



# Quality Assurance in DOE

Presented to  
EFCOG QA Subgroup Meeting  
November 18, 2008

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Office of Quality Assurance Policy and Assistance  
(HS-23)



# “HOT” Topics



- Office of Quality Assurance Policy and Assistance (May 2008)
- DOE O 414.1C Revision
- DOE Quality Council
- Safety Software QA
- HEPA Filters
- EFCOG Initiatives



# Office of QA Policy and Assistance (HS-23)



- Provides a single point of contact for QA within DOE and for interfacing with external organizations
- Increases the visibility of the importance of QA
- Consolidates the responsibilities for development and maintenance of DOE QA Policy, including the Order, Guides, and Rule.
- Consolidates the responsibility for interpretative authority for QA Directives – providing consistency
- Consolidates QA implementation and technical assistance activities (for Program Offices and Field Offices).



# Office of QA Policy and Assistance



Colette Broussard	Director	301-903-5452
Stacey Onley	Administrative	301-903-8019
Mary Haughey	QA Policy/Rule	301-903-2867
Duli Agarwal	QA Assistance/Trending	301-903-3919
Lisa Treichel	QA Assistance/Communications	301-903-8177
Sonya Barnette	QA Assistance/QA Website	301-903-2068
Subir Sen	SQA/HEPA/Seismic	301-903-6571



# Quality Assurance Order

(DOE O 414.1C)



- Team of Federal and Contractor staff (June 2008)
- Draft Revision to 414.1C
  - ✓ Requires NQA-1-2008 for new nuclear facilities
  - ✓ Allows flexibility (Nuclear vs. Non-Nuclear)
  - ✓ SQA requirements clarified
  - ✓ Includes training requirements for nuclear oversight



# Quality Assurance Order

(DOE O 414.1C)



- Integration of QA, ISM (450.4) and Oversight (226.1A) Directives
  - ✓ Crosswalks
  - ✓ “Integration” language to allow seamless implementation
  - ✓ Incorporate 226 CRD into 414 CRD – one path forward
  - ✓ All written as Orders (Elimination of Manuals)
  - ✓ Terminology consistency (2 steps)
  - ✓ QAPs and Security



# Quality Assurance Order (DOE O 414.1C)



- Peer Review
  - ✓ Quality Council
  - ✓ EFCOG QA Subgroup
  - ✓ Others from Team Member Organizations
  - ✓ Management of Team Members



# Quality Assurance Order

(DOE O 414.1C)



## TEAM MEMBERS

- Colette Broussard (HS)
- Bob Toro (EM)
- Matt Cole (SC)
- Carl Sykes (NE)
- Nate Morley (NNSA)
- Charlie Hughey\* (NNSA)
- Debra Sparkman (CTA)
- Roy Lebel (Brookhaven) – Contractor
- Mike Mason (Bechtel) – Contractor
- Norm Barker (Energy Solutions) – Contractor
- Craig Barnes (LLNL)- Contractor



# Quality Assurance Order (DOE O 414.1C)



## Additional Non-Member Resources

- Mary Haughey (HS)
- Subir Sen (HS)
- Bud Danielson (CNS)
- Bill Lancaster (PXSO)
- Amy Ecclesine (LBL)
- Ava Holland (WIPP)
- Dan Dilley (SSO)
- Anton Tran (NNSA)
- Bob Murray (EM)
- Lisa Treichel (HS)



# Quality Assurance Order (DOE O 414.1C)



## Tentative Schedule:

- ✓ Finish effort of “integration” (December ‘08)
- ✓ Peer review of Draft QA Order with integration language (January ‘09)
- ✓ Comment resolution of Peer Review (March ‘09)
- ✓ Red Team (April ‘09)
- ✓ Leadership Team (April/May ‘09)
- ✓ RevCom Entry (~May ‘09)



