



METROPOLITAN
TRANSPORTATION
COMMISSION

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Memorandum

TO: Partnership Technical Advisory Committee

DATE: January 31, 2011

FR: Grace Cho

W. I.

RE: PM_{2.5} Project Level Conformity – New Quantitative Hot-Spot Analysis Procedures

Overview

On December 14, 2009, EPA designated the Bay Area region as non-attainment for the criteria pollutant Particulate Matter 2.5 (PM_{2.5}). As a designated non-attainment area, the Bay Area will be subject to new conformity requirements, which includes individual project level conformity for PM_{2.5}. Starting on December 14, 2010 Bay Area project sponsors will be required to undergo project level conformity determinations for PM_{2.5} if their project meets certain criteria. This project level conformity determination process usually is completed in parallel with the project's environmental review process.

Under federal requirements, projects which are not exempt, as defined by 40 CFR 93.126 and 40 CFR 93.128 are required to undergo PM_{2.5} project conformity. Of those projects undergoing project level conformity process, some will be required by the federal regulation to complete a hot-spot analysis. In particular, these projects pertain to highway and transit projects that involve significant levels of diesel traffic. Established and defined by 40 CFR 93.123(b)(1), these projects are considered as "projects of air quality concern"(POAQC).

MTC developed and adopted PM_{2.5} interagency consultation procedures (MTC Resolution No. 3946), which establish the Air Quality Conformity Task Force as the forum for interagency consultation on whether a project qualifies as a project of air quality concern (POAQC) and for reviewing the assumptions, methods, and analysis to be included in the PM_{2.5} hot-spot analysis. Projects meeting POAQC criteria that have already completed the environmental phase but still require subsequent federal approval will need to undergo hot-spot analysis prior to the next federal approval action.

Hot-Spot Analysis

A hot-spot analysis is an estimation of likely future localized pollutant concentrations and a comparison of those concentrations to the national ambient air quality standards. It estimates the air quality impacts of a project on a small scale, such as at a congested roadway intersection or a bus terminal, and uses an air quality dispersion model to determine the effects of emissions on air quality. Project sponsors of projects of air quality concern must complete a hot-spot analysis consistent with the most recent EPA/DOT guidance. Hot-spot analyses also may include mitigation measures, as appropriate, to address any air quality concerns identified in the analysis.

Hot-Spot Analysis Methods

In 2006 EPA established qualitative hot-spot analysis procedures for demonstrating project-level PM_{2.5} and PM₁₀ conformity. However, the qualitative analysis approach will no longer be in effect due to new EPA quantitative procedures that will go into effect on December 20, 2012.

In May 2010, EPA released the draft revised PM_{2.5} and PM₁₀ quantitative hot spot analysis guidance for project level conformity. This guidance introduces quantitative (dispersion modeling) analysis to replace the qualitative emission analysis process used in the 2006 guidance for projects of air quality concern. EPA held a public comment period from the draft release date to July 19, 2010 and hosted webinars to introduce the new quantitative hot-spot analysis methodology.

On December 20, 2010, EPA announced the approval of quantitative PM_{2.5} and PM₁₀ hot-spot analysis procedures. The quantitative procedures will replace the EPA approved 2006 qualitative hot-spot procedures. On the same date, EPA announced the approval of the EMFAC2007 emissions model for quantitative hot-spot analyses for transportation conformity purposes within California. As of this date, projects have a two-year grace period before the quantitative procedures and the use of EMFAC2007 is required to be used for PM hot-spot analyses for project-level conformity determinations in California.

Starting on December 20, 2012 the quantitative method will be required for all PM hot-spot analysis in non-attainment and maintenance areas. While EPA is approving the EMFAC2007 models today for project-level transportation conformity purposes, this notice is applicable to current and future versions of EMFAC models, unless EPA notes otherwise when approving the models for conformity purposes. In addition, EPA announced the availability of new guidance documents for completing quantitative particulate matter (PM_{2.5} and PM₁₀) hot-spot analysis. For more information or to access to PM_{2.5} quantitative guidance document, please see: www.epa.gov/OTAQ/stateresources/transconf/policy/420b10040.pdf