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

AUDIT REPORT

OF

CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEMS
MANAGEMENT AND OPERATING CONTRACTOR

LAS VEGAS AND MERCURY, NEVADA

AUDIT YMP-93-07
MARCH 1 - 8, 1993

Prepared by: R E Powe Date: 4/7/93
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Approved by: R E Powe For Date: 4/8/93
Donald G. Horton
Director
Office of Quality Assurance

102.7

1.0 EXECUTIVE SUMMARY

This report contains the results of the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Audit YMP-93-07 of the Civilian Radioactive Waste Management System (CRWMS) Management and Operating Contractor (M&O). This QA audit evaluated implementation of seven of the 19 QA program elements described in the CRWMS M&O Quality Assurance Program Description (QAPD) document. This was done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements. The seven QA program elements evaluated were: 1.0 Organization; 2.0 Quality Assurance Program; 5.0 Plans, Procedures, and Drawings; 6.0 Document Control; 15.0 Control of Nonconforming Items; 16.0 Corrective Action; and 17.0 Quality Assurance Records.

Overall, for the QA program elements audited, the CRWMS M&O implementation of a QA program in accordance with the CRWMS M&O QAPD and implementing procedures at the Nevada Site (NS), Las Vegas, Nevada, is marginally effective. This assessment is based on the following:

> Four of the seven QA program elements audited, 1.0, 6.0, 16.0, and 17.0, are being implemented satisfactorily. However, implementation of QA Program Element 5.0 was considered unsatisfactory because numerous examples of incorrect implementation of Quality Administrative Procedure (QAP) 5-1, "Preparation of M&O Quality Administrative and Implementing Line Procedures," were identified and numerous examples of inadequate procedures were identified. QA Program Element 15.0 was also found to be unsatisfactory since the CRWMS M&O had not issued an approved procedure for dispositioning Nonconformance Reports (NCRs). In addition, implementation of QA Program Element 2.0 was considered marginal because of deficiencies identified in verification of education and experience and concern regarding a just-in-time training program.

The audit team identified three deficiencies during the course of the audit which resulted in the issuance of Corrective Action Requests (CAR) and one deficiency was corrected during the audit. CAR YM-93-034 documented the lack of a procedure to disposition NCRs, CAR YM-93-036 documented that numerous portions of QAP-5-1 were not being implemented properly, and CAR YM-93-037 documented that Implementing Line Procedures (ILPs) either did not address requirements or were not kept current with actual practice. In addition to the three issued CARs, Yucca Mountain Quality Assurance Division (YMQAD) supplied Headquarters Quality Assurance Division (HQAD) with additional examples of deficient conditions that they had identified during Headquarters QA Audit HQ-93-03. CAR HQ-93-013

documented that QAPs either did not address requirements or were not kept current with actual practice and CAR HQ-93-019 documented that there had been a failure to verify education for some employees. CARs YM-93-036, YM-93-037, and HQ-93-13 were considered to be significant conditions adverse to quality.

It should be noted that during the audit, CRWMS M&O personnel took a proactive position of finding out details of what the auditors were identifying as areas that needed improvement, evaluated the situation, and immediately began to implement corrective actions.

Other areas of the CRWMS M&O strengths were: the innovative development of a NS Notification of New Hire form, and the implementation of QA Records Indexing and Microfilming activities.

2.0 SCOPE

This report contains the results of the U.S. Department of Energy (DOE) OCRWM QA Audit YMP-93-07 of the CRWMS M&O that was conducted in Las Vegas, Nevada, on March 1 - 8, 1993. This QA audit, by a team of auditors from the YMQAD of the Office of Quality Assurance (OQA), evaluated implementation of seven of the 19 QA program elements described in the CRWMS M&O QAPD, A00000000-AA-06-00042-03. This was done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements (i.e. verifying adequacy).

The QA program elements/requirements evaluated during the audit are in accordance with the published audit plan and are as follows:

QA PROGRAM ELEMENTS/REQUIREMENTS

1.0 Organization
2.0 Quality Assurance Program
5.0 Plans, Procedures, and Drawings
6.0 Document Control
15.0 Control of Nonconforming Items
16.0 Corrective Action
17.0 Quality Assurance Records
18.0 Audits*

* The Audit Plan originally called for an audit of QA Program Element 18.0. However, it was determined prior to the start of the audit, that CRWMS M&O performs audits via their Vienna, Virginia office; therefore, there was no activity to audit in Nevada.

The following QA program elements/requirements were not reviewed during the audit because CRWMS M&O has no activity for which these elements apply.

9.0 Control of Processes
12.0 Control of Measuring and Test Equipment
13.0 Handling, Storage, and Shipping

TECHNICAL AREAS

The scope of this audit did not include any technical areas.

3.0 AUDIT TEAM AND OBSERVERS

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

Individual	QA Program Element/Requirement
Richard E. Powe, Audit Team Leader (ATL), YMQAD	1.0
Amelia I. Arceo, Auditor, YMQAD	5.0, 6.0, 17.0
James Blaylock, Auditor, YMQAD	5.0, 6.0, 17.0
Gerard Heaney, Auditor, YMQAD	2.0, 15.0, 16.0, 18.0
Sam H. Horton, Auditor, YMQAD	2.0
William L. Belke, Observer, U.S. Nuclear Regulatory Commission (NRC)	
Robert D. Brient, Observer, NRC	
John T. Buckley, Observer, NRC	
Susan W. Zimmerman, Observer, State of Nevada	
Engelbrecht von Tiesenhausen, Observer, Clark County, Nevada	
Donald G. Horton, Observer, DOE	
Fred Bearham, Observer, HQAD	

4.0 AUDIT MEETINGS AND PERSONNEL CONTACTED

The preaudit meeting was held at the CRWMS M&O offices at the Bank of America Center in Las Vegas, Nevada, on March 1, 1993. As necessary, debriefing and coordination meetings were held with CRWMS M&O management and staff, as were audit team meetings to discuss issues and potential deficiencies. The audit was concluded with a postaudit meeting held at the same CRWMS M&O offices in Las Vegas, Nevada, on March 8, 1993. Personnel contacted during the audit are listed in Attachment 1 to this report. The list includes those who attended the preaudit and postaudit meetings.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Effectiveness

Overall, for the QA program elements audited, the CRWMS M&O implementation of a QA program in accordance with the CRWMS M&O QAPD and implementing procedures at the NS, Las Vegas, Nevada, is marginally effective. This assessment is based on the following:

Four of the seven QA program elements audited, 1.0, 6.0, 16.0, and 17.0, are being implemented satisfactorily. However, implementation of QA Program Element 5.0 was considered unsatisfactory because numerous examples of incorrect implementation of QAP-5-1 were identified and numerous examples of inadequate procedures were identified. QA Program Element 15.0 was also found to be unsatisfactory since the CRWMS M&O had not issued an approved procedure for dispositioning nonconforming items. In addition, implementation of QA Program Element 2.0 was considered marginal because of deficiencies identified in verification of education and experience and concern regarding a just-in-time training program.

5.2 Stop Work or Immediate Corrective Actions or Additional Actions

During the course of the audit, there were no Stop Work Orders issued and no immediate corrective actions necessary.

5.3 QA Program Audit Activities

Details of the QA program audit activities are provided in Attachment 2. A list of objective evidence reviewed during the audit is provided in Attachment 3.

5.4 Technical Activities

No technical activities were included in the scope of this audit.

