

15th Quality Assurance Corporate Board
U.S. Dept. of Energy - Office of Environmental Management
Nevada Federal Building – Room: Auditorium
October 27, 2014

Time (local)	Topic	Presenter
General Overview and Introductory Remarks		
8:00-8:10 am	Introductions, Roll Call, and Status from Last Meeting	Larry Perkins (EM-43)
8:10-8:25 am	Opening Remarks and General Status of EM Quality Assurance Program	Jim Hutton (EM-40) Bob Murray (EM-43)
8:25 – 8:40 am	Current Efforts from CNS	Debbie Sparkman (CNS)
8:40-8:55 am	Status of Efforts on Integrating DOE/RW-0333P & NQA-1	Christian Palay (EM-43)
8:55-9:10 am	Status of Efforts on Resource Recommendations	Ray Wood (Trinity Eng.)
9:10-9:25 am	Centralized NQA-1 Lead Auditor Program within EM/DOE	Jerry Lipsky (EM-43)
9:25-9:40 am	Discussion of the Development of New Annual Declaration Metrics	Steven Ross (EM-43)
Summary of Current Issues and Site Office Concerns <i>(each site has 20 minutes that are intended to be interactive discussion of issues not simply a presentation)</i>		
9:40-10:00 am	Carlsbad Discussion	Mike Brown (CBFO)
10:00-10:20 am	River Protection Discussion	Rob Hastings (ORP) Jeff May (ORP)
10:20-10:30 am	Break	
10:30-10:50 am	Savannah River Discussion	Jacob Miller (SR)
10:50-11:10 am	Richland Discussion	Steve Chalk (RL) <i>Presentation not provided due to a family emergency.</i>
11:10-11:30 am	Consolidated Business Center Discussion	TJ Jackson (EMCBC)
11:30-11:50 am	Oak Ridge Discussion	Jason Armstrong (OR)
11:50 am-12:10 pm	Idaho Discussion	Randy Kay (ID)
12:10 – 12:30 pm	Wrap-Up/Action Summary/Adjourn	Bob Murray (EM-43) Larry Perkins (EM-43)



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Nevada Field Office

October 27, 2014



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Welcome and Administrative Items

- Agenda is very compact – please try to stay on schedule
- Please sign-in so we can capture the attendance for the meeting
- Intent is to have more discussion
- Those on the call-in number
 - Please mute your phones until you are speaking
 - Please send an email to perkinstlw@oro.doe.gov to indicate your attendance
- Voting member roll-call
- Actions from the last meeting are complete
- Discussion - adding mission unit representatives as voting members





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EM Headquarters Quality Assurance Status

Jim Hutton

**Acting Deputy Assistant Secretary
Safety, Security, and Quality Programs
Office of Environmental Management**

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Outline

- Status of Changes in QA Efforts at the Site
 - WIPP Corrective Actions
 - EMERS Development
- EM-40 QA Staffing Levels and Field Element Support
- Recent Lessons Learned in Quality from EM-HQ
- Top Issues in QA Affecting EM (from DNFSB QA briefing)
- Discussion



Recent Changes in QA Efforts at the Site

- Waste Isolation Pilot Plant (WIPP) Fire Event (February 5, 2014)
 - Accident Investigation Board completed investigation on March 8, 2014
 - 22 Conclusions and 35 Judgments of Need
 - 2 Conclusions and 5 Judgments of Need associated with HQ oversight
- EM-HQ Corrective Action Plan from WIPP Fire Event
 - CAP has been approved by EM-1 and is being implemented
 - Assessment follow-up and CA tracking (Corrective Action Hub)
 - Resources needed to properly manage the WIPP project



Recent Changes in QA Efforts at the Site

- Waste Isolation Pilot Plant (WIPP) Rad Event (February 14, 2014)
 - Accident Investigation Board completed Phase I of the investigation in April 2014
 - 31 Conclusions and 47 Judgments of Need
 - 12 Conclusions and 10 Judgments of Need associated with HQ oversight
 - Phase II of the Accident Investigation Board is pending
- EM-HQ Corrective Action Plan from WIPP Rad Event
 - EM-40 is working on the development of the CAP for this event
 - Approved CAP for the fire event will be used to the extent possible where JONs overlap between the two events



Recent Changes in QA Efforts at the Site

- EM Enterprise Requirements System (EMERS)
 - Application that contains the summaries of all requirements
 - Subject Areas, Functional Area Descriptions, Procedures
 - Applies to all of EM
- EMERS is not just an information system
- EMERS will not replace site level implementing procedures
- EM-40 has worked with the development team to complete the QA subject area

Status of QA Staffing Levels

- EM-40 currently maintains 6 individuals qualified to DOE-STD-1150
- EM-40 QA expertise is supplemented with support service contractor QA experts to assist with reviews and field element support
- EM-40 has hired an SQA SME to focus on software issues
- EM-40 maintains 2 individuals qualified under DOE-STD-1172
- Resources provided to EM-43 are justified by the amount of support provided to the field elements
- FY-15 funding is reduced from FY-14 so some activities may not be fully funded from FY-14



Recent Lessons Learned in Quality

- Lessons Learned
 - Confusion on the implementation of EM-QA-001, DOE O 414.1D, NQA-1
 - EM-QA-001 is required to be met for all EM work
 - EM-QA-001 requires the use of NQA-1 unless a variance has been approved
- How the Corporate Board Members can benefit from the experience
 - Use standard contract language
 - Involve QA staff early in the procurement process
 - Continued diligence is needed to ensure proper flow-down



Top Issues in QA Affecting the Site

- Issues continuing to challenge implementation of QA within EM (as presented in the DNFSB QA Annual Briefing):
 - Federal oversight resources (QA, QE, SQA, QC).
 - Variation in maturity/effectiveness of site QA practices.
 - Robust integration of QA in design, engineering, construction, and operations.
 - Comprehensive and consistent application of QA requirements/expectations in the procurement process. Recognition of EM-QA-001.
 - Suspect/Counterfeit Items of Electronic Components (S/CI).
- Consistent mature quality culture integrated throughout the EM federal and contractor workforce.



Conclusions/Questions

- Coordination and communication is key now more than ever
- EM QA Corporate Board should help with that coordination
- Future Mission Unit Participation in the Corporate Board
- Discussion topics throughout our meeting today
 - How can the EM QA Corporate Board help your site?
 - What additional support do you need from HQ and other sites?
 - What are the top QA issues where you need help and support?
 - What lessons learned and other information can you pass along to other sites?





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Chief of Nuclear Safety Activities

Debra Sparkman & Gustave Danielson
Chief of Nuclear Safety Staff

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Outline

- CNS Staff Operational Awareness Visit Topics of Interest
- Update of V&V of SASSI
- Nuclear Quality Assurance Standards Direction
- EM/NE/SC SQA Support Group Activities
- IAEA Activities
- Top Issues in S/QA for CNS
- Conclusions/Questions



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CNS Site Operational Visits

- **SRS CGD Visit**
 - Supported by EM-43, AU-33
 - Reliance of Receipt Inspection
 - References to documents that contain CC acceptance criteria
 - Insufficient correlation between critical characteristic and item failure modes
 - Inclusion of non-safety functional descriptions
- **ORP Quality oversight staffing with EM QA**
 - Established an evaluation method
 - Provided recommendations and ORP is evaluating path forward
 - Future applications?



