



Department of Energy
Washington, DC 20585
February 8, 2002

Docket Coordinator
Superfund Docket Office
RAGS Part E
Mail Code 5202G
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue
Washington, DC 20460

Subject: Docket Control Identifier: RAGS Part E

The purpose of this letter is to transmit U.S. Department of Energy (DOE) comments on the U.S. Environmental Protection Agency's "Notice of Availability of the Draft Supplemental Guidance for Dermal Risk Assessment, Risk Assessment Guidance for Superfund, Volume I, Part E" (66 FR 237, 63706-63707, December 10, 2001)

The Department appreciates the opportunity to comment on this Draft Supplemental Guidance for Dermal Risk Assessment, and supports the Agency's issuance of risk assessment guidance based on the best available science.

An electronic copy of the DOE comments will be forwarded to the EPA contact person indicated in the aforementioned *Federal Register* Notice. If you have questions about the attached comments, please contact Mr. John Bascietto of my staff at (202) 586-7917 (e-mail john.bascietto@eh.doe.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "T. Traceski".

Thomas T. Traceski
Director, RCRA/CERCLA Division
Office of Environmental Policy and Guidance

Enclosure



UNITED STATES DEPARTMENT OF ENERGY

COMMENTS ON DRAFT SUPPLEMENTAL GUIDANCE FOR DERMAL
RISK ASSESSMENT, RISK ASSESSMENT GUIDANCE FOR SUPERFUND,
VOLUME I, PART E

(66 FR 237, 63706-63707, December 10, 2001)

U. S. Department of Energy
Comments on Draft Supplemental Guidance for Dermal Risk Assessment,
Risk Assessment Guidance for Superfund, Volume I, Part E
(66 FR 237, 63706-63707, December 10, 2001)

The U. S. Department of Energy (DOE) wishes to commend the U.S. Environmental Protection Agency (EPA) for developing supplemental guidance on dermal risk assessment. The Department has noted and appreciates the several incremental development efforts for dermal risk assessment guidance put forth by EPA. DOE believes that the current supplemental draft improves upon the existing knowledge base on this subject. DOE encourages EPA to continue to develop risk assessment guidance based on the best available science and offers the following comments in the spirit of improving the usability of the final guidance.

General Comments

A basic assumption underlying the approach taken in the document is that dermal exposure to vapors is negligible compared with the exposure and risk associated with the inhalation pathway. The nature of this assumption should be made more transparent. For example, has the assumption been quantitatively evaluated and demonstrated with a model? Because potential occupational exposures at certain industrial facilities and Superfund sites could include significant dermal exposures, risk assessors would benefit by having a better understanding of dermal *versus* inhalation exposure.

The discussion in Chapter 3 refers to a variety of exposure pathways, including dermal soil residential, occupational, and recreational; and dermal water swimming, wading, and sediment. It would be helpful to add a text box or table clarifying the various pathways and discussing why they are quantitatively included or excluded from the analyses.

The discussion in Chapters 2 and 6 (and the appendices) include a 10% screening level that is based on the ratio of dermal dose to oral dose. This level appears arbitrary, or at least it appears that it may not be sufficient to screen the “riskiest” contaminants (as the text would suggest). Therefore, a question arises as to the rationale for failing to develop a risk-based dermal concentration for each contaminant. It would be more transparent to include an explanation of why a screening level is better than a risk-based concentration in this case.

Chapter 4 should provide the procedures to follow if no toxicity information is available (the additional text could be similar that in Section 5.2.3).

In addition to a qualitative uncertainty discussion in Chapter 5, why not encourage risk assessors to perform a quantitative uncertainty analysis using distributions for the model input parameters in a Monte Carlo analysis or other acceptable probabilistic technique? The draft guidance could be augmented to include input parameter distributions. In addition to the on-line spreadsheets, a Monte Carlo or other probabilistic tool could be made available on-line. If this is not desirable, it would be more transparent to include an explanation for rejecting such an approach

Finally, the Preface should contain a more thorough discussion of what the reader can expect to see in the appendices. The titles of the appendices could be rewritten to better reflect their contents (e.g., “Appendix A: Dermal Exposure for the Water Pathway;” “Appendix C: Dermal Exposure for the Soil Pathway”).

Specific Comments

p. 1-5 (last paragraph in Chapter 1): The text states "the decision whether or not to use default values as surrogates for those chemicals without specific recommended values must be made." Adding text to explain the basis for this evaluation would enhance the transparency of the document.

p. 3-1: After the reference to EPA 1989, add text to explain why not all high-end estimates should be used. For example: "The use of only high-end estimates to calculate exposure can result in exposures that are 99.99% or 99.999% estimates. These are not representative of RME."

Section 3.1.2.1, last paragraph in the “Organics” section, last sentence: How will a new correlation "be explored" and will the finding be included in RAGS Part E updates? Adding explanatory text to address these questions would enhance the transparency of the document.

Appendix A: change the horizontal axis title from “Ko/w” to “Kow”.

Appendix B: at the beginning (and throughout) Appendix B, explain the contents and purpose of the information contained therein. This will make the format of Appendix B consistent with the other three appendices. Also, explaining why the 95% lower confidence limit (LCL) and 95% upper confidence limits (UCL) are included in Exhibits B-1 and B-2 would enhance the transparency of the document.