



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

## **Tentative Agenda Summer Meeting June 29 and 30, 1999**

### **Repository Design and the Scientific Program**

Beatty Community Center  
200 A Avenue South  
Beatty, Nevada 89003  
Tel: (775) 553-2050

#### **Tuesday, June 29 Repository Design**

- 9:00 a.m.**                    **Call to Order**  
Jared Cohon, meeting chair  
Chairman, Nuclear Waste Technical Review Board (NWTRB)
- 9:05 a.m.**                    **Welcome**  
Jeff Taguchi, Nye County Commissioner
- 9:10 a.m.**                    **Goals and Guidelines for the Meeting**  
Jared Cohon, NWTRB
- 9:20 a.m.**                    **OCRWM Update**  
[Lake Barrett](#), Acting Director  
Office of Civilian Radioactive Waste Management, DOE
- Legislative update
  - FY2000 budget
  - Meeting the 2001 site recommendation and 2002 license application schedules
- 9:35 a.m. Questions, discussion*
- 9:45 a.m.**                    **Yucca Mountain Site Characterization Office Update**  
[J. Russell Dyer](#), Project Manager  
Yucca Mountain Site Characterization Office (YMSCO)
- Recent accomplishments
  - Plans through site recommendation
  - Defensibility/traceability of information
- 10:05 a.m. Questions, discussion*

- 10:20 a.m.**            **Session on License Application Design Selection (LADS)**  
Daniel Bullen, NWTRB, session chair
- 10:30 a.m.**            **LADS Overview and DOE Requirements for LADS**  
[Paul Harrington](#), YMSCO  
*10:40 a.m. Questions, discussion*
- 10:45 a.m.**            **BREAK**
- 10:55 a.m.**            **Overview of LADS Process**  
[Richard Snell](#), Fluor Daniel, Inc.
- 11:00 a.m.**            **Enhanced Design Alternatives (EDAs): Assumptions and Summary Descriptions**  
[Robert Dulin](#), Duke Engineering & Services, Inc.
- Assumptions (technical and nontechnical)
  - Summary descriptions
- 11:20 a.m.**            **EDA Evaluation Process**  
[Kevin Coppersmith](#), Geomatrix, Inc.
- Criteria
  - Role of technical uncertainty in making a design choice
  - Alternatives
  - Role and effect of decision analysts
- 11:40 a.m. Questions, discussion (last three presentations)*
- 12:00 noon**            **Questions and Comments from the Public**
- 12:20 p.m.**            **Continue questions, discussion (last three presentations)**
- 12:30 p.m.**            **LUNCH**
- 1:40 p.m.**            **Consideration of Uncertainties in Waste Package/Drip Shield System for LADS**  
[James Blink](#), Lawrence Livermore National Laboratory (LLNL)
- 2:05 p.m.**            **Consideration of In-drift and Near-Field Uncertainties for LADS**  
[Ernest Hardin](#), LLNL
- 2:30 p.m.**            **EDA-II: Detailed Description and Future Plans**  
[James Blink](#), LLNL
- Description
  - Plans
- 2:55 p.m. Questions, discussion (last three presentations)*

- 3:35 p.m. BREAK**
- 3:45 p.m. Subsurface Design**  
**Mal Murphy**, Nye County; and **Dan McKenzie**, Morrison Knudsen Corporation
- Ventilation
    - Nye County workshop
    - Design for optimal ventilation
  - Preclosure issues
  - Design basis events
  - 2<sup>nd</sup> tunnel stability workshop
  - Subsurface performance confirmation needs and plans
- 4:10 p.m. Question, discussion*
- 4:25 p.m. Session on Thermal Testing**  
Debra Knopman, NWTRB, session chair
- 4:30 p.m. Drift-Scale Test (DST)**  
**Deborah Barr**, Bureau of Reclamation
- Status
  - Interpretation of results to date
  - Applicability of results to EDA-II
  - Issues in applying DST results to rest of repository
  - Integration/corroboration with single-heater test/large-block test
- 4:50 p.m. Questions, discussion*
- 5:00 p.m. Questions and Comments from the Public**
- 5:30 p.m. Concluding Remarks; Recess until Wednesday, June 30, 8:00 a.m.**  
Jared Cohon, NWTRB

**Wednesday, June 30**  
**The Scientific Program**

- 7:15 a.m.**                    **Informal coffee: Board members and public**
- 8:00 a.m.**                    **Call to Order and Opening Remarks**  
Debra Knopman, NWTRB
- 8:05 a.m.**                    **Session on Materials and Performance Modeling**  
Alberto Sagüés, NWTRB, session chair
- 8:10 a.m.**                    **Corrosion: Tests and Process Modeling**  
[Joseph Farmer](#), LLNL
- Laboratory tests on Alloy 22, titanium alloys, etc.
  - Process modeling: Alloy 22
  - Process modeling: titanium and other corrosion-resistant alloys
  - Process modeling: premature failure
- 8:40 a.m. Questions, discussion*
- 9:00 a.m.**                    **Overview of Total Systems Performance Assessment Modeling Plans**  
[Mark Tynan](#), YMSCO
- Highlights of TSPA Peer Review Report
  - Changes made due to TSPA Peer Review Report
  - Changes made due to recommendation of EDA-II
  - Process Modeling Reports (PMRs)
  - Schedule for TSPA for site suitability/site recommendation
  - Limitations on TSPA support for LADS
- 9:30 a.m. Questions, discussion*
- 9:50 a.m.**                    **BREAK**
- 10:00 a.m.**                    **Session on Geochemistry and Hydrology**  
Richard Parizek and Donald Runnells, NWTRB, session cochairs
- 10:05 a.m.**                    **Scientific Program Overview**  
[Mark Peters](#), Los Alamos National Laboratory
- Integration of scientific program and Process Modeling Reports (PMRs)
  - Data defensibility/traceability
  - Seepage and moisture monitoring
  - Overview of USGS H-3, Tc-99, Cl-36 validation study
  - Other
- 10:40 a.m. Questions, discussion*

- 11:00 a.m.**                    **Nye County’s Drilling Program**  
[Tom Buqo](#), Nye County hydrology contractor
- Description
  - Results
  - Interpretation of downhole water temperature significance
- 11:20 a.m. Questions, discussion*
- 11:30 a.m.**                    **Use of Chlorine-36 and Chloride Data to Determine Hydrologic Pathways at Yucca Mountain**  
[Paul Dixon](#), LANL
- 11:45 a.m. Questions, discussion*
- 12:00 noon**                    **Lunch**
- 1:10 p.m.**                    **State of Nevada Regional Hydrology Studies**  
[Linda Lehman](#), Technical & Regulatory Evaluations Group, Inc. (T-Reg)
- Saturated zone hydrology
  - Infiltration
- 1:35 p. m. Questions, discussion*
- 1:50 p.m.**                    **Unsaturated Zone Transport Test at Busted Butte**  
[Paul Dixon](#), LANL
- 2:15 p.m. Questions, discussion*
- 2:30 p.m.**                    **Questions and Comments from the Public**
- 3:00 p.m.**                    **Closing Remarks and Adjournment**  
Jared Cohon, NWTRB