



METROPOLITAN
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COMMISSION

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Memorandum

TO: Air Quality Conformity Task Force

DATE: May 20, 2015

FR: Harold Brazil

W.I.:

RE: Approach to the Conformity Analysis for the Amended 2015 Transportation Improvement Program and Plan Bay Area

MTC staff is developing the Draft Transportation Air Quality Conformity Analysis for the Amended 2015 Transportation Improvement Program (TIP) and Plan Bay Area and seeks the Air Quality Conformity Task Force's review of the proposed approach to adhere to federal conformity regulations. The analysis will include I-580 access improvements to the Richmond-San Rafael (RSR) Bridge which will yield traffic congestion benefits (in the eastbound direction of I-580 in Marin County) and provide bicycle and pedestrian access between Contra Costa and Marin Counties. This project will likely result in negligible changes in the air quality conformity analysis as compared to that completed in December 2014 for the 2015 TIP and Plan Bay Area.

MTC is scheduled to release the Draft Transportation Air Quality Conformity Analysis for the Amended 2015 TIP and Plan Bay Area on Wednesday, June 24, 2015. Attachment A includes a full schedule for review and approval of the conformity analysis for the Amended 2015 TIP and Plan Bay Area.

Ozone Requirements

On February 13, 2015, the U.S. Environmental Protection Agency (EPA) issued a final rule that addresses a range of implementation requirements for the 2008 National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The EPA set the final primary and secondary standards at 0.075 ppm on March 12, 2008.

This final rule addresses a range of nonattainment area state implementation plan (SIP) requirements for the 2008 ozone NAAQS, including requirements pertaining to attainment demonstrations, reasonable further progress (RFP), reasonably available control technology (RACT), reasonably available control measures (RACM), major new source review (NSR), emission inventories, and the timing of SIP submissions and of compliance with emission control measures in the SIP.

Other issues also addressed in the final rule was the revocation of the 1997 ozone NAAQS and anti-backsliding requirements that apply when the 1997 ozone NAAQS were revoked. In addition, this final rule revokes the 1997 NAAQS for all purposes, including transportation conformity, upon its effective date, which occurred 30 days after publication in the Federal Register (which was April 6, 2015).

PM_{2.5} Requirements

The Bay Area's designation as nonattainment was published in the Federal Register on November 13, 2009 and the designation became effective on December 14, 2009. Nonattainment areas were required to meet the standard by 2014 and transportation conformity requirements began to apply to the Bay Area on December 14, 2010.

On February 8, 2013, EPA took final action and determined that the San Francisco Bay Area nonattainment area attained the 2006 24-hour PM_{2.5} National Ambient Air Quality Standard (NAAQS). This determination was based upon complete, quality-assured, and certified ambient air monitoring data showing that this area has monitored attainment of the 2006 24-hour PM_{2.5} NAAQS based on the 2009–2011 monitoring period. Based on the above determination, the requirements for the San Francisco Bay Area nonattainment area to submit an attainment demonstration (including transportation conformity emission budgets), together with reasonably available control measures (RACM), a reasonable further progress (RFP) plan, and contingency measures for failure to meet RFP and attainment deadlines were suspended for as long as the Bay Area continues to attain the 2006 24-hour PM_{2.5} NAAQS.

Therefore, since approved motor vehicle emissions budgets for PM_{2.5} are not available for use in this conformity analysis, MTC must complete one of the two interim emissions tests:

1. “Baseline Year Test”. Emissions for each analysis year for the “Action” are less than or equal to the level of emissions in the year 2008¹; or
2. “Build/No-Build Test”. Emissions for each analysis year in the “Action” scenario are less than or equal to emissions from the “Baseline” scenario.

