

**U.S DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
OFFICE OF QUALITY ASSURANCE**

AUDIT REPORT

OF THE

CRWMS M&O

VIENNA,VA

AUDIT NUMBER HQ-ARP-95-01

OCTOBER 10-14, 1994

Prepared by:

Dennis Threatt

Dennis Threatt
Audit Team Leader
Headquarters QA Division

Date: 11/3/94

Approved By:

R. W. Horton

Donald G. Horton
Director
Office of Quality Assurance

Date: 11/3/94

9411100219 941104
PDR WASTE
WM-11 PDR

1.0 EXECUTIVE SUMMARY

As a result of Performance Based Quality Assurance (QA) Audit HQ-ARP-95-01, the audit team determined that the CRWMS Management & Operating (M&O) Contractor implementation of the process for control of subcontract work was determined to be marginal. The evaluation of the process implementation was based on deficiencies corrected during the audit including the several open M&O Corrective Action Reports for which corrective action was not being implemented in a timely manner.

The audit team identified one deficiency requiring one Corrective Action Request (CAR). Another five deficiencies, requiring only remedial action, were corrected during the audit. Nine recommendations were identified for M&O management consideration. The deficiencies and recommendations are described in Section 5 of this report.

The audit team believes that the M&O has made significant progress since the previous audit. This is especially demonstrated by the M&O identification of problem areas. The audit team encourages the M&O to rigorously implement their corrective action program to eliminate the identified problems. In addition, the audit team recommends that problems identified at one location be evaluated to assure that effective corrective actions at all locations are considered.

2.0 SCOPE

The audit was conducted to evaluate the effectiveness of the CRWMS M&O QA Program as described in the Quality Assurance Requirements and Description with regard to the M&O control of subcontract work.

The processes/activities evaluated during the audit, in accordance with the approved Audit Plan, are as follows:

1. Work Definition
2. Work Classification
3. Procurement Planning
4. Procurement Document Preparation
5. Supplier Evaluation & Selection / P.O. Award
6. Post Award Activities
7. Evaluation & Acceptance

Requirements were drawn from DOE/RW-0333P, *Quality Assurance Requirements and Description* document (QARD), revision 1, the M&O implementing Quality Administrative Procedures (QAPs), and related M&O location specific line procedures.

3.0 AUDIT TEAM AND OBSERVERS

The following is a list of audit team members, their assigned areas of responsibility, and observers:

| <u>NAME</u> | <u>ORGANIZATION</u> | <u>PROCESS ELEMENT</u> |
|-----------------|---------------------|--------------------------|
| AUDITORS | | |
| Dennis Threatt | QATSS | Audit Team Leader |
| Hugh Lentz | QATSS | PBA Processes 1, 2, 3 |
| Walter Coutier | QATSS | PBA Processes 4, 5, 6, 7 |
| Fred Bearham | QATSS | PBA Process 3 |
| Tom Swift | QATSS | PBA Process 2 |
| Gary Wood | QATSS | PBA Processes 4, 5, 6, 7 |

OBSERVERS

| | |
|--------------|-----|
| Jack Spraul | NRC |
| Tom Trbovich | NRC |

4.0 AUDIT MEETINGS AND PERSONNEL CONTACTED

A preaudit meeting was held at the M&O office in Vienna, VA on October 10, 1994. A daily debriefing and status meeting was held with M&O management and staff to discuss issues and potential deficiencies. The audit was concluded with a postaudit meeting held at the M&O office in Vienna, VA on October 14, 1994. Personnel contacted during the audit are listed in Attachment 1. The list also identifies those who attended the preaudit and postaudit meetings.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Effectiveness

As a result of the performance-based evaluation, the overall effectiveness of the M&O process for control of subcontract work is considered to be marginal due to the deficiencies corrected during the audit including the lack of timely implementation of corrective action for open M&O CARs. The process for M&O control of subcontract work requires improved controls to ensure effective implementation and visibility.

5.2 Stop Work or Immediate Corrective Actions Taken

There were no Stop Work Orders, immediate corrective actions, or related additional items resulting from this audit.

5.3 QA Program Audit Activities

The details of the audit evaluation along with objective evidence reviewed are contained within the audit checklists. The checklists are processed as non-permanent QA Records.

A summary table of audit results is provided in Attachment 2.

5.4 Technical Activities

Because the audit was conducted to evaluate the effectiveness of processes and activities, the audit team did not evaluate any technical activities.

5.5 Summary of Deficiencies

The audit team identified one deficiency during the audit for which one CAR has been issued. Five additional deficiencies were identified and corrected prior to the postaudit meeting.

Deficiencies documented on a CAR and those corrected during the audit are detailed below.

5.5.1 Corrective Action Requests (CARs)

As a result of the audit, the following CAR was issued:

CAR HQ-95-002

Work Authorization Directive/Technical Direction Letter (WAD/TDL) review for impact of quality affecting work is not being performed using a QA implementing procedure.

