

#### *E M Environmental Management safety performance cleanup*

Vol. 1 No. 2

closure

#### March 2009 QA Corporate

Board Executive Members:

## Quality Assurance Corporate Board News

**G**Quarterly

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#### Message from the Chair



Chair

e welcome the New Year having accomplished a series of critical

initiatives aimed at strengthening and institutionalizing quality assurance (QA) in how we perform work. The mission of the Office of Environmental Management (EM) is very broad and encompasses the entire spectrum of facility life cycle including design, technology development, engineering, construction, operation, surveillance and maintenance, and deactivation and decommissioning (D&D). Included are activities related to waste management, packaging,

transportation, and disposal. Fulfilling this mission safely, reliably, and correctly is paramount to maintaining public trust and advancing the future of DOE's nuclear business.

Our efforts in 2008 focused on building the infrastructure necessary to ensure QA is embedded in work execution as well as in corporate decision making. For example:

- 1. Established the EM QA Corporate Board and the EM/EFCOG QA Improvement Initiative Project Plan.
- Developed the EM Corporate Quality Assurance Program (QAP). The EM Corporate QAP builds on DOE O 414.1C; Quality Assurance and requires graded and tailored application of ASME NQA-1-2004 to all EM activities. The QAP is designed to ensure consistency and rigor to the application of QA in the EM Program.
- **3.** Developed the EM Standard Review Plan (SRP) and associated review modules (expectations and requirements). The SRP addresses key functional areas such as project management, engineering and design, nuclear and facility safety, worker safety, environment, security, and quality assurance, grouped per each specific Critical Decision point.
- **4.** Developed the QA Annual Declaration and Validation Process. This process is integrated with the Integrated Safety Management (ISM) Declaration process.
- 5. Developed EM Corporate Performance Metrics System.
- **6.** Established the EM QA Centralized Training Platform (Academy). Established in June 2008 to provide NQA-1 training for the EM Program federal and contractor staff.

Our challenges in 2009 are great. We are continuing to learn from past, both successes and setbacks. Our immediate QA priorities in 2009 consist of the following:

- **1.** Ensure that all EM elements at Headquarters, Field, and contractors have an approved QAP and a Quality Assurance Implementation Plan (QIP).
- **2.** Continue with development of high priority SRP Review Modules to support EM's new initiative-Construction Project Review.
- **3.** Continue to build and expand the depth and breadth of the EM QA Academy to meet the needs of the EM community (federal and contractor); nuclear suppliers; and the academic community.
- 4. Emphasize and continue the QA outreach and awareness efforts to the workforce and nuclear suppliers.

I look forward to seeing many of you at the next EM QA Corporate Board Meeting in Augusta, Georgia (March 19, 2009) and the 2009 Regional Nuclear Suppliers Outreach Event, which will be hosted by the Savannah River Site in Augusta, Georgia, March 17-18, 2009.

Federal Representatives Dae Chung Chair Sandra Waisley Deputy Chair David Brockman Richland Shirley Olinger Office of River Protection Jeffrey Allison Sayannah River Site

William Murphie

Portsmouth & Paducah

Project Office Rick Provencher

Idaho

Jack Craig EM Consolidated

**Business Center** 

David Moody

Carlsbad Robert Brown

Oak Ridge Contractor Representatives

David Amerine Parsons George Jackson Fluor Joe Yanek Fluor/EFCOG Thomas Stevens AREVA **Mark Spears** CH2M Hill Norm Barker **Energy Solutions** David Walker Bechtel Michael Mason BNI/ EFCOG Leo Sain URS Washington Group Charles Munns SRNS **Robert Cochran** 

