

EM QA Corporate Board Meeting
Las Vegas, NV
March 13, 2008
8:00 am – 5:00 pm

Meeting Notes

The meeting was held at the OCRWM Yucca Mountain campus, Building 9, Room 915 (See Attachment 1, Agenda). After brief introductions (See Attachment 2, Attendees List) and each participant's expression of expectations for the day, Leo Sain (WSRC) provided his perspectives on the Savannah River Site (SRS). Leo commented on the dwindling number of suppliers and used 9975 as an example of where the vendor had lots of problems and it took considerable effort to keep the vendor on track. Many vendors are now procuring from foreign suppliers, adding additional challenges. He indicated the margin for error is very small, and problems can result in schedule delays and cost increases. QA can prevent this. At SRS they have ways to integrate ISM into QA and vice-versa. They use a graded approach, with only Level 1 procurements from the QSL. They still have oversight of vendors under Level 1, but not as rigorous. Leo commented on the many different requirements/standards and the need for us to share programs to evaluate how the different programs compare. Leo said that the TRU Waste Corporate Board was very worthwhile; it took on issues coming out of the different programs and shared them through the TRU Waste Corporate Board. He used liquid-in-drums as an example of one of those issues. They looked at different issues to see how others might resolve them under the different programs. SRS adopted NQA-1 in late 1980's; currently implementing NQA-1 as part of its QA program. Commercial grade dedication (CGD) is used at SRS, but is an issue that is being focused on. Leo used filters as an example of using CGD to get the products in. Foreign manufacturers may make CGD difficult. For the tritium facility, SRS purchased a packaged system from a manufacturer and evaluated the unit's capability. After installation they found a significant issue. The packaged system had not been broken down component by component, and because of that, a section of the packaged system would not last very long under the humid conditions in South Carolina. There was some discussion as to whether this example was more of an engineering problem than a QA problem. Leo reiterated that the availability of qualified and certified QA resources is a big problem, with a shortage of QA resources at the current time. The demand is high, and the resources are going to support other nuclear opportunities.

Dae Chung reviewed the key objectives (Attachment 3). For objective 3, *Obtain input and perspectives from EM sites and contractors*, Dave Amerine suggested an EFCOG sub-committee to help out on this objective.

Steve Piccolo called attention to the need for separating QA issues from performance in engineering activities. Dae responded that some of the engineering issues have their inception in QA issues.

Sandra Waisley described the new DOE Headquarters Office of Standards and QA, which was stood up in January 2008. Attachment 4 provides the Office of Environmental Management Initiatives. This list reflects two major activities completed in 2007: 1) EM QA Improvement Initiative – 12 action items resulted from the August 2007 meeting with federal and contractor participants; 2) National Academy of Public Administration (NAPA) study of EM/HQ organization and functions. The office currently consists of three individuals, and a number of positions are posted. Most of the positions are “boots on the ground” at the field office locations. The new office will have a multi-disciplinary workforce (electrical and instrumentation, mechanical systems, chemical process safety, operations, nuclear safety/AB etc.) and many of the employees will be located at the field sites. However, this the small team started in May 2007 to address an oversight need within the EM QA Improvement Initiative. EM began a series of QA “Assist Visits” (Phase I) at its line item constructional and operational projects. The ultimate goal of this effort was to evaluate the general health of QA within EM and the projects reviewed. This Initiative was developed to respond to Secretary’s Bodman’s concerns of quality of work negatively impacting the mission.