REF: A-MSP-0020 M&O Contract Cost and Schedule Baseline
Management and Control

5.5.2 Deficiencies Corrected During The Audit (CDA)

Deficiencies which are considered isolated in nature and only require remedial action may be corrected during the audit. The following deficiencies were corrected during the audit:

1. Problems existed with control over procurement of National Underground Storage (NUS) services, including lack of timely resolution of CARs. Amended responses to the CARs were provided during the audit to expedite closure.
2. A contract change (CN #6 not issued) had not been issued to require NUS to implement VLP-17-8 (effective 3/31/94). Based on the amended responses to CARs as identified in item #1 above, the contract with NUS is being cancelled, therefore, a contract change is not required.
3. Improper corrections have been made to records (Reading/Self-Study). The records were properly corrected prior to the conclusion of the audit.
4. Reports provided by Sandia National Laboratories (SNL) for deliverables required by Task Order #9, revision 3, are identified as revision date September 1994. The SNL Document Review Records (DRRs) and Data Tracking System (DTS) sheets identify the revision level as 1 or no number or date. The deliverable was returned to SNL for correction.
5. Document Reviewers accepted comment resolutions that were indicated as "to be incorporated at a later date". The Comment Sheets were corrected to indicate the actual comment resolution.

6.0 RECOMMENDATIONS

The following recommendations resulted from the audit and are presented for consideration by M&O management.

1. There is a lack of defined overall responsibility for the integration of procurement activities with respect to coordination of QA and technical functions. It is recommended that overall responsibility be assigned to one individual to include coordination of technical and QA functions.

2. The audit team recommends that the M&O implement the planned proactive system for monitoring subcontract deliverables prior to the required due date.
3. It is recommended that document reviewers do not accept responses to comments until the comment is completely dispositioned. This will avoid leaving comment responses open-ended (i.e., to be included at a later date).
4. It is also recommended that mandatory and non-mandatory comments be easily distinguished. Attaching a marked-up document to a comment sheet for mandatory comments can be confused with the option to submit non-mandatory comments on a marked-up copy.
5. The classification analysis performed by General Atomics (GA) for the casks should be considered and appropriate recommendations provided to OCRWM's Office of Waste Acceptance, Storage and Transportation (RW-40) for inclusion on the Q-list.
6. The audit team recommends M&O Administrative Procedures be updated to current practices. This should include QA as a member of the Weekly Operations Status Meeting (WOSM).
7. It is recommended that OCRWM Headquarters Quality Assurance Division comments to QA classifications of the Multi-Purpose Canister (MPC) Subsystem, Transfer Cask Subsystem, On-Site Transfer (OST) Segment, On-Site Storage (OSS) Segment, and Bare Spent Nuclear Fuel Transfer (BST) Segment be considered for incorporation.
8. Status reports of subcontract activities submitted by suppliers (weekly, monthly, and quarterly) should be copied to the Quality Engineering Support organization and other appropriate organizations to assist in planning and conducting supplier performance evaluation activities.
9. Revised documents should be annotated "supersedes _____". This would provide better tracking when a revision level is skipped.

7.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Audit
Attachment 2: Summary Table of Audit Results

ATTACHMENT 1

PERSONNEL CONTACTED DURING THE AUDIT

| NAME | TITLE | CONTACT | MEETINGS | |
|-----------------|-------------------------------------|---------|----------|------|
| | | | PRE | POST |
| F. Bearham | Auditor | x | x | x |
| B. Bernhardt | Subcontracts & Purchasing Manager | x | x | |
| J. Blandford | Storage & Transportation Manager | x | x | x |
| G. Boyt | CO Technical Representative | x | x | |
| J. Cassidy | Quality Engineering Manager | x | x | x |
| M. Chisholm | Subcontract Specialist | | x | x |
| P. Chomentowski | QA Engineer | x | | |
| E. Chulick | Training Manager (VA) | | | x |
| C. Clark | Transportation Dept Engineer | x | | x |
| J. Clark | MPC Project Manager | x | x | x |
| W. Coutier | Auditor | x | x | x |
| C. Denton | Design Engineer | x | | |
| M. Donovan | Quality Engineer | x | | |
| R. Eble | Engineering Supervisor | x | | |
| D. Franks | QA Audits Manager | x | | x |
| D. Graser | DOE IRM Team Leader | x | | |
| V. Harris | QA Sr. Staff Secretary | x | | x |
| E. Holloman | System Planner | x | | |
| M. Horseman | QATSS Audit Lead | x | x | |
| A. Kancitis | Manager, Program Plans | x | | x |
| G. Keener | QA Audit Specialist | x | | |
| C. Kelly | Training Records Specialist | x | x | x |
| S. Keyser | CRF Manager | x | | x |
| A. Kubo | AGM, Waste Accept/S & T | | | x |
| W. Lake | DOE Transportation Engineer | x | | |
| F. Lentz | Auditor | x | x | x |
| J. Levine | Director Communications | | | x |
| S. Levine | Sr. Program Planner/Analyst | x | | |
| J. McConaghy | Engineering Supervisor | | | x |
| E. McDonnell | Contracts & Subcontracts Manager | | x | x |
| R. Morgan | Vienna QA Manager | x | x | x |
| D. Nolan | Transportation Cask Supervisor | x | x | x |
| M. Rahimi | Senior Engineer | x | | |
| B. Rawles | Weston Sr. Technical Manager | x | | |
| K. Rees | Subcontract Specialist | x | x | x |
| R. Robertson | General Manager | x | x | |
| S. Robinson | Configuration Management Specialist | x | | |
| V. Sauers | Modeling/DB | | x | |
| W. Schlener | Project Engineer | x | | |
| P. Schlereth | Sr. QA Engineer | x | x | x |
| W. Schneider | Subcontract Manager | x | x | x |

