MOVES2010

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What is MOVES2010?

- State-of-the-art upgrade to EPA's modeling tools for estimating emissions from vehicles
- Replaces the MOBILE6.2 model

Why is EPA replacing MOBILE6.2 with MOVES2010?

- CAA requires EPA to regularly update its mobile source emission models
- Represents the Agency's most up-to-date assessment of on-road mobile emission sources

Can MOVES2010 be used for state implementation plans (SIP) and transportation conformity?

- MOVES2010 can be used to estimate air pollution emissions from cars, trucks, motorcycles, and buses
- Best available tool for quantifying criteria pollutant and precursor emissions, as well as other emissions analyses of the transportation sector
- EPA's approved motor vehicle emission factor model for estimating:
  - VOCs, NOx, CO and direct PM (PM10 and PM2.5) and other pollutants

When should MOVES2010 be used for SIP and transportation conformity analysis?

- Should be used as expeditiously as possible
- It is approved for SIP and transportation conformity analysis as of March 2, 2010.
- There is a 2-year grace period before MOVES2010 emissions model is required to be used in new regional emissions analyses for transportation conformity
- Grace period ends March 2, 2012

When should MOVES2010 be used for project-level transportation conformity hot-spot analyses?

- MOVES2010 has **not** yet been approved for project-level hot-spot analyses
- Draft Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas
  - Released on May 26, 2010
  - Comments due to EPA by July 19, 2010
  - Finalized late 2010
  - 2-year grace period (*this will be a separate grace period from the SIP and transportation conformity grace period*)

Can MOVES2010 be used to estimate greenhouse gas emissions (GHG)?

- Currently the best available tool that EPA has for estimating GHG emissions

Can MOVES2010 be used to estimate mobile source air toxics (MSATs)?

- MOVES 2010 estimates emissions for the following MSATs:
  - benzene, 1,3-butadiene, formaldehyde, acetaldehyde, acrolein, naphthalene, ethanol and MTBE
- Best available tool for quantifying emissions
- EPA working to integrate additional MSATs into the MOVES modeling framework
- There are **no** SIP and transportation conformity requirements for air toxics
- MSAT are addressed as a part of the National Environmental Policy Act (NEPA) process

Why has EPA changed the name of its mobile source model from "MOBILE" to "MOVES"?

- Motor Vehicle Emissions Simulator
- New approach to projecting mobile source emissions
- Not merely an upgrade of the previous MOBLE model
- Brand new software, designed from the ground-up
- Estimates emissions at a more detailed level
- MOVES2010 is named to indicate the first year that the model maybe used in SIPs and conformity determinations

What has EPA done to prepare users for the release of MOVES2010?

- Draft MOVES2009 released in April 2009
- EPA and FHWA conducted 20 training sessions across the country
- Documents:
- MOVES2010 User Guide
    - www.epa.gov/otaq/models/moves/index.htm
- Policy Guidance on the Use of MOVES2010 for SIP Development, Transportation Conformity and Other Purposes
    - www.epa.gov/otaq/models/moves/index.htm
- Technical Guidance on the Use of MOVES2010 for Emission Inventory Preparation in SIPs and Transportation Conformity
    - www.epa.gov/otaq/models/moves/index.htm
- Transportation Conformity Guidance for Quantitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas
    - www.epa.gov/otaq/stateresources/transconf/policy.htm

MOVES Schedule

- **January 2005**
  - MOVES2004 released
    - Includes energy consumption, greenhouse gases
- **May 2007**
  - MOVES Demo released
    - Basic structure of MOVES without criteria pollutant emission factors
- **April 2009**
  - Release of Draft MOVES2009
    - Adds draft criteria pollutant emission factors

MOVES Schedule (continued)

- **December 2009**
  - EPA released the final version of MOVES2010
- **March 2, 2010**
  - EPA announced the availability of MOVES2010 for SIPs and certain transportation conformity analyses
  - Started 2-year grace period for transportation conformity determinations
  - **Not** approved for project level transportation conformity hot-spot analyses
- **May 26,2010**
  - Draft Transportation Conformity Guidance for Quantitative Hot-spot analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas
  - Comments due to EPA by July 19, 2010

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Questions?