



Office of Environment, Safety, and Health

Quality Assurance Briefing

Defense Nuclear Facilities Safety Board
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Today's Briefing Topics

- ◆ **Key accomplishments since last briefing**
- ◆ **Current activities**





Key Accomplishments

- ◆ **Secretary's memorandum on improving QA**
- ◆ **EH Management System for Quality and Safety Management issued**
- ◆ **DOE wide rollout of DOE O 414.1C completed, implementation in progress**
- ◆ **DOE-STD-3020-2005 (HEPA Filter Specifications) issued**
- ◆ **Supported development and deployment of EM QAP**





Current Activities

- ◆ **EH Management System implementation**
- ◆ **DOE O 414.1C implementation initiated**
- ◆ **Central Registry code evaluation**
- ◆ **2004-1 Implementation Plan quality activities**
- ◆ **Data analysis to address on quality issues**
- ◆ **Cooperative efforts with standards organizations**
- ◆ **Approaching closure of DNFSB Recommendation 2002-1**





Current EH Activities

Details





EH MS Implementation

- ◆ **EH Management System for Quality and Safety Management approved and issued**
- ◆ **Orientation for managers - March 2006**
- ◆ **EH procedures and processes being developed for:**
 - Document and Records Management
 - Management Assessments
 - Independent Assessments
 - Quality Improvement
- ◆ **Staff and contractors orientation – April 2006**
- ◆ **Assessments planned**
- ◆ **ISM manual addressed in next revision.**





DOE O 414.1C Implementation

◆ **Completed Workshops & Training**

- West with ASME NQA Committee meeting Oct 12, 2005
- Southwest with EFCOG meeting Nov 1, 2005
- Southeast at SRS Nov 30, 2005
- Southwest with NNSA Workshop Dec 7, 2005
- Mid-Atlantic at GTN Jan 18, 2006
- Northwest at RL Feb 6, 2006

◆ **Upcoming Workshops & Training**

- Mid-West regional meeting at ANL Mar 14, 2006
- Technical session at EFCOG/ISM meeting April 2006
- Emergency management meeting - May 2006

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DOE O 414.1C Implementation ..Cont'd

- ◆ **Implementation support**
 - FAQs posted on SQA Knowledge Portal
 - DOE QA Newsletter
 - QA Safety Bulletin
- ◆ **Technical Assistance**
 - Review of field QAPs (SPRU, RL)
 - Participation in assessments (RL)
 - Consultation
- ◆ **DOE Directives Improvements**
 - DOE G 414.1-1A - Assessment
 - DOE G 414.1-5 - CAMP
 - Additional – per 2004-1 Implementation Plan





DOE O 414.1C Implementation ..Cont'd

- ◆ **EH Supported PSO & field QAP development and implementation**
 - EM QAP development, training program development
 - NA QAP review
 - Field and M&O contractor QAP review
 - NE QAP review
- ◆ **Technical Qualification Standards updates (QA & SQA)**
- ◆ **Support PSO in conducting field Quality Management Assessments**





QA Implementation Assessments

EH participating / involved in the following assessments
(Oct '05 through Sep '06)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
NE			Mat'l Group ORNL							AGR INL		AGR ORNL
EM					WCH (2/6- 2/10)			WTP, PPPO (Lex.)		SRS		PPPO (Port - Pad)
NA						Y12 QAS-2 PX QAS-2 YSO	LANL QAS-1 (DA.PA, NV)		LANL QAS-2 KC QAS-2	Y-12 QAS-2 SNL QAS-1	SSO QAS-1 NV- Bechtel QAS-1 NSO QAS-1	LASO QAS-1 LLNL QAS-1
SC										BNL (TBD)		
EH						OR DOECAP		FTF (TBD)	ID MAPEP			MNGT ASSESS





2004-1 Implementation Plan

- ◆ **Oversight Manual development in progress**
 - **EH-31 contributing – Ensure QA integration**
 - **Leverages QA Guides and DOE Order**
- ◆ **QA & SQA CRADS based on DOE Guides and ASME NQA-1-2004**





Central Registry Code Evaluation

- ◆ **Integrated Module Bioassay Analysis (IMBA) being evaluated for possible inclusion as toolbox code**
 - Scope includes assessment per DOE O 414.1C SQA requirements & model performance verification
 - IMBA identified as DOE G 414.1-4 Grade Level B
- ◆ **CFAST model upgrade**
 - Joint project by EH, NIST, and NRC
 - Scope includes upgrading to DOE O 414.1C SQA requirements





Cooperative Efforts with Standards Organizations

- ◆ **ANS 10.4, Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs for the Nuclear Industry**
 - DOE G 414.1-4 being reviewed for partial inclusion into ANS 10.4 revision
- ◆ **ASME NQA, QA Requirements for Nuclear Facility Applications**
 - Reviewed and proposed revision to include components of DOE G 414.1-4
 - NRC staff, DOE, and NQA Committee – first ballot closed
 - Issues that affect DOE applications identified
- ◆ **IEEE Software and Systems Executive Standards Committee**
- ◆ **IAEA Quality Assurance for Nuclear Facilities Training**

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Quality Assurance Analyses

- ◆ Trends being developed for QA related events and for QA systems at the Complex, Field Office and Contractor Level
- ◆ ORPS information being augmented to assist in identifying systemic QA issues
- ◆ DOE Respiratory Protection program evaluated for QA issues.
- ◆ Respirator QA issues identified include:
 - Inventory control
 - Inspection procedures and Quality Control
 - Design related issues
 - Inconsistent and Infrequent Management Assessments
 - Ineffective corrective action management process
 - DOE and M&O management communication issues





Revision of DOE HEPA Filter Standards

- ◆ **First revised DOE HEPA standard was issued Dec 2005**
 - Revised to comply with ASME AG-1
 - Incorporates results from previous assessments and advances in HEPA filter technology
- ◆ **Revision to other HEPA standards continues by DOE, DNFSB staff, and industry SME working team**
- ◆ **Remaining three standards are being combined into one and will be issued by Dec 2006**





Approaching Closure of Recommendation 2002-1

- ◆ **All commitments have been closed except one**
- ◆ **NNSA working to close this open commitment by June 2006**
- ◆ **At next Board briefing DOE will propose initiating closure**