Update on V&V of SASSI

- All technical reports and test procedures have been completed
 - Technical work being performed by SSI experts with review by academia
 - 12 “Tasks” or engineering calculations to verify the computer code and validate the mathematical foundations
 - Over 1000 test procedures using literature and alternate calculations as benchmarks
- All Tasks have completed QA concurrence
- Being processed by Y-12 ADC for public release



Nuclear QA Standards Direction

- ASME NQA-1
- ISO TC 85 WG 4 Nuclear Quality Management & NSQ 100
- ASME NQA-1 International Working Group
- ASME Certification Programs for NQA-1 QAP and Lead Auditor
- Federal Acquisition Regulation for S/CI
- NRC RIS on S/CI



EM/NE/SC SQA Activities

- Annual Meeting May 6-8, 2014 at SRS
- Technical Reports Released
 - SQASG-TP-14-01 Safety Software Graded Approach Checklist
 - SQASG-TP-14-02 SQA Security Awareness and Oversight
- Technical Reports In Process
 - Information to Feds for oversight of spreadsheets
 - Assist Feds in understanding aspects of the “Cloud” and its impact quality of software
 - Identification of all the NQA-1 “checklists” used by DOE



Final Questions



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Backup Slides



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CNS Letters & Staff Reports of Interest

- Low Activity Waste Pretreatment Facility Safety Design Strategy
 - Use of current Orders and standards



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Focus Area #1 Status Report

**Christian Palay, Quality Assurance Specialist
Office of Standards and Quality Assurance**

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Focus Area #1

- Integrating DOE/RW-0333P, Revision 20, *Quality Assurance Requirements and Description* into a future revision of ASME NQA-1
- The team for Focus Area #1 has been established
 - Christian Palay
 - Bob Thompson, CH2M-WG, Idaho, LLC
 - Bob Hinds, Savannah River Remediation LLC



Goal

- Goal of Focus Area #1
 - Integration of DOE/RW-0333P into a future revision of NQA-1 results in only administrative changes to existing HLW/SNF programs that implement DOE/RW-0333P
- Goal of Task Proposal Notice #13-10
 - Augment NQA-1 by providing amplified quality assurance requirements for High-Level Nuclear Waste Management.
 - Specific method to augment NQA-1 but may include:
 - Development of a new Subpart in Part II of NQA-1
 - Additional requirements added to the applicable Requirements in Part I of NQA-1



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Objectives

- Develop methodology for performing gap analysis between DOE/RW-0333P and NQA-1-2008/2009a
- Establish method with consensus and alignment with EFCOG community and the EM Corporate Board (i.e., we understand each other and are on the same sheet of music)
- Break up the sections of DOE/RW-0333P to determine gaps with NQA-1 to participants as individual assignments
- Establish deadlines and POCs for deliverables
- Establish review teams independent of the participants who worked on gap analysis (i.e., Someone from CHPRC reviews a gap analysis done by someone else at SRNS, etc.)
- Establish review and acceptance criteria
- Establish an overall project schedule from ultimate deadline based on when the NQA-1 Waste Management Subcommittee needs input to develop subpart II language for inclusion in future revision of NQA-1



Partnership with EFCOG

- At the May 2012 meeting at DOE Headquarters in Washington, DC, EFCOG assigned the EFCOG QA Policies and Procedures task team to assist with the gap analysis
- During the Las Vegas meeting the team will develop the methodology that will be used to perform an unbiased gap analysis
 - A working session will work through Requirements 4 & 7 establishing a model for the gap analysis output
- After working session the other sections of DOE/RW-0333P will be assigned individual to other team members to perform similarly to the model established in the working session
- Planned completion of gap analysis by end of the 2014
- Team will review and update gap analysis and provide final draft by 3/06/2015



EFCOG Working Session

- Ground rules established to ensure active and constructive participation
- Facilitator will be used
 - Keep progress moving
 - Making sure everyone is heard
 - Encourage active participation
- Resources provided:
 - Laptop with Projector for live development of matrix
 - Scribe (Mr. Thompson)
 - Poster board and Sticky Notes for parking lot issues



Conclusions/Questions

- There will be no reduction in EM's commitment to DOE/RW-0333P
- All sites will be expected to maintain their DOE/RW-0333P programs with continued EM-43 oversight
- After Gap Analysis is complete, the ASME NQA-1 Waste Management Subcommittee must develop proposed language consistent with the ASME Main Committee policies and procedures
- A new Focus Area may be requested to assist in drafting the proposed language for a future revision to NQA-1





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Status of Efforts on Resource Recommendations

Ray Wood
Trinity Engineering

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Focus Area Direction

- Scope - Provide recommendations associated with:
 - how to report current QA resources
 - how to determine the needed level of QA resources, and
 - what can the EM QA Corporate Board do to assist with this effort.
- Include a review of past surveys and resource reporting data
- Include an evaluation of how other organizations and industries report the same types of data
- Develop a methodology for consideration in determining an estimate of the QA resources needed given the scope of the office, phase of the work, and resources available
- Develop a set of recommendations for the Corporate Board to consider that can help federal sites with inadequate resources until those resources can be properly obtained



Overview of Recent Resources Effort

- Participants
 - Department of Energy quality experts
 - Chief of Nuclear Safety quality experts
 - Nuclear Regulatory Commission quality experts
- Input considered in the evaluation
 - Site visits including V.C. Summer Nuclear Generating Station (VCS)
 - Benchmarking activities conducted during the site visit to VCS
 - Information from Southern Nuclear Vogtle units 3 and 4
 - Review of the Salem Hope Creek organization chart
 - Review of Diablo Canyon organization structure
 - Review of NRC Inspection Modules and procedures regarding their oversight of new nuclear deployment activities
 - Nuclear quality assurance auditing experience



V.C. Summers (VCS) vs. DOE

- VCS QA Manager has structured and staffed a very comprehensive program for oversight of contractors and suppliers
- DOE resource constraints limit the scope and conduct of oversight activities.
- VCS QA Manager is a singular role solely responsible for all aspects of QA. Typically a DOE QA Manager is not a singular role.
- VCS licensee has developed a robust interface plan that defines the interfaces between the various quality organizations. Typically the quality functions and interfaces at DOE are not as well defined.



V.C. Summers (VCS) vs. DOE (cont.)

- VCS performs audits annually of all aspects of the project. DOE typically does not cover all aspect annually.
- In DOE, there is not a consistent or common understanding of the definitions and importance of quality, quality achievement, and the verification (assurance) of quality.

Key Questions Considered in Analysis

- What are the gaps (if any) in the federal office field quality assurance oversight program?
- What is basis for selecting activities covered by the federal office Quality field oversight and what is not covered?
- Has the federal office adequately leveraged its available oversight resources (QA, FR's, Site Inspectors, etc.)?
- Does the federal office have the right oversight activities planned for FY14?
- Is the federal office Quality field oversight program prepared to oversee upcoming mission changes?
- What Quality field oversight skills are missing (if any) in the federal office Quality field oversight for startup and operations of new facilities?



Sample Items Considered in the Analysis

- QAP Program Audit (18 NQA-1 Req)
- CA Follow-up
- Review of Contract Deliverables
- M&TE
 - High-Level Design Requirements
 - Engineering/Design
 - DSA
- Design
 - High-Level Design Requirements
 - Engineering/Design
 - DSA
- Procurement

Activities Needing Federal Oversight	Current QA	Recommended QA	FTE Range	
QAP Program Audit (18 NQA-1 Req)	3yr	annual	0.75	0.25
CA Follow-up	X	continuous	0.25	0.25
Review of Contract Deliverables	X	continuous	0.05	0.05
M&TE	X	X	0.05	0.05
Design				
High-Level Design Requirements	X	X	0.05	0.05
Engineering/Design	X	X	1	0.25



Deliverables and Recommendations

- Complete the analysis for federal oversight of:
 - Federal site office
 - Each contractor working under the site office
- Handout shows a sample of the way the analysis would look
- Implemented at two sites to date to evaluate needed resources
- Recommendation to distribute the template and have each federal office complete it to determine how the sites compare
- Depending on the results, determine if additional research is needed, if this should be contained within the annual QA declaration for the federal offices, and if this should expand to the contractors





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Joint EM NQA-1 Lead Auditor Proposal

Jerry Lipsky

**Office of Standards and Quality Assurance
Office of Environmental Management**

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Sources

- ASME NQA-1–2008, *NQA-1 Quality Assurance Requirements for Nuclear Facility Applications*
- IP-414-02, *EMCBC Qualification of Assessment Personnel*



Lead Auditor Problem Statement

There is no over-arching guidance for EM Field Offices or their contractors to utilize qualified NQA-1 Lead Auditors from other organizations as Lead Auditors or Auditors at their site.

- This discussion addresses DOE led audits, but the concepts could be applied to DOE contractors.
- NQA-1 does not specify requirements for this.



Impact

Since EM, EMCBC and the EM Field Offices tend to have limited QA resources, it is common practice to share assets or bring in Lead Auditors or Auditors from other organizations.

- Some organizations do not have process to ensure or document outside Lead Auditors or Auditors are qualified.
- Some organizations have documentation processes that may be more burdensome than necessary.



Desired Outcomes

1. Discussion of options.

- A. Options presented could be combined - in whole, or in part.
- B. Management of auditing group always has the prerogative to exclude Lead Auditors/Auditors that they feel are not appropriate for the task.

2. Path forward for resolution.



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NOA 1: An Overview for
Federal Project Directors



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Option 1

Minimalistic Approach

- There is already precedent for use and acceptance of results of other organizations' Lead Auditors/Auditors.
 - JSEP
 - EM organizations frequently share assets with minimal documentation
- Document in Appointment Memo or report body.
- PRO - Minimizes extra administrative burden.
- CON - Not “crisp”. Need sufficient documentation in report to ensure it stands on its own.