5.5 Summary of Deficiencies

The audit team identified five deficiencies during the audit that warranted the issuance of CARs. Since two of the deficiencies were similar to deficiencies identified by an OCRWM audit of the CRWMS M&O-Vienna in February, 1993, only three new CARs were generated as a result of this audit.

A synopsis of the deficiencies documented as a CAR and those corrected during the audit are detailed below. An information copy of each YMQAD issued CAR is included in Attachment 4.

5.5.1 Corrective Action Requests

As a result of the audit, the following CARs were issued:

CAR YM-93-034

No implementing procedure for dispositioning nonconformance reports.

CAR YM-93-036

Failure to properly implement QAP-5-1, "Preparation of M&O Quality Administrative and Implementing Line Procedures"

CAR YM-93-037

CRWMS M&O ILPs do not meet some of the requirements of the CRWMS M&O QAPD and in some instances do not reflect current practice.

In addition to the above issued CARs, the following CARs issued by HQAD as a result of Audit HQ-93-03, were enhanced to include examples of similar deficiencies found during this audit.

CAR HQ-93-013

The CRWMS M&O QAPs do not meet some of the requirements of the CRWMS M&O QAPD, and in some instances do not reflect current practice.

CAR HQ-93-019

The CRWMS M&O has not verified the highest level of education for some personnel.

CARs YM-93-036, YM-92-037, and HQ-93-013, were considered significant conditions adverse to quality.

5.5.2 Deficiencies Corrected During the Audit

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

> Attachment II, Item 2, of QAP 2-9, Revision 0, requires that training courses/subject areas be listed for each instructor. Each certification examined was noted as "Initial Instructor Development" and did not note the specific subject of instruction. This condition was satisfactorily corrected prior to the postaudit meeting.

5.5.3 Follow-up of Previously Identified CARs

There were no open CARs against CRWMS M&O within the scope of the audit; therefore, no follow-up was necessary.

6.0 RECOMMENDATIONS

During most audits, the audit team identifies areas within the audited organization's QA program where there are opportunities for improvement that warrant consideration by the audited organization's management. OQA identifies these opportunities for improvement in the audit report as recommendations. Normally, OCRWM OQA does not require a written response regarding recommendations; however, occasionally OQA will request a written response to specific recommendations.

The following recommendations are offered for CRWMS M&O management consideration. OQA requests a written response to Recommendation 15.

1. The CRWMS M&O QAPD description of the M&O organization does not include the organizational structure and functional responsibilities of the functions (Offices and Departments) that report to the NS Manager; however, there are published organization charts that clarify reporting relationships and position descriptions that describe responsibilities. As part of the transition to the OCRWM Quality Assurance Requirements and Description (QARD) document, DOE/RW-0333P, the M&O is developing a procedure to replace the organization section of the CRWMS M&O QAPD. In order to make certain that everyone understands the M&O organization at the NS, it is recommended that the M&O include the functional description of each M&O Nevada Office and Department within that new procedure.

2. Procedure QAP 2-1 was revised in September 1992 to change the training philosophy from one of a closed-loop maintenance "Maintenance Required (RD)" system, to a "just-in-time" training system. The M&O now requires that personnel be trained to the latest revision of procedures prior to performing quality-affecting work (QAW) rather than establishing a baseline of procedures to be trained to, based on an individual's Position Description (PD). There is concern regarding the M&O's ability to successfully implement this new training philosophy. Based on the implementation of "just-in-time" training, the following situations may exist:

   A. On occasion, it is expected that individuals will receive assignments with exaggerated completion dates. To meet these dates, the individual is subject to performing the work without first being properly trained to the procedures used to complete the assignment. In essence, this type of training can allow for production to be the driver, while quality may be subject to being compromised.

   B. The existing M&O is made up of ten different companies, each with a different understanding of the importance of training as it relates to the quality of work. To require managers/supervisors and each individual to be responsible for their own training requirements, without the necessary checks and balances, places the M&O at risk relative to the quality of its deliverables.

   If the M&O is to successfully implement "just-in-time" training, the following recommendations are offered:

   A. Ensure that the M&O indoctrination clearly spells out this philosophy and emphasizes the importance of each individual's responsibility relative to "just-in-time" training.

   B. Place emphasis on proper planning, coordination, and communication to ensure that individuals are aware of procedures and changes to procedures that may affect their work.

   C. The M&O Nevada QA organization should include in the surveillance schedule, on-going checks of the "just-in-time" training, through a performance-based process, to ensure individuals are properly trained to applicable procedures prior to performing QAW.

3. QAP-2-5, Revision 1, "QA Surveillance," should be revised to clarify the following:

   A. Revise the term "open item" in Paragraph 4.3.6 to be consistent with the term "items of concern" listed in Paragraph 5.5.1.H. During the audit, it was explained that open items were actually items of concern.

   B. Revise Paragraph 5.5.1 to match with Attachment II, Items I through XI. Paragraph 5.5.1 currently does not address an executive summary or the M&O QAPD requirement to provide an effectiveness statement. Attachment II requires an executive summary, and the requirement to provide a statement of the effectiveness of the QA program elements and the implementation of procedures.

   C. The "Responsibilities" section of the procedure does not address the responsibilities of Technical Experts. Paragraph 5.3 of the procedure currently addresses the use of technical experts (refer to Paragraph 3.2.6 of QAP 18-2, "Audits," for a definition of "technical experts").

4. The M&O requirements matrix was of no value in identifying the multitude of redundancies found in the QAPs/ILPs. The requirements matrix should be at a sufficient level-of-detail to allow QA management to eliminate such redundancies.

5. QAP 5-1, Revision 1, provides a mechanism by which any M&O employee can propose a modification to QAPs/ILPs. In too many instances, individuals were not implementing the procedural requirements as documented on CAR YM-93-036, yet there was no evidence that any initiative had been taken to exercise the modification process to effect a change to the procedure. M&O management needs to reinforce the implementor's responsibility to recommend changes when the procedure needs to be changed.

6. Procedure NSP-6-1, Revision 1, has elements that are not the Document Records Center (DRC) responsibility to implement. The DRC distributes controlled copies of documents at the direction of the Document Control Center (DCC) in Las Vegas, Nevada. The Las Vegas operation establishes and maintains the distribution list and is responsible for the decontrol of documents in the event a recipient does not acknowledge receipt. It is recommended that NSP-6-1 be revised to accurately reflect DRC responsibilities.

7. QAP 16-1, Revision 0, "Corrective Action Report" should be revised to clarify the following:

   The current flow of the procedure permits the evaluation of the significance of an adverse condition to be conducted after an interfacing manager provides "Action Planned to Correct Adverse Condition." The procedure should be revised to ensure that adverse conditions are immediately evaluated for the possibility of a stop work condition. In addition, an interfacing manager needs to know if the adverse condition is significant, prior to submitting a response, in order to provide root cause determination if the condition is significant.

8. QAP 17-1, Revision 2, delineates work source responsibilities to include a list of guidelines for those individuals originating/submitting documents to the Local Records Center (LRC). Those same guidelines appear in QAP 17-2, Revision 0, as review criteria for becoming records prior to acceptance by the LRC. A note should be added to both procedures indicating that the same criteria are used in both procedures to help assure that if one procedure is revised in this area, both procedures are revised.

9. QAP 17-1, Revision 2, Paragraph 5.1.8, details the completion of blanks, yet the final sentence seems to provide an escape clause inconsistent with those instructions. The procedure should be revised to clarify the intent.

