



South Coast  
Air Quality Management District  
21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 ♦ www.aqmd.gov

**E-MAILED: November 13, 2015**

November 13, 2015

Mr. Ronald Kosinski,  
Division of Environmental Planning  
Caltrans District 7  
100 S. Main Street, MS 16-A  
Los Angeles, CA 90012

Ms. Yi Tian  
Environ  
18100V on Karman Avenue Suite 600  
Irvine, CA 92612

**Review of Revised Protocol for the Air Quality, Greenhouse Gas and  
Health Risk Assessments (AQ/HRA) for the I-710 Corridor Recirculated Environmental  
Impact Report / Supplemental Environmental Impact Statement (REIR/SEIS)**

The South Coast Air Quality Management District (SCAQMD) staff has reviewed the Revised Protocol (Revised Protocol) for the Air Quality, Greenhouse Gas and Health Risk Assessment (AQ/GHG/HRA) for the I-710 Corridor Recirculated Environmental Impact Report/ Supplemental Environmental Impact Statement (REIR/SEIS). As you are aware, SCAQMD staff has been engaged with the project proponents for many years, and we appreciate your reaching out to us for feedback on the air quality analysis. Detailed comments are attached to this letter. In addition, we refer you to comments<sup>1</sup> we made on the Draft EIR for this project and ask that any comments on the technical approach made in that letter be addressed in the RDEIR. Given the highly technical nature of the document, and our comments, we recommend that our technical staff meet with your technical experts to discuss our letter and your proposed approach.

Please contact me at (909) 396-3244 if you have any questions regarding these comments.

Sincerely,

A handwritten signature in black ink that reads "Ian V. MacMillan".

Ian MacMillan  
Planning and Rules Manager

LAC151013-01  
Control Number

IM:JW:SW:MS  
Attachment

---

<sup>1</sup> [www.aqmd.gov/docs/default-source/ceqa/comment-letters/2012/october/i-710-corridor-october-2012.pdf](http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2012/october/i-710-corridor-october-2012.pdf)

**Attachment**

**General Comments:**

- Tables 3-1 and 3-2 summarize the potential additional impact analyses currently proposed and currently not proposed for this project, respectively. The information contained in these tables is confusing and does not provide the reader with a clear understanding of what analyses will be included and what will be excluded. Furthermore, there is no explanation or information provided as to the rationale behind excluding analyses which should be included for CEQA projects. SCAQMD staff recommends that Tables 3-1 and 3-2 be revised to include additional information and justification as to why some analyses will not be included. For example it is unclear if localized air quality impacts from construction will be analyzed, and the rationale for excluding these impacts from the air quality analysis.
- The Revised Protocol should clearly state the significance thresholds being used for criteria pollutants, greenhouse gases, and TACs during the project construction, operation, and construction/operation overlap phases. Based on the Meeting Minutes of the I-710 EIR/EIS Corridor Project Committee on October 29, 2009, Caltrans had agreed to the use of SCAQMD's CEQA significance thresholds for assessing air quality and GHG impacts and the Revised Protocol should be updated to reflect this. The SCAQMD's CEQA significant thresholds can be found at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>.
- The Revised Protocol does not include information regarding the estimated construction schedule. This information should be included in the air quality analysis for the REIR/SEIS as it is important for determining the air quality impacts during interim years.
- The Revised Protocol does not indicate if any interim years will be modeled. Since this is a lengthy construction process, it is likely that the maximum project impacts will occur during a phase where the overlap of construction of one segment and operation of other completed segments will yield the highest emissions. Please indicate which interim or milestone years will be analyzed for the project and provide an explanation as to how those years were chosen. It is important to note that the use of a composite emissions scenario (i.e. the maximum emissions from each phase analyzed together in the same timeframe) is not recommended and should be avoided.
- Given the regional nature of this project, SCAQMD staff recommends that the mortality and morbidity impacts from the project be analyzed in the REIR/SEIS. SCAQMD staff looks forward to a meeting with Caltrans and its consultants to discuss this issue.
- When the REIR/SEIS is released for public review and comment, SCAQMD staff requests that electronic copies of all files used in the analysis be provided to SCAQMD staff for review. This includes electronic versions of all files used to develop emissions (e.g., spreadsheets), perform dispersion modeling (all input and output files), and any database files with the corresponding formulae, queries, and codes used.
- The Revised Protocol does not include the methodologies to be used to demonstrate conformity for PM Hotspots. The comments provided here by SCAQMD staff do not preclude future comments on any PM Hotspot protocols for this project.