Option 2

Place guidance in EM QAP to be flowed down to the Field

- Modify EM QAP to more formally recognize use and acceptance of other ORGs' Lead Auditors/Auditors.
- EM HQ validates effectiveness of each EM ORG's Lead Auditor/Auditor program
- Auditing organization can document validation by EM in Appointment Memo or report body.

Option 2 (continued)

Place guidance in EM QAP to be flowed down to the Field

- PRO – Further minimizes extra administrative burden by placing overall rationale in QAP(s).
- CON – Need a vehicle to readily link acceptance of Lead Auditor/Auditor to EM acceptance of auditor's parent program.

Option 3

Utilize EMCBC's process and assets to have a larger clearinghouse of qualified NQA-1 Lead Auditors and Auditors.

- IP-414-02, *EMCBC Qualification of Assessment Personnel* already establishes R&R for T&Q of personnel who conduct QA assessments for the EMCBC, applicable SLA Sites, or other requesting DOE Offices and who are required to be qualified under a NQA-1 standard.
- <https://www.emcbc.doe.gov/msd/documents.php>

Option 3 (continued)

Utilize EMCBC's process/assets to manage a base of qualified NQA-1 Lead Auditors and Auditors.

- PRO
 - Drives consistency of T&Q
 - Minimizes administrative of tracking T&Q.
 - NQA-1 based
 - Certification Authority is **RETAINED** by each DOE ORG
- CON – ???

Recommendation

1. Adopt and implement a policy that incorporates the optimal components of the options provided in order to drive consistency of Lead auditor/Auditor Qualifications within EM.

Discussion



Ukrainian Parliament in a “Debate”



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Development of New Annual Declaration Metrics

Steven Ross
Office of Standards and Quality Assurance
Office of Environmental Management

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ISM/QA Declaration

- **Current Practice: Stoplight Charts**
- **13 Categories with 50 subcategories**
- **Ratings are color coded:**
 - **Blue (Highest or Best)**
 - **Green (No CAQs but could have opportunities for improvement)**
 - **Yellow (Alert, possible CQAs, areas needing attention)**
 - **Red (Hanging offense, posse being formed as we speak)**

Stoplight Chart Deficiencies

- **Subjective / Qualitative – one man’s blue is another man’s green; no absolute standard**
 - What does the color actually mean?
 - How is the assigned color determined?
- **Color Rating Determination often Difficult to Defend**
- **Time consuming: Many subcategories, each of which needed to be reviewed, analyzed, and rated**



Suggested Alternative Reporting Method

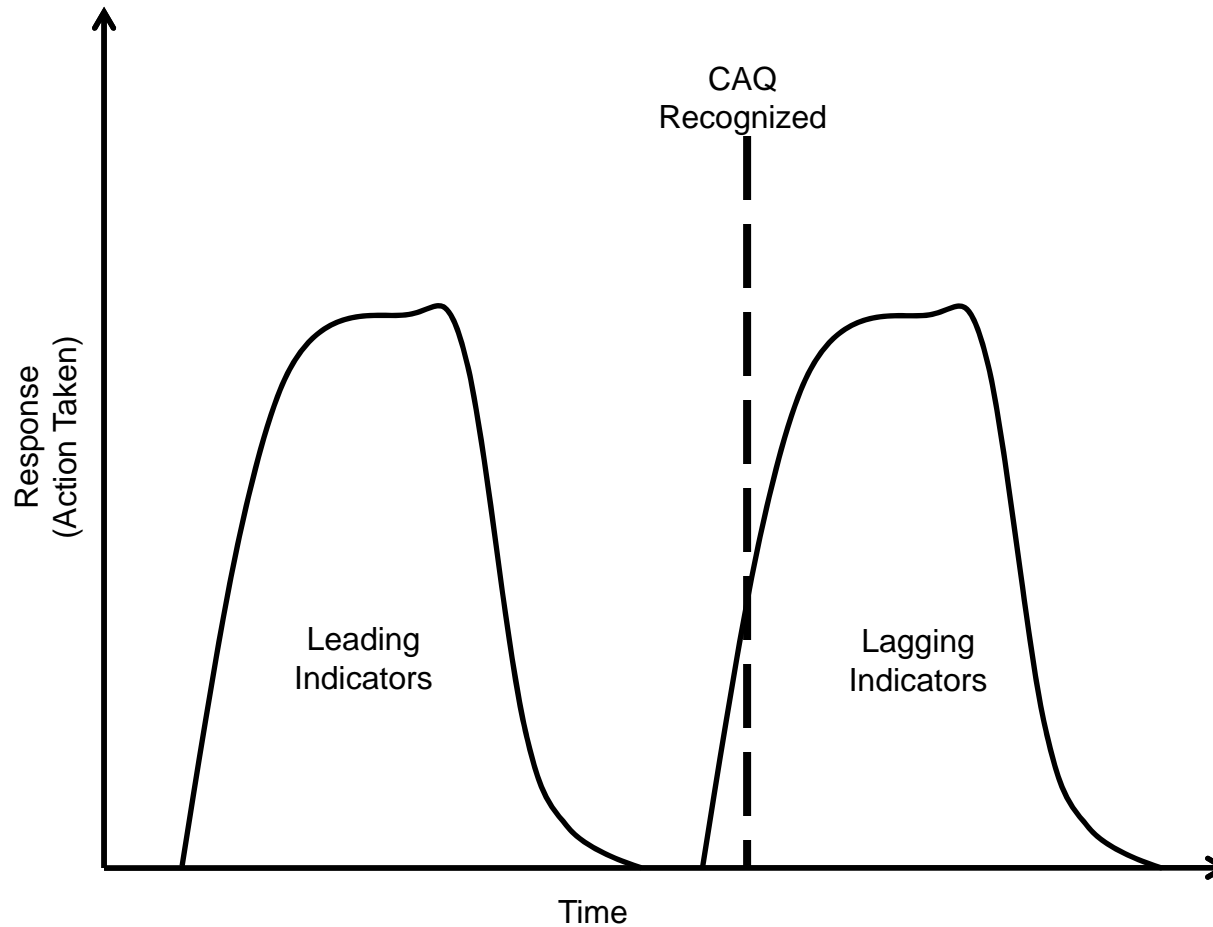
- **Use of Leading and Lagging Indicators**
- **Note that this type information was requested by the Defense Nuclear Facilities Safety Board**
 - Information was collected
 - Therefore, procedures already in place

Definitions

- **Leading: actions taken to prevent a future occurrence likely to result in a Condition Adverse to Quality**
 - Identify issues that may lead to a CAQ
 - Before the fact; CAQ not yet occurred
 - Preventative, proactive, your program is in control
 - A time when costs to are low compared to trying to fix CAQ later
- **Lagging: actions taken after recognition that a CAQ is either imminent or has occurred**
 - Often a nasty surprise
 - Occurs after the fact, reactive, your program is being driven by events outside your control
 - Costs to repair (or ameliorate) are usually much higher



