

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

AUDIT REPORT

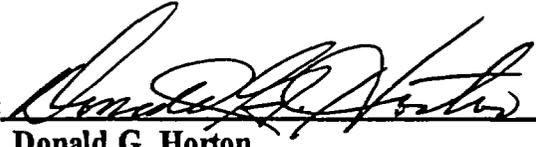
OF

YUCCA MOUNTAIN SITE CHARACTERIZATION OFFICE

LAS VEGAS, NEVADA

AUDIT NUMBER YM-ARP-95-13
JUNE 19 THROUGH 23, 1995

Prepared by:  Date: 7/19/95
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Approved by:  Date: 7/20/95
Donald G. Horton
Director
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1.0 EXECUTIVE SUMMARY

As a result of performance based QA Audit YM-ARP-95-13, the audit team determined that the YMSCO is satisfactorily implementing an effective QA program and process controls for the procurement processes: Work Definition and Work Classification, Procurement Document Preparation and Planning, Evaluation and Acceptance, and associated activities. The processes for: Supplier Evaluation and Selection/Contract Award, and Post Award Activities could not be evaluated due to lack of activity in these areas at this time.

The audit team identified two deficiencies during the audit that resulted in the issuance of one CAR. CAR YM-95-048 documents the lack of adequate QA instructions for quality affecting work issued to LBL regarding what QA program to follow since LBL's QA program has not been accepted by OQA, and that LBL has submitted quality affecting deliverables without specifying which quality program was used for the development of the deliverable. The other deficiency was corrected during the audit and is described in Section 5.5.2.

Additionally, there were three recommendations resulting from this audit which are detailed in Section 6.0 of this report.

Acronyms used in this report are listed in Attachment 3.

2.0 SCOPE

The limited scope audit was conducted to evaluate the effectiveness of selected YMSCO processes and the quality of resultant end products for procurement and related activities.

The processes/end-products evaluated during the audit, in accordance with the approved audit plan, are as follows:

PROCESS/ACTIVITY/OR END-PRODUCT

The performance based evaluation of process effectiveness and product acceptability was based on:

1. Work Definition and Work Classification
2. Procurement Document Preparation and Planning
3. Supplier Evaluation and Selection/Contract Award
4. Post Award Activities
5. Evaluation and Acceptance

TECHNICAL AREAS

No technical areas were reviewed during this audit.

3.0 AUDIT TEAM

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

<u>Name/Title/Organization</u>	<u>Processes</u>
Frank J. Kratzinger, ATL, YMQAD	Evaluation and Acceptance
Walter R. Coutier, Auditor, HQQAD	Supplier Evaluation and Selection/Contract Award Post Award Activities
Stephen R. Maslar, Auditor, YMQAD	Work Definition and Work Classification Procurement Document Preparation and Planning

4.0 AUDIT MEETINGS AND PERSONNEL CONTACTED

The preaudit meeting was held at the YMSCO offices in Las Vegas, Nevada, on June 19, 1995. Daily debriefings and coordination meetings were held with YMSCO management and staff, and daily audit team meetings were held to discuss issues and potential deficiencies. The audit was concluded with a postaudit meeting held at the YMSCO offices in Las Vegas, Nevada, on June 23, 1995. Personnel contacted during the audit are listed in Attachment 1. The list includes those who attended the preaudit and postaudit meetings.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Effectiveness

The audit team concluded that, in general, and with the exception of the areas identified as deficiencies, YMSCO process controls are being effectively implemented for all the areas identified in the scope of the audit, except for Supplier Evaluation and Selection/Contract Award, and Post Award Activities which could not be evaluated due to lack of activity in these areas at this time.

5.2 Stop Work or Immediate Corrective Actions Taken

There were no Stop Work Orders, immediate corrective actions taken as a result of this audit

5.3 QA Program Audit Activities

A summary table of audit results is provided in Attachment 2. The details of the audit evaluation, along with the objective evidence reviewed, are contained within the audit checklists. The checklists are kept and maintained as QA Records.

5.4 Technical Audit Activities

There were no technical activities audited during this audit.

5.5 Summary of Deficiencies

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

Synopsis of the deficiencies documented as a CAR and the one corrected during the audit are detailed below. The CAR has been transmitted to you under separate letter number YMQAD:RBC-3755, dated June 28, 1995.

5.5.1 Corrective Action Request (CAR)

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

CAR YM-95-048

PPS issued to LBL for quality affecting work do not specify which Affected Organizations quality program LBL is to work to since LBL's quality program has not been accepted by OQA. In addition LBL has submitted quality affecting deliverables without specifying which quality program was used for the development of the deliverable.