## **Air Quality Analysis:**

### *Quantification of Emissions from Construction Equipment:*

- It is not clear what sources or models will be used to obtain the GHG and criteria pollutant emissions (SO<sub>2</sub>, CO, PM<sub>2.5</sub>) from construction equipment as the OFFROAD2011 model does not provide emission factors for these pollutants. If the PM<sub>10</sub> emissions from OFFROAD2011 will be used to derive the PM<sub>2.5</sub> contribution, please refer to the SCAQMD's Final Methodology to Calculate PM<sub>2.5</sub> and PM<sub>2.5</sub> Significance Thresholds, which can be found at [http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-\(pm\)-2.5-significance-thresholds-and-calculation-methodology/final\\_pm2\\_5methodology.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf).
- SMAQMD's linear construction model is proposed to be used to estimate the construction emissions. The project proponent should ensure that this model includes updated the most recent EMFAC2014 and OFFROAD2011 models. Additionally, the emission rates from the use of new tiered equipment should also be included to ensure that quantification of Metro's Green Construction Policy is included in the analysis.

### *Quantification of Emissions from Construction and Operational Vehicles:*

- The idling emissions from EMFAC2014 need to be included in the analysis.

### *Dispersion Modeling:*

- On page ES.6, there is a statement that AERMOD version 15181 will be used only if it is compatible with AERMET version 14134. Please explain how this compatibility will be determined.
- In Section 3.2.1 on page 43, it is not stated if the latest version of AERMOD (currently version 15181) will be run in regulatory default mode. Please provide information on the use of the regulatory default settings. In later sections of the Revised Protocol, it is stated the NO<sub>2</sub> will be modeled with AERMOD. However, there is no mention on the use of which screening tier(s) will be utilized in the NO<sub>2</sub> air dispersion modeling. If Tier 3 screening (using OLM or PVMRM) is anticipated, then AERMOD will need to be run using the regulatory non-default settings. Please provide more information on NO<sub>2</sub> specific settings for AERMOD, and whether more refined data is needed, such as O<sub>3</sub> data.
- Reference 69 on page 47 states that the latest version of the AERMOD Implementation Guidance was issued in March 2009. This document was updated by EPA in August 2015 to include additional information on urban/rural determinations and capped/horizontal stacks. Please update the date in the document to reflect the latest Implementation Guidance issued by EPA.
- On page 50 of Section 3.2.4, it is stated that "As multiple stations were selected to identify the meteorological profile of the AOI, the selected meteorological data can be considered as on-site data, and one year of data will be used for air dispersion modeling." SCAQMD staff does not agree that the use of multiple meteorological stations in an analysis constitutes these stations as on-site stations, and that only one year of meteorological data is therefore required. Proximity of a meteorological tower to a

project does not imply adequate representativeness of meteorological conditions in the areas of interest. Without further justification, SCAQMD staff recommends the use of the most recently available five years of meteorological data, as is recommended in EPA's Guidelines on Air Quality Models (40 CFR Part 51, or Appendix W). In the event that five years of meteorological data is not available, as in the case with the Compton station, three years of the most recent available meteorological data should be used.

