# Quality Plan for the Nuclear Test Personnel Review (NTPR) Program

Brief for: Veterans' Advisory Board on Dose Reconstruction (VBDR)

CTIO

- Briefer: Richard E. Toohey, Ph.D., CHP
- Time: 11:30 AM 12:00 PM
- Date: September 19, 2007





### **Briefing Outline**

- Goals of NTPR Quality Assurance (QA) Program
- Elements of QA Program
  - Document hierarchy/status
  - QA program implementation
  - Qualification and training
  - QA program evaluation
- Remaining Tasks

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• Projected briefing time: 30 minutes



- "Quality" is meeting the client's needs:
  - Department of Veterans Affairs (VA)
    - Verification of participation and radiation dose assessment (RDA) reports that enable an unambiguous compensation decision
  - Veterans
    - RDAs must be timely, complete, fair, and provide the "benefit of the doubt" where appropriate



### **RDA Report Requirements**

- Defensibility: any questions as to the validity of the results can be resolved expeditiously and favorably
- Consistency: any comparison of two RDAs will find that the veterans were treated in a fair and consistent manner
- Objectivity: any RDA can be reproduced, based on veteran's application and input, by any qualified analyst with essentially the same results
- Documentation: adequate to support defensibility without reference to the analyst(s) who performed the RDA



### **Elements of the QA Program**

- Documentation, including document hierarchy and control
- Quality reviews and metrics
- Personnel qualification and training
- Quality program assessments



# **Document Hierarchy**

- 1. Policy and Guidance documents
  - a. External: Code of Federal Regulations, National Research Council reviews, VBDR recommendations
  - b. Internal: Policy and Guidance manual
- 2. Program Planning documents
  - a. Project Management plan
  - b. Quality plan
- 3. Implementing documents
  - a. Procedures
  - b. Technical guidance
  - c. Training materials
- 4. Operating documents
  - a. Worksheets
  - b. Forms



### **Document Status**

- Policy and Guidance documents:
  - Policy and Guidance manual, revised August 2007 to provide guidance on expedited processing methods
- Program Planning documents:
  - Quality plan, May 2007: approved by Defense Threat Reduction Agency (DTRA), submitted to VBDR
  - Program Management plan, June 2007: comments received from DTRA on first revision



# **Program Management Plan**

- Describes processes used to produce products and services
- Identifies roles and responsibilities
- Task 1: Veteran Assistance and Case File Management
- Task 2: Dose Reconstruction
- Task 3: Records Research and Information Management
- Task 4: Program Management
- Task 5: External Agency Support
- Task 6: Process Improvement and Special Studies
- Task 7: Facilities and Other Support



- Required QA processes and their application
- Sequence and interaction of these processes
- Criteria and methods to ensure that both operation and control of processes are effective
- Resources and information necessary to support QA processes
- Effective methods to monitor, measure, and analyze the processes
- Actions necessary to achieve planned results



- Six QA Procedures submitted to DTRA
- Case File Management Procedures, May 2007, approved by DTRA
- Veteran Assistance Procedures, June 2007, submitted to DTRA
- RDA Procedures draft in internal review
- Four remaining procedures in drafting or internal review
- Four technical reports released; three in internal or peer review

# QA Program Implementation

- RDA reports:
  - Internal QA review by dose reconstruction contractor senior staff
  - Independent technical review by external QA review team
  - Review and approval by DTRA staff
  - External VBDR audit of random cases
  - Detailed audits of random cases by external QA review team (i.e., verify calculations and use of source materials)
  - Double-blind case completion: independent RDAs performed on the same cases by dose reconstruction contractor and independent consultants; evaluation by external QA review team, DTRA, and VBDR

# QA Program Implementation (cont.)

- Technical guidance documents:
  - Internal peer review
  - DTRA review and approval
  - External VBDR review
- Metrics established in Quality Assurance Procedure 802, Monitoring and Measuring of Product and Processes, May 2007
- Metrics tracked and trends identified



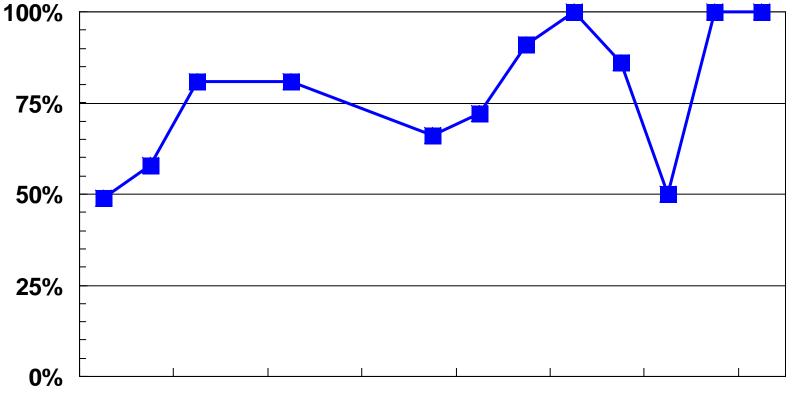
- Timeliness criteria for completion of historical research and SPARE\* development
- Review of draft RDAs
- Completion time for program office requests
- Status of pending case load by type
- RDA external technical QA review trends
- Cost management, deliverable status, and network status
  - \*: <u>Scenario of Participation And Radiation Exposure</u>



# **RDA Quality Review Checklist**

- Dose Reconstruction Overview
- Dose Estimate
- Individual Film Badge Data
- External Gamma Dose Reconstruction
- Neutron Dose Estimate
- Beta Dose (external ambient)
- Beta Dose (dermal contamination)
- Internal Dose (inhalation)
- Internal Dose (ingestion)
- References





Jun-06 Aug-06 Oct-06 Dec-06 Feb-07 Apr-07 Jun-07 Aug-07



- Requirements identified in Quality Assurance Procedure 601, Competence, Awareness, and Training, 31 May 2007
- Training materials developed and issued with procedures, e.g., Technical Library User's Guides
- Supervisors ensure completion of formal and on-the-job training
- Training and qualification records maintained



- Quality Assurance Procedure 801, Internal Quality Audits, May 2007
- Monthly Program Management Reviews
- Track and review quality metrics
- Identification and control of technical issues
- Verification and closure of technical issues
- Annual internal quality audit plan
- External oversight by VBDR



#### **Remaining Tasks**

- Approval of remaining draft procedures
- Develop detailed procedures for selection of and dose assignment for expedited processing cases
- Conduct internal audits under revised quality plan