



UNITED STATES
NUCLEAR WASTE TECHNICAL REVIEW BOARD
2300 Clarendon Boulevard, Suite 1300
Arlington, VA 22201

Agenda

Spring, 2013, Board Meeting
Tuesday, April 16, 2013

Marriott Courtyard
480 Columbia Point Drive
Richland, WA 99352
509-942-9400

- 8:00 am:** **Call to Order and Introductory Statement**
Rod Ewing, Board Chairman
- 8:10 am:** **Welcome to Hanford**
Kevin W. Smith, Manager, Office of River Protection, Department of Energy
Stacy Charboneau, Deputy Manager, Office of River Protection, Department of Energy
- 8:20 am:** **Complex-wide Overview of Department of Energy – Office of Environmental Management**
Ken Picha, Deputy Assistant Secretary for Tank Waste and Nuclear Materials, Office of Environmental Management, Department of Energy
- 8:45 am: *Questions and Discussion*
- 9:00 am:** **Vitrification as a Complex-Wide Management Practice for High-Level Waste**
Carol M. Jantzen, Advisory Scientist, Environmental & Chemical Process Technology, Savannah River National Laboratory
- 9:40 am: *Questions and Discussion*
- 10:00 am:** **BREAK**
- 10:15 am:** **Presentations and Discussion on Technical Experience with Vitrification**
Stéphane Gin, Visiting Scientist at Pacific Northwest National Laboratory, Commissariat à l'Énergie Atomique
William F. Hamel, Assistant Manager/Federal Project Director, Waste Treatment and Immobilization Plant, Office of River Protection
Jonathan Bricker, Savannah River Site
Albert A. Kruger, Glass Scientist, Department of Energy, Waste Treatment Plant Start-up and Commissioning Integration
Moderated by: *Werner Lutze*, Catholic University of America
- 11:15 pm: *Questions and Discussion*

11:45 am: Presentations and Discussion on the Department of Energy’s Technology Development Programs on Waste Forms

David K. Peeler, Senior Fellow Engineer, Savannah River National Laboratory
Ian L. Pegg, Professor of Physics and Director of The Vitreous State Laboratory, The Catholic University of America
John D. Vienna, Research Scientist, Pacific Northwest National Laboratory
Moderated by: *Werner Lutze*, Catholic University of America

12:20 pm: Questions and Discussion

1:00 pm: LUNCH

2:15 pm: Comments by Tribal, State, and Public Organizations: Views on the Most Important Technical Issues Associated with the Eventual Disposal of High-Level Radioactive Waste and Spent Nuclear Fuel stored at the Hanford Site (10-minutes per presentation)

Russell Jim, Yakama Nation
Suzanne Dahl, Washington State Department of Ecology
Ken Niles, Oregon Department of Energy
Steve Hudson, Hanford Advisory Board
Pam Larsen, Hanford Communities
Gary Petersen, TRIDEC
Allyn Boldt, Hanford Challenge
Moderated by: *Roy E. Gephart*, Consultant

3:45 pm: BREAK

4:00 pm: Update on Potential for Direct Disposal of Dry Storage Containers Currently in Service at Nuclear Power Plant Sites

William Boyle, Director, Office of Used Nuclear Fuel Disposition Research & Development, Office of Nuclear Energy, Department of Energy

4:20 pm: Questions and Discussion

4:35 pm: Overview of the Administration’s Response to Recommendations of the Blue Ribbon Commission on America’s Nuclear Future

Peter B. Lyons, Assistant Secretary for Nuclear Energy, Department of Energy

4:55 pm: Questions and Discussion

5:15 pm: Public Comment

Moderated by: *Rod Ewing*, Board Chairman

6:00 pm: ADJOURN (Poster Session Follows)

6:00 pm: Poster Session on Technical Topics Related to the Meeting

Organizers:

John D. Vienna, Research Scientist, Pacific Northwest National Laboratory

Albert A. Kruger, Glass Scientist, Department of Energy, Waste Treatment Plant Start-up and Commissioning Integration

Posters:

Experimental Investigation and Mathematical Modeling of Cold Cap Behavior in the HLW Melter, *David Pierce*, Pacific Northwest National Laboratory

Determining the Temperature Profile within a High-Level Waste Cold Cap, *Derek Dixon*, Pacific Northwest National Laboratory

Studies to Improve Tc-99 Management Strategy for Hanford Waste Vitrification, *Dong Kim*, Pacific Northwest National Laboratory

Crystal-Tolerant HLW Glasses: A Novel Pathway to High Waste Loading in the Borosilicate Glasses, *Josef Matyas*, Pacific Northwest National Laboratory

Understanding the Corrosion of Glass: Enabling the Reliance on Waste Form Durability, *Joe Ryan*, Pacific Northwest National Laboratory

High Waste Loading, High Melt Rate Glass Formulations for Waste-Treatment-Plant Aluminum-Rich HLW Streams, *Hao Gan, Wing K. Kot, Keith S. Matlack, Innocent Joseph*, and *Ian L. Pegg*, Vitreous State Laboratory of The Catholic University of America

Vitrification Development for Diverse Waste-Treatment-Plant HLW Compositions, *Hao Gan, Wing K. Kot, Keith S. Matlack, Innocent Joseph*, and *Ian L. Pegg*, Vitreous State Laboratory of The Catholic University of America

Bubbled Joule-Heated Ceramic Melter Technology for HLW Vitrification, *Keith S. Matlack, Innocent Joseph, Bradley W. Bowan*, and *Ian L. Pegg*, Vitreous State Laboratory of The Catholic University of America