

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

# **Spring Meeting** Tuesday May 18, 2004

*Embassy Suites Hotel* 1250 22<sup>nd</sup> Street, NW Washington, DC 20037 Voice: (202) 875-3388 Fax: (202) 293-3173

- 8:00 a.m. Call to Order and Introductory Statement David Duquette, Chair, Executive Committee, Nuclear Waste Technical Review Board (NWTRB), Member
- 8:10 a.m. Program Overview Margaret Chu, Director, Office of Civilian Radioactive Waste Management (OCRWM), U.S. Department of Energy (DOE)
  - 8:20 a.m. Questions, discussion
- 8:25 a.m. Transportation Update Gary Lanthrum, Director of National Transportation, Office of Strategy and Program Development, OCRWM
  - 8:40 a.m. Questions, discussion
- 8:50 a.m. Yucca Mountain Project Status W. John Arthur III, Deputy Director for Repository Development, Office of Repository Development, OCRWM
  - 9:05 a.m. Questions, discussion
- 9:15 a.m. Science Update Mark Peters, Project Manager, Los Alamos National Laboratory

10:00 a.m. Questions, discussion

- 10:15 a.m. BREAK (15 min.)
- **10:30 a.m.** Seismic Update Jon Ake, Geophysicist, U.S. Bureau of Reclamation

11:00 a.m. Questions, discussion

11:15 a.m. Session on Corrosion During the Thermal Pulse Session Chair, Ron Latanision, NWTRB Member

The Board's Evaluation (based on the Board's October 21, 2003, letter and November 25, 2003, report)

- 11:15 a.m. Introductory Remarks and Overview Ron Latanision, Panel Chair, Engineered System, NWTRB Member
- 11:25 a.m. Evolution of Environments on Waste Package Surfaces Thure Cerling, NWTRB Member
- 11:45 p.m. Corrosion David Duquette, NWTRB Member
- 12:00 noon Public Comment Period
- 12:25 p.m. LUNCH (1 hour 5 min)
- **1:30 p.m.** Session on Corrosion During the Thermal Pulse (cont'd) Session Chair, Dan Bullen, NWTRB Member

# The Nuclear Regulatory Commission (NRC): Views and Recent Research

- 1:30 p.m. Regulatory Perspective on Corrosion of Alloy 22 Tim McCartin, Senior Advisor for Performance Assessment, NRC
- 1:35 p.m. Near-Field Chemical Environment Roberto Pabalan, Principal Scientist, Center for Nuclear Waste Regulatory Analyses (CNWRA)
- **1:50 p.m.** Factors Influencing the Uniform and Localized Corrosion of Alloy 22 Darrell Dunn, Principal Engineer, CNWRA
- 2:10 p.m. Sensitivity Analysis of Waste Package Corrosion Tae Ahn, Senior Materials Engineer, NRC and Tim McCartin, NRC
  - 2:25 p.m. Questions, discussion

# State of Nevada: Views and Recent Research

#### **2:45 p.m. Evolution of Near-Field Environments** Don Shettel, Chairman and Geochemist, Geoscience Management Institute, Inc.

# 3:10 p.m. Corrosion

Roger Staehle, Materials Science and Engineering Consultant

3:40 p.m. Questions, discussion

### 4:00 p.m. BREAK (15 min)

### Electric Power Research Institute (EPRI): Views and Recent Research

- 4:15 p.m. Overview John Kessler, EPRI
- 4:25 p.m. Effect of Desert Dust Composition on WP Environment Don Langmuir, Geochemist
- **4:45 p.m. Corrosion** Fraser King, Principal, Integrity Corrosion Consulting, Ltd.
- **5:00 p.m. Summary** Mick Apted, Executive Consultant, Monitor Scientific, LLC

5:05 p.m. Questions, discussion

- 5:25 p.m. Public Comment Period
- 5:45 p.m. Adjourn for the day

# Wednesday May 19, 2004

Session on Corrosion During the Thermal Pulse (cont'd) Session Chair, David Duquette, NWTRB Member

- 8:00 a.m. Call to Order and Opening Remarks David Duquette, NWTRB Member
- 8:05 a.m. Regulatory Requirements Margaret Chu, Director, OCRWM

8:15 a.m. Questions, discussion

### 8:25 a.m. Introduction to Presentations Robert Andrews, Manager Postclosure Safety, Bechtel SAIC Company (BSC)

9:05 a.m. Questions, discussion

9:20 a.m. Thermal Hydrological Environment and Thermal Seepage Gudmundur Bodvarsson, Director, Earth Sciences Division, Lawrence Berkeley National Laboratory (LBNL)

10:05 a.m. Questions, discussion

- 10:25 a.m. BREAK (15 min.)
- **10:40 a.m.** The In-Drift Chemical Environment During the Above-Boiling Period Carl Steefel, Geochemist, LBNL

11:40 a.m. Questions, discussion

- 12:05 p.m. LUNCH (1 hour 25 min.)
- **1:30 p.m.** Session on Corrosion During the Thermal Pulse Session Chair, Ron Latanision, NWTRB Member
- **1:30 p.m.** The In-Drift Chemical Environment during the Below-Boiling Period Carl Steefel, Geochemist, LBNL
  - 2:15 p.m. Questions, discussion
- 2:35 p.m. Corrosion Resistance of Alloy 22 Joe Payer, Professor of Materials Science and Engineering, Case-Western Reserve University
  - 3:35 p.m. Questions, discussion
- 4:05 p.m. Summary of Presentations Robert Andrews, Manager Postclosure Safety, BSC
  - 4:15 p.m. Questions, discussion
- 4:20 p.m. BREAK (30 min.)
- 4:50 p.m. Opportunity for Brief Wrap-up Statements
- 5:20 p.m. Public Comment Period
- 5:50 p.m. Adjourn