

August 28, 2009

Address:

Dear TBD,

Thank you for agreeing to review the attached document, *Draft MOVES2009 Highway Vehicle Temperature, Humidity, Air Conditioning and Inspection and Maintenance Adjustments*. The report summarizes the highway vehicle adjustments made to the base emission rates in the Draft MOVES2009 model to reflect changes in the temperature, humidity, the level of air conditioning use and the impacts of state run periodic vehicle inspection programs.

We are submitting this document to you for a peer review of the document for the completeness of the literature discussed therein, the validity of the assumptions made, the conclusions drawn, and of the coherence of the recommendations made assuming current science as you understand it.

The attached list of charge questions are designed to focus your review on specific areas of the report. We ask that you give special attention to whether there are alternate data sources or approaches that would better estimate the effects of these adjustments. We also request that your review comment on:

1. the clarity of the presentation,
2. the integration of information from multiple areas,
3. the appropriateness and completeness of literature discussed, and
4. the appropriateness of the resulting adjustments for use in our national-level highway vehicle emissions modeling.

For this review, no independent data analysis or information summary is required. Instead, we ask that you assess whether the information provided is representative of the state of current understanding in relevant scientific, professional, or academic disciplines. We ask that in doing so, you identify scientific literature and other resources that are substantively related to the material presented that you are already aware of that may help to improve the overall document or change its conclusions.

In making comments, you should distinguish between recommendations for clearly defined improvements that can be readily made based on data or literature already available to EPA, and improvements that are more exploratory, long-term, or dependent on information not currently available to EPA. Please focus on those improvements that can be readily made. The comments should be sufficiently detailed to allow a thorough understanding by EPA or other parties familiar with the subject matter.

Your comments should be provided as an enclosure to a cover letter that clearly states your name, the name and address of your organization, what material was reviewed, a summary of your expertise and qualifications, and a statement that you have no real or perceived conflicts of interest. Please also send us your comments electronically in Microsoft Word, or a format that can be imported into Microsoft Word, so we can create a document that lists both your comments and our responses to those comments. The comments should be sent to:

Ms. Kathryn Schwende,
U.S. Environmental Protection Agency
Assessment and Standards Division
Office of Transportation and Air Quality
2000 Traverwood Drive
Ann Arbor, MI 48105

schwende.kathryn@epa.gov

When the EPA report is finalized, we will include your comments as an attachment to the report. We would appreciate your not providing the peer review materials or your comments to anyone else until we make them public.

We would also like to receive the results of this review in the shortest time frame possible, preferably by September 30, 2009. This will allow us the maximum time to incorporate your comments into the final model. If you have any questions about what is required in order to complete this review, or if you need additional background material, please contact Kathryn Schwende, phone (734) 214-4895, e-mail: schwende.kathryn@epa.gov. If you have any questions about the EPA peer review process itself, please direct them to Ms. Ruth Schenk in the office of our Deputy Office Director by phone (734-214-4017) or e-mail (schenk.ruth@epa.gov).

You will be paid a flat fee of \$1,500 (US) for this peer review. In your cover letter please indicate the number of hours spent on the review; spending fewer or more hours will not affect the fee paid for this work, but it will help us improve our future estimates. A purchase order form is also included showing payments information. You may expect to receive payment in full within forty-five (45) days of submitting your comments and a copy of your invoice to Ms. Schwende. Please send your invoice directly to:

RTP Finance
Mail Drop MC-D143-02
109 T.W. Alexander Drive
Research Triangle Park, NC 27711

Thank you again for your time and consideration.

Sincerely,

John Koupal, Director
Air Quality Modeling Center
Assessment and Standards Division
Office of Transportation and Air Quality

Enclosure
cc (w/o enclosures):
M. Beardsley, ASD
D. Brzezinski, ASD
K. Schwende, ASD

ADDENDUM: ADDITIONAL PEER REVIEW CHARGE QUESTIONS

1. Is there reason to believe that temperature is an important adjustment for fully warmed running emissions on modern vehicles?
2. Are the EPA certification humidity adjustments sufficient for inventory work?
3. Are there other practical surrogates for air conditioning usage other than humidity ratio?
4. Are there practical alternative methods for predicting benefits from vehicle repairs?