U.S. Department of Transportation
Federal Highway Administration

Memorandum

SENT VIA ELECTRONIC MAIL

Subject: **INFORMATION:** Federal Highway Administration Carbon Monoxide Categorical Hot-Spot Finding with MOVES2014a

Date: July 17, 2017

From: Cecilia Ho
Acting Director, Office of Natural Environment

In Reply Refer To:
HEPN-10

To: Division Administrators
Federal Lands Highway Division Engineers

PURPOSE

The purpose of this memorandum is to announce the availability of the Federal Highway Administration's (FHWA's) carbon monoxide (CO) categorical hot-spot finding updated with MOVES2014a. The original finding was completed on February 12, 2014, following provisions in the transportation conformity rule at 40 CFR 93.123(a)(3) for urban highway projects that include one or more intersections in CO maintenance[1] areas, except in California. Project sponsors may be able to rely on the categorical hot-spot finding in place of doing an independent CO hot-spot analysis as part of a project-level conformity determination in CO maintenance areas. This 2017 CO categorical hot-spot finding updates and supersedes the February 2014 finding, and uses the latest version of the MOVES emissions model, MOVES2014a. The FHWA consulted with the U.S. Environmental Protection Agency (EPA) and the Federal Transit Administration (FTA) during the development of this CO categorical hot-spot finding with MOVES2014a and addressed all issues raised prior to issuing this finding.

BACKGROUND

On October 7, 2014, EPA provided notice that the MOVES2014 motor vehicle emissions model was available for determining transportation conformity (79 FR 60343). That notice began a 2-year grace period that ended on October 7, 2016, after which MOVES2014 must be used for new transportation conformity analyses outside of California. The transportation conformity rule requires that all conformity analyses must be completed using the latest emissions model and allows for a grace period before the latest model must be used for conformity (40 CFR 93.111). The FHWA's February 2014

[1] EPA's "Greenbook" states that, "As of September 27, 2010, all carbon monoxide areas have been redesignated to maintenance areas."

CO categorical hot-spot finding used the applicable emissions model at the time, MOVES2010b. As discussed in EPA's MOVES2014 Notice of Availability, any CO hot-spot analysis begun after the end of the grace period, October 7, 2016, will no longer be able to rely on the 2014 CO categorical hot-spot finding which was based on the MOVES2010b model (79 FR 60346). This updated CO categorical hot-spot finding applies MOVES2014a and a revised set of receptor locations for air quality modeling; all other analytical details are generally the same as in the 2014 CO categorical hot-spot finding.

MOVES (Motor Vehicle Emission Simulator) is EPA's emission modeling system that estimates emissions for mobile sources at the national, county, and project-level for criteria pollutants, greenhouse gases, and air toxics. MOVES2014 and MOVES2014a introduced several improvements over MOVES2010 such as inclusion of new regulations, new and up-to-date emissions data, and improved functionality. MOVES2014a is the latest version of MOVES currently available.

The FHWA expects that a large number of highway projects that include one or more intersections and are subject to the conformity hot-spot analysis requirements for CO will be able to rely on this CO categorical hot-spot finding. This CO categorical hot-spot finding will greatly benefit all of the areas outside California by reducing the number of hot-spot analyses that project sponsors must conduct to only those projects that cannot rely on this CO categorical hot-spot finding.

APPLICATION

In order to rely on the CO categorical hot-spot finding as part of a project-level conformity determination (40 CFR 93.116(a) and 93.123(a)), a project's parameters must fall within the acceptable range of modeled parameters. This means that for a project with multiple intersections, the project sponsors should follow Section 4 in EPA's "Guideline for Modeling Carbon Monoxide from Roadway Intersections" to select the highest volume and worst level of service intersections for analysis.[2] Once the intersection(s) are identified, the project sponsor will need to look at each approach within the intersection(s) separately and compare each approach to the acceptable ranges in order to rely on the CO categorical hot-spot finding.

When a particular project falls within the acceptable range to rely on the CO categorical hot-spot finding, the project sponsor should reference the categorical finding in their project-level conformity determination. The project-level conformity finding is subject to interagency consultation and the public involvement requirements under the National Environmental Policy Act (NEPA) and the conformity rule (40 CFR 93.105). The existing interagency consultation and public involvement processes will thus be used to determine if the use of the CO categorical hot-spot finding is appropriate for the project.

Project sponsors may rely on this updated CO categorical hot-spot finding for applicable hot-spot analyses in CO maintenance areas effective immediately. Any new CO hot-spot

[2] U.S. Environmental Protection Agency, Guideline for Modeling Carbon Monoxide from Roadway Intersections, EPA-454/R-92-005, Office of Air Quality Planning and Standards, November 1992.

analyses begun after October 7, 2016, that uses the CO categorical hot-spot finding must rely on the new updated CO categorical hot-spot finding using MOVES2014a as applicable.

For more information related to the analysis that supports the 2016 CO categorical hot-spot finding, and its applicability, please visit http://www.fhwa.dot.gov/environment/air_quality/conformity/policy_and_guidance/cmcf/

The website includes a copy of this memo, the finding, and the technical document.

CONTACT INFORMATION

Please contact Karen Perritt at 202-366-9066 at FHWA with any questions on this CO categorical hot-spot finding.