

*Office of  
Civilian Radioactive Waste  
Management*

*Yucca Mountain Program Overview*

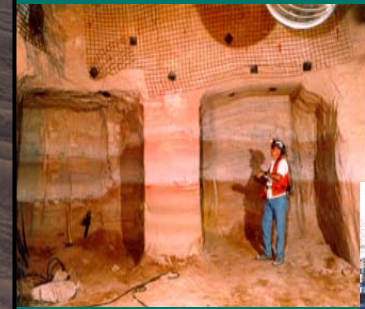
*Presented to:*

*Nuclear Waste Technical Review Board*

*Presented by:*

*Margaret S.Y. Chu, Director*

*May 7, 2002*



# ***My Background***

- **B.S. in chemistry, Purdue University**
- **P.h.D in physical chemistry, University of Minnesota**
- **Almost 22 years at Sandia National Laboratories, Albuquerque, New Mexico**
  - **Development of nuclear waste disposal regulations (HLW, LLW, MLW)**
  - **Research and management in nuclear waste programs**
  - **Research and management in environmental remediation**
  - **R & D in nuclear energy**
  - **Integration of scientific programs for the certification of Waste Isolation Pilot Plant (WIPP)**

# ***YMP Status Summary***

- **On February 14, Secretary of Energy recommended to the President that the site is suitable for further development**
- **On February 15, the President affirmed the Secretary's decision and forwarded the recommendation to the Congress**
- **On April 8, State of Nevada disapproved the President's decision**
- **The issue now resides within the hands of Congress -- we await the passage of a "joint resolution" before the House and the Senate**
- **The joint resolution must pass within 90 continuous legislative session days of the state of Nevada's disapproval (around July 26)**

# *Future Milestones*

- **December 2004 -- Submission of license application**
- **2007 -- Construction authorization**
- **2010 -- Waste receipt**
- **Closure of repository ~ 100 years later**

# ***Next Steps (Assuming Site Designation)***

- **Preparation for license application in 12/2004**
  - **Quality assurance program**
  - **Addressing Key Technical Issues**
  - **LA design decisions**
- **Ramp up a transportation program**
  - **National**
  - **Nevada**
- **Address waste receipt/contract issues**
- **Enhance the science and technology program**

# ***RW Is Jump-Starting the Transportation Program***

- **Establish fleet equipment and operational needs**
  - Logistic and operations planning support
  - Fleet hardware and auxiliary equipment
  - Transportation services
- **DOE has stated preference for rail shipment**
  - Requires rail development in Nevada
  - Preparing approach to support designation of:
    - Mode and Corridor
    - Development of possible EIS and preliminary design activities to support determination of rail alignment
- **Cooperation with stakeholders**
  - Work with Nevada interests on rail alignment
  - Preparing to initiate 180(c) grant activities
  - Will work with States through cooperative agreements

# ***Vision for the Future***

**Ensure the best science and technology are utilized in the planning, development, and implementation of the repository program:**

- **Safe and cost-effective repository**
- **Enhanced public confidence**

# ***Spectrum of Science & Technology Program***

- **To reduce uncertainties through continuous improvement in scientific understanding of Yucca Mountain repository system**
- **Breakthroughs (new ideas)**
- **Generic and common technical issues facing both Yucca Mountain and other countries**
- **Pre-closure and post-closure phases**



# *Implementation of Science & Technology Program*

- **Develop a sustained program with continuous funding**
- **Identify a limited number of “important” themes that benefit Yucca Mountain**
- **Leverage through an International Program and U.S. universities and National labs**
- **Concurrent and congruent with LA scientific investigations**
- **Incorporate new information/data/science into Yucca Mountain repository development, operation, and closure**

# *Concluding Perspectives*

- **Looking forward to continuing valuable input from NWTRB on:**
  - **License application**
  - **Repository development**
  - **Transportation program**
- **Seeking help from NWTRB to implement a long-term sustained science and technology program**
- **Encourage and support additional technical interactions with NWTRB**