EXTERNAL PEER REVIEW-HUMAN HEALTH RISK ASSESSMENT PROTOCOL FOR HAZARDOUS WASTE COMBUSTION FACILITIES

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6

U. S. EPA
RCRA DOCKET NO. F-1998-HHRA-FFFFF

PEER REVIEW WORKSHOP

AGENDA

The priority of the External Peer Review Workshop for the evaluation of the guidance document, *Human Health Risk Assessment Protocols for Hazardous Waste Combustion Facilities* (HHRAP), will be to discuss charge statement questions for which there were disagreements among the Peer Reviewers. In addition, responses to the specific charge statements that tend to diverge from EPA direction will also be addressed. One purpose of the Workshop is to allow the Peer Reviewers a chance to discuss their views on the charge statements questions.

The External Peer Review HHRAP Workshop is set for two days. Questions dealing with General Issues (e.g., overall presentation, typographical errors, etc.) will not be discussed during the Workshop. In addition, **no Policy Issues** will be discussed during the External Peer Review HHRAP Workshop. A limited Public Comment Period will be held at the end of each day's session.

Day 1

Wednesday, May 24, 2000

8:30 am **Introduction:** Welcome Guests, Introduction of Peer Reviewers, Establish rules for Peer Reviewer Participation and set Ground Rules for Public Participation.

9:00 am **Comments to be Discussed:**

1. Comments have been received by the EPA regarding the guidance presented for inclusion of the "unknown" or unspeciated Total Organic Emission (TOE) data when estimating stack emission rates (Section 2.2.1.3). Considering the technical complexity of the TOE issue, is guidance on quantifying unspeciated TOE data for use in the risk assessment adequate and presented clearly? Provide comments as to whether the guidance on assigning toxicity values to the "unknown"or TOE portion of the emissions is adequate and scientifically sound?

2. Comments have been received by the EPA concerning the definition of the 95th percentile emission rate in the risk assessment (Section 2.2). Provide comments as to whether the guidance on quantifying emission rates of compounds for use in the risk assessment are adequate and scientifically sound? Should the guidance specify use of the 95th percentile or the 95th upper confidence limit (UCL) of the mean?

3. Comments were received regarding guidance presented for quantifying non-detect compounds when estimating stack emissions rates (Section 2.4). Is the guidance on quantifying non-detect compounds for use in risk assessment adequate and scientifically sound? Provide comments on the recommendations of detection limit related issues: (1) can instrument detection limit (IDL) be substituted for the method detection limit (MDL) in determining the RDL for metals, (2) can sample condensates be combined to lower detection limits without effecting the quality assurance and control of the data generated from analysis, and (3) how should J-flagged or qualified data be used if its below the calculated RDL?

4. Comments have been received regarding recommendations on (dry) vapor phase deposition modeling (Sections 3.1.1 and 3.5.1.7; and 5.7.1.2). Is the guidance provided for estimating (dry) vapor phase deposition technically valid as applied? Review and comment on the scientific validity regarding the assumption that wet deposition and precipitation rates are linear. Are the equations to estimate dry deposition of vapors (L_{diff}) to water bodies technically valid or do they incorrectly consider only one-way transfer of pollutants from the air to the water body.

5. Comments were received regarding guidance presented for speciating and modeling of mercury in the risk assessment (Section 2.3.8.3; Appendix B and Appendix C). Provide comments on the technical validity of key elements of mercury modeling.

6. Comments have been received regarding assumptions governing determination of Route-to-route extrapolations of toxicity benchmarks presented in the HHRAP (Appendix A-3). Provide comments as to whether route-to-route extrapolation is appropriate and conservative in determining benchmark values for use in an initial screen of potential toxicity of compounds for which peer reviewed toxicity benchmarks are not available?

4:00 pm **Public Comment Period**

5:00 pm **END OF DAY**

Day 2

Thursday, May 25, 2000

8:30 am **Comments to be Discussed:**

7. Comments were received regarding the guidance on assessing contaminant losses due to atmospheric degradation. Should atmospheric degradation be incorporated, and if so, which documented methodologies and associated parameter values should be included in the guidance for implementation? Would changes to the guidance for air dispersion modeling be required?

8. Comments have been received by EPA regarding guidance on determination of stack-specific particle size distributions recommended for use in the air dispersion modeling (Section 3.4). Provide comments as to whether inclusion of stack-specific particle size distributions are warranted, or could general or default distributions be applied without inducing additional uncertainty in the risk assessment?

9. Comments were received regarding the recommended determination and application of biotransfer (B*a*) values (Chapter 5; Appendix A-3: Appendix B). Considering the scientific literature currently available provide comments on the technical validity of guidance presented for determination and application of B*a* values. Are the equations presented in Travis and Arms (1988) and Baes, et al (1984) for the estimation of B*a* values appropriate as applied in the guidance?

10. Comments were received stating a violation in conservation of mass exists based on guidance presented for calculating exposure concentrations of some organic compounds via indirect pathways, based on not accounting for removal of the contaminant fraction assumed to deposit on vegetation (Sections 5.2; 5.3; Appendix A-3; and Appendix B). Does application of the recommended B*a* values violate conservation of the mass of contaminants emitted to mass concentrated in plant or tissues?

11. Comments were received regarding the guidance on accounting for losses to soil due to erosion (Sections 5.2.2 and Appendix B). Are the presented recommendations regarding losses to soil due to soil erosion technically valid for evaluation of all terrestrial exposure scenarios?

12. Comments were received on guidance provided for selection of exposure scenario locations (Section 4.3.). Provide your comments to this subject?

4:00 **Public Comment Period**

5:00 **END OF WORKSHOP**