

Solving Cleanup Challenges Through Risk Reduction

Status of EM Quality Assurance Activities

Presented by

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Office of Standards and Quality Assurance (EM-64)

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Discussion Topics

- **EM Office of Standards and Quality Assurance**
- **Review of Major QA Initiatives for FY2008**
- **Major Initiatives for FY2009**

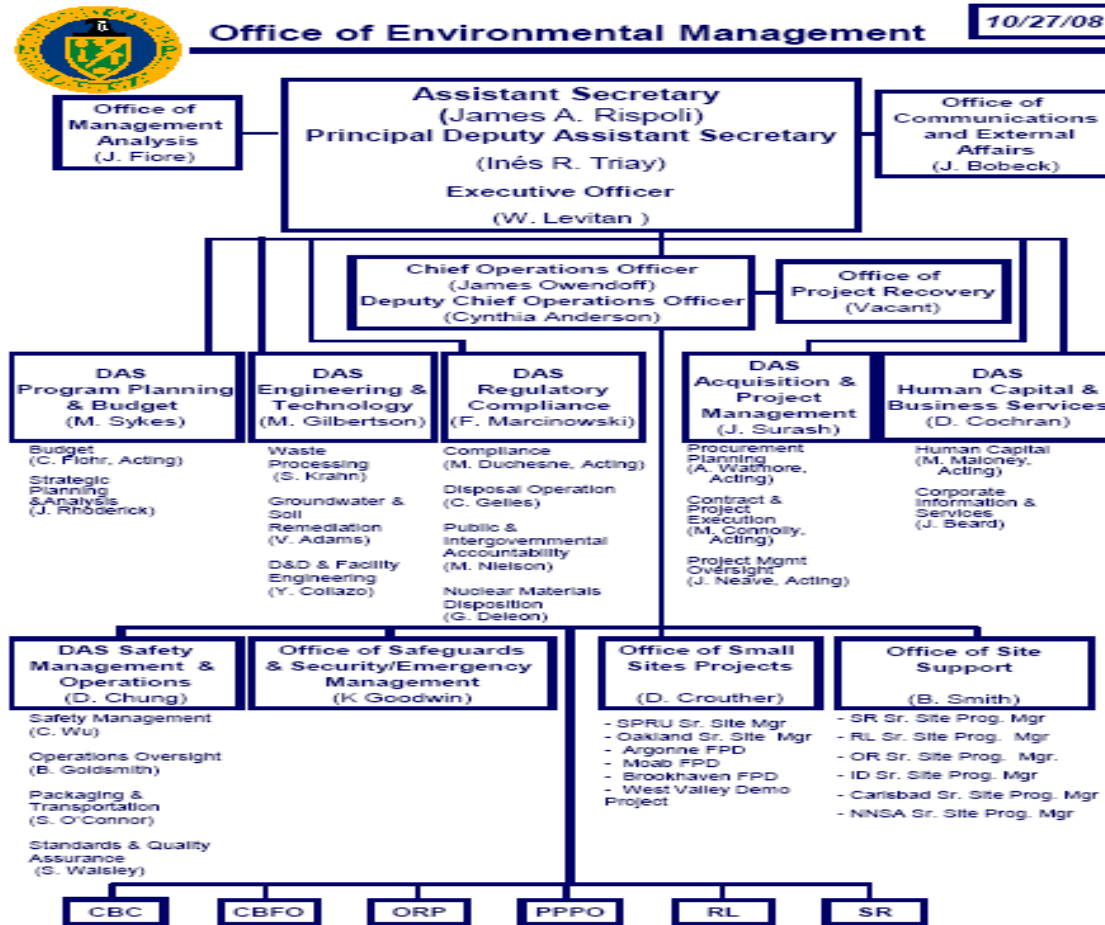


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- **DOE Corporate Vision:**
 - Perform mission work safely AND correctly
- **EM Corporate Objectives:**
 - EM investments are protected
 - Programs adequately address stated requirements
 - Programs correspond to risks and hazards of work being performed
- **EM-HQ Strategies:**
 - Establish a corporate QA program to oversee the field implementation of the specific QA processes applied to EM projects
 - Ensure that all EM projects have the technical, safety, and quality requirements/standards properly identified and adequately implemented
 - Develop evaluation criteria and attributes to support the decision making process for appropriate implementation of requirements and standards through the critical phases of a project