5.5.2 Deficiencies Corrected During the Audit

Deficiencies which are considered isolated in nature and only requiring remedial action can be corrected during the audit. The following deficiency was identified and corrected during the audit:

1. YAP-5.1Q, Revision 2, Document Development, Change, Review, Approval, and Acceptance Control, Exhibit YAP-5.1Q.1, instructions for completing DAR form, step 14, requires the Assistant Manager to indicate "Q" if the document is subject to QARD requirements, otherwise mark non-Q.

A review of the DARs for the deliverables submitted since April, 1995, revealed that 7 out of 61 DARs were incorrectly marked as to the type of document (Q vs non-Q).

The seven deliverables that were changed are:

TM199J	From Non-Q	to Q
MOL137	From Non-Q	to Q
OBB03C	From Non-Q	to Q
OBB02C	From Non-Q	to Q
3GCH520M	From Non-Q	to Q
MOL235	From Q	to Non-Q
MOL265	From Q	to Non-Q

The auditor verified that the satisfactory corrections were made to the above referenced documents during the course of the audit.

5.5.3 Follow-up of Previously Identified CAR

The corrective actions to CAR YM-93-086, identified as a result of audit YMP-93-15, were verified based on the following review of data.

1. Reviewed TD Letters for the following TDs:

<u>TD</u>	<u>Letter</u>	<u>Date</u>
SNL-93-009	RSED:JMB-4732	8/31/93
TRW-93-014	RSED:JMB-4725	9/28/93
LANL-93-011	RSED:JMB-4753	8/18/93
LLNL-93-012	RSED:JMB-4726	8/25/93
USGS-93-010	RSED:JMB-4749	8/25/93
SAIC-93-018	AMA:JGG-4292	8/26/94
TRW-93-024	VOIDED	

2. A RTN Report dated 6/13/95 was reviewed and showed that the QARD requirements were now satisfied with procedures YAP-2.6Q, Rev 0, ICN 2, YLP-4.1Q, Rev 0, YAP-5.1Q, Rev 2, YAP-6.1Q, Rev 0, and AP-7.4Q, Rev 0. QMP-04-02 was cancelled on 2/1/95.
3. The results of this audit concluded that corrective actions have been satisfactorily implemented.

6.0 RECOMMENDATIONS

The following recommendations resulted from the audit and are presented for consideration by YMSCO management.

1. It is recommended that the following items be considered for inclusion in future PPS:
 - A clear definition of the applicable QA requirements (see YAP-2.6Q, paragraph 5.1.1a5).
 - Distinguish between Q and Non-Q items for each PPS that includes a mixture of Q and Non-Q deliverables.
 - When identified participants on the PPS do not have an approved QA program in place, identify what QA program(s) is to be used for the workscope (see PPS WBS 1.2.3.3.1.2 for LBL).
2. Contract DE-AC08-95NV11784 dated 4/27/95 with AECL Technologies requires the application of the QARD for work identified on PPSs. This contractor is not listed on the QSL.

QA affecting work will be performed as the contract progresses. No QA work has been done to-date.

In accordance with QARD requirements, it is recommended that AECL Technologies QA Program be accepted and AECL Technologies be added to the QSL or the contract be modified to address QA work and the fact that it would be done under the YMSCO QA program. PPS worksheets would need to clearly identify QA requirements that are applicable to the workscope.

Additionally, personnel should be made aware that this contractor cannot perform any quality affecting activity until the above condition is resolved.

3. Although not a Quality issue, there seems to be a large discrepancy between the deliverables identified on the PACs deliverable schedule and the list of deliverables generated by PPD as being received for processing. Eighteen out of 42 deliverables for the month of May, 1995, were not received by PPD but were shown as completed on the PACs schedule.

It is recommended that some sort of validation check be performed by PPD for those deliverables entered by the affected organizations into the PACs system.