# **G**Quarterly

Mark Your Calendar			QA News	
Date	Event	Location	3rd Corporate QA Board Mee	
Mar. 17-18, 2009	DOE Nuclear Suppliers Outreach Regional Event	Augusta, GA	EM Corporate Quality Assuration	
Mar 19, 2009	EM QA Corporate Board Meeting (4th meeting)	Augusta, GA	(page 3)	
April 19-24, 2009	Society of Quality Assurance Annual Meeting	San Diego, CA	<ul> <li>Quality Assurance Centralized (page 3)</li> </ul>	
April 20-22, 2009	GQA Nuclear Internal/ External Auditor Training	Orlando, FL	<ul> <li>Success Story from Denver D</li> </ul>	

Detroit, MI

Chicago, IL

Orlando, IL

#### GQA Root Cause Analysis Training Orlando, FL GQA Commercial Grade Item Dedication Training Orlando, FL Oak Ridge, TN EFCOG ISM/QA Working Group Meeting

- eeting (page 2)
- rance Program (QAP) Issued
- ed Training Platform (Academy)
- DOE/NNSA Nuclear Suppliers Outreach Event (page 4)
- Savannah River Site to Hold Monthly Quality Assurance Interface Meetings (page 4)
- EM Quality Assurance Fiscal Year 2009 Audit Schedule (page 5)
- EM-RW Quality Assurance Fiscal Year 2009 Audit Schedule (page 5)

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April 23-24, 2009

Early May 2009

June 4, 2009

August 2009

October 8, 2009

April 22, 2009

#### 3rd QA Corporate Board Meeting - Atlanta, Georgia

NEI Nuclear Manufacturing Outreach Workshop

NEI Nuclear Manufacturing Outreach Workshop

NEI Nuclear Manufacturing Outreach Workshop



The third EM Quality Assurance Corporate Board Meeting was held November 13-14, 2008, in Atlanta, Georgia. There were 50 participants, including 15 Executive Board members and one Defense Nuclear Facilities Safety Board staff member in attendance. During the  $1\frac{1}{2}$  day meeting each of the five EM/ EFCOG Quality Assurance Improvement Project Focus Area Groups provided an update on progress and completed deliverables.

In addition, there were several lessons learned presented: "Fall from NRC's Grace" by Mike Mason (Bechtel), LANL's Chemistry and Metallurgical Research Replacement (CMRR) Project by Tim McEvoy (Bechtel National, Inc., LANL), and the Washington Closure Hanford Performance Metrics Pilot results by Mike Hassell (Washington Closure Hanford). Lessons learned included: self-assessments and rigorous OA oversight need to be performed to ensure a successful program; the use of a corporate performance metrics system provides a tool to report the overall health of the QA program at a facility; and the

importance of establishing a realistic cost and schedule contingency to address significant QA risks.

Board Members were briefed about the proposed standard QA language for EM contracts, EM-Complex QA site resources, and the EM Corporate Performance Metrics pilot test results. Further, a presentation titled Commercial Grade Items and the NQA-1 Criteria was presented by John Adkins of Southern Company, providing the history of the NQA-1 Commercial Grade Dedication process. Bob Murray presented an overview of the Corporate Quality Assurance Program (QAP) Implementation Roadmap developed by the EM Office of Standards and Quality Assurance.

The next EM QA Corporate Board meeting is Thursday, March 19, 2009 in Augusta, Georgia. The featured speakers for the meeting are Mr. Reinhard Hinterreither, President and CEO of Louisiana Energy Services and the National Enrichment Facility, and Mr. David Pethick, President of Energy and Environment, URS Washington Division. %



#### **QA** News

#### EM Corporate Quality Assurance Program (QAP) Issued November 5, 2008

The EM Corporate QAP was issued to the EM-complex on November 5, 2008. The QAP will provide consistent QA implementation across the EM Program while allowing for a graded approach to implement site-specific QA Programs based on the importance to the EM mission and safety. Each organization will develop 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. The flow down of QAP requirements is a critical element. EM adopted the American Society of Mechanical Engineers (ASME) NQA-1-2004, Quality Assurance Requirements for Nuclear Facility Applications, and addenda through 2007, as the national consensus standard for implementing the EM QAP due to the high hazards and costs of our activities and facilities. Each organization was requested to prepare a gap analysis to identify differences between their current site specific QAP and the requirements of the Corporate QAP. The gap analysis is to be used as a basis to update existing site QAPs to meet the requirements of the EM Corporate QAP. To provide ample time for transition to the EM corporate QAP, implementation of the Corporate QAP is planned for Summer

