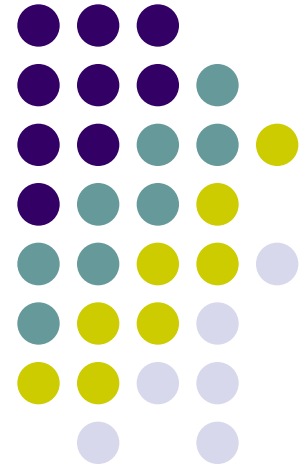


# “EFCOG’s Knowledge Portal Review” 2010 Waste Management Symposium

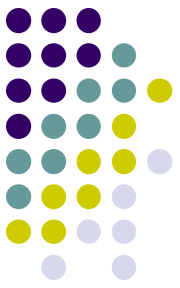


Presented by

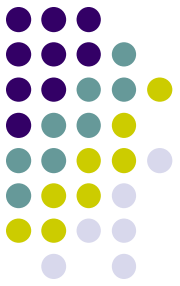
ISM & QA Working Group  
Panel Session 39  
March 9, 2010



# Integrated Safety Management & Quality Assurance-ISM&QA



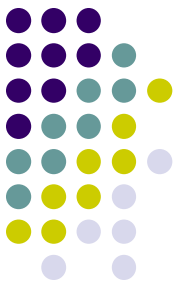
- Over 150 DOE & Contractor personnel addressing key generic issues within the DOE complex for:
  - Integrated Safety Management
  - Safety Culture
  - Work Management
  - Quality Assurance
  - Feedback and Improvement
  - Human Performance
- Focused Improvements through the EFCOG “Best Practices” Program



# Recent Key Tasks

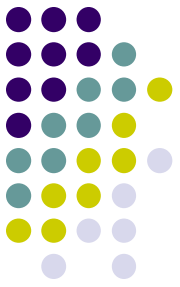
- Completing EFCOG/DOE Safety Culture Task pilots
- Completed the initial 5 tasks by the EFCOG-EM QA task force in support of the EM QA Corporate Board
- Completed 2 tasks for NNSA-EFCOG QA Improvement Initiative
- Initiating NNSA-EFCOG Work Management at Activity Level Project

# Expectations of Safety Culture Pilot Facilities



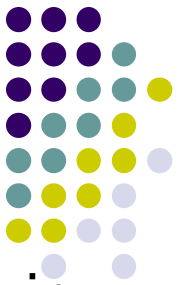
- Management commitment to assess and improve safety culture, using EFCOG/DOE methodology as a guide
- Assessment (s) of safety culture during 2009 to identify safety culture improvement target areas
- Initiation of improvement activities based on targets identified by assessments
- Willingness to provide feedback to EFCOG/DOE on the pilot documents

# Pilot Feedback to EFCOG

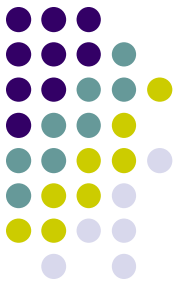


- Culture improvement is competing priority with ISMS verification, HSS inspections, ARRA, etc.
- Don't regulate it
- EFCOG documents are informative and useful
  - Use by facility was dependent on where the involved facility was when Web resources were activated
- There is no “one size fits all” approach
- Change the organizational culture (not just the safety culture) so that safety is a component of how the organization thinks and behaves
- Integrate HPI, VPP, SCWE, HRO, behavior-based culture change, etc. into ISMS

# Feedback to EFCOG



- Variety of assessment approaches and improvements in use which are consistent with EFCOG documents
- Some facilities are using subcontractors to conduct improvement initiatives such as surveys
- Assessment triangulation improves confidence in results
- Many ISMS attributes correlate with key safety culture attributes
- More could be added to EFCOG documents specific to DOE complex such as:
  - Subcontractors and safety culture
  - Other tools that can be used to assess/improve

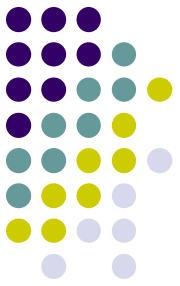


# DOE QA Initiatives

QA Issues and Problems Continue to Emerge across the DOE Complex

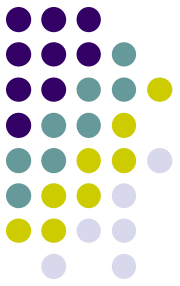
- QA Issues Generally Arising from Nuclear QA Construction Projects
  - Supplier and Construction Quality Deficiencies
  - Inconsistent flow down of QA & Technical requirements
  - Availability and Adequacy of Contactor and Supplier Implementation NQA-1 QA Programs
  - Adequacy and Effectiveness of Oversight