10. QAP 17-2, Revision 0, Paragraphs 5.2, 5.3, 5.4, and 5.5, contain administrative details inappropriate to a QAP such as handling incoming mail, and the second sentence of Paragraph 5.13.8c is inconsistent with the first sentence. The procedure should be revised to clarify intent.

11. CRWMS M&O has determined through Purchase Requisition DX-1082LJ3 and a Memorandum from T. E. Reding to J. Jackson, dated February 24, 1993, that the Micro D Company does not need an evaluation of their program for supplying microfilm services to the Project Microfilm Center (PMC). Micro D Company performs tests on microfilm for residual thiosulfate ion content and remits a Certificate of Findings indicating the results of the thiosulfate ion content of the film. However, there are no verifications or validations to substantiate the accuracy of the results of Micro D's testing of the film. Based on the importance of assuring the microfilm integrity, it is recommended that the Project Microfilm Center acquire the capability to perform residual thiosulfate ion content testing or to utilize the services of another company to compare and verify the results of Micro D's submittals, on a sampling basis.

12. QAP 17-5, Revision 0, "Program Records Management: Indexing Program Records," Paragraph 5.5 should be revised to reflect the current practice of placing appropriate indexing information from a corrected record index to the original record index.

13. QAP-17-6, Revision 0, "Program Records Management: Storage, Retrieval and Disposition of Program Records," should be revised to specify the requirements of the referenced standards/regulations into the procedure, instead of citing the entire standards.

14. NSP-17-1, Revision 0, Paragraph 5.15, first sentence, is not clear as to the record to be microfilmed: the one-of-a-kind record, its complete description, or both. This should be clarified.

15. CRWMS M&O has established a temporary storage facility by obtaining a certification that a designated room on the fifth floor of the Bank of America Center, Las Vegas, Nevada, is a one-hour rated container. There may be a potential for a fire starting within the room and it is recommended that CRWMS M&O management assess that potential, and decide if any controls are needed for limiting the potential for fire. This assessment should include the possibility of establishing administrative controls that would assure that when no one is occupying the room, all potential fire is minimized by shutting down computers, copiers, and other heating devices such as coffee warmers. Management should consider minimizing the number of potential fire-starting devices in the room.

16. QAP 18-1, Revision 0, "Certification of Audit Personnel," Paragraph 5.6.1 should be revised to read "Prior to qualification as a Technical Expert for audit/surveillance purposes...." The term "surveillance" should be added to this sentence since both Paragraphs 5.6.1.A and B discuss audit/surveillance qualifications.

7.0 LIST OF ATTACHMENTS

Attachment 1: Personnel Contacted During the Audit
Attachment 2: Audit Details
Attachment 3: List of Objective Evidence Reviewed During the Audit
Attachment 4: Information Copies of CARs

ATTACHMENT 1

PERSONNEL CONTACTED DURING THE AUDIT

Name	Organization/Title	Contacted		
		Preaudit Meeting	During Audit	Postaudit Meeting
Abbold, Mark	M&O PA&M		X	
Abend, G. S.	M&O QA Technical Specialist		X	X
Ackaret, R. L.	M&O Sup., SD, ESF Design		X	
Adame, S. A.	M&O Mgr. Human Resources Office		X	X
Allan, J. N.	M&O ESF Mgr. Constr. Mgmt. Dept.		X	
Arceo, A. I.	YMQAD Auditor	X		X
Arth, F. C.	M&O Technical Specialist		X	X
Ashworth, B.	Security Archives, President		X	
Blaylock, J.	YMQAD Auditor	X		X
Belke, W. L.	NRC Observer	X		
Bearham, Fred	HQQAD Observer	X	X	
Benton, H. A.	M&O Mgr. MGDS Waste Pkg. Dev.	X		X
Bledsoe, D.	M&O Morrison Knudson Design Quality Dept.	X		
Bowlinger, S.	M&O DRC Supervisor		X	
Brackett, R. J.	M&O QA Mgr.	X	X	
Bradley, L. J.	M&O Pub. Support Tech. Ed.		X	
Brandstetter, A.	M&O Sys. Analyst		X	
Brient, R. D.	NRC Observer	X		
Buckley, J. T.	NRC Observer	X		
Calovini, J.	M&O DC Records Clerk		X	
Carruth, S. A.	M&O Pub. Support		X	
Chulick, E. T	M&O Training Mgr.	X		
Cruz, B. G.	M&O Mgr. Systems Eng. Spec. Eng.		X	
Dana, S. R.	YMQAD Lead QE			X
Diaz, M. R.	YMQAD Lead-Audits	X		
Dokuzoguz, H. Z.	M&O Mgr. Repository EBS		X	
Ebner, Hans	M&O DC Mgr.		X	
Engwall, L. G.	M&O Surface Design ESF		X	
Fortsch, E. M.	M&O Sys. Analyst		X	
Foust, L. D.	M&O NS Mgr.	X	X	X
Frank, J. W.	M&O Mgr. NS Support Op. Office	X	X	X
French, Bill	M&O Surface Design, Elec. Eng.		X	

ATTACHMENT 1

PERSONNEL CONTACTED DURING THE AUDIT
Continuation

Name	Organization/Title	Preaudit Meeting	Contacted During Audit	Postaudit Meeting
Gardner, J. R.	M&O Sys. Eng. Requirements		X	
Gilray, John	NRC Site Rep.	X		X
Geer, T. C.	M&O Mgr. Sys. Eng. Requirements		X	
Harris-Womak, S.	M&O DC Clerk		X	
Heaney, Gerard	YMQAD Auditor	X		X
Hodgson, N. W.	M&O QA Verification Mgr.	X	X	X
Horton, D. G.	OQA Director	X	X	
Horton, S. H.	YMQAD Auditor	X		X
Houston, C. J.	M&O FCCB Secretary		X	
Jackson, J. A.	M&O Nevada QA Mgr.	X	X	X
Jacobson, J. P.	M&O Supervisor RMD CRF		X	
Johnson, C. L.	M&O Site Investigation		X	
Justice, B. R.	M&O QE Mgr.	X	X	X
Justice, J. B.	M&O Training Coordinator	X	X	
Keener, K.	M&O Supervisor DC		X	
Lee, L. J.	M&O Mgr. Project Records Center		X	
Lugo, M. A.	M&O Mgr. Sys. Reg. and Lic. Dept.		X	X
Mann, E. B.	M&O PA&M		X	
McKie, P. W.	M&O Mgr. MGDS Dev. SD Dept.		X	
McKenzie, D. G.	M&O ESF Project Eng.	X	X	
Memory, Richard	M&O Supervisor Sys. Eng. Sys. Anal.		X	
Morgan, R. A.	M&O Vienna QA Mgr.		X	X
Nesbitt, C. J.	M&O Senior Eng. ESF Dept.			X
Nesbitt, Steve	M&O Reg. Interactions		X	
Parker, David	M&O Project Eng.	X	X	
Penovich, M. F.	M&O Training Mgr.	X	X	X
Pimentel, P. A.	M&O Mgr. Surface Design Dept.		X	X
Powe, R. E.	YMQAD ATL	X		X
Quinnell, K. L.	M&O RMD Group Leader		X	
Quittmeyer, R. C.	M&O Mgr. Site Investigations Dept.		X	
Reding, T. E.	M&O Mgr. Records Mgmt. Dept.		X	X
Reed, William	M&O SD Lead Electrical Eng.	X	X	
Rixford, C. A.	M&O RMD LRC/R&H Supervisor		X	
Ruth, R. P.	M&O Construction QA Mgr.	X	X	

