



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219 2000

Charles A. Kilpatrick, P.E.
Commissioner

May 11, 2016

Mr. Edward Sundra
Federal Highway Administration
Post Office Box 10249
Richmond, Virginia 23240-0249

Re: Programmatic Agreement for Project-Level Air Quality Analyses for Carbon Monoxide –
2016 Interim Update

Dear Mr. Sundra:

The purpose of this letter is to update the *Project-Level Carbon Monoxide Air Quality Studies Programmatic Agreement* between the Virginia Department of Transportation (VDOT) and the Federal Highway Administration (FHWA), which was last updated in 2009. The new programmatic agreement (PA) will be executed upon the signature of both parties on the attached signature page (Attachment 1). The proposed new PA and associated Technical Support Document (TSD) are provided as Attachments 2 and 3 respectively.

The proposed new FHWA-VDOT PA and TSD are based upon national templates that were created in a recently completed National Cooperative Highway Research Program (NCHRP) study¹ in which VDOT staff participated. The NCHRP templates are based on modeling conducted using the US Environmental Protection Agency MOVES2010b emission model and same dispersion model (CAL3QHC) that was applied for the 2009 FHWA-VDOT PA. The NCHRP templates were designed to be applied using state-specific background concentrations and persistence factors, without the need to update the detailed modeling in the TSD. This is the approach that we are proposing to follow on an interim basis with this update, as it facilitates both the review and approval process and early implementation of this new NCHRP-based PA.

¹ ICF International, Zamurs and Associates LLC, and Volpe Transportation Systems Center, "Programmatic Agreements for Project-Level Air Quality Analyses", NCHRP 25-25 (78), 2015. See: <http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=3311>

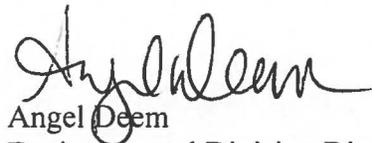
Note the proposed new FHWA-VDOT PA provides, on an interim basis, for the continued usage of the thresholds for skewed intersections that were originally established in the 2009 FHWA-VDOT PA. This is needed as the new NCHRP template PA, due to funding limitations, did not include skewed intersections (although it did expand project-types covered beyond just intersections to include freeway and arterial segments as well as freeways with adjacent congested intersections.) We believe that the continued use of the thresholds established for skewed intersections in the 2009 FHWA-VDOT PA is a reasonable interim provision for the proposed new FHWA-VDOT PA, until the supporting modeling in the TSD is updated using Virginia-specific input data.

With regard to future updates, we plan to refine the modeling presented in the NCHRP TSD using the new VDOT Resource Document and its associated online data repository. As that updated FHWA-VDOT PA and TSD will be based on Virginia-specific modeling input data, rather than national level inputs, it will be more representative of local conditions. It will also be based on the latest models (e.g., MOVES2014a) and include expanded project types or configurations, e.g., intersections with skew angles, and a wider range of road grades. We expect that it will further increase the effective thresholds for CO analyses to be conducted over that already provided by the NCHRP template PA and TSD and the interim FHWA-VDOT PA.

Finally, as a matter of interest, and as noted in the NCHRP report (Executive Summary, page X, and main report, page 14), the NCHRP study conducted a survey of programmatic agreements in place across the nation and selected the 2009 FHWA-VDOT PA and TSD as the model for the new national templates. This selection reflects well on our (FHWA-VDOT) process for developing and implementing such agreements.

If you have any questions about the proposed new PA, please feel free to contact me or Jim Ponticello, the Department Air & Noise Program Manager. If you have technical questions about the PA, TSD and/or the NCHRP study, please contact Christopher Voigt at (804) 371-6764.

Sincerely,



Angel Deem
Environmental Division Director

Attachments

1. Signature page to the 2016 FHWA-VDOT Programmatic Agreement
2. 2016 FHWA-VDOT Programmatic Agreement
3. Technical Support Document

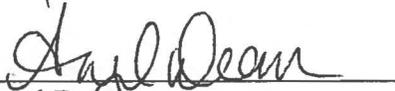
FHWA-VDOT Programmatic Agreement for Project-Level Air Quality Analyses for Carbon Monoxide

By signature below, both parties agree to the terms and conditions specified in the FHWA-VDOT *Programmatic Agreement for Project-Level Air Quality Analyses for Carbon Monoxide* (2016 interim update).



Edward Sundra
Director of Program Development
FHWA Virginia Division

5/16/16
Date



Angel Deem
Environmental Division Director
Virginia Department of Transportation

5/16/16
Date