



May 11th, 2015

Dr. Timothy DeFries
Principal Scientist, Eastern Research Group
3508 Far West Blvd., Ste. 210
Austin, TX 78731

Subject: Peer Review of Speciation Profiles and Toxic Emission Factors for Nonroad Engines

Dear Dr. DeFries,

ICF International has been contracted by EPA to facilitate a peer review. In late April we corresponded by email and you indicated your availability to participate as a paid reviewer to review of the EPA Office of Transportation and Air Quality's report "Speciation Profiles and Toxic Emission Factors for Nonroad Engines". You have been selected to participate on this panel. ICF will compensate you \$2,000 for your services. This charge letter provides you with a list of directed questions for your review, the review schedule, and the materials we would like you to send to us at the conclusion of the review. In addition, attached to this letter is a copy of the report that we would like you to review.

Charge Questions

We are submitting this material for you to review the selected methods and their underlying assumptions, their consistency with the current science as you understand it and the clarity and completeness of the presentation. For this review, no independent data analysis is required. Rather, we ask that you assess whether the information provided is representative of the state of current understanding, and whether incorporating this information in MOVES will result in appropriate predictions and conclusions.

We request that you provide us with your comments on the content sequentially. Grammatical/formatting and other minor comments can be provided separately.

Below are questions to define the scope of the review; we are not expecting individual responses to the questions, but would like them to help guide your response.

General Questions to Consider

1. Does the presentation describe the selected data sources sufficiently to allow the reader to form a general view of the quantity, quality and representativeness of data to be used in the development of emission rates? Are you able to recommend alternate data sources that might better allow the model to estimate national or regional default values?
2. Is the description of analytic methods and procedures clear and detailed enough to allow the reader to develop an adequate understanding of the steps taken and the assumptions made by EPA in developing the model inputs? Are examples selected for tables and figures well chosen and do they assist the reader in understanding the intended approaches and methods?

3. Are the methods and procedures employed technically appropriate and reasonable with respect to the relevant disciplines, including physics, chemistry, engineering, mathematics and statistics? Are you able to suggest or recommend alternate approaches that might better achieve the goal of developing accurate and representative model inputs? In making recommendations please distinguish between cases involving reasonable disagreement in adoption of methods as opposed to cases where you conclude that current methods involve specific technical errors.
4. In areas where EPA has concluded that applicable data is meager or unavailable, and consequently has made assumptions to frame approaches and arrive at solutions, do you agree that the assumptions are appropriate and reasonable? If not, and you are so able, please suggest an alternative set(s) of assumptions that might lead to more reasonable or accurate model inputs while allowing a reasonable margin of environmental protection.
5. Are the resulting model inputs appropriate, and to the best of your knowledge and experience, reasonably consistent with physical and chemical processes involved in mobile source emissions formation and control? Are the resulting model inputs empirically consistent with the body of data and literature that has come to your attention?

Schedule

The schedule for this peer review is as follows:

- May 11th, 2015: Charge letter distributed to reviewers
- June 8th 2015: Comment/review due via email to Laurence.O'Rourke@icfi.com

Materials

Upon completion of your review, you should submit your report under a cover letter that states 1) your name, 2) the name and address of your organization, and 3) a statement of any real or perceived conflict(s) of interest.

Should you have any questions or concerns, feel free to contact me via phone at 617-250-4226 or by email. In addition, the EPA project manager for this effort is Kent Helmer and he may be reached at 734-214-4825.

Thanks for your participation!

Sincerely,

Larry O'Rourke
Manager, ICF International

Attachment: Speciation Profiles and Toxic Emission Factors for Nonroad Engines_Draft March 2015



May 11th, 2015

Dr. Thomas Durbin
Research Engineer II
Center for Environmental Research and Technology
University of California, Riverside
Riverside, CA 92521

Subject: Peer Review of Speciation Profiles and Toxic Emission Factors for Nonroad Engines

Dear Dr. Durbin,

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in developing the model inputs? Are examples selected for tables and figures well chosen and do they assist the reader in understanding the intended approaches and methods?

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Larry O'Rourke
Manager, ICF International

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