



**Presentation to the National Spent Nuclear Fuel Program Meeting
March 25-26, 2010**

**The Office of Environmental Management
Approach to QA Post Yucca Mountain**

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Environmental Management Mission and Priorities

Mission

“Complete the safe cleanup of the environmental legacy brought about from five decades of nuclear weapons development, production, and Government-sponsored nuclear energy research.”



Radioactive tank waste remains a top priority.

Our Priorities are consistent and clear:

- Essential activities to maintain a safe and secure posture in the EM complex
- **Radioactive tank waste stabilization, treatment, and disposal**
- **Spent nuclear fuel storage, receipt, and disposition**
- **Special nuclear material consolidation, stabilization, and disposition**
- High priority groundwater remediation
- Transuranic and mixed/low-level waste disposition
- Soil and groundwater remediation
- Excess facilities deactivation and decommissioning (D&D)
- Continuing DOE missions



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

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Yucca Mountain

Current Status



- DOE has submitted a motion to the Nuclear Regulatory Commission (NRC) to withdraw with prejudice its pending License Application for a geologic repository at Yucca Mountain, Nevada
- The motion states:
 - Yucca Mountain is not a workable option for long-term disposition of the nation's used nuclear fuel (UNF) and high-level waste (HLW)
 - DOE still reaffirms its obligation to dispose of the nation's UNF and HLW waste
 - DOE has established a Blue-Ribbon Commission on America's Nuclear Future to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle
 - The Commission has been chartered to make recommendations for permanent disposal of UNF and/or HLW, including deep geological disposal.





Quality Assurance Program Governing SNF and HLW

- Memorandum of Agreement (MOA) between EM and OCRWM specifies technical and quality agreements for OCRWM's acceptance of EM's UNF and HLW at Yucca Mountain.
 - Office of Technical and Regulatory Support , EM-40, is the authority for the technical agreements
 - Office Safety and Security Program, EM-20, is the authority for the quality agreements
- MOA requires:
 - EM must meet and implement the RW *Quality Assurance Requirements and Description* (QARD) document (DOE/RW-0333P)-
 - 10 CFR 63, Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada
 - NQA-1-1983
 - Periodic audits via joint teams with participants from both EM and OCRWM
 - Audits can not exceed 3 years interval



Current Condition



- Eight QA programs at four EM sites that process and store UNF and HLW in accordance with the QARD
 - Defense Waste Processing Facility (DWPF) at the Savannah River Site is still in production of vitrified HLW
 - The other HLW and used nuclear fuel sites are in the maintenance & monitoring cycle of their programs

- All EM/RW audits are current except for the Office of River Protection
 - Bechtel National Inc. (BNI) QARD, ORP's prime contractor, was audited week of March 15, 2010
 - West Valley Demonstration Project (WVDP) at West Valley is due for their tri-annual audit this summer





EM Corporate Strategy

- Continue to uphold and honor QA obligations
- Continue to implement existing QA programs at the EM sites with SNF and HLW
 - Meet current commitments
 - Ensure integrity and effectiveness of established QA programs for the HLW and used nuclear fuel programs in such a way as to facilitate final disposition at a future date
 - Maintain the associated records and objective evidence of QA Program implementation for the stabilization, processing, handling, and storage to facilitate final disposition.



Path Forward



- Proceed with audits planned for FY 2010:
 - Office of River Protection
 - DWPF at SRS (annual audit)
 - WVDP at West Valley (tri-annual audit)
- Continue to provide corporate QA programmatic support and technical assistance
 - Regulatory interpretation and guidance
 - Program development and implementation
 - Subject matter expertise
- Integrate EM/RW audit process into the overall EM QA corporate oversight and assessment activities
 - Ensure current and ongoing operational awareness
- Coordinate with other EM organizations (e.g., EM-40) to ensure an integrated corporate approach to maintaining appropriate technical baseline



Questions and Answers



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Points of Contact

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