ATTACHMENT 1

PERSONNEL CONTACTED DURING THE AUDIT
Continuation

Name	Organization/Title	Preaudit Meeting	Contacted During Audit	Postaudit Meeting
Sandifer, R. M.	M&O Mgr. NS MGDS Dev. Office	X	X	
Saterile, S. F.	M&O Sys. Analyst		X	
Schutt, W. D.	M&O Mgr. MGDS Dev. Sys. Eng. Dept.		X	X
Sinnock, Scott	M&O Senior Staff	X	X	
Stafford, H. C.	M&O Senior Staff	X		X
Stahl, David	M&O Waste Pkg. Dev. Perf. Analysis		X	
Statton, C. T.	M&O Mgr. NS Site Charac. Office	X	X	
Van Luik, A. E.	M&O Mgr. Sys. Perf. Assessment Dept.		X	X
Vaslos, G. A.	M&O Internal Audits Mgr. - Vienna			X
Verden, J. D.	M&O Pub. Support Mgr.		X	
von Tiesenhausen	Clark County, Nevada Observer			X
Younker, J. L.	M&O Mgr. NS Sys. Office	X	X	X
Zimmerman, S. W.	State of Nevada Observer	X		X

Legend:

CRF = Central Records Facility
EBS = Engineered Barrier System
ESF = Exploratory Studies Facility
DC = Document Control
MGDS = Mined Geologic Disposal System
PA&M = Performance Assessment and Modeling
QE = Quality Engineer
RMD = Records Management Department
SD = Subsurface Design

ATTACHMENT 2

AUDIT DETAILS

The following is a summary of the CRWMS M&O QA Program activities covered during the audit. The list of objective evidence reviewed and specific procedures audited are provided in Attachment 3.

1.0 ORGANIZATION

The evaluation of this QA program element was based on a review of issued organization charts, interviews with CRWMS M&O personnel to determine job knowledge regarding QA requirements and implementing procedures, and the examination of objective evidence to determine compliance with selected requirements taken from QAP 1-1. The selected requirements are listed below:

- Completion of a Quality Concerns Exit Interview form for all CRWMS M&O personnel who terminate.
- Completion of Dispute Escalation forms in a timely manner.
- Proper processing of completed Dispute Escalation and Quality Concerns Exit Interview forms as QA Records.

The CRWMS M&O QAPD describes the CRWMS M&O organization in Nevada that performs quality-affecting activities as consisting of a NS Manager, who serves as the M&O Technical Project Officer (TPO) to the Yucca Mountain Site Characterization Project Office (YMPO), and four managers, Systems, Support Operations, Site Characterization, and MGDS Development, reporting to the NS Manager.

Additionally, the QAPD describes the duties and responsibilities of a Nevada Quality Assurance Manager with three functions reporting to him, QE, QA Verification, and Construction QA.

The QAPD does not describe the duties and responsibilities of any NS personnel other than the NS Manager and the Nevada QA Manager; however, during the pre-audit meeting the CRWMS M&O provided the audit team with a detailed description of each functional office/department/section of the CRWMS M&O NS organization, and during the audit detailed organization charts were quite evident and used throughout the CRWMS M&O organization.

Generically, the managers reporting directly to the NS Manager are referred to as Office Managers and the managers that report to the Office Managers are referred to as Department Managers. The functional titles of CRWMS M&O personnel who report to Department Managers varies. Some are referred to as Section Managers, while others are referred to as Supervisors or Leads. During the audit, one Office Manager, two Department Managers, two Section Managers, and five other CRWMS M&O personnel were interviewed to determine awareness of organizational structure, duties and responsibilities, and to evaluate their knowledge and understanding of the implementing procedures. The personnel interviewed are as follows:

J. L. Younker, Manager, MGDS Systems Office
A. E. Van Luik, Manager, PA&M Department, MGDS Systems Office
W. D. Schutt, Manager, Systems Engineering Department, MGDS Development Office
T. C. Geer, Manager, Requirements, Systems Engineering Department, MGDS Development Office
B. G. Cruz, Manager, Specialty Engineering, Systems Engineering Department, MGDS Development Office
R. L. Ackaret, Supervisor, ESF Design, Subsurface Design Department, MGDS Development Office
Bill Reed, Lead Electrical Engineer, ESF Design, Subsurface Design Department, MGDS Development Office
L. G. Engwall, Supervisor, ESF Surface Facility, Surface Design Department, MGDS Development Office
Bill French, Electrical Engineer, ESF Surface Facility, Surface Design Department, MGDS Development Office
N. W. Hodgson, Manager, QA Verification/M&O Quality Concerns Program Participant Coordinator

The results of the evaluation indicate that although there is no procedure describing the M&O NS organizational functions and responsibilities in detail, the present personnel working for the M&O were able to demonstrate satisfactory knowledge of organizational reporting relationships, duties, and responsibilities. Although no condition adverse to quality was identified during the audit, it was evident that the communication of organizational duties and responsibilities could be improved (see Section 6.0, Recommendation 1 of this report for details).

Results of the audit concerning implementation of QAP 1-1 are:

- There were nine Quality Concerns Exit Interview forms processed.

- There were no Dispute Escalation forms processed to the M&O Quality Concerns Program Participant Coordinator.

- None of the nine Quality Concerns Exit Interview forms had been processed as a QA Record. The current practice was to process the forms to the OCRWM Quality Concerns organization. This discrepancy was included as another example of a procedure that did not reflect current practice (see CAR HQ-93-013 for details).

Based on the examination of the above requirements, except for the specific deficiency identified, implementation of QA Program Element 1.0, "Organization," is considered satisfactory.

2.0 QUALITY ASSURANCE PROGRAM

The evaluation of this QA program element was based on interviews, observations, and the examination of objective evidence to determine compliance with selected requirements taken from the M&O QAPD and the following implementing procedures: QAP-2-1, QAP-2-2, QAP-2-3, QAP-2-5, QAP-2-6, QAP-2-9, and Quality Line Procedure (QLP)-2-1. The selected requirements and results are listed below:

Indoctrination and Training (QAP-2-1)

Requirements:

- Managers/supervisors shall designate M&O personnel under their supervision to attend program indoctrination classroom training and this training shall be mandatory for personnel prior to performing QAW.

- Required indoctrination and training shall be established and assigned for each individual by the individual's manager or supervisor.

- Program indoctrination classroom training shall consist of the following:

  QARD (DOE/RW-0214)/M&O QAPD, QAP 1-1, QAP 2-1, QAP 2-3, QAP 6-1, QAP 16-1, and QAP 17-1.

  In addition, M&O personnel shall read the current revision of the above procedures and shall complete the proper sections of the Training Attendance Record.

- M&O personnel shall receive indoctrination and training on the following:

  a) General criteria
  b) Applicable codes, standards
  c) DOE documents
  d) Procedures for their particular job assignment

- The CRWMS M&O personnel shall either have training on or have read the latest revision of a procedure, before doing work according to that procedure.

- The manager/supervisor may submit a Waiver of Required Training to exempt personnel from program indoctrination requirements provided adequate justification is provided.

- The CRWMS M&O Training Manager shall establish policies, standards, and procedures for the development and conduct of training.

- The M&O QAPD requires that proficiency of personnel performing QAW shall be maintained through additional training.

Results of the audit are:

- Thirty-seven training files were reviewed. It was determined that all M&O personnel performing QAW had attended the M&O indoctrination training and the manager/supervisor, through their signature on the appropriate training form(s), had assigned the required indoctrination and training.

