



## Department of Energy

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Mr. W. Turpin Ballard  
U.S. Environmental Protection Agency, Region 4  
Federal Facilities Branch  
61 Forsyth Street  
Atlanta, Georgia 30303

PPPO-02-234-09

Mr. Edward Winner, FFA Manager  
Kentucky Department for Environmental Protection  
Division of Waste Management  
200 Fair Oaks Lane, 2<sup>nd</sup> Floor  
Frankfort, Kentucky 40601

Dear Mr. Ballard and Mr. Winner:

**TRANSMITTAL OF THE METHODS FOR CONDUCTING RISK ASSESSMENTS AND RISK EVALUATIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, VOLUME 1, HUMAN HEALTH, AND VOLUME 2, ECOLOGICAL (DOE/LX/07-0107&D1/V1&V2)**

Please find enclosed the *Methods for Conducting Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Volume 1, Human Health, and Volume 2, Ecological* (DOE/LX/07-0107&D1/V1&V2). These revised volumes for the risk methods document for Paducah Gaseous Diffusion Plant (PGDP) were developed through meetings and review by the Risk Assessment Working Group (RAWG). Revisions to the volumes ensure that the methods document promotes development of risk assessments in accordance with the most current state and federal guidance.

The RAWG members revising the human health volume included representatives from U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), Commonwealth of Kentucky Division of Waste Management (DWM), and Commonwealth of Kentucky Radiation Health Branch (RHB). The major aspects of the revisions to the human health volume include updates to toxicity values for chemicals, incorporation of the revised dermal risk assessment guidance in EPA Risk Assessment Guidance for Superfund (Part E), changes to exposure factors based on consensus of the RAWG members, and incorporation of a new approach to background comparisons based on the consensus of the RAWG members. The changes include development of an electronic calculator to assist in streamlining further updates to PGDP screening levels for human health.

The RAWG members revising the ecological volume also included representatives from DOE, EPA, DWM, and RHB. In revising the ecological risk assessment volume, RAWG reviewed

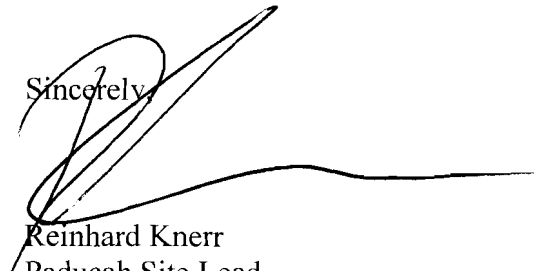
new compilations of screening levels for various species of wildlife and produced new tables of screening levels for all media for chemicals and for radionuclides. The revisions also include

modification of the steps between screening and baseline assessments by adding a process for calculating quantitative hazard quotients and updating the role of background comparisons to better assist in site decision-making.

Upcoming investigations that utilize human health and ecological risk evaluations will benefit from this updated document; therefore, DOE requests that the agencies review and provide comments or concurrence within 45 days. Any comments received from your agency will be addressed by the working group and incorporated into a revision of the document.

If you have any questions or require additional information, please contact Rich Bonczek at (859) 219-4051.

Sincerely,



Reinhard Knerr  
Paducah Site Lead  
Portsmouth/Paducah Project Office

Enclosure:

Risk Methods Document Vol. 1 & 2

cc w/enclosure:

DMC/Kevil

e-copy w/enclosure:

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