Response VS Time



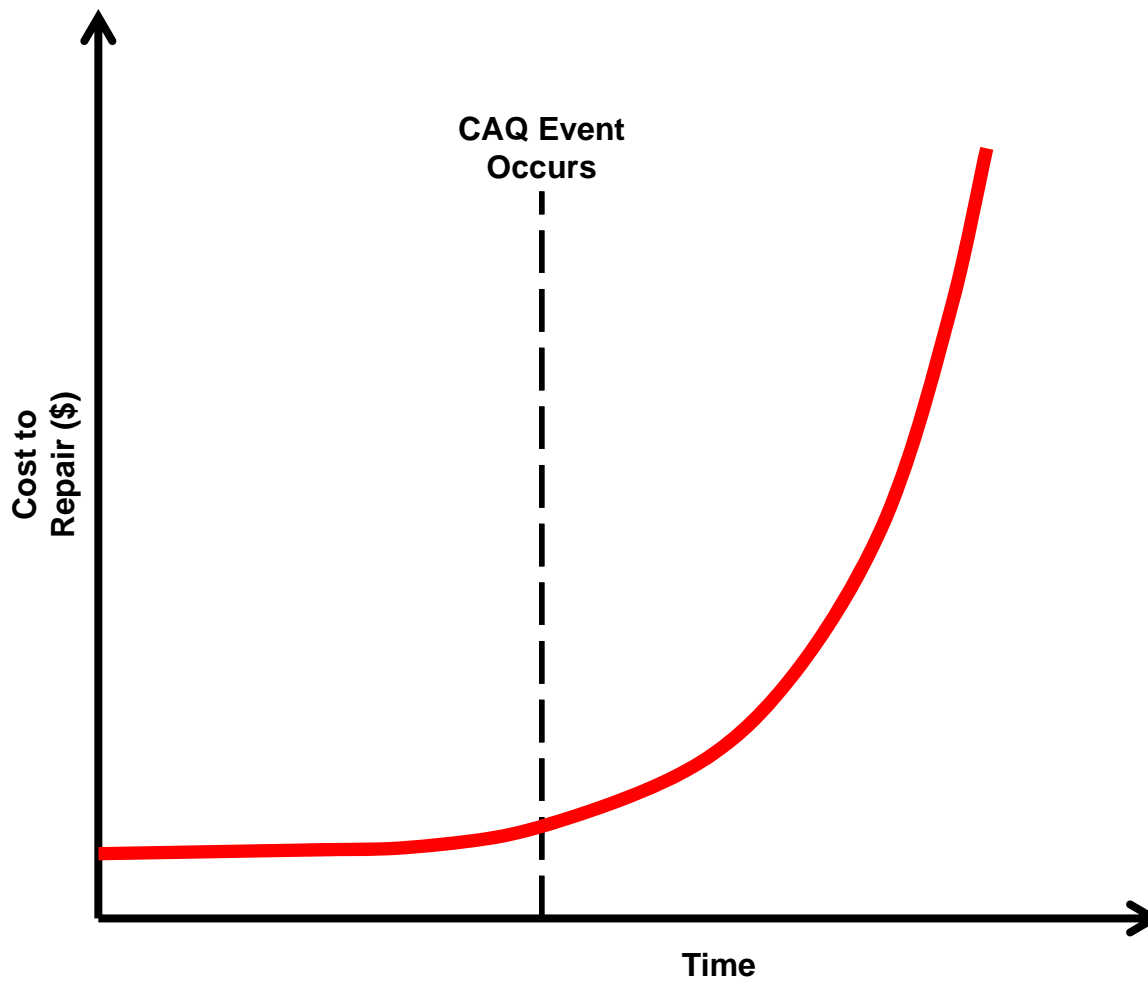
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Cost of Repair VS Time



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Benefits VS Stoplight Charts

- **Collecting this information is not new;**
 - Something already done at request of DNFSB;
 - Procedures already exist
- **Data call to be smaller in scope**
 - Fewer items to track
 - Less time consuming



Characteristics

- **Objective**
 - No guesswork, estimates or approximations
- **Quantifiable**
 - Report an actual number
 - Can make year-to-year comparisons
- **Defendable**
 - Supported by approved reports and records
- **Less Time Consuming**
 - Fewer categories to assess



Leading Indicator Examples

- **Training**
- **Process Improvement**
- **Trends in Process Deviation**
- **Timely Resolution of Non-Conformances**
- **Progress toward Program Improvement Milestones**
- **Professional Development**
- **Severity Level of Non-Compliances**
- **Number of Lessons Learned for Trends in Non-Compliances**



Lagging Indicator Examples

- **Number of Assessment Findings**
- **Number of Non-Conformances**
- **Timely Performance of Required Assessments**
- **Number of Repeated or similar Non-Conformances**
- **Process Evaluation**
- **Implementation of Corrective Actions**
- **Number of Infractions**
- **Timeliness of Operations Support**
- **Event Response**
- **Performance Improvement**
- **On Board QA Staff (or Safety & QA Staff)**



Quantitation

- **Using Lead/Lag indicators, quantitation is current and indicates performance now**
- **Using Stoplight Charts, quantitation is historic, analysis is performed by HQ (that's me), tells us how things were (and everyone knows I'm not your best friend)**



Discussion, Questions, Path Forward

- **Vote to Adopt?**
- **More Discussion?**
- **More Development: by whom, selection of indicators, add, delete,**
- **Trial Run: select 2-3 of each type indicator and include in next declaration data call?**
- **Consign this idea to the trash can?**





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WIPP

**Mike Brown, QA Division Director
Department of Energy - Carlsbad Field Office**

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Outline

- ❖ Brief Status of any Changes in QA Efforts at the Site
 - ❖ Expanded work in procurement oversight
 - ❖ Greater number of surveillance activities
 - ❖ Verification activities for corrective actions
 - ❖ Review of procedures and documentation for improvement
- ❖ Brief Status of Staffing Levels in QA
 - ❖ CBFO: QA Director,
 - ❖ 2 Sr. QA Specialists,
 - ❖ Quality Improvement Specialist –Open
 - ❖ QA Software Specialist- Open
 - ❖ Administrative Support
 - ❖ Technical Assistance Contractor 19 individuals
- ❖ Recent Lessons Learned in Quality from the Site
 - ❖ Frequently reevaluate risks and circumstances.
 - ❖ CBFO did not make conservative or risk –informed decisions in all cases
- ❖ Top Issues in QA Affecting the Site
 - ❖ Corrective Action Management / Actions to Prevent Recurrence
 - ❖ Scope and depth of assessment activities
 - ❖ Verification of Corrective actions
 - ❖ Construction
- ❖ Discussion



Recent Changes in QA Efforts at the Site

- Major QA projects
 - ❖ WIPP Site Recovery Activities – HEPA Filtration System, Supplemental Ventilation System, New Mine Shaft
 - ❖ Continuing Waste Certification
 - ❖ Responses to AIB Judgments of Needs (JONs)
 - ❖ Rebuilding Regulator and Stakeholder Confidence
 - ❖ IT Upgrades
- ❖ Current Status
 - ❖ WIPP site is currently in suspended operations and is in recovery mode.
 - ❖ Generator site waste certification audits continue as required by New Mexico Environment Department Hazardous Waste Facility Permit and the EPA
 - ❖ Process improvement and infrastructure changes – oversight and Issues management processes under review/revision. CBFO is implementing a computer based Issues, Collection, and Evaluation System (ICE)
 - ❖ Conducting additional WIPP Site Surveillances. Since December 15th, 34 CBFO audits and surveillances



Status of QA Staffing Levels

❖ Federal and Prime Contractors

❖ Numbers of QA and SQA staff

❖ Federal

- ❖ 1- Director
- ❖ 2- Sr. QA Specialists
- ❖ 1-Software Quality Assurance Specialist – Vacant
- ❖ 1-Quality Improvement Specialist - Vacant

❖ Contractor

- ❖ Technical Assistance Contractor is funded at approximately \$4M annually to provide QA and technical support including audits of generator sites.

❖ Changes in QA staffing levels

- ❖ No recent significant changes. 2 federal positions soon to be posted. 3 CTAC positions are in process of being filled.

- ❖ Reorganization splitting out the oversight and safety functions and clarifying QA reporting

❖ Method used to determine resources needed

- ❖ Evaluation of past work loads as compared to future expectations and number of corrective actions

❖ Changes in funding for QA organizations from FY-14 to FY-15- Increased funding FY 15



Recent Lessons Learned in Quality

❖ Lessons Learned

- ❖ Do not get complacent in times of good performance
- ❖ When accidents happen, stakeholder confidence must be earned anew
- ❖ Immediate, open and effective communication with stakeholders is necessary

❖ How the Corporate Board Members can benefit from the experience

- ❖ Look at changes in maintenance and processes. Look at the cumulative effects of small changes made over time. It could happen at your site!
- ❖ Is your oversight effective?



Top Issues in QA Affecting the Site

❖ Issue

- ❖ Effective Issues/Corrective Actions Management
- ❖ Training new personnel
- ❖ Filling vacant positions
- ❖ Recovery-Process improvement/resistance to change

❖ How can the EM QA Corporate Board help with this issue?

- ❖ Examples of electronic systems to use for benchmarking
- ❖ If you have great people who are interested in a change, encourage them to look at postings. Carlsbad is a great place to raise a family!



