

SCAQMD Staff Preliminary Comments - October 15, 2014:

1. Section 4.2.1, Page 15 – In selecting the roadway segments to be analyzed, the protocol states that the highest emissions were seen between mile marker 16 and 19. In the table showing the Detailed Emission Rates (lb/day) by segment, it would be useful to add the segment distance to provide the reader with a way to understand the emission rate per distance analyzed and would likely make the segment selection clearer.
2. Section 4.2.2, Page 16 – It is unclear how the roadways will be modeled. There are descriptions of the use of both area and volume sources to model the traffic links, freeway segments, and ramps. Since there are only 4 segments being modeled, it would be helpful to add figures to show the placement of the area or volume sources in relation to the roadways, show the placement of the receptors, and describe the modeling parameters for each segment (similar to Figures 6B to 6E). Further, ***EPA's input and concurrence would be helpful*** when calculating the appropriate release height and sigma z for the volume source.
3. Section 4.2.2, Page 16 & Section 4.3, Page 23 – The protocol proposes to use the surface roughness of the meteorological site in AERMOD. The AERMOD default is to use a surface roughness of 1.0 and SCAQMD's modeling guidance for AERMOD (<http://www.aqmd.gov/home/library/air-quality-data-studies/meteorological-data/modeling-guidance>) specifies that if AERMOD's non-regulatory default options are used, that the applicant provide justification. Please provide more information and justification for the use of the non-default surface roughness length. ***EPA's input and concurrence might be helpful in this matter.***
4. Section 4.2.2, Page 17 – The protocol proposes to use the study conducted by the city of Fontana for the trip generation rates associated with the warehouses. For high cube warehouse projects, the SCAQMD staff has been working on a Warehouse Truck Trip Study to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. Draft final results for the Warehouse Truck Trip Study are completed and are lower than current SCAQMD recommended truck trip rates in the California Emissions Estimator Model (CalEEMod). Details regarding this study can be found online here: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/high-cube-warehouse>. As an interim measure, staff is recommending truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects located in SCAQMD. Consistent with CEQA Guidelines, the project may use a non-default trip rate if there is substantial evidence indicating another rate is more appropriate for the air quality analysis. Staff will be bringing this item to the SCAQMD Governing Board in the Fall 2014 and anticipates to have a formal policy recommendation on truck trip rates for high cube warehouses based on the study results. Using the trip generation rates from the Fontana truck study would likely have underestimated the truck trips and possibly excluded some warehouses which should have been included.
5. Section 4.2.2, Page 17 – For PM emissions from warehouses, the protocol describes modeling 15-minutes of idling as an area source, which is appropriate. However, there is no mention of how the emissions from on-site truck movement and truck travel on local roads will be modeled (besides the mention of running exhaust emission factors). Please provide more clarification.

6. Section 4.4.1, Page 24 – The Upland monitoring station was excluded on the basis that the instruments at the station collect hourly PM data and therefore would not be representative of a 24-hour sample. It would seem logical that the hourly data could be averaged to get the equivalent 24-hour concentration. Please note that at the Upland monitor, the PM2.5 equipment is not an FEM BAM; furthermore, according to the U.S. EPA comparability tool, the FEM network did not meet the U.S. EPA criteria for comparability to the FRM for which SCAQMD obtained a waiver for 2012 and 2013 PM2.5 data (<http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan/2014-aagmnp-appendix-cA4ED7731453B.pdf?sfvrsn=2>). Although the background monitored values are excluded from being compared to the NAAQS, it does represent the background concentrations at the Upland location. The Transportation Conformity Guidance for Quantitative Hot-spot Analyses is not clear about this issue and ***EPA's input and concurrence in this matter is necessary.***
7. Section 4.4.1, Page 28 – Regardless of the validity of the monitored data at the Upland monitoring station, the use of the Fontana station for segment 4 is questionable, when the Ontario-Fire station is being used for segment 3. Please provide additional justification. For example, it would be more useful to show the monitoring/meteorological stations and corresponding wind roses, along with a zoomed in map of the land uses for each segment since the selection of the monitoring stations seems to be based on land uses. Another useful tool would be to use AERSURFACE to show the surface characteristics at each station and the segments.