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Review of Major FY2008 EM QA Initiatives

- **EM Corporate QA Program**
- **EM QA Corporate Board**
- **EM/EFCOG QA Improvement Project Plan**
- **QA Managers at Major Sites, CBC, and Small Sites**
- **QA Performance Metrics System/Process with pilot tests**
- **EM Centralized Training Academy**
- **DOE Nuclear Suppliers Outreach Event**



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Other Major FY2008 EM QA Initiatives

- **EM Assist Visits and Phase II QA audits**
- **EM & HLW/SNF Sites review of OCRWM QARD Revision 20 and EM direction to WC Sites to Implement QARD Revision 20**
- **EM/RW Program audits/surveillances of EM HLW & SNF Sites**
- **QA system evaluation process and annual declaration criteria integrated with ISM management system**
- **QA Community of Practice and “QA Quarterly” newsletter**



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EM PHASE II AUDITS

- Over 20 “Assist Visits” and Audits conducted in FY2007 and FY2008
- Results briefed to senior management and DNFSB
- Phase II support contract awarded September 30, 2008 – EDI/Navarro
- Focus of FY 2009 will be on implementation vs. documentation
 - Address issues from FY 2007 Phase I “assist visits” and FY 2008 Phase II audits
 - Targeted reviews address immediate QA issues
 - Address operational and small sites projects, in addition to construction projects
- Projects will be evaluated to contractual requirements
- Site participation planned for FY 2009
- Continued EFCOG participation welcomed

Phase II Audit Plan Schedule FY 2009						
Site	FPC	Project	Audit Number	Start Date	Audit Team	EM-60 Participant
EM-HQ	N/A	EM-HQ Corporate QAP Gap Analysis	EM-PA-09-004	Oct 08 – Jun 09	TBD	Bob Murray
Richland	Rudy Guercia	RL-0041 Nuclear Facility D&D - River Corridor Closure Project	EM-PA-08-018	Oct. 21, 2008 Oct. 24, 2008	Bob Murray Dave Kimbro Norm Frank JackWalsh Ray Wood	Jim Davis David Faulkner
Oak Ridge	Gary Riner	OR-0011 Z U233 Stabilization	EM-PA-09-001	Nov. 17, 2008 Nov. 21, 2008	Bob Murray TBD	Jim Davis Butch Huxford
PPPO	Dave Kozlowski	PPPO-PO-0040 Nuclear facility D&D Portsmouth (RFP Review only)	EM-PA-09-003	December 2008	TBD	Bob Murray Butch Huxford
CBFO	TBD	Carlsbad CCP	EM-PA-09-013	Jan. 13, 2009 Jan. 16, 2009	Bob Murray TBD	David Faulkner
Savannah River	Zack Smith	SR-05-D-405 Salt Waste Processing Facility	EM-PA-09-002	Feb. 17, 2009 Feb. 20, 2009	Bob Murray TBD	Butch Huxford
SPRU	Steve Feinberg	SPRU-VL-0040 Nuclear Facility D&D	EM-PA-09-006	Mar. 24, 2009 Mar. 27, 2009	Bob Murray TBD	Jim Davis
River Protection	John Eschenberg	RP-Q1-D-416 Waste Treatment and Immobilization Plant	EM-PA-09-007	Apr. 21, 2009 Apr. 24, 2009	Bob Murray TBD	Bob Toro
Grand Junction	Don Metzler	GJ-MOAB-0031 Soil and Water Remediation	EM-PA-09-008	May 19, 2009 May 22, 2009	Bob Murray TBD	David Faulkner Jim Davis Butch Huxford
PPPO	Jack Zimmerman	PPPO-02-U-101 DUF6 Conversion - Portsmouth	EM-PA-09-009	Jun. 16, 2009 Jun. 19, 2009	Bob Murray TBD	Bob Toro Jim Davis Butch Huxford
Brookhaven	John Sattler	BNL-0040 Nuclear facility D&D Graphite Research Reactor	EM-PA-09-010	Jul. 21, 2009 Jul. 24, 2009	Bob Murray TBD	David Faulkner
Oak Ridge	William McMillan	OR-0013B Solid Waste Stabilization and Disposition (TRU Processing Facility)	EM-PA-09-011	Aug. 18, 2009 Aug. 21, 2009	Bob Murray TBD	David Faulkner Jim Davis Butch Huxford
Idaho	Guy Girard	ID-06 D-401 Sodium Bearing Waste Project	EM-PA-09-12	Sept. 22, 2009 Sept. 25, 2009	Bob Murray TBD	Bob Toro Jim Davis

