

U.S. Department of Energy
Office of Civilian Radioactive Waste Management

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Project Update

Presented to:
DOE/NRC Quarterly Management Meeting

Presented by:
W. John Arthur, III
OGRWM Deputy Director, Office of Repository Development
U.S. Department of Energy

September 15, 2005
Rockville, Maryland

Enclosure 3

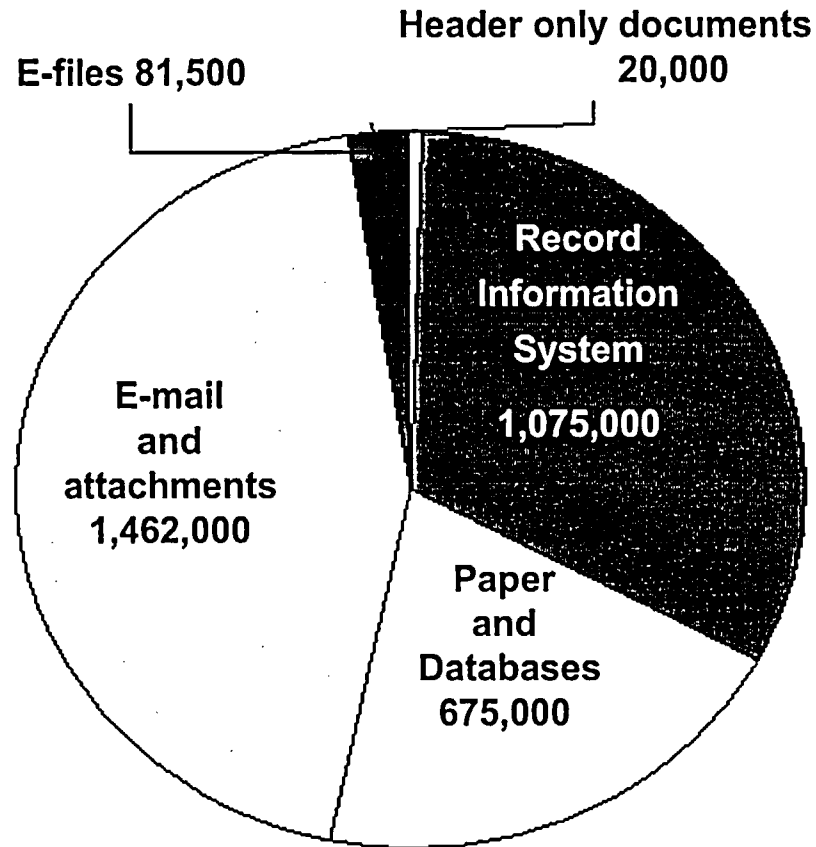
Goals and Objectives

- **Summarize Licensing Support Network activities**
- **Provide an update on DOE's preparations to complete the License Application and supporting systems and documentation**
- **Summarize Yucca Mountain Project (YMP) challenges and our progress towards resolution**
- **Summarize budget, management processes, and Quality Assurance (QA)**



Licensing Support Network

3,300,000 Documents



USGS E-mail Issue

- **Condition Report (CR) 5223 elevated to a Level A on June 20, 2005**
- **Root cause analysis estimated completion by mid-October**
- **Root cause charter addresses these questions:**
 - **Did technical product output and/or software and data related to infiltration analysis/model report meet applicable qualification requirements?**
 - **Did a culture exist at the time the e-mails were generated that promoted and/or ignored noncompliance with the QA program?**
 - **Did Project QA miss an opportunity to identify conditions adverse to quality?**



USGS E-mail Issue

(Continued)

- **Corrective action underway to replace and remediate the moisture infiltration work. Projected completion in April 2006**
- **Planning underway for self-assessment on Project QA, management processes, and nuclear culture**



July 2005 Annunciator Panel

Primary and Secondary Metrics

Organization and Safety Culture

WORK EXECUTION	Primary		Secondary	
	G Y Y Y *	Y Y Y Y *	Y O O O	O Y O O *
1.1 Licensing	1.1.1 LA Development (1.5.02.02)	1.1.2 NRC Commitments (1.6.02.03)	1.1.3 NRC Interactions Effectiveness	
1.2 Facilities EPC Performance IOC (Design)	1.2.1 Fuel Handling Facility IOC (Design)	1.2.2 Cask Handling Facility IOC (Design)	1.2.4 Design Quality	
1.3 Preclosure Safety Analysis Documents				
1.4 Post Closure	1.4.1 Post Closure Safety Analysis Documents	1.4.2 Total System Performance Assessment		
1.5 Site Operations	1.5.1 Site Status	1.5.2 Site Performance		
1.6 Licensing Support Network				

