

# SOUTHWEST RESEARCH INSTITUTE®

6220 CULEBRA RD. 78228 5166 • P.O. DRAWER 28510 78228 0510 • SAN ANTONIO, TEXAS, USA • (210) 684 5111 • WWW.SWRI.ORG

February 14, 2003

To: Environmental Protection Agency  
2000 Traverwood Drive  
Ann Arbor, MI 48105

Attention: Robert J. Johnson  
Project Officer, OTAQ/ASD/ATC

From: Patrick M. Merritt  
Department of Emissions Research  
Southwest Research Institute  
P.O. Drawer 28510  
San Antonio, Texas 78228-0510

Subject: Addendum to Final Report for Work Assignment 1-5, EPA Contract 68-C-02-022, under SwRI Project 08.06129.05

Contract Title: "Testing and Analytical Support for Regulation of Motor Vehicles, Engines, Fuels, and Fuel Additives"

Assignment Title: "Independent Peer Review of the MOVES Design and Emissions Analysis Plans"

This document has been prepared as an addendum to the final report for Work Assignment 1-5. After the final report was completed, EPA requested that SwRI ascertain whether the peer reviewers felt that their remarks were appropriately represented. In addition, the reviewers were asked to read the other panelists' criticism and comment on them as well. The panelists' comments are presented below.

Dr. Armistead Russell:

"First, you did a great job of finding three very different types of users. Thus, I think you are getting very different and varied comments, and the ones by the other two users are generally not in my range of expertise.

Ross noted that binning of low vs. high mileage is not preferable, and I agree, and I should have caught that when I was discussing binning on VSP.

Replogle notes that environmental justice evaluation may be important, and given two projects/studies I am currently involved in, that is very much so, and both involve automotive emissions. I can not comment on his discussion of traffic calming, though I don't see how that is not already included in MOVES, given that the difficulty there appears to be what information is provided to MOVES, not how MOVES operates on that information."



Dr. Marc Ross:

"You did a good job with the disparate material.

Replogle. These comments are interesting. The concept of "sketch models" sounds well worth exploring. However, in my opinion, most of Replogle's suggestions would make MOVES too large and complicated. Nevertheless, some of these suggestions are interesting, suggesting to me that MOVES could be designed so that adjunct papers and models, made available after the initial model is completed, should be planned and should be made convenient for users to adopt.

Russell. I support the notion that a presentation of MOVES be created for the air-quality community as a whole. A few of Russell's suggestions are similar to mine: fuel-based emissions estimates, an alternative approach to binning. But most of his suggestions are too specialized for me to make useful comments."

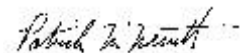
Mr. Michael Replogle:

"This looks fine to me. However, since completing my review, I have thought a bit more about the use of HPMS traffic data, which lies at the heart of part of MOVES. While this data set has undergone some improvement in recent years, I would raise the question about whether further enhancements to HPMS might be warranted so that it can provide fuller and more effective support to MOVES applications around the U.S. in coming years. I have not had time to keep up with some of the most recent developments in HPMS, however, so I will not be more specific for now, but do want to raise this question."

Mr. Replogle made no comments on the other reviewers' criticism.

Should any you have any comments or questions, please contact Mr. Patrick Merritt (telephone 210/522-5422, e-mail pmerritt@swri.org) or Dr. Lawrence R. Smith (telephone 210/522-2977, e-mail lsmith@swri.org). Thank you for this opportunity to be of service.

Prepared by:



Patrick M. Merritt  
Senior Research Scientist  
Department of Emissions Research  
Automotive Products and Emissions  
Research Division

Approved by:



Bruce B. Bykowski  
Director  
Department of Emissions Research  
Automotive Products and Emission  
Research Division

Reviewed by:



Lawrence R. Smith  
Manager, Light-Duty and Unregulated Emissions  
Department of Emissions Research  
Automotive Products and Emissions  
Research Division