Draft Proposed Methodology for Conducting the Air Quality Conformity Determination for the 2050 RTP

Introduction

SANDAG is currently developing the 2050 Regional Transportation Plan (RTP), which is anticipated to be adopted in summer 2011 along with its air quality conformity determination. While the horizon year of this RTP is 2050, both the current version of the emissions model approved by the U.S. Environmental Protection Agency (EMFAC 2007) and the new version of the model (EMFAC 2010), which is under development by the California Air Resources Board (CARB), only contain emissions factors to 2040. Since no other emissions model is approved for use in conformity determinations by Metropolitan Planning Organizations in California, SANDAG staff has explored options under the Transportation Conformity Rule to conduct the air quality conformity determination for the 2050 RTP.

San Diego Region Air Quality Designations

The federal Clean Air Act (CAA), which was last amended in 1990, requires the U.S. Environmental Protection Agency to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. Areas with levels that exceed the standard for specified pollutants are designated as non-attainment areas.

Eight-Hour Ozone

On April 15, 2004, the U.S. Environmental Protection Agency (EPA) designated the San Diego air basin as nonattainment for the 1997 Eight-Hour Ozone Standard. This designation took effect on June 15, 2004. Several areas that are tribal lands in eastern San Diego County were excluded from the nonattainment designation.

The air basin was initially classified as a basic nonattainment area under Subpart 1 of the Clean Air Act and the maximum statutory attainment date for the 8-Hour Ozone Standard was set as June 15, 2009. In response to a court decision, however, on January 16, 2009, U.S. EPA proposed that, among other areas of the country, the San Diego basic nonattainment area will be reclassified as a Subpart 2 moderate nonattainment area, with a maximum statutory attainment date of June 15, 2010. Final EPA action on this proposed reclassification has not been taken.

In cooperation with the San Diego County Air Pollution Control District and SANDAG, the CARB developed an 8-Hour Ozone Attainment Plan which was submitted to the U.S. EPA on June 15, 2007. The budgets in the Eight-Hour Ozone Attainment Plan for San Diego County were found adequate for transportation conformity purposes by the U.S. EPA, effective June 9, 2008.
Carbon Monoxide

In June 1998, the U.S. EPA approved California’s Maintenance Plan for Carbon Monoxide (CO) and redesignated the San Diego air basin as a federal attainment/maintenance area for the CO standard. On November 8, 2004, the CARB submitted to the U.S. EPA the 2004 revision to the California State Implementation Plan (SIP) for CO, which covers the second ten-year maintenance period to 2018. Effective January 30, 2006, the U.S. EPA has approved this maintenance plan as a SIP revision.

Conformity Rule Provisions for Shortening the RTP Timeframe

Eight-Hour Ozone

The San Diego air basin does not have an adequate or approved Maintenance Plan for the 1997 8-Hour Ozone Standard. According to 40 CFR 93.106 (d), for areas that do not have an adequate or approved maintenance plan, the Metropolitan Planning Organization (MPO) may elect to shorten the timeframe of the RTP conformity determination, after consultation with state and local air quality agencies, solicitation of public comments, and consideration of such comments (40 CFR 93.106(d)(2)). The conformity determination must be accompanied by a regional emissions analysis (for informational purposes only) for the last year of the transportation plan (40 CFR 93.106(d)(2)(ii)).

The shortened timeframe must extend at least to the latest of the following years (40 CFR 93.106(d)(2)(i)):

(A) the tenth year of the transportation plan (for SANDAG, 2021)

(B) The latest year of the adequate emissions budget (for SANDAG, 2008)

(C) The year after completion of a regionally significant project if the project is included in the Transportation Improvement Program (TIP) or the project requires approval before the subsequent conformity determination (for SANDAG, there will be regionally significant projects up to and beyond 2040; the next RTP conformity determination is anticipated in 2015)

Given the availability of EMFAC 2007 and the future EMFAC 2010 emissions factors to 2040, SANDAG only will be able to determine conformity of the 2050 RTP to 2040 as the latest conformity year. A regional emissions analysis for the 8-Hour Ozone Standard will be conducted for regionally significant projects included in the 2050 RTP between 2041 and 2050 for informational purposes.

Carbon Monoxide

The San Diego air basin has an approved Maintenance Plan. According to 40 CFR 93.106 (d)(3), for areas that have an adequate or approved Maintenance Plan, the MPO may elect to shorten the timeframe of the conformity determination to extend through the last year of such maintenance plan, after consultation with state and local air agencies, solicitation of public comments, and consideration of such comments.

For the San Diego air basin, the last year of the CO Maintenance Plan is 2018. U.S. EPA Region 9 staff has consulted with its Office of Transportation and Air Quality and has confirmed that the timeframe could extend beyond the last year of the Maintenance Plan, to 2040 for the 2050 RTP conformity.
SANDAG Proposal for Shortening the Timeframe of the 2050 RTP Conformity Determination

SANDAG staff is proposing to shorten the timeframe of the air quality conformity determination for the 2050 RTP to the year 2040. A regional emissions analysis for the 8-Hour Ozone and Carbon Monoxide standards will be conducted for regionally significant projects included in the 2050 RTP between 2041 and 2050, for informational purposes.

Proposed 2050 RTP Air Quality Conformity Methodology

SANDAG staff will conduct the Air Quality Conformity Analysis for the 2050 RTP 2011 through 2040, with the analysis years of 2018, 2020, 2030, and 2040. SANDAG will prepare a regional emissions analysis (for information purposes only) for 2050. To perform the informational analysis SANDAG will use the 2050 travel data from the SANDAG transportation model as input into EMFAC 2007 for the last year of the EMFAC 2007 model (2040).\(^1\)

\(^1\) This methodology also would be applied using the EMFAC 2010 model once available.