# DOE EM QA Initiative

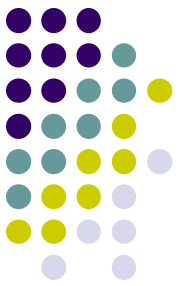


- Established Headquarters Quality Organization and Staff
- Performed QA Assist & Audits
- Provided a specific EM QAP to customize and manage EM Nuclear Project QA Requirements Including Nuclear Industry Standard ASME NQA-1
- Established a Corporate QA Board with Line Site Managers with Contractors Support
- Initiated a Joint EM EFCOG QA Improvement Plan Covering the Corporate Board's 5 top QA Issues

# EM Corporate QA Board Focus Areas

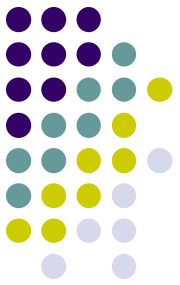


- Requirements Flow-down to Contractors and Subcontractors
- Availability of NQA-1 Suppliers/Vendors
- Commercial Grade Item Dedication Process and Acceptance of Nuclear Services
- Graded Approach to Quality Assurance
- Line Management Understanding of QA and Oversight



## MAJOR LESSONS LEARNED

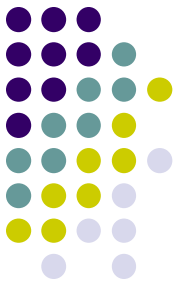
- QA Program requirements and Quality related (Product Quality) requirements are often not well defined, or consistently flowed down to contractors and suppliers
- Too few vendors do not have NQA-1 QA programs and Commercial Grade Dedication is required to find adequate suppliers of nuclear components and services
- Commercial Grade Dedication programs are not consistent or adequate to meet quality standards



## MAJOR LESSONS LEARNED

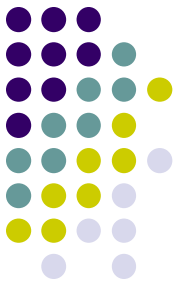
- Graded approaches for appropriate QA requirement application are inconsistent and often times not well applied
- Availability of well trained and skilled QA professionals across the complex is lacking

# NNSA QA Improvement Initiative



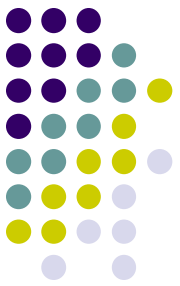
- Established a Joint NNSA EFCOG Quality Improvement Plan
- Established an Executive Committee to Guide the Improvement Process
- Initiated 2 initial tasks as priority
  - Lessons Learned on Nuclear Construction Projects
  - Base Lining QA Programs Implementation Status
- Evaluation of Existing EFCOG & EM Tools and Practices

# NNSA QA Improvement Initiative



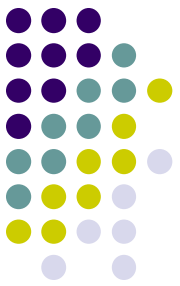
## Identified Critical QA Concerns on NNSA Nuclear Projects

- Critical QA issue Lessons Learned to be Applied to Key New Projects
- Establishing a Base Line of QA Program Application
- Flow down of QA and Technical Requirements
- Work Planning Evaluation to Include QA & QC Requirements
- QA Resource, capability, and availability
- Evaluation of Safety & Quality Culture



## MAJOR LESSONS LEARNED

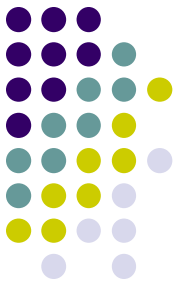
- QA implementation must be included in project planning and budgeting processes.
- QA requirements must be specified early and maintained under configuration control.
- Selection of contractors needs to be informed by their recent performance under (preferably) directly qualified QA programs.
- M&Os and Feds need to plan implementation of CGD efforts before contractor selection and should not just rely upon general contractors and vendors to run CGD efforts post-contract award.



## MAJOR LESSONS LEARNED

- Projects need to plan how they will address shortages of qualified QA professionals.
- QA requirements need to be flowed down to the lowest applicable level in the supply chain.\
- Vigorous oversight of contractor/subcontractor/supplier QA program is required.
- The project needs to own QA. Quality assurance is a commitment of the mgmt of the project, not just a function assigned to a QA group.

# Work Management Initiative



- EFCOG-NNSA Initiative to Address Concerns on Activity Level Work Planning & Control Processes
- NNSA-EFCOG Project plan targeted for May 2010
- Work Management Group EFCOG Peer Reviews
- NNSA Project lead- Jim Winter
- EFCOG Project Lead Tim Flake
- Executive Sponsors Frank Russo, Al Konetzni, Norm Barker