

ENCLOSURE 4



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



# Management Improvement Initiatives

Presented to:  
**DOE/NRC Quarterly Quality Assurance Meeting**

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# Outline

- **History and Background**
- **Lessons Learned**
- **Five Key Areas for Improvement**
- **How Are We Going to Manage?**
- **Effectiveness Indicators**
- **Conclusions**



# History and Background

- **1998: Senior managers began transition from work technically sufficient for site suitability to traceability needed for licensing**
- **2001: Quality Assurance (QA) organization identified recurring conditions adverse to quality (BSC 01-C-001 and -002)**
  - **Root cause analysis identified weaknesses in management systems, quality processes, and roles and responsibilities**
  - **Management recognized need for sustained initiative to:**
    - ◆ **Clarify roles, responsibilities, authority, and accountability**
    - ◆ **Improve effectiveness of QA program implementation**
    - ◆ **Drive culture to consistency with NRC-regulated environment**



# History and Background

(Continued)

- **2002: OCRWM Management Improvement Initiatives (OMII) submitted to NRC**
  - Document did not meet previous commitments or expectations
  - OCRWM committed to submit a revised document that reflects:
    - ♦ Actions to address deficiencies and recommendations
    - ♦ Remedial and corrective actions for corrective action reports
    - ♦ Other relevant actions to improve OCRWM management practices
- **Revised document completed in July 2002**



YUCCA MOUNTAIN PROJECT

# Source Documents

- **15 documents were reviewed, including:**
  - **Corrective Action Reports (CARs) [2]**
  - **Root Cause Analyses [2]**
  - **Concerns Program Trend Report [1]**
  - **NRC-DOE Correspondence [3]**
  - **DOE/BSC Internal Evaluation and Correspondence [4]**
  - **Quality Assurance Management Assessments [2]**
  - **External Evaluation Report (Morgan, Lewis & Bockius) [1]**
- **Management Improvement Initiatives Appendix A references source documents and correlates with action summaries**



# Lessons Learned

- **Lessons Learned Evaluation Team reviewed OMI submittal process**
  - Reference: OCRWM-LL-2002-066 (Completed July 2002)
- **Team found Yucca Mountain Project management system needs improvements in:**
  - Program standards, policies, administrative controls and direction to employees
  - Oversight, employee relations, and employee feedback
  - Accountability
- **Findings common to both DOE (line and QA) and BSC; impact all levels of organizations**



# Lessons Learned

(Continued)

- **Recommended corrective actions are:**
  - **Conduct management meetings to communicate lessons learned and future expectations**
  - **Issue letters to clearly define performance expectations, responsibilities, and authorities**
  - **Redirect or establish Deputy Manager for conflict identification and resolution, issue escalation, and independent assessment of CAR/Deficiency Reports (DRs)**
  - **Establish senior review board for independent review of significant issues and plans**
- **Actions address Program's weaknesses and envelope lower-level deficiencies and recommended actions from source documents**





# Five Key Areas for Improvement

- **Project Roles, Responsibilities, Authority, and Accountability (R2A2)**
- **Quality Assurance Programs and Processes**
- **Project Procedures**
- **Corrective Action Program**
- **Safety-Conscious Work Environment**



# **Roles, Responsibilities, Authority, and Accountability (R2A2)**

- **Objective: Define ownership and accountability**
- **Current: Support site suitability; R2A2 confusion**
- **Desired: Align for licensing; understand and accept**
- **Approach: Realignment, clarification, and definition**
  - Issue DOE policy statement identifying expectations
  - Clarify R2A2 to align authority and responsibility
  - Orient DOE staff to hold BSC accountable
  - Orient BSC staff to organization and R2A2
  - Issue DOE Program Manual on implementing requirements
  - Revise DOE annual performance appraisals



# Quality Assurance Programs and Processes

- **Objective: Implement QA requirements and processes**
- **Current: Quality processes need improvement; requirements documentation confusing and difficult**
- **Desired: Define and clarify roles and responsibilities**
- **Approach: Focus on quality at working level**
  - Issue DOE policy statement on expectations
  - Clarify R2A2 for Office of Quality Assurance (OQA)
  - Orient DOE and BSC staffs on R2A2
  - Review Quality Assurance Requirements and Description
  - Reflect QA requirements in implementing procedures
  - Revise DOE annual performance appraisals



# Project Procedures

- **Objective: Institute effective and efficient procedures**
- **Current: Overly prescriptive and inefficient**
- **Desired: Effective and efficient DOE and BSC procedures**
- **Approach: Realign R2A2; review and revise procedures**
  - Clarify OCRWM R2A2
  - Review existing procedures
  - Issue new or revised procedures
  - Train personnel prior to implementation



# Corrective Action Program

- **Objective: Single corrective action program**
- **Current: Multiple management systems**
- **Desired: Single, Project-wide system**
- **Approach: Simplify and communicate program**
  - **Assign OQA Director responsibility for administration and hold accountable**
  - **Establish DOE task team for requirements and specifications**
  - **Develop and implement BSC system identify and minimize adverse repetitive conditions**
  - **Implement single OCRWM corrective action program**
  - **Define and implement self-assessment and lessons-learned programs based on corrective action program**



# Safety-Conscious Work Environment

- **Objective: Foster and sustain Safety Conscious Work Environment (SCWE)**
- **Current: Lack of SCWE understanding, common values, and timely actions**
- **Desired: SCWE embraced; work environment encourages input without fear of harassment, intimidation, retaliation, or discrimination (HIRD); prompt and meaningful response to concerns**



# **Safety-Conscious Work Environment**

(Continued)

- **Approach: SCWE Policy with clear expectations, training, reinforcement, and communication**
  - **Modify BSC and other DOE contracts for SCWE**
  - **Eliminate backlog of open OCRWM employee concerns**
  - **Establish DOE and BSC policies and procedures**
  - **Develop/Revise SCWE training modules**
  - **Establish internal BSC mechanisms for employee concerns**
  - **Conduct employee and supervisor/manager training**
  - **Have external SCWE expert group evaluate YMP**



**YUCCA MOUNTAIN PROJECT**

# Appendix B

- **Contains action summaries for CARs BSC-01-C-001 and -002 for modeling and software**
  - **BSC is responsible for these corrective actions**
  - **Corrective actions listed as complete have been verified**
  - **Effectiveness will be verified during routine Office of Quality Assurance audits and surveillances**





# How Are We Going to Manage?

- **Establish vision, policies, and procedures yielding continuous improvement**
- **Establish rigor, discipline, safety-consciousness, formality, and accountability**
- **Create team of competent change agents dedicated to continuous improvement**
- **Assure success by measuring performance and providing resources to implement improvements**



# How Are We Going to Manage?

(Continued)

- **Effectiveness Review and Closure Process**
  - Responsible manager reviews and approves each action
  - OCRWM OQA reviews and agrees action is complete
  - Outside experts review overall effectiveness
- **Effectiveness Indicators**
  - Establish goals to manage and hold accountable
  - Goals establish desired end state
  - Interim goals measure progress toward end-state goals



# Conclusions

- **Senior management has reviewed and taken stock of changes needed to improve management systems and prevent further recurrence of adverse conditions**
- **Revised Management Improvement Initiatives sets forth plans for effective implementation of changes**
- **Key elements of revised approach include:**
  - **Recognition that managers' behaviors and accountability need to change**
  - **Identification of 5 key areas where improvements are needed**
  - **Personal commitment of Dr. Chu, OCRWM Director, to make resources available, review progress, and report to NRC**