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Conclusions/Questions

- ❖ Any specifics you would like to emphasize
 - ❖ **Wasn't just the contractor**
- ❖ Discussion points
 - ❖ WIPP is on schedule to open stronger and better than before
- ❖ Questions





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15th EM QA Corporate Board Meeting

Nevada Site

ORP Quality Assurance EM Corporate Board Presentation

Rob Hastings, ORP Assistant Manager for Technical and Regulatory Support
Jeffrey D. May, ORP Quality Assurance Division Director

October 27, 2014



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Outline

- Changes in QA Efforts at ORP
- Status of QA Staffing Levels
- Top Issues in QA Affecting ORP
- Discussion



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Changes in QA Efforts at ORP

- **Established Audit and Surveillance sub-group within QAD**
 1. Review of Submittals
 2. Performs independent audits/surveillances of ORP and contractor QA program implementation, through performance/compliance based oversight
 3. Audits and assessments include input from FRs, SSOs, SMEs and others
 4. Provides results of audits and assessments responsible contractor and ORP
 5. Provides field oversight (1 day per week) of both ORP and contractor field activities
 6. Interface as a team member with the ORP Integrated Project Team



Changes in QA Efforts at ORP

□ Established QA program sub-group within QAD

1. Performs assigned specialized SME duties, i.e., Software POC
2. Responsible for ORP QA program, processes and procedures
3. Develops annual oversight plans for ORP and contractor QA programs- 80% focus (i.e., biased based auditing)
4. Supports emergent issues- 20% focus
5. Identifies quality requirements applicable to ORP and to contractors
6. Responsible for overall adequacy of contractor quality programs, processes and procedures
7. Evaluates, interprets, the results of contractor quality program audits and assessments to contractor and provides analysis results to responsible ORP line organization
8. Provides Quality Engineering support by making recommendations on how to meet quality requirements
9. Qualifies and certifies ORP quality staff as assigned



Changes in QA Efforts at ORP

- **Instituted a QA philosophy that promotes QAD is part of the team**
 1. Structured QAD as a compliance based and performance based oversight and verification organization
 2. Structured QAD to provide assistance and advise to the line organizations
 3. Structured QAD to enable it to provide direct assistance to the line organizations, i.e., participating member of the LBL IPT Anhydrous Ammonia System (AAS) Milestone Assessment
 4. QAD is structured to directly work with line organizations in their planning including prime contractor interface and issue resolution meetings
 5. QAD is functioning as not only a regulator but also as the owners quality assurance organization that provides independent oversight and interactively interfaces with the projects and prime contractors



Status of QA Staffing Levels

❑ **Increased Federal staff**

1. Based upon the projected work load and the oversight rigor required, QAD has increased its staff utilizing a skill mix approach as follows:
 - One Division Director
 - Six GS 13 & 14 General Engineers (including new hire)
 - Three GS 13 Quality Specialists
 - One General Support Services Contractor



Top Issues in QA Affecting ORP

- Software QA

- Commercial Grade Dedication

- Two Significant Conditions Adverse to Quality Issued to BNI
 - BNI's overall QA Program has not been implemented in accordance with requirements and is not fully effective.

 - BNI's overall Corrective Action Program has not been implemented in accordance with requirements and is not fully effective.



Top Issues in QA Affecting ORP

❑ **BNI Software QA Issues**

- ICN (Integrated Control Network) documented software requirements were not adequate to allow for proper requirement traceability, configuration control, and maintenance during operations. (Part of Significant Conditions Adverse to Quality)
- Safety Software Grading can result in incorrect software classification and in inadequate rigor when applied to safety software for non-nuclear hazards; due to issues with PDSA crediting radiological hazards and not nuclear facility hazards as required by 10 CFR 830
- Inadequate change control for ICN software



Top Issues in QA Affecting ORP

❑ **WRPS Software QA Issues**

- WRPS failed to fully implement software QA requirements contained in the WRPS written procedures for safety and quality affecting software; primarily due to inadequate training and procedures written for Software professionals but were implemented by non-software technical staff.
- WRPS software procedures did not fully comply with requirements in the WRPS QAPD; a substantial amount of SQA requirements were not properly addressed in procedures because they were not incorporated, or because requirements were just repeated in the procedures but lacked processes explaining how to implement the requirements.

Top Issues in QA Affecting ORP

BNI Commercial Grade Dedication - Emergency Turbine Generator Assembly

□ **Inadequate Procedures**

1. Procedures written to NQA-1-2000 requirements; BNI would not take advantage of guidance provided in subsequent revisions
2. Procedures written to address simple components and lack process direction for addressing complex procurements

□ **Inadequate approach**

1. Activities were performed out of logical sequence (i.e., surveys performed before technical evaluation and before safety function was clearly determined)
2. Dedication activities focused on several smaller dedications instead of a system with subcomponents
3. Some suppliers became Frustrated and refused to cooperate



Top Issues in QA Affecting ORP

❑ BNI Significant Conditions Adverse to Quality

BNI's Managed Improvement Plan (MIP) provides initiatives that will result in a stringent QAP that meets all QA contractual requirements and provides robust solutions to address complex and challenging technical and safety issues.

- To mitigate impact sufficiently to justify continuing operations, ORP has initiated additional oversight activities:
 1. Managed Improvement Plan Oversight; ORP-WTP line organization will monitor BNI's implementation of the MIP's initiatives and perform oversight of their implementation.
 2. Interim Quality Assurance Oversight of corrective actions; The ORP Quality Assurance Division (QAD) will perform surveillances of BNI's corrective action plan actions after BNI completes the corrective actions to verify adequate resolution, actions are implemented, and to perform verification of adequate completion.
 3. Verification and Closure Review; QAD will lead a multi discipline effectiveness audit of BNI that will review the adequacy, implementation, and effectiveness of BNI's entire QA program and perform a vertical slice audit of a received/accepted complex item.
- ORP Management has directed BNI to have all corrective actions completed and executed such that the improvements to the BNI QA are effectively implemented by all BNI organizations within two years (by October 2015).



Questions

Questions/Discussion



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15th EM QA Corporate Board Meeting

Savannah River Site

**Jacob Miller, Senior QA Advisor
Performance Assurance Division
DOE-Savannah River**

October 27, 2014



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Outline

- Changes in QA Efforts at the Site
- Staffing Levels in QA
- Recent Lessons Learned in Quality
- Top Issues in QA
- Discussion



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Major QA Efforts

M&O Contractor

- Certification of several SRS Laboratories (ISO/IEC 17025)
- Ground-Level Release Project (seismic upgrades to H-Canyon Exhaust Tunnel)
- Commercial-Grade Dedication Improvements
- Graded Approach Improvements
- Continued support for Aiken Technical College in implementing Nuclear Quality Systems Associate Degree program. Development of on-line distance learning module(s) in progress.

Liquid Waste Operations (LWO) Contractor

- Completed transition from NQA-1 2000 to NQA-1 2008/2009 including implementation of EM-QA-001 Rev.1 in July
- Salt Disposal Unit 6 project is in civil construction phase with wall panels and support columns being installed
- Developing and implementing recovery plan to reproduce shredded HLW canister production records
- Graded Approach Improvements
- Continued support Aiken Technical College in implementing Nuclear Quality Systems Associate Degree program. Development of on-line distance learning module(s) in progress.



Status of QA Staffing Levels

- DOE-SR
 - Three FTEs performing QA oversight (not including SWPF)
 - 1.1% of federal workforce (3 of 270)
 - Qualifications
 - Three QA TQP qualified
 - Two NQA-1 Lead Auditors (one pending transfer of certification)
 - One Software QA TQP qualified
 - One retirement imminent
 - Need for 10 FTEs determined by work load analysis
 - Does not include SQA or SWPF oversight
 - Recruitment in progress for 4 QA and 2 SQA specialists
 - Three QA Specialists (one Federal and two contractors) performing QA oversight at SWPF Project Office (9% of Project Office staff)
 - Total Federal QA Oversight to Contractor Ratio
 - 1 to 1925



Status of QA Staffing Levels (cont'd)

- M&O Contractor (excluding Defense Programs QA organization)
 - Personnel = 65 FTEs (39 QEs, 12 QCs, 3 other Exempts, 7 Managers)
 - Total includes 4 subcontractors (2 QEs, 2 QC)
 - Total includes Contractor Assurance organization (5 Exempts, 1 Manager)
 - Does not include SRNL
 - Funding for QA provided by EM and NNSA; some QA funding comes via SRS facility budgets
 - QA is approximately 1.5 % of company total staffing (65 of 4419)
- SRNL
 - Personnel = 15 FTEs (8 QEs, 3 Techs, 2 Clerical, 2 Managers)
 - Total includes Standards Lab organization (4 QEs, 4 Metrology Lab Techs, 1 Clerical, 1 Manager)
 - Funded by numerous sources
 - QA is approximately 1.8 % of company total staffing (15 of 833)



Status of QA Staffing Levels (cont'd)

- LWO Contractor
 - 22 Quality Engineers, 18 Quality Control, and 5 Managers (includes 11 subcontractors)
 - M&O performs bulk of receiving inspections, Qualified Supplier List auditing/maintenance by company level interface agreements
 - Vendor source surveillance is being performed by newly formed SRR supplier surveillance group
 - QA is approximately 2.8 % of company total staffing (56 of 1972)
 - Staffing levels marginally adequate to address FY15 scope. Scope increases would require additional staffing/subcontracting
- SWPF Contractor
 - 23 Quality Assurance and Quality Control Personnel
 - QA is approximately 4.8 % of company total staffing (23 of 482)