KEY PROCESSES	Organization & Safety Culture			
	G O O O *	G O O O *	B B O O *	Y Y Y Y *
2.1 Safety Performance	2.1.1 Industrial Safety Performance	2.1.2 Emergency Management		
2.2 Performance Improvement	2.2.1 Lessons Learned Effectiveness	2.2.2 Self Assessment Effectiveness	2.2.3 Corrective Action Program Effectiveness	
2.3 Work Management				
2.4 SCVE				
2.5 Human Performance	2.5.1 Error Prevention Behavior & Results	2.5.2 Error Detection Behavior & Results	2.5.3 Error Correction Behavior & Results	
2.6 Quality Performance				



Corrective Action Program Status

- As of August 23, 638 total condition reports open
- Corrective Action Program status yellow
 - Continued yellow status from July management review
- While goal of 90% of plans approved within 30 days not achieved, overall average of 23 days for completion of all plans
- Level B & C CR action plans have an average of 86 days to complete versus the 60-day goal
- While improvement is occurring in the Corrective Action Program's (CAP) effectiveness, continued and increased management attention required



Condition Report Status

- **Level A Condition Reports**

- CR 5223 Potential willful non-compliance of Project QA
- CR 3235 Improper CR closure / Ineffective CAP corrective actions
- CR 6278 Yucca Mountain Site Characterization Project Requirements Document is not current

- **Level B Condition Reports**

- CR 5559 Extensive rework of technical work products
- CR 6233 Evaluate contract changes for Project Requirements Document



Summary

- **Good progress on Licensing Support Network**
- **Steady progress on closure of the U.S. Geological Survey issue and corrective actions**
- **Continued progress on License Application work**
- **Schedule for preclosure and design interactions is being established**
- **Management emphasis on replacing critical QA and licensing positions and strengthening organizational capabilities to perform as a licensee**





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Quality Assurance Overview

Presented to:
DOE/NRC Quarterly Management Meeting

Presented by:
R. Dennis Brown
Director, Office of Quality Assurance
Office of Civilian Radioactive Waste Management
U.S. Department of Energy

September 15, 2005
Rockville, Maryland

Quality Assurance Overview

- **Quality Assurance Requirements and Description (QARD)**
- **Corrective Action Program Oversight**
- **Trending**
- **Office of Quality Assurance (OQA) Audits/Surveillances**
- **Management & Operating (M&O) Contractor Quality Assurance (QA) Audits/Surveillances**



Quality Assurance Requirements and Description (QARD)

- QARD Rev 17 accepted by NRC on August 4, 2005
- Implementation in progress



Corrective Action Program Oversight

- **M&O surveillance of effectiveness of Condition Report (CR) actions**
- **Four M&O surveillances of Level C CR processing**
- **OQA surveillance of DOE Level C CR processing**



Trending

- **Separate procedures for OCRWM and M&O Contractor**



Office of Quality Assurance Audits/Surveillances

- **Completed Audits**
 - Office of Repository Development
 - AQAP and Applicable Site Activities
 - BSC Procedural Adequacy
 - Office of Quality Assurance
 - Software QA Activities

- **Completed Surveillances**
 - Review of QAMA process



Office of Quality Assurance Audits/Surveillances

(Continued)

- **Upcoming Audits**
 - BSC Compliance Audit
 - BSC Design
 - OCRWM



Office of Quality Assurance Audits/Surveillances

(Continued)

- **Completed EM/OCRWM Audits**
 - INEEL Spent Nuclear Fuel
 - Hanford Spent Nuclear Fuel



Management and Operating Contractor Quality Assurance Audits/Surveillances

- **Completed QA Audits**
 - **Corrective Action Process**
 - **Scientific Investigation, Measuring and Testing Equipment and Sample Control**
- **Completed QA Surveillances**
 - **Seven surveillances of AMR activities including Data Submittals, Use of Data, and IRANs**
 - **Pre-closure Safety Analysis Calculation**
 - **Six surveillances of YMP Site Activities**
 - **Two surveillances of Training Activities**
 - **Specifications**



Management and Operating Contractor Quality Assurance Audits/Surveillances

(Continued)

- **Upcoming QA Audits**
 - U.S. Geological Survey
 - National Laboratories including LANL, LBNL, SNL
 - BSC Procurement Process

- **Upcoming Notable QA Surveillances**
 - Corrective Action Program Charter and Initiatives
 - Four surveillances of Direct Support Subcontractors implementing OCRWM procedures for YMP Activities

