds per day  $SO_x$

### 4.2.2 Operations

For operational air quality impacts resulting from vehicle emissions, a project would be considered significant if it would create a new CO,  $PM_{10}$ , and  $PM_{2.5}$  violation (federal standards) or would exacerbate an existing violation, as indicated by hot spot analyses.

Indirect impacts resulting from marine vessel emissions would be considered significant if the resulting increase would be above the significance thresholds for operational emissions provided in the SCAQMD CEQA Air Quality Handbook (SCAQMD, 2006). The operational emission thresholds are provided below.

- 55 pounds per day ROG
- 55 pounds per day  $NO_x$
- 550 pounds per day CO
- 150 pounds per day  $PM_{10}$
- 55 pounds per day  $PM_{2.5}$
- 150 pounds per day  $SO_x$

### 4.2.3 General Conformity

Increases in marine vessel emissions due to the construction and operation of the project are subject to general conformity applicability analysis. The EPA Final Conformity Rule requires that total direct and indirect emissions of nonattainment and maintenance criteria pollutants, including  $O_3$  precursors (VOCs and  $NO_x$ ), be considered in determining conformity. In this report, VOCs are assumed to be the same as ROG. If the total direct and indirect emissions of nonattainment and maintenance criteria pollutants from a federal action do not exceed *de minimis* threshold levels for criteria pollutants established in 40 CFR 93.135(b), general conformity rules do not apply. Tables 4 and 5 present the *de minimis* threshold levels of nonattainment and maintenance areas, respectively.

TABLE 4  
General Conformity *De Minimis* Thresholds in Nonattainment Areas

Pollutant	Degree of Nonattainment	<i>De Minimis</i> Threshold* (ton/yr)
$O_3$ (VOCs and $NO_x$ )	Serious	50
	Severe	25
	Extreme	10
	Other ozone – outside an $O_3$ transport region	100
$O_3$ (VOCs)	Marginal and moderate – inside an $O_3$ transport region	50
	$O_3$ ( $NO_x$ )	Marginal and moderate – inside an $O_3$ transport region
CO	All	100
$PM_{10}$	Moderate	100
	Serious	70

## *Draft Environmental Impact Report (DEIR/S) Interstate 405 Sepulveda Pass Widening Project (May 2007) Page 199:*

### **Construction Equipment Exhaust Emissions**

Construction activities associated with the build alternatives of the proposed project would be temporary and would last the duration of project construction. A qualitative construction emissions analysis has concluded that Project construction would not create adverse pollutant emissions. Short-term impacts to air quality would occur during minor grading/trenching, new pavement construction and the re-striping phase. Additional sources of construction related emissions include:

- Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site; and
- Exhaust emissions from the motor vehicles of the construction crew.

Project construction would result in temporary emissions of carbon monoxide, nitrogen oxide, Reactive Organic Gases, and PM<sub>10</sub>. Stationary or mobile-powered onsite construction equipment would include trucks, tractors, signal boards, excavators, backhoes, concrete saws, crushing and/or processing equipment, graders, trenchers, pavers and other paving equipment. Based on the low number of daily work trips required for project construction, construction worker trips are not anticipated to contribute substantially to traffic flow on local roadways.