South Coast
Air Quality Management District
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February 19, 2008

Ms. Jessica Kirchner
Southern California Association of Governments
Environmental Planning Division
818 West Seventh Street, 12th Floor
Los Angeles, CA 90017-3435

Dear Ms. Kirchner:

Draft 2008 Regional Transportation Plan Program Environmental Impact Report (DPEIR) (January 2008)

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated in the Final Environmental Impact Report.

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final Environmental Impact Report. The SCAQMD would be available to work with the Lead Agency to address these issues and any other questions that may arise. Please call me at (909) 396-3054 if you have any questions regarding these comments.

Sincerely

Steve Smith

Steve Smith., Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

Attachment

SS:JK:CB

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Control Number

Draft 2008 Regional Transportation Plan Program Environmental Impact Report (DPEIR)

1. **Construction Greenhouse Gas Emissions:** In Appendix B, the lead agency states that construction greenhouse gas emissions were calculated, in part, using the URBEMIS2007 model. The lead agency notes that the URBEMIS2007 model has limitations based on project size and does not proportionally adjust the fleet mix for large projects. As a result, the lead agency assumed an average project size of 100 dwelling units or 250,000 square feet of commercial development. The average project size was then modeled using URBEMIS2007, model defaults were used, and then the results were multiplied by the number of average-sized projects expected in each county. Staff was unable to verify the results because the URBEMIS2007 output reports were not included in Appendix B. Further, the assumptions regarding the number of average-sized projects for each county were also not included. Further, this analysis appears to exclude GHG emissions associated with construction of roadway and other transportation improvement projects, which appear to comprise a large portion of the 2008 RTP. The lead agency should provide more detail in the final PEIR with regard to the URBEMIS2007 output reports, assumptions used, and indicate whether or not construction emissions from roadway improvement projects were included in the overall results.

2. In the SCAQMD's 1/25/08 comment letter on the 2008 RTP from the SCAQMD's Executive Officer to SCAG's Executive Director, the SCAQMD notes that the 2008 RTP relies heavily on the benefits of accelerated upgrades to Tier 4 diesel locomotives. While substantial emission reductions can be achieved from Tier 4 engines, even greater emission reductions of NOx and particulate matter can be achieved through rail electrification and other zero emission technologies. SCAQMD staff, therefore, recommends that rail electrification and other zero emission technologies be evaluated, either as part of the 2008 RTP or as an alternative.

   Similarly, any projects that include increasing rail capacity should include developing more on-dock rail of sorted and unsorted containers at the ports. The SCAQMD is concerned about locating new rail yards in existing residential communities. Therefore, unsorted containers should be taken to new rail yards outside of the region in areas where there are no residential communities. SCAQMD staff recommends that these concepts either be evaluated, either as part of the 2008 RTP or as an alternative.

Health Risk Assessment

The following comments are based on information provided in the draft PEIR. SCAQMD staff requested additional information to clarify specific components of the analysis, but did not receive the requested information before the end of the public comment period.

3. In Appendix B, the lead agency identifies the limitations of preparing a health risk assessment for such an extensive freeway system with a horizon year of 2035. The health risk assessment, therefore, appears to be designed similar to a CO hot spots analysis where CO concentrations are estimated at the most impacted intersections for the existing setting, initial implementation year and a future date where traffic patterns have stabilized. Specifically, the lead agency chose a freeway segment in each county within its jurisdiction based on the highest traffic volumes. There are several potential problems with this approach as explained in the following paragraphs.

   First, although the freeway segments modeled were those experiencing the highest traffic levels, it is not clear if they represent the highest cancer risk. Other factors that influence risk include meteorology and distance to the nearest receptors. It is not clear if these factors were taken into consideration.

   Second, it appears that the analysis assumed that the freeways would maintain the current configurations, e.g., width. A number of recent roadway and freeway improvement projects include road widening, which brings the roadways and, therefore, traffic closer to receptors. It is assumed that future roadway improvement projects would also include widening the roadways through adding additional lanes. As a result, the distance to the potential receptors would be reduced, thus, potentially increasing cancer risk.

   Further, the RTP, as a comprehensive transportation program, also includes rail transport systems, high speed regional transport (HSRT) and the Compass Blueprint Growth Vision that lays out principles that seek to integrate land use and transportation with the goals of accommodating an expected six million additional residences by 2035. The health risk assessment does not appear to assess health risks from these components. As indicated in the SCAQMD's 1/25/08 comment letter on the 2008 RTP to SCAG's Executive Director, although the 2008 RTP calls for deployment of U.S. EPA Tier 4 locomotives in the region, the proposed standards would not occur until after 2015 and they do not require railroad operators to replace existing locomotives.

   Similarly, to the extent that the Compass two percent development occurs in areas disproportionately close to diesel emission sources, including diesel locomotives, adverse health impacts may result.

   It is unclear that the health risk assessment has addressed the above issues. SCAQMD staff requests that the above elements be analyzed and mitigated to the maximum extent feasible.

4. It is not clear how the emission factors used in the health risk assessment were developed. It appears that BURDEN emission factors from EMFAC2007 were used, since the screening risk assessment text states that the emissions were divided by VMT. BURDEN generates three emission factors (run, idle and start) for each

pollutant. The text in the Screening Risk Assessment of Sample Selected Projects Included in the Southern California Association of Governments' Draft 2008 Regional Transportation Plan (text) states that starting idling emission factors were not included, which implies that EMFAC emission factors were used instead of BURDEN. Detailed documentation should be provided that specifically states which emission module of EMFAC2007 was used (BURDEN or EMFAC). The documentation should state specifically which emission factors were used (run, idle, start for BURDEN; running exhaust, hot soak, etc. for EMFAC).

