



# Quality Assurance In DOE



## EFCOG ISM/QA Meeting

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June 15, 2010



# Topics



- HSS Directives Reform Effort
- Proposed Approach to DOE O 414.1X
- Proposed Approach to DOE QA Guides
- QA Order Revision Actions to Date
- Safety Software Update
- HEPA Filter – Related Actions
- Other QA Initiatives



# HSS Directives Reform Effort



## DOE 2010 Safety and Security Reform Plan

- Streamline/clarify requirements to better support DOE Line Management
- Provide for flexibility in implementation
- Be less prescriptive
- Maintain DOE expectations for high standards of security and safety
- Follow DOE O 251.1C



# Proposed Approach to DOE O 414.1X



- Require the use of NQA-1 for contractors performing nuclear work in Haz Cat 1, 2, 3 facilities
  - Allows for an equivalent consensus standard to be used if approved by responsible SO
- Add Federal qualification requirements



# Proposed Approach to DOE O 414.1X (cont.)



- Clarify QA requirements apply to non-safety software
- Clarify that each HQ Element and Field Element assign a person to have Federal QA manager responsibility
- Move CAMP requirements to one of the Worker Safety and Health Directives (e.g., 226.1A)



# Proposed Approach to DOE O 414.1X (cont.)



- Add requirement for Quality Council representation (DOE Field and HQ)



# Proposed Approach to DOE O 414.1X (cont.)



- Add responsibility for GC to notify HSS of external legislation and cases before DOJ that may impact DOE S/CI programs
- Refine the S/CI and SQA attachments and corresponding sections of the CRD



# Proposed Approach to DOE O 414.1X (cont.)



- Update safety software QA requirements
  - Assign Federal SSQA leads for each Secretarial Office and Field Element
  - Detail attributes of safety software inventory
  - Establish and document grading levels for safety software



# Proposed Approach to DOE QA Guides



- DOE G 414.1-1B – Remains unchanged
- DOE G 414.1-2A – Update based on DOE O 414.1X revisions; add new IAEA reference for S/CI guidance
- DOE G 414.1-3 – Eliminate Guide and delete reference in DOE O 414.1X



# Proposed Approach to DOE QA Guides (cont.)



- DOE G 414.1-4 – Remains unchanged
- DOE G 414.1-5 – Remains unchanged (may be deleted or be revised/moved to be consistent with where CAMP requirements are incorporated)



# QA Order Revision Actions to Date



- Revised draft DOE O 414.1X - started with last version from 2008-2009 effort
- Draft DOE O 414.1X reviewed by 2010 QA Order writing/review team
- Comments are being dispositioned internally
- Executive Steering Committee (ESC) established
  - SC, Energy and NNSA SES level participation



# QA Order Revision Actions to Date (cont.)



- Directives Review Board approval of Justification Memorandum is pending
- Next phases include review by ESC, HSS, DNFSB, and stakeholders (e.g., Quality Council and EFCOG)
- RevCom anticipated late summer 2010
- Issuance anticipated early 2011



# Safety Software Update



- Safety Software Expert Working Group (SSEWG) Activities
  - Added new software (HotSpot) to the Central Registry (CR)
  - New versions of software under review for listing in CR (CFAST, IMBA, GENII, ALOHA and MACCS2/WinMACCS)



# Safety Software Update (cont.)



- Safety Software Expert Working Group (SSEWG) Activities
  - Interface with the EFCOG's Accident Analysis Sub-Group to identify desirable software for inclusion in the CR (e.g. FDS )
  - Interface with ASME NQA-1 sub-committee on software quality assurance



# Safety Software Update (cont.)



- Central Registry Management
  - Server for hosting Communication Forum (CF) certified and authenticated
  - Hosting of CF application under way
  - CF will facilitate software user interface and communication



# HEPA Filter - Related Actions



- Monthly and semi-annual FTF reports being distributed for review
- Continued monitoring of the filter manufacturer's performance is necessary for continued improvement of the filter quality



# Other Initiatives



Office of Quality Assurance Policy and Assistance (HS-23) is working closely with ASMQ NQA-1, IAEA and EFCOG on the following QA related activities:

- (a) NQA-1 Subpart 4.5, Application Guide on the use of NQA-1-2008/1a-2009 for compliance with 10 CFR 830, Subpart A, and QA Order 414.1C (to be published in 2010 addenda)
  
- (b) NQA-1 Subpart 4 .X, Application Guide on the comparison of NQA-1-2008/1a-2009 and IAEA Safety Standard GS-R-3 (to be published in 2010 addenda)



## Other Initiatives (cont.)



- (c) New NQA-1 Part II to address gaps with 10 CFR 830, Subpart A, (especially requirements on Quality Improvement and Management Assessment)
  
- (d) EFCOG procedure for evaluating and accepting commercial grade items and services (expected to be completed by September 2010)



# Other Initiatives (cont.)



- DOE Quality Council Initiatives:
  - ✓ DOE 2009 Survey on QA Implementation
  - ✓ QA Training for DOE HQ
  - ✓ ISM QA Integration template
  - ✓ NQA-1 Part II application
  - ✓ Commercial Grade Dedication
  - ✓ QA Program Performance Metrics
- DOE Quality Council Website  
<http://www.hss.energy.gov/nuclearsafety/qa/council>