Recent Lessons Learned in Quality

- Lessons Learned
 - Level of oversight of Site Records Management group from QA and DOE is less than adequate.
 - Increased CGD Documentation required by NQA-1-2008/9 has shown that CGD process links to safety basis needs improving
- How the Corporate Board Members can benefit from the experience
 - Provide additional management attention and QA oversight of record management processes
 - Provide additional management attention and QA oversight of CGD process



Top Issues in QA Affecting the Site

- Continuing Impacts from lack of Staffing and Funding
 - Challenge to perform on-going routine functions and in-depth assessments and other initiatives without consuming overtime budget
 - Availability of Inspectors continues to have potential to impact facility schedules
 - One-deep in many functions
 - Aging workforce
- Sustaining effective performance in newly incorporated/revised QA program elements (CGD, Fluid System Cleaning, Housekeeping)
- Managing the construction and procurement processes of safety-related facilities/items with a limited number of suppliers meeting NQA-1-2008/09a requirements
- Managing records retention process between paper and electronic storage



Top Issues in QA (cont'd)

- How can the EM QA Corporate Board help with this issue?
 - Provide an EM Policy document on electronic records management addressing geographical separation, loss prevention, ensured destruction, etc..



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Questions



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15th EM QA Corporate Board Meeting

EMCBC and Small Sites

TJ Jackson
Office of Technical Support and Asset Management

October 27, 2014



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Outline

- QA Efforts at Each of the Small Sites
- Staffing Levels in QA
- Recent Lessons Learned in Quality the Small Sites
- Top Issues in QA Affecting the EMCBC and Small Sites
- Discussion



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QA Efforts at Moab

The Moab UMTRA Project substantially increased both internal and external assessments to enhance DOE oversight following release of the Waste Isolation Pilot Plant initial accident investigation report.



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QA Efforts at ETEC

Recently awarded ETEC
Environmental Monitoring
and D&D Contract to North Wind



CDM - Completing EIS

Boeing – Site security and infrastructure



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QA Efforts at WVDP

Completion of focused Oversight Plan activities associated with construction of the HLW Storage Pad (August 2014)



Construction of the Vertical Storage Casks



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QA Efforts at WVDP

- Major Procurements and Functional Testing

Vertical Cask Transporter



TL-220 HD



- Modifications to the Haul Path and the Equipment Decontamination Room in the Main Plant Process Building to support HLW relocation



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QA Efforts at SPRU

- **SPRU Disposition Project Status**

- Sludge Processing & Shipment Complete
- G2 Characterization & Pipe Removal
- H2 Debris Removal



- H2 Characterization & Pipe Removal
- H2 Tank Removal



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QA Efforts at the EMCBC

Delegation of Authority Activities

- North Wind QAP Approval
- CHBWV QAP Approval
- CHBWV QARD QAP Approval
- URS QAP Approval

Line Management Activities

- EMCBC QA Document Development
- SPRU QA Document Development
- ETEC Document Development
- Contract Reviews


VERIFY HARD COPY AGAINST WEB SITE IMMEDIATELY PRIOR TO EACH USE

West Valley Demonstration Project	Doc. ID Number	WVDP-074
	Revis. Number	20
	Revis. Date	09/17/14

CHOW HILL - RAW WEST VALLEY LLC QUALITY ASSURANCE PROGRAM
FOR
HIGH-LEVEL WASTE RELOCATION AND STORAGE

Cognizant Area: Barbara Hill

Cognizant Manager: Heather Dales


West Valley
Decommissioning
Team
CH2M HILL - BDP West Valley, LLC
15322 Rock Springs Road
West Valley, New York USA 14171-0799

WV-1016, Rev. 7



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QA Efforts at the EMCBC

Service Level Agreement Activities

- Assisting CBFO in the QAP and Procedure Development
- Assisting ORO in the QAP and Procedure Development

MOU Activities

- Maintaining HLW/UNF Documents and Records
- Maintaining NQA-1 Lead Auditor Qualifications

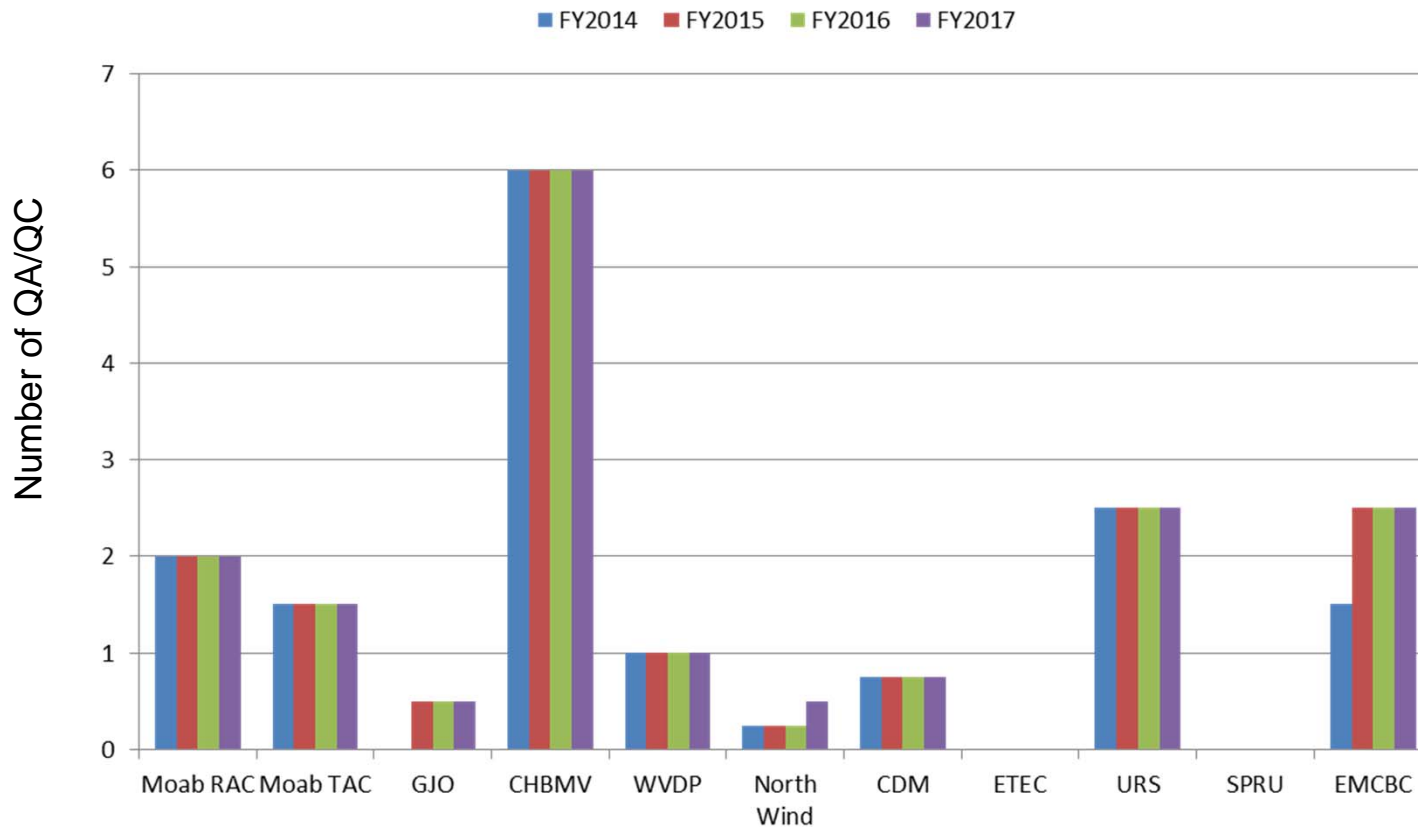
Personnel Activities

- Requisition to Replace QA Engineer
- Requisition to Replace QA Manager (AD of OTSAM)
- Establishing a Technical Services Contract for Support



Status of QA Staffing Levels

- Federal and Prime Contractors



Recent Lessons Learned in Quality

- Lessons Learned - West Valley Demonstration Project

Deferred Maintenance - WVDP -DOE request to utilize a formal audit process to complete the Deferred Maintenance review resulted in a comprehensive document that was sufficiently detailed that EM headquarters felt a phone conference could substitute for the site visits that were being conducted at other facilities.