Since adequate documentation was not provided, the emission factors could not be verified. An example EMFAC2007 output and description of which emission factors where used from the output should be included in the documentation for the Final PEIR.

5. The emission rates in the air dispersion model were adjusted for time of day variations in the traffic volume in the air dispersion model. It is not clear if this was appropriate.

   BURDEN generates daily average emission factors. Multiplying the BURDEN emission factors by the daily average traffic volume generates daily average emission rates. If BURDEN emission factors were used, adjustment for time of day variations in traffic volume would not be appropriate.

   EMFAC generates speed rated emission factors (i.e., emission factors are generated for a specific vehicle speed). Traffic volume is typically inversely proportional to vehicle speed. If EMFAC emission factors were used, then the emission factors should change with traffic volume to reflect the reduction in speed. If speed rated EMFAC emission factors were used, documentation for the Final PEIR should demonstrate that the adjustment for time of day variations in traffic volume were appropriate. If BURDEN emission factors were used, then the adjustment for time of day variations in traffic volume are not appropriate and the air dispersion modeling should be revised in the final PEIR and appropriate documentation provided.

6. It is not clear from the text which specific EMFAC2007 categories (LDT1, LDT2, MDV, HHDT, etc.) were used with which specific MOBILE6 categories. An example of how the emission factors from EMFAC2007 and MOBILE6 emission factors for toxics were developed that shows how the categories were matched should be included with the documentation for the Final PEIR.

7. The text states that carcinogenic pollutant emissions for each modeling each modeling analysis were converted to equivalent units of cancer risk and distributed uniformly over each area source. This could not be verified. The CONCUNIT parameter is listed as 1,000,000 (GRAMS/SEC) with an output in (MICROGRAMS/CUBIC-METER) in the air dispersion input file. Table 4 Fleet-wide Composite Risk Emission Factor for 2035 Baseline I-405 NB Mixed-Use Link presents a risk emission factor of 2.61E-6 g-risk/mi-ug/m3. Since the emission rate in

ISCST3 is in units per time, there is a time factor that prevents verification of the emission rates. The Final PEIR should document how the exact emission rate input into the air dispersion model was developed.

8. The text states that the SCAQMD 1981 meteorological files were used. The meteorological file for Los Alamitos listed in the input file is LOSALAMS.ASC. The SCAQMD met file is named LOSALAM.ASC. Because of the name difference it is not clear if SCAQMD 1981 meteorological files were used.

9. Review of the modeling analysis indicates that the missing data processing routine was used. The SCAQMD recommends for typical dispersion modeling within the SCAQMD's jurisdiction that the missing data processing routine parameter should not be used.

10. Review of the modeling analysis indicates that the WINDCATS parameters were used. The SCAQMD recommends for typical dispersion modeling within the SCAQMD's jurisdiction that the WINDCATS parameters should not be used.

11. A summary of the highest concentrations and health risk for valid receptors for each run was not completed. Some of the receptors appear to overlap the area sources. Also it is not clear which receptors are residential. A summary of the highest concentrations and health risk for valid receptors for each air dispersion run should be included in the documentation for the Final PEIR.

12. It is not clear why only health risks to residential receptors reported. Worker health risk should also be reported in the Final PEIR.

13. It is unclear what is represented by Table 6 "Increased Cancer Risk at Maximum Exposed Residence from Vehicle Operation by Planning Scenario and Freeway Corridor." Typically, there is no increased cancer risk from the existing setting, but a total existing cancer risk. It is unclear what increased cancer risk from the existing setting means (i.e., the 2008 existing setting). Typically the health risk from the project at the existing setting would be zero. So, it appears that the total health risk is reported in Table 6 and should be labeled as such.

    Based on the title, it appears that the incremental health risk from the 2035 scenarios is the difference between the 2035 scenarios and the 2008 existing setting. However, since the existing setting health risk appears to be total health risk, it is possible that the 2035 health risks in Table 6 are also total health risk instead of incremental cancer risk as stated in the title. If this assertion is correct, Table 6 should be corrected in the Final PEIR to identify which cancer health risks are total health risks and which are incremental health risks. It would be even clearer if a table with total health risk from the existing setting and each project scenario is presented and a second table is included that presents the incremental increase or decrease in health risk from the proposed project compared to the existing setting.

14. The DPEIR compares the health risk values of the future planning scenarios, but does not provide a discussion on why the health risk values vary between the planning scenarios. There should be a sufficiently detailed discussion in the Final PEIR regarding what contributes to the differences in the future planning scenarios that would lead to different traffic volumes, which would cause increased health risk. The discussion should describe which scenario better achieves the project objectives and benefits in each future planning scenario. The additional detail should be added, since it is possible that a scenario may generate benefits that could cause decision makers to choose it over another scenario with less health risks that does not achieve as many benefits. As presented, the analysis does not provide enough information for the public to determine how each alternative's parameters contribute or reduce health risk in relation to the parameters in the other alternatives.

15. **Conformity:** The conformity determination includes projects that do not show full funding. According to federal guidelines, all projects included in the conformity analysis must show reasonable funding for the duration of the project life, i.e. Caltrans Rte. 5 HOV/Truck lanes project which has approx. $500,000 of committed funding – this is a $400 billion project; High Desert Corridor Toll Project has been identified as requiring a joint public/private partnership, needing some type of funding commitments. If the RTP is not accepted and subsequently approved with the above types of projects modeled, is there a contingency plan with alternative projects which can be funded with the current funding sources that are committed and available?

16. **Project Specific Analysis:** The SCAQMD understands that the level of detail of the analysis in a program EIR is not as great as the level of detail of the project-specific analysis for the projects that follow. Therefore, The SCAQMD looks forward to reviewing the CEQA documents for the individual projects that comprise the 2008 RTP.