

# **MOVES Review Workgroup**

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***Reporting to the Mobile Source  
Technical Review Subcommittee***

# **MOVES Review Workgroup**

- **Created as part of the peer-review process to oversee the development of MOVES**
- **Workgroup originally created and in service from April 2007 to October 2010**
- **Workgroup reconstituted in July 2012 to oversee MOVES-2013 development**

# MOVES Review Workgroup Process

- From July 2012 – Summer 2013, EPA is presenting proposed updates to MOVES, including underlying data and analyses as appropriate
- Workgroup members coordinate within their organizations and with their constituents to solicit *specific* comments on EPA's proposals prior to the next meeting
- In addition, Workgroup will develop *general recommendations* to the MSTRS based on proceedings of workgroup meetings; this takes the form of a report

# MOVES Review Workgroup Recommendation Report (1)

- **Section 1: Introduction and Background**
- **Section 2: Specific Workgroup Recommendations and EPA response (example below):**

Additional MSTRS Questions	EPA Response
<p>What are EPA plans for addressing the known uncertainties in the model (e.g. fuel effects, operation at higher power, modeling of conventional hybrid and PHEV)?</p>	<p>For the past 3 years, EPA, DOE and CRC have collaborated on the largest evaluation of fuel effects since the Auto/Oil study in the early 1990's; this study is focused on Tier 2 vehicles. Project partners are currently analyzing these data, and we EPA plans to integrate the findings from the research as part of the anti-backsliding study required by Congress and future model updates.</p> <p>Data on emissions in higher power bins will be collected in our Tier 2 PEMS study, beginning this fall .</p> <p>Hybrid vehicles are addressed below.</p>
<p>What are EPA plans for scheduling new releases of the model (e.g. annual, biennial, point releases)?</p>	<p>Each MOVES release requires careful consideration of the policy implications and technical justification for a model change. It also requires overcoming the analysis, software and design challenges required to update the model.</p> <p>Because the policy climate and technical context are not easily predicted, future MOVES releases will not meet a rigid pre-determined schedule. However, EPA does plan to continuously improve the MOVES model, as we did with our recent release of MOVES2010a, and to update the model frequently enough that it continues to reflect our best understanding of vehicle emissions.</p>

# MOVES Review Workgroup Recommendation Report (2)

- **Section 3: Workgroup Final Comments and Recommendations**
- **Previous Comments and Recommendations:**
- **The overall structure of MOVES is solid, providing a good deal of flexibility for a variety of mobile source emissions modeling applications**
- **The MOVES validation and corroboration work has been helpful. EPA has compared MOVES results to a variety of independent data sets.**
  - *EPA should budget funds for an ongoing effort to identify areas for improvement*
  - *Data comparisons should be conducted by other organizations as well as U.S. EPA*

# MOVES Review Workgroup Recommendation Report (3)

- **Section 3: Workgroup Final Comments and Recommendations**
- **Previous Comments and Recommendations:**
- **EPA needs to continue model updates:**
  - *EPA should update emission rates as well as features*
  - *In the short term, EPA needs to improve user features, reduce model run time and to update information on light duty energy consumption and gasoline fuel effects and to add additional air toxics.*
  - *EPA should consider planning for annual or biennial release*
    - *EPA needs to balance user's need for continuity with their need to incorporate the most up-to-date understanding of emissions. New versions should not be released too often due to their use in the SIP process, however they should be released on a regular basis with significant improvements and new data.*
- **EPA needs to plan for long-term data collection, identifying data gaps and prioritizing data collection efforts:**
  - *EPA needs to budget and plan for continued data collection on vehicle emissions and activity*
  - *EPA needs to seek out additional data from the private sector, academia, state research programs and other sources*

# **MOVES Review Workgroup Recommendation Report (4)**

- **Section 4: Appendix: Workgroup Charge**
- **Section 5: Appendix: Workgroup Membership**
- **Section 6: Appendix: Meeting dates and topics**