- Program indoctrination classroom training could only be verified for personnel hired since the latest revision of QAP 2-1 (effective date 1/22/93). Of the 15 training files randomly selected, 12 Training Attendance Records were verified as well as objective evidence that the procedures had been read (reading/self study records). The remaining three individuals were not assigned to perform QAW. The 15 training files reviewed are listed in Attachment 3, Section 2.0, of this report as training files No. 27 through 41.

- Lesson plans, dated 9/12/92 and 1/14/93, for QA orientation training addressed general criteria, applicable codes, standards, DOE documents, and procedures for their particular job assignment. The lesson plans included such documents as the OCRWM QARD, M&O QAPD, NQA-1, DOE Orders, M&O procedures (QAPs, and ILPs).

- A performanced-based interview with 15 personnel, resulted in noting the procedures each individual works to and then verifying this in their files. Only one individual was missing one procedure which was then read and documented as such. It was determined that no QAW was performed.

- It was verified from reviewing 26 training files, that there was no objective evidence that there had been any Waiver of Required Training. However, it was determined that waiving the program indoctrination classroom training was not in compliance with the OCRWM QARD or the M&O QAPD. See CAR HQ-93-013 for details.

- It was verified that adequate procedures are in place to execute a systematic approach to training (QAPs 2-1, 2-2, and 2-9).

- The review of the M&O training procedure indicated the M&O has allowed continuing training to be non-mandatory. See CAR HQ-93-013 for details.

- There was a recommendation generated as a result of auditing Indoctrination and Training, see Section 6.0, Recommendation 2, of this report for details.

Verification of Personnel Qualifications (QAP-2-2)

Requirements:

- Managers/supervisors shall ensure that PDs describe the minimum skills, knowledge, education, and experience for each position within their organization and the manager/supervisor shall list the quality-affecting activities in the appropriate section.

- The manager/supervisor shall verify relevant experience by checking personnel documentation, such as applications or resumes, for personnel under their supervision, and so document by signing the PD.

- The M&O Human Resources Manager shall verify and document the highest level of education of each person on the CRWMS M&O Verification of Education form.

- When minimum education and experience cannot be specifically verified, managers/supervisors shall provide a statement and justification of the personnel assignment.

- Training needs shall be identified by the manager/supervisor based on needs analysis and reviewing regulatory requirements.

Results of the audit are:

- PDs were verified to exist for 37 training files examined. All PDs were approved by the manager/supervisor. The PDs examined had "boilerplate" generic skills, knowledge described for each position, and each were noted with information as to quality-affecting and/or non-quality affecting tasks.

- Of the 37 PDs examined, all were signed by the manager/supervisor. However, the method used to verify experience of personnel by the manager/supervisor is inadequate. The M&O has issued CAR 92-QA-C-032 which documents this deficiency. The review of the proposed corrective action is adequate to address verification techniques relative to experience.

- Four individuals with high school diplomas were not verified. Refer to CAR HQ-93-019 for details.

- Of the 37 PDs examined, none were noted as requiring justification because education or experience could not be verified. However, it was determined that the OCRWM QARD and the M&O QAPD require that minimum education and experience be verified without exception. Refer to CAR HQ-93-013 for details.

- In interviewing three managers, it was determined that a review of the PD is the basis for establishing training requirements. In addition, the complexity of the task and how often the task will be performed were also determining factors.

Development and Conduct of Training (QAP-2-9)

Requirements:

- Upon satisfactorily completing Initial Instructor Development Training, each instructor shall receive a certification to conduct training, M&O Instructor Certification. In lieu of completing Initial Instructor Development Training, the manager/supervisor shall submit justification in accordance with the M&O Instructor Certification.

- Lesson plans shall be reviewed and approved for content and completeness by a certified instructor, and reviewed and approved for procedural compliance by the Training Manager.

- Briefings shall be conducted by subject matter experts and shall be documented by completing a Training Attendance Record.

- Lesson plan standards shall be completed in accordance with associated instructions.

- Certified instructors shall conduct classroom instruction in accordance with approved lesson plans.

Results of the audit are:

- Seven certifications were verified. Two of the seven were waived in accordance with procedural requirements.

- Five lesson plans were reviewed and verified for proper approval signatures and found to be completed in accordance with instructions.

- Three different briefings and associated attendance records were verified.

- Certification dates for the selected instructors were compared against the classroom attendance records to verify this requirement. Instructors were certified prior to performing classroom training.

There was one deficiency regarding trainer certifications that was corrected during the audit, see Section 5.5.2 of this report for details.

Certification of QC Inspectors (QLP-2-1)

Requirements:

- QLPs shall be approved by the NS QA Manager.

- The M&O Human Resources Manager shall be responsible for the maintenance of Levels I, II, and III qualification and certification records, as these records are to be maintained in the personnel training files.

- Inspectors shall be trained and certified in one or more of the following categories:

Structural Steel	Mechanical
Electrical/Instrumentation	Soils
Concrete	Receiving
Coatings	Mining
Firestop	

- Levels of inspector certification shall be Levels I, II, and III.

- Level II Inspector shall:

  a. Have experience and relevant training.

  b. Have all capabilities of a Level I Inspector for the appropriate inspection category.

  c. Be capable of supervising or maintaining surveillance over the inspections, examinations, and tests performed by others.

  d. Have demonstrated proficiency, planning inspections, examinations and tests, and setting up tests, including preparation and set-up of related equipment.

- The Level III Inspector shall: have all the capabilities of a Level II and be capable of evaluating adequacy of specific programs used to train and test Levels I and II personnel; reviewing and approving inspection, examination, and test procedures; evaluating the adequacy of procedures to accomplish the inspection objectives; and certifying lower level personnel.

- Formal classroom training shall be: conducted in accordance with outlines or lesson plans approved by the Level III Inspector; conducted by the Level III Inspector or designee; and be documented on an M&O Quality Control (QC) Inspector Certification form.

- For Levels I and II certifications: the QA Site Supervisor shall initiate the certification form; the form shall be approved by the NS QA Construction Manager; and the form shall be certified by the Level III Inspector.

- For Level III certification: the supervisor of the Level III shall initiate the certification form, and the form shall be certified and approved by the M&O NS QA Manager.

- The Level II Inspector shall have: one year of satisfactory performance as a Level I in the corresponding category, or high school diploma plus three years of related experience.

- To be considered as a candidate for certification as a Level III Inspector, one of the following criteria shall be satisfied: four year college degree plus five years of related experience; or, completed college level work leading to an Associates degree, plus seven years of related experience with three years of this experience in QA or QC; or, six years as a Level II in the corresponding

category; or, high school diploma or equivalent plus ten years of related experience; or, high school diploma plus eight years of related experience, with two years as a Level II.

- Examinations shall consist of a general examination which covers the basic principles relative to the inspection category, and a specific examination which covers codes, standards, equipment, procedures, and inspection techniques that the candidate may encounter in a specific assignment or a combination of both.

- A copy of documentation required to support certification shall be included in each file and includes: M&O QC Inspector Certification, resume, and examinations.

Results of the audit are:

- QLP was signed by a QA individual other than the NS QA Manager. A letter signed by the NS QA Manager delegating authority to act in his behalf was verified (reference: letter, J. Jackson to L. Foust, dated 9/30/92).

- The QC certifications are kept in the individual's training files maintained by the Training Department; the Human Resources Manager has access to the files to enter or modify information in the file.

- QC certifications are on file that document certification in the categories of soils and concrete. Lesson plans and attendance sheets for soils and concrete classes were verified.