HLW Storage Pad - Detailed Oversight Plan including surveillance planning, references to approval requests, standards applied and testing data resulted in a defensible documentation that could be used as a ready reference and time line for the project.



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Recent Lessons Learned in Quality

- Lessons Learned – Moab

Haul Truck Tires - An articulated truck tire with a section repair failed shortly after installation. Previously another articulated truck tire experienced a blown tire as the result of improper storage. Previous to both of these incidents an articulated truck tire was inspected during a daily equipment inspection and considered suspect. As a result, the tires were removed from the site, along with several other tires that were purchased from an off-brand supplier during a cost savings exercise. The project has adopted a policy to only purchase new quality tires on all haul trucks. In addition to procurement controls, personnel should be trained on proper tire storage and thorough pre-trip tire inspections.



Recent Lessons Learned in Quality

- Lessons Learned – Moab

Requirement Flow Down - While performing safety oversight at the Moab site, a safety representative identified a subcontractor who failed to follow the Project's Lockout/Tagout Procedure while performing repairs to a heating, ventilation and air conditioning unit. No injuries occurred and the subcontractor received additional training prior to resuming work. Flow down of project requirements to the subcontractor is critical to the overall safety and quality of operations. The subcontractor's implementation of these requirements should be verified through frequent oversight of their activities.



Recent Lessons Learned in Quality

- Lessons Learned – SPRU Project

Water Sample Contamination - For the Lower Level Land Area project at the Separations Process Research Unit (SPRU), extracted groundwater stored in a tank contained trace levels of volatile organic compounds (VOC); this raised questions on whether in-situ groundwater was contaminated. Further evaluation determined the contamination was transferred from the piping leading to the holding tank and did not originate in the groundwater; however, the on-site discharge of the extracted groundwater required approval by the State and had a negative impact on project cost and schedule. Ensure systems used for conveying and storing water do not contaminate the water during handling.



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Top Issues in QA

- **Issues**
 - WVDP - Delegation of Safety Authority for Order 414.1D was removed for the Field Element Manager and transferred to EMCBC. This impacts approval of contractor QAPs and the Field Element QAP.
 - QA resources to support ETEC and SPRU are minimal until EMCBC support vacancies are filled.



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Top Issues in QA

- **How can the EM QA Corporate Board help?**
- Serve as an advocate to restore the DOE-WVDP Field Element Delegation of Safety Authorities to include Order 414.1D.TBD
- Assist in getting a copy of the updated “EM Corporate QA Performance Metrics” form for use at the sites when available.



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Conclusions/Questions



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15th EM QA Corporate Board Meeting

Nevada Site

Oak Ridge Office of Environmental Management

Jason Armstrong, FOD Director
OREM

October 27, 2014



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Outline

- Brief Status of any Changes in QA Efforts at the Site
- Brief Status of Staffing Levels in QA
- Recent Lessons Learned in Quality from the Site
- Top Issues in QA Affecting the Site
- Discussion



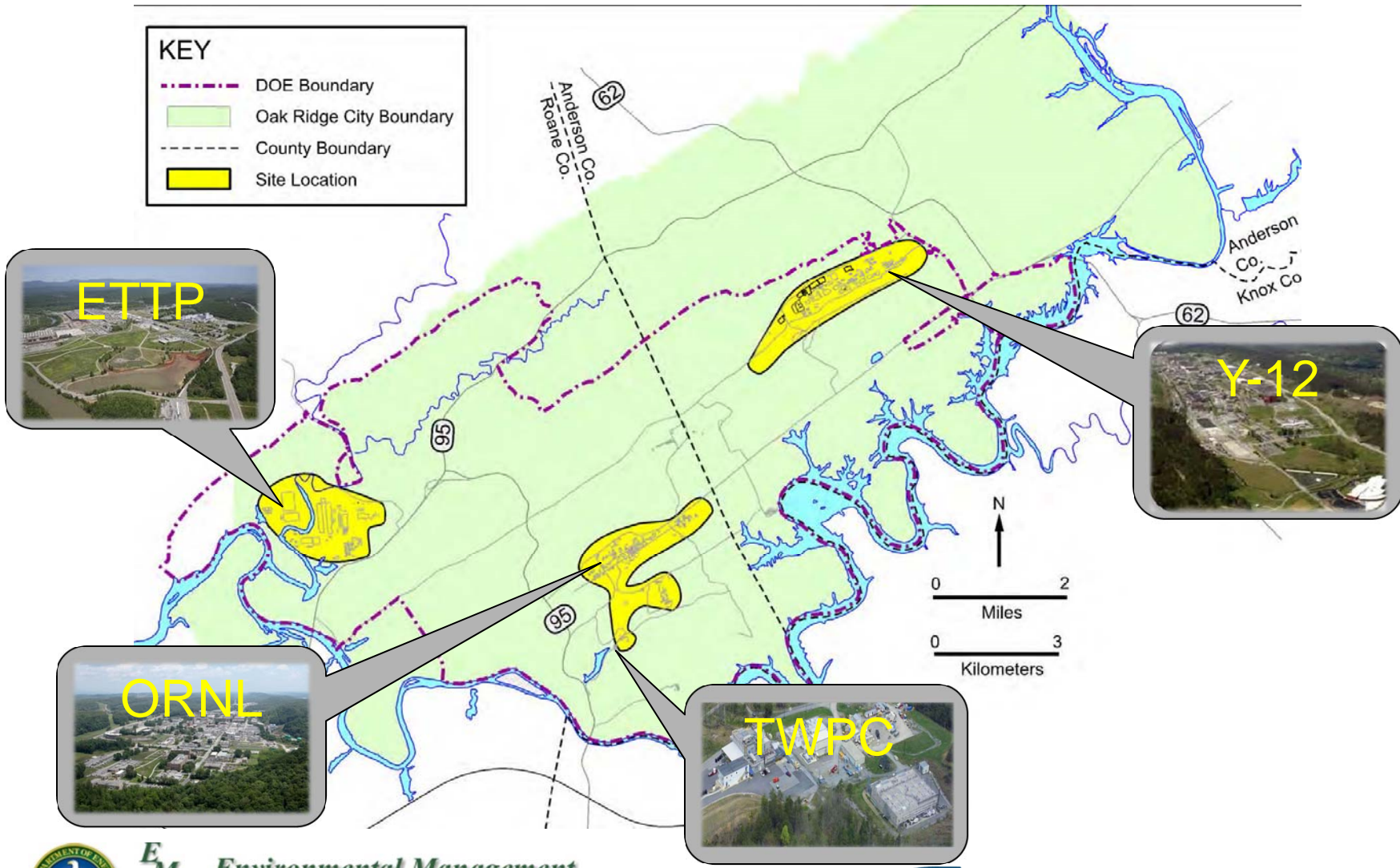
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Oak Ridge Reservation



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Recent Changes in QA Efforts at the Site

Oak Ridge Office of Environmental Management (OREM)

Major QA Projects:

- Federal Office
 - QA Program implementation scheduled for December 31, 2014.
 - EM-43 assist visit conducted in September 2014 provided useful feedback for process going forward and expectations for future audits.
- URS|CH2M Oak Ridge, LLC (UCOR) - cleanup contractor for the DOE Oak Ridge Reservation, primarily focused on cleanup of East Tennessee Technology Park (the former Oak Ridge K-25 Site).
 - Re-aligning resources from QA to Performance Assurance (Operating Experience/ Lessons Learned; Assessments; and Corrective Actions management) to better support the technical requirements of UCOR's Contractor Assurance Program.

Recent Changes in QA Efforts at the Site



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Recent Changes in QA Efforts at the Site

OREM Major QA Projects:

- Wastren Advantage, Inc. (WAI) - responsible for all aspects of management, operations, and programmatic oversight of the TRU Waste Processing Center (TWPC) facility and its mission to safely process and disposition all transuranic (TRU) waste generated by the Oak Ridge Reservation.
 - Developed and implemented a new deficiency reporting and tracking system.
 - Implemented a senior management review board that oversees the identification, classification and applicable reporting requirements of deficient conditions, events, reporting requirements and the management of issues through the corrective action process
 - Applied a quantitative approach to developing quality specifications for procurement of items and services and for on-site delivery of products and services
 - Initiated a site-wide online training system for quality issues (Quality Minute)
 - Initiated a coaching and mentoring initiative for the QA Staff to brief key staff from other departments on important site quality issues.



