

4.7 Air Quality

4.7.1 Methodology for Impact Evaluation

A number of air quality modeling tools are available to assess project level air quality impacts of individual projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, *CEQA Air Quality Handbook, April, 1993*, were adhered to in the assessment of air quality impacts for the proposed project. For additional information about the air quality analysis, please see the Air Quality Technical Report for the Winchester to Temecula Corridor (LSA, 2002).

The air quality impacts from the proposed project includes emissions associated with short-term construction and long-term operation of the proposed project. Due to the characteristics of the proposed project, i.e., a regional circulation improvement plan, regional air quality impacts include only mobile source emissions associated with regional vehicle miles traveled (VMT). Mobile emissions include vehicles using the system of roadways included in the study area. In addition, localized air quality impacts from carbon monoxide emissions (CO hot spots) along the project corridors would potentially occur due to the proposed changes.

The air quality analysis focuses on the potential differences in regional vehicular emissions among various project alternatives. Because there is no information available at this stage of the planning process for construction schedule and activity, construction emissions impacts are discussed qualitatively. In addition, the information on peak hour vehicle turn movements at intersections in the project area is not available at this time, therefore, no detailed CO hot spot analysis could be conducted. Construction emissions and CO hot spot analysis will be conducted in a future Tier 2 environmental review document, when more specific construction information and peak hour vehicle movements are available for analysis.

Transportation conformity is a way to ensure that Federal funding and approval are given to those transportation activities that are consistent with air quality goals. It ensures that these transportation activities do not worsen air quality or interfere with the "purpose" of the State Implementation Plan (SIP) which is to meet the NAAQS. Meeting the NAAQS often requires emissions reductions from mobile sources.

According to the CAA, transportation plans, programs, and projects cannot:

- C Create new NAAQS violations;
- C Increase the frequency or severity of existing NAAQS violations; or
- C Delay attainment of the NAAQS.

To determine a project's conformity, the following would usually be required:

- C Projects must come from conforming RTP/RTIP
- C Currently conforming RTP/RTIP must be in place for project approval
- C Hot-Spot analysis in CO and PM₁₀ control measures
- C Compliance with SIP's PM₁₀ control measures

Because the proposed project is a Tier 1 level impact study (i.e., the Tier 1 action is route selection for right-of-way preservation, not a precise alignment for construction), no CO or PM₁₀ hot spot analysis is required. These studies will be conducted later in a Tier 2 document.

The daily operational emissions thresholds for the SCAB area are as follows.

- 55 pounds or 0.0275 tons per day of ROC
- 55 pounds or 0.0275 tons per day of NO_x
- 550 pounds or 0.275 tons per day of CO
- 150 pounds or 0.075 tons per day of PM₁₀
- 150 pounds or 0.075 tons per day of SO_x.

4.7.2 Impacts

Air pollutant emissions associated with the proposed CETAP project would occur from construction activities, such as fugitive dust from site preparation and grading and emissions from equipment exhaust. The proposed CETAP project would not generate any new vehicular trips and their corresponding emissions. There would be no regional emissions associated with new vehicular trips. There would also be very limited stationary source emissions from energy consumption, such as natural gas and electricity usage from the proposed project, as a result of roadway lighting.

4.7.2.1 Construction Impacts

Air quality impacts would occur during the site preparation, including grading and equipment exhaust. Major sources of emissions during grading and site preparation include exhaust emissions from construction vehicles and equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces, as well as by soil disturbances from grading and filling. Implementation of mitigation measures will minimize air quality impacts.

Because no detailed construction schedule and activity is available at this stage of the planning process, no emissions estimate was conducted for the construction of the proposed project. A detailed construction emissions estimate will be conducted in Tier 2, at which time more specific construction information will be available for analysis. However, the project will be required to comply with regional rules, which would assist in reducing the short-term air pollutant emissions. Fugitive dust from a construction site, generally associated with grading activities, must be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Dust suppression techniques should be implemented to prevent fugitive dust from creating a nuisance off site. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM₁₀ component) by 50 percent or more.

4.7.2.2 Long-Term Regional Air Quality Impacts

Long-term air emission impacts are those associated with stationary sources and mobile sources related to any change in vehicle travel resulting from the project. Although the proposed project is not expected to result in new regional vehicular traffic trips within