Analysis Approach

MTC will review the proposed conformity approach at this May 28th Conformity Task Force meeting. MTC will review the approach with the Conformity Task Force again when we present the draft conformity analysis in June 2015. Key aspects of the conformity analysis are as follows:

1. Regional Emissions Analysis: MTC will conduct a new regional emissions analysis to conform the 2015 TIP and the Plan.
2. Latest Planning Assumptions: MTC will use the latest planning assumptions, including:
 - The socio-economic/land use forecast *Jobs/Housing Connection* developed by the Association of Bay Area Governments (ABAG). ABAG staff prepares master databases at the 1,405 census tract-level, and MTC staff then disaggregates these tract-level forecasts to MTC’s 1,454 travel analysis zone system.
 - Updated travel demand forecasts using MTC’s *Travel Model One* (version 0.3), released in spring 2012, calibrated to a 2000 base year, and validated against both year 2000 and year 2005 observed conditions with the most up to date highway and transit networks.
 - VMT estimates used in the EMFAC2011 emission model will be consistent with the California Air Resources Board’s (CARB) recommended adjustment methods.
3. Latest Emissions Model: MTC will apply EMFAC2011 model system to produce emission estimates.
4. Emissions Budget/Interim Emissions:
 - **Ozone**: MTC will use the 1-hour motor vehicle emissions budget from the *2001 Ozone Attainment Plan* as the 8-hour motor vehicle emissions budget to demonstrate conformity with the 8-hour ozone standard. The ozone budget for ROG and NO_x was compared to quantified emissions for analysis years **2020, 2030 and 2040**.
 - **Carbon Monoxide (CO)**: MTC will use the CO motor vehicle emissions budget from the 2004 Revision to the *California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas* to determine conformity

¹ See 40 CFR 93.119; <http://www.epa.gov/otaq/stateresources/transconf/baseline.htm>

with the CO standard. The CO budget will be compared to projected emissions for analysis years **2018** (the CO Maintenance Plan horizon year), **2020, 2030 and 2040**.

- **PM_{2.5}**: MTC will use the “Baseline Year Test” interim emission test to demonstrate conformity with the 24-hour PM_{2.5} standard. Consistent with EPA’s Transportation Conformity Rule PM_{2.5} and PM₁₀ Amendments; Final Rule published in the federal register in March 2010. MTC will quantify emissions for both directly emitted PM_{2.5} and NO_x (as the precursor to PM_{2.5} emissions) and for the baseline year test, emissions from the planned transportation system are compared to emissions that occurred in the baseline year for analysis years **2020, 2030 and 2040**. The analysis will be carried out using inputs for the winter season, during which the Bay Area experiences its highest levels of PM_{2.5} concentrations. MTC will present documentation regarding the projects proposed for inclusion in the Build scenarios.
5. **Transportation Control Measure (TCM) Implementation**: The motor vehicle emissions estimates for ROG and NO_x will include the effects of TCMs A-E in the 2001 Ozone Attainment Plan. These TCMs are now fully implemented.
 6. **Financial Constraint**: The TIP must be financially constrained by year, meaning that the amount of dollars committed to the projects (also referred as “programmed”) must not exceed the amount of dollars estimated to be available. The draft amended 2015 TIP includes the fiscal constraint analysis. No financial changes are proposed for the Plan, so the Plan remains financially constrained in accordance with federal requirements.
 7. **Interagency and Public Consultation**: MTC will conduct the appropriate agency and public consultation for the Draft Transportation Air Quality Conformity Analysis for the Amended 2015 TIP and Plan Bay Area.

Attachment A: Draft Transportation Air Quality Conformity Analysis for the Amended 2015 Transportation Improvement Program (TIP) and Plan Bay Area

Activity	Timeline
Conformity Task Force Reviews Proposed Conformity Approach	May 28, 2015
MTC Staff Conducts Technical Analysis & Report Preparation	May-June 2015
Discuss Draft Conformity Analysis with AQCTF	June 18, 2015
Authorize Release for Public Review and Begin Public Comment Period	June 19, 2015
End of Public Comment Period	July 20, 2015
AQCTF Briefing on Responses to Comments	August 27, 2015
Committee Approval	September 11, 2015
Commission Approval	September 23, 2015