Recent Changes in QA Efforts at the Site

OREM Major QA Projects:

- Isotek Systems, LLC (Isotek) – principal mission is the disposition of the Department's inventory of Uranium-233 from Building 3019, the world's oldest operating nuclear facility, which is located at the Oak Ridge National Laboratory.
 - Annual review and revision of Project QA Plan (PQAP); approved by DOE OREM.
 - Submitted a revised Quality Assurance Program Description (QAPD) to DOE HQ Office of Packaging & Transportation; pending completion of DOE HQ review.
 - Upcoming: revision of PQAP to address scope and implementing procedures for processing campaign (down blending).



Recent Changes in QA Efforts at the Site



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Status of QA Staffing Levels

Federal Office

- Number of Quality Assurance Staff (FY15 and FY16)
 - Quality Assurance 3 FTEs
 - Quality Engineer 2 FTEs
 - Quality Control 0 FTE
 - SQA 1 FTE
- FTEs are determined utilizing Federal Technical Capabilities Panel (FTCP) analysis
- Senior Quality Engineer was added in July 2014
- Level of support dollars provided to the QA organization
 - FY14 Actual \$431K; focus on gap analysis and new/revised procedures for QA implementation
 - FY15 Estimated \$405K; focus on QA implementation and self-assessment



Status of QA Staffing Levels

Prime Contractors

- UCOR
 - 11.5 QA FTEs (includes issues management and assessment programs) and 1 QC FTE
 - The projects determine the level of field QA support needed and the ESH&QA Manager and QA Manager jointly determine the level of non-deployed support.
 - No changes in staffing levels. Funding relatively flat from FY14 to FY15
- WAI
 - 1 Quality Manager, 5 full-time WAI Quality Engineers, 1 part-time WAI Quality Engineer (65% loaded), 2 temporary/part-time contracted Quality Engineers (85% and 65% loaded), Current Total: 8.2 FTE
- Isotek
 - 1 QA Specialist (SQA Lead), 1 QA Engineer, 1 QA Manager, Current Total: 3 FTEs. Additional QA support will be necessary for down blending, 1 FTE max.
 - The QA Manager determines staffing needs based on resource loaded schedules. No anticipated changes in funding from FY-14 to FY-15



Status of QA Staffing Levels



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Recent Lessons Learned in Quality

- UCOR
 - From the recently completed URS corporate assessment, UCOR could benefit from a more robust issues management program.
- WAI
 - A graded approach needs to be applied to the TWPC Software Quality Assurance Program.
 - The interface between design, procurement, and maintenance offers opportunities for continued improvement.
 - Effective ways of communicating with site personnel are necessary to achieve a substantial improvement in site quality.
 - Implementing quality at the worker level through more coaching and mentoring is vital to improving TWPC site quality.
- Isotek
 - Inspection by a Competent Person was Essential to Identify Multiple Ladders with Similar Structural Cracking (Source: UCOR)
 - Corrective Actions Closure Documentation (Issued as Quality Tip)



Recent Lessons Learned in Quality

- How the Corporate Board Members can benefit from the experience
 - Based on assessment findings they may be aware of, some information could be worth sharing to others within the DOE complex.



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Top Issues in QA Affecting the Site

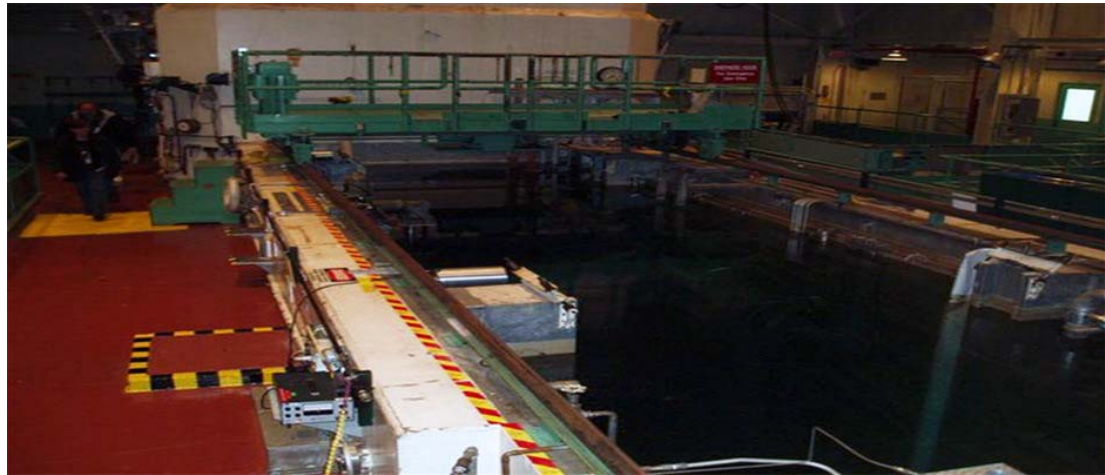
- UCOR
 - Lack of depth in QA personnel resources; all positions “one-deep”. Each Quality Engineer deployed to provide oversight to field operations is covering multiple projects.
 - Breadth, availability, and quality of causal analysis training for non-QA personnel needs improvement.
- WAI
 - Continuing the improvements in the TWPC Corrective Action Program.
- Isotek
 - Delay in shipping can lead to complacency.
 - Maintaining sharp attention to safety is a concern as delay times build.
 - Adherence to procedural requirements can also become an issue if not properly managed.



Top Issues in QA Affecting the Site

- How can the EM QA Corporate Board help with this issue?
 - Training needs analysis across the EM complex to determine need for causal analysis training for QA and non-QA personnel

Top Issues in QA Affecting the Site



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Conclusions/Questions

- Consistent, quality oversight is essential for the success of a diversified Environmental Management program.
- There is no time to let your guard down and reflect on past successes while there is ongoing work in the field.
- Questions



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15th EM QA Corporate Board Meeting

Nevada Site

Randy Kay, Quality Assurance Manager
Idaho Operations Office

October 27, 2014



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Outline

- Brief status of any changes in QA efforts at the Idaho Operations Office
- Brief status of staffing levels in QA
- Recent Lessons Learned in quality from the Idaho Operations Office
- Top issues in QA affecting the Idaho Operations Office
- Discussion



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Recent Changes in QA Efforts at INL

❖ Major QA projects

➤ Support of contract renewals

- NRC licensed facilities
- Advanced Mixed Waste

❖ Current status

➤ IWTU

- Startup/testing in process



Recent Changes in QA Efforts at INL

❖ Current status

➤ AMWTP

- Packaging/characterization continues/shipments on hold to WIPP
- CBFO recertification audit

Status of QA Staffing Levels

❖ Federal and Prime Contractors

➤ **Federal QA staffing**

- Current Federal staff – 3 QA Specialists, 1 QA Manager
- Projected Federal staff FY15/16 – 5 QA Specialists, 1 QA Manager

➤ **Contractor QA staffing**

- CWI current staff – 7 Quality Engineers, 7 Inspectors, 2 QA Managers
- Projected CWI staff FY15/16 – 7 Quality Engineers, 7 Inspectors, 2 QA Managers



Status of QA Staffing Levels

❖ Federal and Prime Contractors

➤ **Contractor QA Staffing (Continued)**

- ITG Current Staff – 13 Quality Engineers, 6 Inspectors, 1 Quality Manager
- Projected ITG Staff FY15/16 – 13 Quality Engineers, 6 Inspectors, 1 Quality Manager

➤ **Federal Staffing Changes**

- Minus 2 QA Specialists



Status of QA Staffing Levels

❖ Federal and Prime Contractors

➤ **Contractor Staffing Changes**

- CWI - No Staffing Changes
- ITG - Plus 4 Quality Engineers

❖ Method used to determine resources needed

➤ **Federal Staff**

- Annual Staffing Needs Analysis



Status of QA Staffing Levels

- ❖ Method used to determine resources needed (Continued)
 - **Contractor Staff**
 - CWI – Staffing Analysis Based Upon Program/Project Input
 - ITG – Staffing Analysis Based Upon Cleanup Schedule Commitments

- ❖ Changes in funding for QA organizations from FY-14 to FY-15
 - No Funding Changes are Anticipated



Recent Quality Lessons Learned

❖ Lessons Learned

➤ No quality related lessons learned generated

❖ How the Corporate Board Members can benefit from the experience

➤ None

Top QA Issues Affecting the INL

❖ Contract transition uncertainties

➤ Loss of focus

- How can the EM QA Corporate Board help with this issue?

- Open for suggestions

❖ Contractor Assurance System

➤ Self-Assessment adequacy – Depth/documentation of results

➤ Issues Management/Corrective Action adequacy - Cause analysis

- How can the EM QA Corporate Board help with this issue?

- Share Complex Wide Issues With Contractor Assurance System



Conclusions/Questions

QUESTIONS??



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