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EM/RW Audits

- **Four audits conducted in FY 2008**
No significant programmatic issues identified
- **Six audits planned for FY 2009**
 - Focus on ongoing compliance with QARD for HLW and SNF activities, including qualification of Fed/Contractor HLW QA Programs at ORP
 - Verification of CA Implementation from CAQs identified in last year's audits
- **NRC Involvement in FY 2009 EM/RW audits**

2009 Audit Schedule

- 12/2008 - Aiken, SC SRS Status Visit (SRNL HLW and SRS SNF)
- 1/2009 - Richland, WA Qualification Audit of BNI HLW
- 2/2009 - Idaho Falls, ID Annual Audit of NSNFP
- 4/2009 - Aiken, SC Annual Audit of SRS HLW
- 6/2009 - Richland, WA Qualification Audit of ORP HLW
- 8/2009 - Idaho Falls, ID Annual Audit of INL SNF
- 9/2009 - Richland, WA Annual Audit of RL SNF



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EM QA Corporate Board (established in March 2008)

- **Mission**
 - Body to facilitate institutionalization of QA management systems across the EM complex
 - Provides leadership role in overseeing the effectiveness of quality requirements and disseminating best practices and lessons learned
- **Membership**
 - Chair: Dae Chung, DAS, Office of Safety Management and Operations
 - EM HQ, EFCOG, Site, and Contractor Management
- **First meeting held in March 2008**
 - Twenty (20) top issues/concerns specific to QA/QC identified
 - DOE EM/EFCOG QA Improvement Project Plan developed
 - Five highest priority issues
 1. Requirements flow down
 2. Adequate NQA-1 suppliers
 3. Commercial Grade Item & Services Dedication Implementation & Nuclear Services
 4. Graded Approach to Quality Assurance
 5. Line Management Understanding of QA and Oversight
- **Second meeting held in July 2008**
 - DOE EM/EFCOG QA Improvement Project Plan accepted and approved
 - Focused on working group activities/status related to high priority issues
- **Third meeting held in November 2008**

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EM Corporate Quality Assurance Program

- QAP issued by EM-1 in November 2008
- Provide consistent QA implementation across EM while allowing for a graded approach
- Requirements apply to both nuclear and non-nuclear work in EM (HQ, Field/Project offices, Contractors)
- EM adopts American Society of Mechanical Engineers (ASME) NQA-1-2004, *Quality Assurance Requirements for Nuclear Facility Applications*, and addenda through 2007.
 - Parts 1 and 2 implemented with a graded approach
 - Parts 3 and 4 should be applied to work scope
- For those organizations that are not currently implementing NQA-1-2004, a gap analysis should be prepared and submitted to EM HQ for review.
- Each organization will have a Quality Assurance Implementation Plan (QIP) describing how the applicable requirements of the corporate QAP are implemented and/or passed down to their lower-tier organizations.
- Effective Implementation Date of Corporate QAP is June 30, 2009
- Yearly declaration process

Integrated Quality Management System EM Corporate QAP	
- Purpose and Objective	
- Scope	
- EM Management Commitments & Expectations	
- Roles and Responsibilities	
- Implementation	
- Quality Performance Objectives, Measures, and Commitments (POMCs)	
DOE Order 414.1C Criteria	
Program	Design
Personnel Training and Qualification	Procurement
Quality Improvement	Inspection and Acceptance Testing
Documents and Records	Management Assessment
Work Processes	Independent Assessment
EM HQ QIP EM Field - Federal QIP EM Field - Contractor QIP	

