



Modeling and Inventories

ITEM #7
<http://www.epa.gov/otaq/models/moves/index.htm>

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MOVES (Motor Vehicle Emission Simulator)

EPA's Office of Transportation and Air Quality (OTAQ) is developing the **MO**tor **V**ehicle **E**mission **S**imulator (MOVES). This new emission modeling system will estimate emissions for on-road and nonroad mobile sources, cover a broad range of pollutants, and allow multiple scale analysis.

New! **MOVES2010 is now available** for analysis of air pollution emissions from highway vehicles. Material relating to Draft MOVES2009 has been moved to [MOVES Technical Background](#).

- [MOVES2010 Mobile Source Emissions Model: Questions and Answers \(PDF\)](#) (9 pp, 128K, EPA-420-F-09-073, December 2009) Describes the model and provides general information for model use.
- [Instructions for downloading and extracting MOVES2010InstallationSuite](#)
- [Installation instructions](#) These are also included in the MOVES2010InstallationSuite, as readme.txt.
- [Download MOVES2010InstallationSuite \(ZIP\)](#) (558MB) Includes everything needed to install MOVES2010: installation instructions (readme.txt), executable file for the MOVES software, default database, and the User Guide.
- [MOVES2010 Errata Sheet/Information Sheet \(PDF\)](#) (5 pp, 117K, EPA-420-B-09-043, December 2009)
- [MOVES2010 Policy Guidance \(PDF\)](#) (17 pp, 148K, EPA-420-B-09-046, December 2009) This document describes how and when to use the MOVES2010 emissions model for SIP development, transportation conformity determinations, and other purposes.
- [MOVES2010 Technical Guidance \(PDF\)](#) (46 pp, 397K, EPA-420-B-09-042, December 2009) This document provides guidance on appropriate input assumptions and sources of data for the use of MOVES2010 in SIP submissions and regional emissions analyses for transportation conformity purposes.
- [Input file converters and other modeling tools](#) Includes spreadsheet tools that help with the transition from MOBILE6.2 to MOVES.
- [MOVES2010 User Guide \(PDF\)](#) (150 pp, 4.75MB, EPA-420-B-09-041)
- [MOVES2010 User Guide Example Files \(ZIP\)](#) (1.9M) These files correspond to the examples described in the appendices of the MOVES2010 User Guide.
- [Software Development Reference Manual for Draft MOVES2009 \(PDF\)](#) (279 pp, 1.3MB, EPA-420-B-09-007, March 2009) (SDRM for MOVES2010 will be posted soon.)
- [MOVES2010 Training Sessions](#)
- [MOVES Technical Background](#) Contains technical details on MOVES design and inputs, and information on previous versions of MOVES.
- [FACA MOVES Review Work Group Materials](#) from recent meetings of the Federal Advisory Committee Act (FACA) MOVES Model Review Work Group.

NOTE: You will need Adobe Acrobat Reader, available as a free download, to view some of the files on this page. See EPA's PDF page to learn more about PDF, and for a link to the free Acrobat Reader.

For further information:

MOVES staff email: mobile@epa.gov.

EPA Strengthens Smog Standard/Proposed standards, strictest to date, will protect the health of all Americans, especially children

Release date: 01/07/2010

Contact Information: Cathy Milbourn milbourn.cathy@epa.gov 202-564-7849 202-564-4355; En español: Lina Younes, younes.lina@epa.gov / 202-564-9924, 202-564-4355

The United States Environmental Protection Agency today proposed the strictest health standards to date for smog. Smog, also known as ground-level ozone, is linked to a number of serious health problems, ranging from aggravation of asthma to increased risk of premature death in people with heart or lung disease. Ozone can even harm healthy people who work and play outdoors. The agency is proposing to replace the standards set by the previous administration, which many believe were not protective enough of human health.

"EPA is stepping up to protect Americans from one of the most persistent and widespread pollutants we face. Smog in the air we breathe poses a very serious health threat, especially to children and individuals suffering from asthma and lung disease. It dirties our air, clouds our cities, and drives up our health care costs across the country," said EPA Administrator Lisa P. Jackson. "Using the best science to strengthen these standards is a long overdue action that will help millions of Americans breathe easier and live healthier."

The agency is proposing to set the "primary" standard, which protects public health, at a level between 0.060 and 0.070 parts per million (ppm) measured over eight hours. Children are at the greatest risk from ozone, because their lungs are still developing, they are most likely to be active outdoors, and they are more likely than adults to have asthma. Adults with asthma or other lung diseases, and older adults are also sensitive to ozone.

EPA is also proposing to set a separate "secondary" standard to protect the environment, especially plants and trees. This seasonal standard is designed to protect plants and trees from damage occurring from repeated ozone exposure, which can reduce tree growth, damage leaves, and increase susceptibility to disease.

In September 2009 Administrator Jackson announced that EPA would reconsider the existing ozone standards, set at 0.075 ppm in March 2008. As part of its reconsideration, EPA conducted a review of the science that guided the 2008 decision, including more than 1,700 scientific studies and public comments from the 2008 rulemaking process. EPA also reviewed the findings of the independent Clean Air Scientific Advisory Committee, which recommended standards in the ranges proposed today.

Depending on the level of the final standard, the proposal would yield health benefits between \$13 billion and \$100 billion. This proposal would help reduce premature deaths, aggravated asthma, bronchitis cases, hospital and emergency room visits and days when people miss work or school because of ozone-related symptoms. Estimated costs of implementing this proposal range from \$19 billion to \$90 billion.

Ground-level ozone forms when emissions from industrial facilities, power plants, landfills and motor vehicles react in the sun.

EPA will take public comment for 60 days after the proposed rule is published in the Federal Register. The agency will hold three public hearings on the proposal: Feb. 2, 2010 in Arlington, Va. and in Houston; and Feb. 4, 2010 in Sacramento.

More information: <http://www.epa.gov/groundlevelozone>