MOVES FACA Review Work Group Update

October 18, 2016

Jim Kliesch Honda



EPA MOVES Model

- U.S. EPA's Motor Vehicle Emission Simulator estimates emissions and energy use from
 - Onroad vehicles: passenger cars, light- and heavy-duty trucks, buses, motorcycles
 - Nonroad equipment: construction, industrial, lawn & garden, commercial, logging, airport, oil
 & gas, mining, railroad service, recreational vehicles
- MOVES accounts for national emission standards, vehicle populations and activity, local rules, fuels, and meteorology
- U.S. EPA uses MOVES to estimate emission impacts of mobile source emissions regulations and policies and to generate national inventories of air pollutants
- State and local agencies use MOVES to prepare emission inventories in State Implementation Plans (SIPs) and transportation conformity
- MOVES is also used in academic research and to model effects of policy choices



MOVES FACA Work Group Objectives

- Evaluate and provide recommendations on the inputs proposed for use in MOVES
 - o Emission rates
 - Fleet and activity
 - Emission adjustment factors
- Evaluate MOVES input and output structures and their usefulness in meeting the needs of modelers developing SIPs and transportation conformity programs
- Review draft MOVES reports as they become available
- Work collaboratively to provide timely, shared recommendations to the MSTRS, which will evaluate them and decide how issues should be reported to the full Clean Air Act Advisory Committee



Work Group Membership

Chairs: Matthew Barth (University of California Riverside) and Edward Nam (U.S. EPA OTAQ)

State and Local Government:

Association of Metropolitan Planning Organizations California Air Resources Board Ozone Transport Commission

Association of Air Pollution Control Agencies National Association of Clean Air Agencies Lake Michigan Air Directors Consortium

American Association of State and Highway Transportation Officials

Industry:

Alliance of Automobile Manufacturers Coordinating Research Council Engine Manufacturers Association

Manufacturers of Emission Controls Association American Petroleum Institute Honda

Environmental Groups:

Environmental Defense Fund International Council on Clean Transportation

Federal Government:

Federal Highway Administration National Renewable Energy Laboratory

Academia:

North Carolina State University University of Vermont University of California Riverside

Work Group Process

- EPA presents MOVES modeling approaches at quarterly work group meeting
- Meeting notes are taken
- Work group members poll their membership and provide feedback/comments to EPA
- Comments are compiled, summarized, and distributed
- EPA responds to comments at the next meeting; work group discusses comments with the goal of developing consensus recommendations to be forwarded to MSTRS
- Work group also reviews draft MOVES reports as they become available
- Meeting materials posted on the MOVES website: https://www3.epa.gov/otaq/models/moves/faca.htm



Work Group Discussion Topics

September 14th Meeting:

- MOVES2014 Overview and Plans for the Future
- Options for Simplifying MOVES Onroad Source Types and Ramps
- MOVES-NONROAD Model Plans and Data Updates
- Heavy-Duty Greenhouse Gas Phase 2 in MOVES

December 7th Meeting:

- Criteria Emission Rates Update 2010+ Heavy-Duty Trucks
- Updated Emission Rates for Extended Idle and APU
- Onroad Population and Activity Updates

• Future Topics:

- Model validation
- Development of driving cycles
- Improvements in speciation
- Tier 2 light-duty emission rates
- Performance improvements



Additional Resources

• For more information on MOVES, please see the MOVES web page:

https://www3.epa.gov/otaq/models/moves/index.htm

Questions: Contact the MOVES Team at mobile@epa.gov