7.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Audit

Attachment 2: Summary Table of Audit Results

Attachment 3: Acronyms List

ATTACHMENT 1

Personnel Contacted During the Audit

<u>Name</u>	<u>Organization/Title</u>	<u>Preaudit Meeting</u>	<u>Contacted During Audit</u>	<u>Postaudit Meeting</u>
Barnes, Wesley E.	DOE/Project Manager	X		
Barton, Robert V.	DOE/Deputy AMSL ¹	X	X	X
Boyles, Alice V.	QATSS/Secretary		X	
Brocoum, Stephen J.	DOE/AMSL	X		
Brodsky, Mitchell G.	DOE/Gen. Eng.	X		
Clark, James E.	SAIC/QA Advisor	X	X	X
Craun, Richard L.	DOE/AMEFO ¹	X		
Cruz, Betty G.	M&O/CM Manager ¹	X	X	
Dyer, J. Russell	DOE/Deputy Project Mgr.	X		
Fox, Charles R.	DOE/Project Control	X	X	
Gardner, Jeffrey	M&O/System Eng.		X	
Hamilton-Ray, Birdie V.	DOE/Task Leader	X	X	
Helms, Ronald G.	M&O/SAIC/Staff Advisor	X	X	X
Harris, Donald J.	QATSS/Sr. QA Specialist		X	
Hudson, Woody	QATSS/Sr. QA Specialist		X	
Iorii, Vincent F.	DOE/Project Control	X	X	
Jones, Maryann	DOE/Computer Specialist		X	
Jones, Susan B.	DOE/AMSP ¹	X	X	
Kozai, Wayne N.	DOE/Program Analyst	X		
Levich, Robert A.	DOE/Int'l Programs Mgr.		X	
Maudlin, Richard L.	QATSS/Sr. QA Specialist	X		
Nusbaum, Maryann C.	M&O/PPD Coordinator	X	X	X
Quittmeyer, Richard C.	M&O/Mgr. Scientific Prog.		X	
Rabe, Alan W.	QATSS/Sr. QA Specialist			X
Schrecongost, Jill M.	DOE/Contract Specialist		X	
Smith, Mackaye W.	DOE/Physical Scientist		X	X
Spangler, Elaine L.	SAIC/Training Records		X	
Spence, Richard E.	DOE/Director YMQAD		X	X
Taylor, Cherry A.	SAIC/Training Records		X	
Warren, Charles C.	QATSS/Sr. QA Specialist	X		
Williams, Dennis R.	DOE/Deputy AMSP		X	
Zimmerman, Judith E.	M&O/Manager PPD	X	X	X

¹ See page 9

ATTACHMENT 2
Summary Table of Audit Results

AUDIT YM-ARP-95-13 DETAIL SUMMARY								
	PROCESS STEP	DETAILS (Checklist)	CARs	CDA	RECOMMEND	ADEQUACY	COMPLIANCE	OVERALL
P r o c u r e m e n t	Work Definition and Work Classification	pgs. 1-8 of 29	YM-95-048	N	6.0 #2	SAT	N/A	SAT
	Procurement Document Preparation and Planning	pgs. 9-15 of 29	N	N	6.0 #1	SAT	N/A	
	Supplier Evaluation and Selection/Contract Award	pgs. 16-23 of 29	N	N	N	Lack of Activity	N/A	
	Post Award Activities	pgs. 24-26 of 29	N	N	N	Lack of Activity	N/A	
	Evaluation and Acceptance	pgs. 26-29 of 29	N	1	6.0 #3	SAT	N/A	

N/A = Not applicable

SAT = Satisfactory

N = None

CDA = Corrected During Audit

ATTACHMENT 3
ACRONYMS LIST

AMEFO	Assistant Manager Engineering and Field Operations
AMSL	Assistant Manager Suitability and Licensing
AMSP	Assistant Manager Scientific Programs
AP	Administrative Procedure
ATL	Audit Team Leader
CAR	Corrective Action Request
CM	Configuration Management
DAR	Document Action Request Form
DOE	U.S. Department of Energy
HQQAD	Headquarters Quality Assurance Division
ICN	Interim Change Notice
LANL	Los Alamos National Laboratory
LBL	Lawrence Berkeley Laboratory
LLNL	Lawrence Livermore National Laboratory
M&O	Management and Operating Contractor
NON Q	Non-Quality
OQA	Office of Quality Assurance
PACS	Planning and Control System
PPD	Plans and Procedures Department
PPS	Participant Planning Sheets
Q	Quality
QA	Quality Assurance
QARD	Quality Assurance Requirements and Description
QATSS	Quality Assurance Technical Support Services
QMP	Quality Management Procedure
QSL	Quality Suppliers List
RSED	Regulatory and Sit Evaluation Division
RTN	Requirements Traceability Network
SAIC	Science Applications International Corporation
SNL	Sandia National Laboratory
TD	Technical Direction
USGS	United States Geological Survey
WBS	Work Breakdown Structure
YAP	YMP Administrative Procedure
YLP	YMP Line Procedure
YMQAD	Yucca Mountain Quality Assurance Division
YMSCO	Yucca Mountain Site Characterization Office