- QC certification forms are identified with Level II certifications, as currently only two Level II inspectors are certified.

- The resumes of the two certified individuals were reviewed in detail. It was verified, based on their experience, they both possessed adequate credentials to meet Level II Inspector capabilities.

- The resume of the Level III Inspector along with examination and certifications, were examined. It was verified the individual met the requirements for Level III Inspector.

- Formal classroom training was conducted in accordance with outlines or lesson plans approved by the Level III Inspector; conducted by the Level III or designee; and was documented on an M&O QC Inspector Certification form.

- For Levels I and II certifications, it was verified that the initiator and approver were signed by the NS QA Construction Manager who is also the QA Site Supervisor. In addition, it was verified the Level III Inspector also signed the form.

- It was verified that the Level III certification was signed by the NS QA Manager as both the initiator and the approver.

- It was verified that one Level II Inspector has over 16 years experience and the other Level II has over 23 years experience in the categories they were certified to.

- The Level III candidate was verified to have a four year degree in Civil Engineering and the individual has over 14 years experience in QA/QC.

- The examinations were reviewed and were specific to the areas of soils and concrete at the Level II level.

- The three packages for the Levels II and III QC Inspectors were verified for M&O QC Inspector Certification; resume; and examinations. The appropriate documentation was found in each individual's training file.

QA Surveillances (QAP 2-5)

Requirements:

- Verify the following selected QAPD requirements are incorporated within M&O implementing procedures:

  - Surveillances evaluate effective implementation of quality-affecting work.

  - Technical experts are not directly responsible for the activity being surveilled.

  - Technical experts are required to be accompanied by trained QA personnel.

  - QAP 2-5 addresses planning, preparation, performance, documentation, reporting, and tracking of surveillance results.

  - QAP 2-5 addresses correcting of findings during surveillances.

- QA Managers responsible for QAP 3-5, "Test to Test Interference Evaluations," QAP 2-3, "Classification of Items," and QAP 3-1, "Technical Document Reviews" have scheduled surveillances of these ongoing activities.

- Ensure surveillances have been performed of ongoing activities to adequately monitor the performance of quality-affecting activities.

- Surveillances are performed with checklists or marked-up procedures.

- Surveillances are led by certified auditors.

- Adverse conditions are described on CARs.

- The dates of the surveillance, persons conducting the surveillance, persons contacted, activity or item under surveillance, procedures governing the activity, conditions adverse to quality, corrective action taken, items of concern and measuring and test equipment used during the surveillance are documented in surveillance reports.

- An effectiveness statement is included within each executive summary.

Results of the audit are:

During the course of the evaluation, surveillance reports were reviewed for procedural requirements and found to be in compliance. It is anticipated that the span of surveillance subjects will expand as M&O quality-affecting work activities progress. Most of the surveillances reviewed during the audit, assessed qualification and training activities. QAP 2-5 was evaluated for adequacy. Several recommendations were made for improvement of the procedure, see Section 6.0, Recommendation 3, of this report for details.

Readiness reviews (QAP-2-6)

Readiness reviews were not audited as this function is performed by the M&O-Vienna organization and was covered during the Headquarters audit of the M&O (Audit HQ-93-03).

Classification of Items (QAP-2-3)

Requirements:

- Verify the M&O is not implementing QAP 2-3 per QAP 2-3 instructions.

- Paragraph 3.1.20 of QAP 2-3 requires revision to address the document "CRWMS M&O Plan for Evaluating Items and Activities in the Mined Geologic Disposal System Program for Importance to Safety and Waste Isolation."

- Verify the Determination of Importance Evaluation (DIE) for the portal wall adequately address potential impacts of temporary items and activities (installation of rock bolts) for Importance to Waste Isolation.

Results of the audit:

During the course of the evaluation, M&O technical staff provided the audit team and observers with a presentation of current classification activities. QAP 2-3 states that the procedure is not to be used for MGDS classifications. YMPO issued Technical Directive TRW-92-008, Revision 0, which instructed the M&O to perform classification analyses under Administrative Procedure (AP)-6.17Q, and develop a plan or procedure that provides the methodology for determining the classification of items and activities. The M&O developed the "CRWMS M&O Plan for Evaluating Items and Activities in the Mined Geologic Disposal System Program for Importance to Safety and Waste Isolation." This plan requires that the M&O prepare a DIE for classification analyses. The plan and four DIEs have been sent to the YMPO Assessment Team for review/comment. It was explained that the classification process is in a transition phase. When comments to the plan are resolved, appropriate procedures will be generated/revised.

Review was made of DIE B00000000-AA-09-00003 titled, "ESF Starter Tunnel Steel Arch Section" to ensure that "Test to Test Interference" and "Waste Isolation Impact" evaluations were performed. It was also observed that a "Tracer, Fluids and Materials" analysis was performed and was part of the DIE.

Review of classifications of Field Change Requests (FCRs) was also reviewed as follow-up on Surveillance Report YMP-SR-93-013. In general, classification of FCRs is not correct. Most of the ESF work performed to date has been non-quality affecting. However, most of the FCRs are indicating that the documents being changed are quality-affecting. There were also several deficiencies identified on FCRs reviewed. CAR YM-93-035 was generated and issued to YMPO documenting these deficiencies. Because FCRs are generated with a YMPO procedure (AP-3.5Q), it was determined that the review was not under the M&O QA Program but rather the OCRWM QA Program and, therefore, CAR YM-93-035 is not considered part of the scope of this audit.

Conclusion regarding QA Program Element 2:

The M&O requirements matrix was reviewed during this audit and a recommendation was generated; see Section 6.0, Recommendation 4 of this report for details. Since two CARs exist regarding Verification of Personnel Qualifications, M&O CAR 92-QA-C-032 and OCRWM CAR HQ-93-19, and there was one deficiency corrected during the audit pertaining to implementation of QAP 2-9, implementation of QA Program Element 2.0, "Quality Assurance Program," is considered marginal.

5.0 PLANS, PROCEDURES, AND DRAWINGS

The evaluation of this QA program element was based on interviews, observations, and the examination of objective evidence to determine compliance with selected requirements taken from the M&O QAPD and the following implementing procedures: QAP 5-1, QAP 3-10, QAP 3-11, and MGP 3-8. The selected requirements and results are listed below:

Preparation for M&O QAPs/ILPs (QAP 5-1)

Requirements:

- QAPs and ILPs are assigned procedure numbers in accordance with Attachment I, QAP/ILP Numbering System Instructions.
- QAPs and ILPs are developed using the format in Attachment II, QAP/ILP Format and Development Instructions.
- New forms are included as an attachment to the QAP/ILP. Instructions for completion of the form are included as a separate attachment.
- The reviewers of QAP/ILPs are selected by the responsible manager and documented on the Interoffice Memorandum used to distribute the QAP/ILP with the Procedure Review Record (PRR), Attachment IV. ILPs are reviewed by each interfacing manager in the organization determined by the responsible manager. The appropriate location QA Manager as well as the Secretariat and/or Support Operations (Las Vegas, Nevada) review all ILPs in area of responsibility.
- Each ILP are distributed by the responsible manager using Interoffice Memorandum to the reviewing managers with a PRR. The PRR is completed with review instructions/criteria to the manager of each interfacing organization.

- Each manager receiving a PRR have the document reviewed and provides written response by PRR. Mandatory comments are noted on the PRR.

- The procedure author assured that all reviewing managers returned PRRs.

- Mandatory comments are resolved prior to the QAP/ILP approval by the procedure author and the individual making the comments.