Implementation of DOE Order 414.1C – supported by Ava Holland and Bob Murray. It is a multi-phased project approach, covering operations, construction, and D&D efforts. With the completion of Phase I Assist Visits (7) in 2007, EM is now beginning Phase II Audits of both the projects reviewed in Phase I and other projects of interest. Fifteen audits are planned for the remainder of 2008. Phase I Assist Visits identified project QA requirements and the extent to which they were implemented, based on NQA-1, 2004. The Phase II audits will take a proactive approach in identifying and resolving QA concerns/issues within EM and also address the NAPA recommendations that EM build on its Phase I Assist Visits and perform a general assessment of its QA Program. Phase II audit plan just signed by Dae. The objective is to identify problems early rather than later, lessons learned, feedback, and overall continuous improvement. Phase II will be done against the contractor requirements but tempered by NQA-1. NAPA had other recommendations in the organizational and human capital areas such as: 1) designating site QA managers; and 2) ensuring that the site QA managers have direct lines of access to the site managers or Deputy Managers– and to be independent.

EM HQ developed a Statement of Work for QA program support. The RFP was issued, with several bidders. Bids are due the first week in April with a contract award date the first week in May.

The QA Corporate Board is established to facilitate institutionalization of QA. It is modeled after the EM TRU Corporate Board model. Other QA Corporate Board initiatives will include addressing the EM QA system evaluation process and annual declaration (similar to ISM process), QA performance metrics (due June 2008, and needs some good strategic thinkers in this area), and contractor feedback on measuring QA performance. Restated the need for QA managers at the major sites – this is ongoing and many have been identified.

The need to establish a Centralized Training Platform was discussed (see Attachment 5). The two objectives are to provide training to EM personnel in basic QA competencies and to meet the requirements for Lead Auditor certification in accordance with NQA-1. There will be four phases to the QA training approach. The first course is to be offered in June 2008 in Carlsbad. Phase I will be classroom training on QA principles and requirements. Phase II will be on the job training under certified lead auditors. They will spend some time at Carlsbad learning interfaces with the M&O, the lab, and DOE. A portion of the qual card will be signed off at this point. Phase III will comprise additional audits to qualify for lead auditor certification, and Phase IV will be follow-up mentoring over a period of time, in which resources are offered to help. There will be follow-up evaluations at the sites.

Dae commented on the inconsistencies between the QARD and EM QA programs.

The academy is a concept that could become the premier QA training institution for both EM staff and the site contractors. There is some discussion of having an accreditation for seasoned QA folks so they will not have to go through the course. This academy is primarily for training new non-QA folks -- to help with the QA shortage. This will be opened to contractors at some later date on a space available basis. Ava Holland has the lead on the EM training academy.

Dae wants to be sure there is consistency/flowdown considering QARD and 414.1C.

A web-based system for communication and a quarterly news letter were discussed as means to provide information throughout the QA organizations (community practice).

Sandra led a discussion of the by-laws (See Attachment 6). An issue was raised regarding proxy votes when voting members are not available. Dae's position is that the site managers need to be the voting members.

Ava Holland asked a question on Article 3, first bullet regarding "nuclear" for QA program. Beth Bilson discussed the need to flow down QA concepts to other work (Level III work), particularly in the area of embarrassment to the DOE at local or national levels. It was decided to remove the word "nuclear" in the first bullet.

Dave Amerine suggested adding an objective to address software QA. All agreed.

Pat Carrier suggested adding a bullet regarding the guides and standards that are out there and the need to address those as part of the board's objectives.

There was a vote on the establishment of the QA Corporate Board. All five voting members voted positively.

Mike Mason discussed EFCOG activities and the EFCOG QA sub-group (See Attachment 7). Dave Amerine said he would discuss the notion of separating QA from the ESH&Q sub-group at the EFCOG meeting held the week of March 17th.

There was considerable discussion about the need for a DOE-wide Qualified Supplier List (QSL), developed through EFCOG and sponsored by DOE. (Note: Additional discussion on the QSL is addressed later.)