2009 for sites and contractors currently implementing an NQA-1 QA program, and Fall 2009 for sites and contractors implementing non-NQA-1 QA programs. %

QAP Milestone Dates					
Who	What	When			
EM-1 EM-3	Issue EM Corporate Quality Policy and QAP	Issued on 11/5/2008			
EM-HQ EM Field & Project Offices EM Contractors	Develop Organization-specific Quality Assurance Implementation Plan (QIP)	3/31/2009* Otherwise by no later than 6/30/2009			
Respective Approval Authority (or delegated)	Review and Approve the QIP	6/30/2009* Otherwise by no later than 9/30/2009			
EM-HQ EM Field & Project Offices EM Contractors	Fully Implement QAP/QIP	9/30/2009* Otherwise by no later than 12/31/2009			

If site/contractor is already subject to NQA-1, then by no later than this date

#### Quality Assurance Centralized Training Platform (Academy)

The first class of the EM Quality Assurance Academy was conducted the week of October 20, 2008 in Carlsbad, New Mexico, and feedback received from attendees was positive. The class content is aligned with DOE Qualification Standard 1150-2002 and NQA-1-2004. The Academy has a phased approach including approximately 700 hours of training and mentoring. The October class had eleven attendees and was the first phase of the Academy's four-phased approach. One attendee felt it was very important to have a cross-section of the EM sites, both large and small, represented at the training so they could all hear the same message about instilling a QA culture. Another attendee applauded the first class, stating that the training was some of the best training he had ever attended within the DOE complex and it is an excellent course for building a solid foundation in QA. In 2009, the QA Academy management function will move from the Carlsbad Field Office location to the EM Consolidated Business Center in Cincinnati, Ohio. There are additional classes and course materials planned for 2009; and course materials will be updated so it will remain relevant and current. Phase II includes on-the-job training under certified lead auditors and is expected to be rolled out in April 2009. Phase III focuses on the qualification for lead assessors to meet the requirements for a lead auditor certification, is scheduled to be implemented in Summer 2009. Phase IV focuses on ongoing mentoring of trainees and the career development process. Course updates should be completed in early 2009. Look for information on the next training class in the coming months. %



#### **QA** News

#### Success Story from Denver DOE/NNSA Nuclear Suppliers Outreach Event: Savannah River Site Sub-Contractor Implements NQA-1



In April 2008, Ms. Margaret Foster became the owner and President of Marshallton Research Laboratories Incorporated (Marshallton) after being co-owner of the company for 38 years. Ms. Foster represented Marshallton at the DOE/NNSA Nuclear Suppliers Outreach Event in July 2008, and found the event's presentations and interactions with DOE site representatives very helpful to her business. What was most beneficial for Ms. Foster was the NQA-1 session where Ms. Foster had the opportunity to meet Mr. Joe Yanek of Fluor and Mr. Norm Barker of Energy Solutions to discuss NQA-1 requirements and how to develop a NQA-1 program.

Marshallton Research Laboratories Incorporated is a technology based company founded in 1970. The company provides fluorinated organic intermediates and fine chemicals

to the pharmaceutical, agrichemical, electronics, aerospace and energy industries. Marshallton, a sub-contractor began supplying first the "Cs7SB modifier" and then the complicated "BOBCalixC6 Extractant" to a prime contractor at Savannah River Site in 2005. Soon after that Marshallton began supplying research chemicals to researchers at several national labs. Currently, Marshallton is doing custom mixing of final extractant systems to the customer's specifications and also custom synthesis of reagents for detecting certain elements.