- In Table 3-10, page 52, it is stated that the volume source width used the road width multiplied by a factor of 2. Please provide detailed information as to why this factor was used in determining the volume source width. More guidance regarding standard techniques for modeling roadways can be found in section J.3.3 in Appendix J of EPA's "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas".
- Under the heading "Fine Grid Receptors" in Section 3.2.7, page 54, details are provided on the volume source exclusion zone and how receptors placed in the exclusion zone will be handled. Particularly, it states that "Ramboll Environ will exclude such receptors...from the analysis if needed. Furthermore, receptors falling in between the I-710 mainline and the freight corridor will be excluded from the analysis." Because there are people living adjacent to the I-710 freeway, the ambient air receptors should not be removed from the modeling domain due to being in the volume source exclusion zone. Instead, the volume sources should be adjusted according to EPA's guidance, such as in section J.3.3 in Appendix J of the "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas". One method would be to model each lane of traffic with individual volume sources. The analyses should not exclude impacts to sensitive receptors in close proximity to the freeway by removing receptors in the volume source exclusion zone, as these people are most susceptible to the impacts of the project. Instead, the analysis should be based on the most recent geometry and include any occupiable spaces as receptors in the model. This will ensure that the air quality impacts to the most susceptible population is disclosed in the REIR/SEIS.
- Section 3.2.8, page 55, states that background data provided in Table 3-11 is for the years of 2011 – 2013, as 2014 monitoring data is not yet available. 2014 monitoring data for CO and NO<sub>2</sub> is available on SCAQMD's Historical Data by Year website at <http://www.aqmd.gov/home/library/air-quality-data-studies/historical-data-by-year>. Please update the background concentrations from 2011 – 2013 to 2012 – 2014. It should be noted though that monitoring station 72 (Long Beach North) was decommissioned in September 2013, so data for CO and NO<sub>2</sub> is not available for 2014 at this station. Also, the maximum 8-hour CO value for 2012 at Long Beach North was listed as 1.9 ppm. However, the 2012 value should be 2.2 ppm. Please correct Table 3-11 with the correct 2012 value.
- On page 53, Table 3-10, states that the initial vertical dimension and the release height for the entrained road dust are 1.2 meter and 1.3 meter above ground respectively. Please provide detailed explanations or revise the parameters used. Please refer to the guidance in section J.3.3 in Appendix J of EPA's "Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas" and EPA's "Haul Road Workgroup Final Report" in 2012 at

[http://www3.epa.gov/scram001/reports/Haul\\_Road\\_Workgroup-Final\\_Report\\_Package-20120302.pdf](http://www3.epa.gov/scram001/reports/Haul_Road_Workgroup-Final_Report_Package-20120302.pdf) for more information.

- The Revised Protocol states that schools and other sensitive receptors will not be modeled. SCAQMD staff disagrees with this approach and recommends that all sensitive receptors in close proximity to the project should be identified and modeled as discrete receptors so that all air quality impacts and health risks to these receptors are disclosed.

### **Greenhouse Gases Analysis:**

#### *Quantification of Greenhouse Gases Impact:*

- Please provide the proposed GWPs to be used to determine the GHG impacts from the project.
- The approach in the Revised Protocol as to the GHG impacts of the project is contrary to CEQA on climate change. It is not acceptable to dismiss the GHG impacts as being speculative. CEQA requires that a significance determination, based on substantial evidence, be made on the environmental topic of climate change.

### **Health Risk Assessment**

#### *Quantification of Air Toxics Emissions:*

- The MSAT/TACs emission factors should either come from the emission speciation of total organic compounds and PM available from CARB. For diesel vehicles, the use of diesel particulate matter (DPM) without further speciation is acceptable.

#### *HRA Modeling:*

- In addition to OEHHA Revised Guidance, the project's HRA modeling needs to comply with the SCAQMD's HRA guidance and use the SCAQMD's updated specific modeling parameters. The SCAQMD's methodology for estimating health risk from the mobile source can be found at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>. The SCAQMD's updated HRA guidance and the modeling parameters can be found at <http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588>.
- Given the duration of construction for this project and that OEHHA now recommends that health risks can be estimated for projects as short as two months in duration, SCAQMD staff recommends a discussion with Caltrans and its consultants on how to prepare a HRA accounting for the temporally and geographically changing emission profile of this project as it is constructed and operated.