- The procedure author makes a recommendation of the training required for an individual to become proficient in the QAP/ILP by initiating a QAP/ILP Training Coordination Sheet, Attachment VI.

- QAP/ILP Review Sheet, Attachment VIII, is completed for concurrent review by affected organizations.

- The ILPs are approved by the cognizant office manager and the cognizant location QA Manager.

- The QAP/ILP is submitted to the M&O Headquarters DCC for copying the distribution in accordance with QAP 6-1. DCC shall release copies of new forms for use at the same time the QAP/ILP is released to controlled distribution.

- Supporting documentation is submitted to the M&O Headquarters LRC in accordance with QAP 17-1.

- Procedure Change Notice (PCN), Attachment X, is completed when modifications to QAP/ILPs are recommended.

- Revisions to approved QAP/ILPs undergo the same development, review, resolution of comments, approval and distribution process as delineated in 5.2 and 5.4. Changes in the QAP/ILP is designated by change bars in the retyped QAP/ILP. All change bars of the previous revision are removed.

- No QAP/ILP has more than three PCNs outstanding at any time.

- When a QAP/ILP Review Sheet is completed, it is determined that a QAP/ILP is to be canceled. When all concurring managers are in agreement, the responsible manager prepares and sends a cancellation notice (QAP/ILP Cover Sheets) to the DCC with the Document Control Action Request (DCAR) (Reference QAP 6-1).

- The DCC distributes the cancellation notice and revises the Table of Contents in accordance with QAP 6-1.

- Expedited PCN is processed in accordance with Paragraphs 5.6.1 through 5.6.4.

- Expedited PCN is effective for only 60 calendar days. During that 60-day period, a formal PCN (or QAP/ILP revision) is processed to incorporate the expedited change.

- Each QAP/ILP is reviewed by the responsible manager for adequacy and compliance with requirements at least once every two years.

- QAP/ILPs are reviewed for required changes as upper-tier documents are changed.

- Documents generated as a result of this procedure are collected and maintained in accordance with QAP 17-1. The following are submitted to the LRC:

  a. PRRs and non-mandatory comments with distribution memorandum and a copy of the draft submitted for review.

  b. QAP/ILP Review Sheets with attached draft, if appropriate.

  c. PRRs for mandatory comments and non-mandatory comments made during concurrence review.

  d. Approved QAPs and ILPs.

  e. PCNs.

  f. PRRs for two-year reviews.

  g. Memos or PRRs documenting the procedure reviews due to upper-tier document changes.

Results of the audit are:

During the course of this audit, a sample of procedure records packages were reviewed to assure compliance with the above requirements. The results of this review revealed numerous instances of procedural noncompliance and procedural inadequacies. CAR YM-93-036 was generated to identify these deficient items and examples of procedure inadequacies were added to CAR HQ-93-13. A recommendation for improving QAP 5-1 was also generated; see Section 6.0, Recommendation 5 of this report for details.

Engineering Drawings and Design Specifications (QAP 3-10, QAP 3-11, and ILP MGP 3-8)

Two procedures, QAP 3-10 and QAP 3-11, were included within the scope as part of Section 5.0. The M&O contractor became the architect/engineer of record for all designs other than Package 1A on 10/1/92 and the architect/engineer of record for Package 1A on 12/11/92 effective 12/1/92. Since there were Raytheon Services Nevada (RSN) drawings being used for the North Portal work, MGP 3-8 was also included within the scope of the audit. There was no objective evidence available to determine effectiveness, so all three procedures fall into the category of no implementation. Since there was no implementation, these procedures were reviewed for adequacy.

One of the shortcomings of the procedures identified above, was the problem of interfacing with YMPO APs. As an example, the M&O has no procedure for assigning a drawing number since the governing procedure, QAP 3-13, was deleted. Consequently, all changes to the RSN procedures are made via the field change control process in accordance with AP-3.5Q.

In the larger perspective, none of the other M&O procedures reference or identify the YMPO APs that are an integral element in the process. This was documented on CAR YM-93-037.

Conclusion regarding QA Program Element 5:

Based on the results of the evaluation of QA Program Element 5.0, "Plans, Procedures, and Drawings," implementation is considered unsatisfactory.

6.0 DOCUMENT CONTROL

This QA program element was evaluated based on interview and review of objective evidence to determine compliance with selected requirements taken from the implementing procedures QAP-6-1, NSP-6-1 and NSP-6-2. The selected requirements and results are listed below:

Document Control (QAP-6-1)

Requirements:

- Controlled documents are distributed to and available at the location where the prescribed activity is performed.

- The revisions to previously issued controlled documents are issued by the DCC in the same manner as the original or prior release.

- Document control information includes document title, originating department/organization, date distributed to each participant, revision designation, and document number when applicable; and, are updated at various points as information is created or becomes available.

- The originator of a controlled document determines appropriate identifiers; completes the DCAR, Attachment I, including any instructions to be passed on to the recipient of the documents; obtains the approval signature of responsible manager; and compiles the controlled document package which consists of the Master of the document to be controlled, the initial distribution list of instructions, and the completed and approved DCAR.

- The DCC prepares Controlled Document Instructions (CDIS), Attachment II; reproduces from the master document and identifies each document as a controlled copy; distributes the controlled document and CDIS to each recipient on the initial distribution list; checks the document information at least weekly to identify recipients who have not acknowledged receipt within 20 working days of issue and to whom inquiries have not previously been sent; transmits inquiries on the CDIS to all recipients who have not acknowledged receipt; and issues decontrol notice using CDIS to the recipient and the recipient's responsible manager when the recipient did not respond within an additional 20 working days.

- The recipient follows the instructions on the CDIS, signs and returns the CDIS to DCC within 20 working days, and maintains the controlled document in storage location where the document is both protected and readily available to the recipient in the performance of work.

- The DCC prepares lists of controlled documents issued to all recipients at least once annually; transmits the list to each recipient; recipients identify needed additions to or deletions from document distribution lists, submits DCAR to the DCC; based on the request, adds new recipient and deletes a recipient to the list; decontrols a controlled copy and issues a new copy only when requested; reassigns controlled copy from one recipient to another; advises recipient to return controlled documents to DCC; decontrols a controlled copy but allowing the recipient to retain the copy stamped "Uncontrolled;" and provides a copy of uncontrolled document stamped "Uncontrolled" that can be used for information purposes only.

- The DCARs with issuance instructions for a new controlled document, CDIS, and initial distribution lists are submitted as a QA records package; and the quarterly submittal of DCARs for the purpose other than issuing new documents are submitted as QA records package.

Results of the audit are:

During the course of the evaluation, objective evidence in the form of Document Distribution Report, Distribution Report by Controlled Document, Document Distribution Report by Holder, Master Controlled Document Report and Controlled Documents Document Transmittal/Acknowledgement Record were reviewed. These reports were generated from the CDIS which is a computer application for tracking and controlling distribution. Copy holders were interviewed to verify that controlled documents are available and current. There were some procedural noncompliance identified during the audit; however, they were due to procedural inadequacies, which were identified in CAR Nos. YM-93-036 and HQ-93-13. There was also a recommendation regarding NSP-6-1; see Section 6.0, Recommendation 6 of this report for details.

Yucca Mountain Site Office: Document and Records Center Operations (NSP-6-1)

Requirements:

- Document control verifies receipt of approved master document, completed transmittal form with instructions and distribution list for document, and approved change directive and document change notice for those requiring Field Change Control Board (FCCB) approval.