# DOE Quality Council



- Quality Council established 2008
- Membership includes 17 Offices represented with interested parties
- Kick-off meeting was held in August 2008
- Charter signed by HS-1 November 5, 2008
- Formal meetings/minutes/formal voting process/annual report/deliverables/website



# DOE Quality Council Objectives



- Identify crosscutting QA issues and develop recommendations for a path forward.
- Improve the DOE QA policy (directives)
- Develop mechanisms to evaluate effectiveness of QA implementation
- Assist line management to evaluate effectiveness of QA implementation
- Support quality initiatives across the DOE complex to improve mission effectiveness
- Improve the effectiveness of quality assurance lessons learned (including recording, disseminating and implementing)
- Provide recommendations on training and qualifications programs related to QA



# DOE QUALITY COUNCIL OBJECTIVES (CONT'D)



- Work effectively with the EFCOG QA Subgroup
- Establish and maintain a working relationship with other Federal agencies and the private sector regarding QA programs, activities or lessons-learned
- Establish and maintain a working relationship with QA consensus standards bodies and professional organizations
- Assist, as requested, in reviews of QA programs, directives, etc., and
- Accomplish other objectives related to DOE QA as agreed to by the Quality Council members, or as directed by the Secretary or Deputy Secretary of Energy.



# DOE Quality Council



- Working Groups/Task Planning Documents (TPDs)
  - ✓ QA Training for DOE HQ
  - ✓ ISM QA Integration – how?
  - ✓ NQA-1 Part II application
- Intended to work closely with EFCOG QA Subgroup
- Other expected interfaces with Council Member POCs
- Monthly Calls (third Thursday of month)
- Annual Meetings (face-to-face)



# DOE QUALITY COUNCIL

## Interfaces



- Standards Development Organizations (ISO, ASME, ANSI, IAEA, etc.)
- DNFSB
- Technical Standards Program (Topical Committees)
- EM Quality Assurance Corporate Board
- National Academy Science (NAS)/Building Research Advisory Board (BRAB)/Federal Construction Council (FCC)
- Office of Independent Oversight (HS-60)
- Office of Enforcement (HS-40)
- EM/NE/SC Software QA Support Group
- EFCOG QA Subgroup



# Safety Software QA Update



- Safety Software Expert Working Group
  - Formed WG with support from EM & NNSA
  - WG includes knowledgeable code users
  - Addressing Toolbox Code gaps
- Safety Analysis and Safety Design Code data call on code usage distributed to the Field Elements
- Central Registry website update in progress – SQA Communication Forum



# HEPA Filters



- Working Team from HQ & Field established to address DNFSB letter on increased rejection rate
- Plan of Action developed
  - POCs identified to facilitate distribution of HEPA filter data/information
  - Manufacturers reporting on causes for increased failures and corrective actions
  - A site survey conducted to document protocols for testing non-safety-related HEPA filters as defined in DOE-STD-3020.
- Working Team to evaluate responses and issue report with recommendations (~March 2009)
- NQA-1 Audit of Filter Test Facility in January 2009



# EFCOG Initiatives



- S/CI Recommendation memorandum
  - Signed 11/6/08
  - S/CI requirements within Directives will be updated
  - S/CI Website now addresses some recommendations
- White paper on NQA-1 Part 2
  - Quality Council task planning document (TPD)
    - NNSA Lead



# EFCOG Initiatives



- Quality Council Interface
  - POC – Colette Broussard (HS-23)
  - Joint initiatives anticipated
  - Co-located face-to-face meetings?



# ADDITIONAL INFORMATION



- QA Exchange (Newsletter) October 2008 Issue
- QA/SQA Website Migration to HS-20 Space (including HEPA site)
- QA Trending using ORPS Data
  - ✓ Less-than-adequate training/qualification
  - ✓ Less-than-adequate documents or records maintenance
  - ✓ Less-than-adequate procedure compliance
  - ✓ Less-than-adequate procurement or flow-down of requirements



# SUMMARY



# THE AXE STORY