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EM Performance Metrics Development and Implementation

- Provide a consistent and uniform basis for EM sites and HQ to report on QA program performance
- QA performance metrics table and instructions distributed on September 2008
- Performance metrics will be applied at the major contract level for each site
- Each contractor is expected to complete the metrics as part of their annual declaration process
 - Site managers will evaluate the annual assessment when delegated
- Three evaluation levels:
 - Program: evaluation of the contractors QA description
 - Performance: evaluation of implementation of QA program
 - Program effectiveness review: annual validation of QA program
- Pilot tests:
 - West Valley, NY and Richland, WA in September 2008
 - PPO in October 2008
 - Results --- positive

EM Corporate Performance Metrics Quality Program Criteria

Site: _____ Evaluation Level: _____ Period: FY09

I. MANAGEMENT									
CD	10 CFR 830 Criteria	ASME NQA- 1, 2004	Supported ISM Guiding Principles	Lines of Inquiry	SCORE				
					Item	Sum	Basis		
	1. Program	1. Organization 2. Quality Assurance Program	Line Management Responsibility Clear Roles and Responsibilities Competence Commensurate with Responsibilities	A The quality management system (QMS) defines and documents the established organizational structure, functional responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the work including overall expectations for effective implementation of the quality assurance program. B The QMS describes a quality assurance organization that has sufficient resources and qualifications to perform its functions. C The QMS defines a process for grading the application of requirements and this process adequately address hazards and mission.					
X	X	X	X						
	2. Personnel Training and Qualification	2. Quality Assurance Program	Line Management Responsibility Clear Roles and Responsibilities Competence Commensurate with Responsibilities	A The methodology is well described for establishing requirements to indoctrinate, train and qualify personnel performing or managing activities affecting quality. B Adequate resources have been identified to support the selection, training, and qualification of personnel conducting work. C Requirements are defined and implemented for the qualification and/or certification of personnel in the various functional areas (e.g., audit personnel, subject matter experts, inspection and test personnel, welders, etc.).					
X	X	X							

Performance Score: Excellent Good Investigate Define Actions

Legend: Previous period Current period



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Centralized QA Training Academy

- Goal: Address lack of available trained, qualified, and experienced QA personnel within EM
- First class conducted during week of October 20, 2008 in Carlsbad, NM
- Class content aligned with DOE Qualification Standard 1150-2002 and NQA-1-2004
- Phased Approach: 700 Hours of training and mentoring
 - Phase I: Initial Classroom Training (40 Hours)
 - Phase II: Hands-On Field Work and Initial Audits (Auditors-In-Training)
 - Phase III: Advanced Audits for Lead Auditor Candidates
 - Phase IV: Follow-up Coaching and Mentoring
- Training program is not intended to “certify” existing QA professionals
- Additional classes and course materials are being planned in FY2009
 - Courses will be held at multiple sites to allow maximum attendance
 - FPDs -- focus will target the benefits of QA and project management
 - SQA -- QA Academy course will be updated to include latest on SQA
- Future course work may be a combination of online and class instruction

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Supplier Outreach Events

- Current effort tied to EM/EFCOG QA Improvement Working Group 2 – Adequate NQA-1 Suppliers
 - Difficulty of contractors finding adequate NQA-1 suppliers
- First “Vendors Day” held in Denver, CO on July 2008 (with EM, NNSA, and EFCOG sponsorship)
- Outreach events are planned for the 2nd, 3rd, and 4th quarters of FY2009
 - Two regional events proposed at SRS (March 17-18, 2009) and Hanford
 - The theme will be similar to Denver



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Major FY2009 EM QA Initiatives

- **Corporate QAP/HQ-Site QIP Issuance/Implementation**
- **EM/EFCOG QA Improvement Project Plan Tasks (5 Working Groups)**
- **Performance Metrics System Implementation**
- **2-3 QA Corporate Board Meetings**
- **12 Phase II QA Oversight Audits**
- **6 EM/RW Audits of EM HLW and SNF Sites**
- **Centralized Training Academy Courses**
- **Nuclear Suppliers Outreach Events**



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Questions and Comments



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