ATTACHMENT 1 (CONTINUED)

PERSONNEL CONTACTED DURING THE AUDIT

| NAME | TITLE | CONTACT | MEETINGS | |
|--------------|-------------------------------------|---------|----------|------|
| | | | PRE | POST |
| N. Seagle | Engineering Supervisor | X | | |
| H. Setzer | COTR Coordinator | X | | X |
| M. Shepherd | Vienna Records Center Manager | X | X | X |
| P. Shutlock | Buyer | X | X | |
| S. Sibrel | Records Analyst | X | | |
| V. Skrinak | IMS Manager | X | | X |
| T. Smith | RM Staff | X | | |
| J. Spraul | NRC Observer | X | X | |
| L. Stallings | Task Manager | X | X | |
| W. Standley | Modeling & Database Manager | X | | |
| T. Stiller | Systems Engineer | X | | |
| T. Swift | Auditor | X | X | X |
| A. Tayfun | Records Manager | X | | |
| R. Tagg | Contract Administrator | X | | |
| B. Teer | Transportation Project Manager | X | X | |
| D. Threatt | Audit Team Leader | X | X | |
| J. Tierney | Quality Engineering Support Manager | X | X | X |
| T. Trbovich | NRC Observer | X | X | X |
| J. Van Ormer | Systems Engineer | X | | |
| P. Viggiano | CAR Coordinator | X | | |
| J. Watson | Training Supervisor | X | | |
| P. White | QA Sr. Specialist | X | | X |
| J. Williams | DOE Director | X | | |
| G. Wood | Auditor | X | X | X |
| T. Wood | DOE Acting Director | X | | |

ATTACHMENT 2
SUMMARY TABLE OF AUDIT RESULTS

Audit Report
HQ-ARP-95-01
Page 9 of 9

AUDIT HQ-ARP-95-01 DETAIL SUMMARY

| ELEMENT | PROCESS STEP | DETAILS (Checklist) | CARs | CDA | RECOMMEND | ADEQUACY | COMPLIANCE | EFFECTIVE |
|---|---|------------------------|-----------|----------|------------|----------|------------|------------------|
| PERFORMANCE BASED | | | | | | | | |
| M&O CONTROL OF SUB- CONTRACT WORK | 1. WORK DEFINITION | pgs. 1-14 | HQ-95-002 | N | 6 | N | N | EFFECTIVE |
| | 2. WORK CLASSIFICATION | pgs. 1-11 | N | N | 5, 7 | N | N | MARGINAL |
| | 3. PROCUREMENT PLANNING | pgs. 1-31 | N | 5 | 1, 3, 4, 9 | N | N | EFFECTIVE |
| | 4. PROCUREMENT DOCUMENT DEVELOPMENT | pgs. 1-9 | N | 2, 3 | N | N | N | EFFECTIVE |
| | 5. SUPPLIER EVALUATE/SELECT, P.O. AWARD | pgs. 1-12 | N | N | N | N | N | LACK OF ACTIVITY |
| | 6. POST AWARD ACTIVITIES | pgs. 1-10 | N | 1 | 2, 8 | N | N | MARGINAL |
| | 7. EVALUATION & ACCEPTANCE | pgs. 1-5 | N | 4 | N | N | N | EFFECTIVE |
| TOTAL | ADEQUATE CONTROL PROCESS | 92 pages | 1 | 5 | 9 | | | MARGINAL |

CARs Corrective Action Requests
CDA Corrected During Audit
RECOMMEND Recommendations
ADEQUACY... Requirements in Procedures
COMPLIANCE Procedures Implemented
EFFECTIVE .. Effectiveness of Process or Activity
TOTAL Overall Summary of Audit Results
N None