Chip Lagdon, Chief Nuclear Safety in the Office of the Under Secretary of Energy, provided an overview of his office. It was formed out of DNFSB recommendation 2004-1. It is modeled after NUREG 0660, safety engineering group. This is an oversight and technical evaluation office. It includes DOE technical, NE, and Science. DOE Order 410.1 is applicable to federal employees who write contracts as part of DOE's acquisition process. Chip's office is determining where the technical evaluation relates to DOE acquisition and is trying to get their arms around the matter. QA is one way to get there. His office looked at all technical issues related to EM projects for six years, which led to development of DOE O 410.1. Chip talked about the need for an EM Standard Review Plan because there is no consistency in what is looked at and what the expectations are. EM needs to get to the performance-based requirements that the commercial nuclear industry went to a number of years ago. In response to DNFSB recommendation 2007-1, nondestructive assay (NDA), EM does not need to go to every facility, but needs to be sure reviews conducted under the recommendation were included in the site oversight. Operational awareness is primary focus of Chip's office. The projects will be the high visibility issues (e.g., Waste Treatment Plant). Some key points made by Chip:

- Standard Review Plan – what is the federal role in QA?
- Consistency in review criteria is needed for technical aspects of projects.
- Technical Authority – modeling after Navy's acquisition process with critical gates.
- Need to improve setting technical requirements through contract specifications and review of award of contracts, technical specifications, and technical input to contracts.
- NRC is going to adopt NQA-1, 2008, which has just been approved and is being sent out.
- Site Assessment Plans – need to review how they are evaluated and whether they represent low risk.
- Idaho best practice of oversight of critical suppliers.
- Chip has budget to bring in specialized contractors to support technical oversight activities.

Dae led a session on defining site QA issues and priorities. The following list shows the results of that session:

1. Requirements flowdown
 - Direction
 - Execution
 - Communication
 - Verification
2. Adequate NQA-1 suppliers (the numbers are going down)
3. Commercial Grade Dedication – implementation
4. Graded approach to quality – implementation
5. Federal understanding of QA and Oversight

6. Resources (Federal) – benchmark industry
 - ORP has three federal employees and four full-time contractors in QA
 - QA should be approx. 4% to 5% of operational staff (includes federal employees and contractors)
7. Procedural compliance/execution
8. FY09 budget impacts
9. Science is moving to ISO 9000: creates inconsistency between NQA-1 for feds and ISO-9000 for contractors
10. Design QA
11. Effectiveness of corrective actions regarding human performance
12. Vendor issues
13. Supplier Quality Assurance
14. GFSI communications/interface agreements/MOA
15. Production pressures
16. Consistent application of regulations/requirements, and consistent interpretations
17. Inspector training/mentoring and understanding inspector expectations. (Note: There was discussion on contractor assurance and inconsistency in how this is applied at different EM sites.)
18. Regulatory and oversight reviews come in waves (stacked reviews) – there is a need for coordination or possibly an integrated project team for these activities.
19. Scope creep – function of new or revised standards, codes, requirements, etc.
20. Qualified Supplier (combined with item #2 above)

After multi-voting on the above issues, the top five issues were selected as issues 1 through 5 on the above list.

Bud Danielson led a discussion on the QA subgroups and that things had shifted to EFCOG. Connie Arnwine (Oakridge) had led the activities of the QA subgroup. The DOE procurement executive was anxious to get the qualified supplier list. The suggestion is to have auditors feeding audit reports into a database for all to use. There was considerable discussion on advantages to having one QSL that the whole complex uses. The database would identify information on supplier performance. The discussions included nuclear industry's NUPIC approach. The issue of liability and potential litigation for the one QSL concept was also brought up.

There was some additional discussion on performance indicators. At Savannah River each project has metrics that would report on QA program implementation (NCR, corrective action). The dilemma is to identify those indicators that will define the health of implementation of the quality program. How do we measure how well we are doing at the project level? There are varying degrees of what is measured among the different sites. Dae wants to enhance the matter to come up with a way to answer the "how are we doing" question. Dae will ask the site managers how on their sites the roll up the overall assessment of how well quality is being implemented at the sites.

Next meeting will be located in Denver, Colorado in July 2008.

The meeting was adjourned at approximately 5:00 pm.