To initiate the development of a NQA-1 program, Marshallton began working with consultants from Longenecker and Associates, Inc. in September 2008. The first step in this process was performing a gap analysis of the company's existing quality assurance requirements. Marshallton entered into a contract with Longenecker and Associates and worked with their consultants through most of November 2008 to develop a NQA-1 plan and the corresponding implementing procedures. The program had to be tailored to meet the needs of Marshallton because they perform scientific research and procedures can not be written ahead of time for scientific research. It took about three months to implement the NQA-1 program. In Ms. Foster's opinion the cost to implement is comparable to ISO-9000. Marshallton's NQA-1 program became effective December 1, 2008.

#### Savannah River Site to Hold Monthly Quality Assurance Meetings

The Savannah River Site (SRS) has started holding monthly meetings to facilitate communications regarding QA program initiatives, challenges and successes at the SRS. Savannah River Nuclear Solutions, LLC, has offered to host the meetings as a part of their regular QA Policy Council meetings; the meetings are tentatively scheduled to take place on the third Wednesday of the each month. The first meeting took place Wednesday, February 18th. DOE encourage contractor QA Managers and their respective Federal counterparts to participant in the discussions.



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### Office of Environmental Management Quality Assurance FY 2009Audit Schedule

Site	Project	Audit Number
CBFO	Carlsbad CBFO/WTS	EM-PA-09-013
Savannah River	SR-05-D-405 Salt Waste Processing Facility	EM-PA-09-002
HUF-P	Columbiana Hi Tech Hanford Unirradiated Fuel Package	EM-PA-09-XX
RL – Design Authority (Transportation)	HUF-P	EM-PA-09-XX
SPRU	SPRU-VL-0040 Nuclear Facility D&D	EM-PA-09-006
River Protection	RP-Q1-D-416 Waste Treatment and Immobilization Plant	EM-PA-09-007
РРРО	PPPO-02-U-101 DUF6 Conversion - Portsmouth	EM-PA-09-009
Brookhaven	BNL-0040 Nuclear facility D&D Graphite Research Reactor	EM-PA-09-010
Oak Ridge	OR-0013B Solid Waste Stabilization and Disposition (TRU Processing Facility)	EM-PA-09-011
Idaho	ID-06 D-401 Sodium Bearing Waste Project	EM-PA-09-12
Grand Junction	GJ-MOAB-0031 Soil and Water Remediation	EM-PA-09-008

#### Office of Environmental Management/Office of Civilian Radioactive Waste Management FY 2009Audit Schedule

Site	Project	Audit Number
Hanford –ORP	Hanford – Bechtel National Inc. HLW Program, Phase 3 Qualification Audit	09-DOE-AU-001
ID	National Spent Nuclear Fuel Program	09-DOE-AU-002
ID	Idaho Internal Audit - NRC-Licensed Integrated Spent Fuel Storage Installations Program	To be provided by DOE-ID
SRS	Savannah River Site Defense Waste Processing Facility HLW Program	09-DOE-AU-003
Hanford -ORP	Office of River Protection High-Level Waste Program, Phase 3 Qualification Audit	09-DOE-AU-004
ID	Idaho Cleanup Project Spent Nuclear Fuel Program	09-DOE-AU-005
RL	Waste Stabilization & Disposal Project and K-Basins Closure Project Spent Nuclear Fuel Program	09-DOE-AU-006

#### QA on the Web

- EM Website www.em.doe.gov
- EFCOG www.efcog.org
- Defense Nuclear Facilities Safety Board www.dnfsb.gov
- American Society for Quality www.asq.org
- Society of Quality Assurance www.sqa.org
- Nuclear Energy Institute www.nei.org
- Nuclear Procurement Issues Committee www.nupic.com

#### Have Questions, Comments or Suggestions?

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