- Document control stamps transmittal with "Received Stamp," signs and retains copy.

- Stamp "First Submittal" on mylar or document if first time receipt by DRC for issuance.

- Changes to Design Documents include approval from FCCB Secretary, entry of FCR information into CDIS, and written instructions from FCCB Secretary, and cross-referencing of documents to impacted documents in CDIS database and/or "Notes and Flags" area of issue log.

Results of the audit are:

The requirements identified above were verified by examining FCRs and documents included in job packages. The personnel at the DRC applied proper controls/markings on the document consistent with the procedural requirement.

The DRC is required to destroy all hardcopies of superseded or obsolete documents, including applicable incorporated change documents upon receipt of an approved master of the design document revision. Such hardcopies go into the job package file for transmittal to the CRF. Once the job package is submitted to the CRF and the CRF acknowledges receipt, then the hardcopies are destroyed. This was included on CAR YM 93-037.

Nevada Site Document Review Tracking (NSP-6-2)

Requirements:

- The NS Document Review Tracking staff verifies that documents received to be distributed for review contain: (a) the titled document, including information that identifies the type of procedure; (b) a distribution list of designated reviewers, if generated by NS personnel; (c) a required or suggested review due date; and (d) authors name and organization.

- The NS Document Review Tracking staff enters the following information; Date Received, Title of Document, Procedure Number and Revision Number, Author/Assigner, Due Date, Designated Reviewers into the database.

- The NS Document Review Tracking staff creates an informal memorandum that requests the designated reviewers comments by the due date and any other pertinent information.

- The NS Document Review Tracking staff distributes copies of any related paperwork with the subject document to the designated reviewers.

- The NS Document Review Tracking staff contacts designated reviewers that have not responded by the required due date. If necessary, the NS Document Review Tracking staff contacts the appropriate manager to ensure Document Review Records (DRRs) or PRRs are received.

- The NS Document Review Tracking staff compiles and logs the date the comments are received from the reviewers and the date the comments are transmitted to the authors of the database.

- The NS Document Review Tracking staff ensures completed DRR/PRRs are received.

- In coordination with the document author, the NS Document Review Tracking staff assists in the compilation of a records package that contains the draft document and related correspondence that was sent out for review, the completed DRR/PRRs, and the final document and log the information in the database.

Results of the audit are:

The Document Tracking Status Report was checked for compliance with the above requirements. Two records packages that this group compiled for the document authors prior to submittal to the LRC, were not submitted in a timely manner. The packages were submitted to the LRC prior to the close of the audit and were identified in CAR YM-93-036. This procedure does not meet the definition of an ILP. It is an administrative procedure with no QA requirements, and should not be part of the ILPs.

Conclusion regarding QA Program Element 6:

Except for the specific deficiencies identified, implementation of QA Program Element 6.0, "Document Control," is considered satisfactory.

15.0 CONTROL OF NONCONFORMING ITEMS

The evaluation of this QA program element was based on a review of the applicable requirements of the OCRWM QARD, the CRWMS M&O QAPD, and AP-5.27Q regarding control of nonconforming items and determining if the CRWMS M&O needed a procedure for processing nonconformances.

Through interview and review of documents it was determined that the M&O QAPD does not address M&O responsibilities for NCRs such as disposition authority by M&O Engineering, numbering, logging etc. and that the CRWMS M&O had not yet developed an internal implementing procedure for dispositioning nonconformances. A procedure was in draft form at the time of the audit; however, since participants have already submitted NCRs to the M&O for disposition, two CARs were written to document the details of the problem. CAR YM-93-034 was issued to document the specific need for a procedure to disposition nonconformances and the fact that AP 5.27Q was not addressed in CRWMS M&O procedures was addressed on a generic basis in CAR YM-93-37.

Based upon the results of the evaluation of QA Program Element 15.0, "Control of Nonconforming Items," implementation is considered unsatisfactory.

16.0 CORRECTIVE ACTION

The evaluation of this QA program element was based on the examination of objective evidence to determine compliance with selected requirements taken from the CRWMS M&O QAPD and implementing procedures, QAP-16-1, QAP-16-2 and QAP-2-4. The Selected requirements and results are listed below:

Corrective Action Report (QAPD and QAP 16-1)

Requirements:

- Significant conditions are evaluated to determine root cause, generic implications to the program, immediate remedial corrective action, and action to preclude recurrence.
- Conditions adverse to quality are evaluated to determine the degree of significance, root cause, and actions required to correct deficiencies and preclude recurrence.
- QA verifies corrective action and that the verification document is part of the close-out process.
- Reasons for not validating CARs are documented.
- CARs meeting the description of Paragraph 5.2.1 are marked significant.
- Significant CARs have a root cause identified.
- Extensions are requested in writing prior to due dates.
- A CAR Status Log exists.

Results of the audit are:

During the course of the evaluation, CARs were reviewed for compliance with procedural requirements. The current flow of QAP 16-1 indicates an evaluation of the significance of an adverse condition is conducted after an interfacing manager provides "Action Planned to Correct Adverse Conditions." The procedure should be revised to ensure that adverse conditions are immediately evaluated for the possibility of a stop

work condition. In addition, an interfacing manager needs to know if the adverse condition is significant prior to submitting a response in order to provide root cause determination if the condition is significant. The audit team was informed that QAP 16-1 is undergoing complete revision and this concern is already being addressed. A recommendation concerning improving QAP 16-1 is included in this report, see Section 6.0, Recommendation 7 for details.

Stop Work (QAP 16-2)

There have been no Stop Work Orders issued to date; therefore, there has been insufficient implementation to determine effectiveness.

Quality Assurance Program Status and Trend Reporting (QAP 2-4)

Trending was not audited as this function is performed by the M&O Vienna organization and was covered during the Headquarters audit of the M&O-Vienna (Audit HQ-93-09).

Conclusion regarding QA Program Element 16:

Based upon the results of the evaluation, implementation of QA Program Element 16.0, "Corrective Action," is satisfactory, although QAP 16-1 has several flaws as indicated in CAR HQ-93-13.

17.0 QUALITY ASSURANCE RECORDS

The evaluation of this QA program element was based on the examination of objective evidence to determine compliance with selected requirements taken from implementing procedures QAP-17-1, QAP-17-2, QAP-17-4, QAP-17-5, QAP-17-6, and NSP-17-1. The selected requirements and results are listed below.

Record Source (QAP 17-1) and
Receipt and Handling of Program Records Packages (QAP 17-2)

Requirements

- QA records stored in one-hour fire-rated containers.
- Privileged records stored and segregated in dedicated cabinet.
- Use of transmittal forms between LRC and CRF.

- Incoming records checked against criteria in Attachments III through VI in QAP 17-2, Revision 0, prior to acceptance by the LRC.

- Record Discrepancy Notice used if incoming review identified documents not meeting review criteria.

- Accession number affixed to records prior to transmittal from LRC to CRF.

- Signature verification lists available for validating signatures on records/records packages.

- Record segments logged and controlled.

- Access lists used to control entry into LRC.

- Access list used to for control of "Privileged Records."

Results of the audit are:

QAP 17-1 describes record source responsibilities. Since record sources would only have a signed transmittal to show that the LRC had received the records, five record sources were interviewed to check their understanding as a records source. The records source responsibilities appear in QAP 17-2 as the review criteria used by the LRC in accepting records from the records source. Implementation of record source responsibilities was found satisfactory, based on the acceptance review performed by the LRC. There were several recommendations associated with QAP 17-1 and QAP 17-2; see Section 6.0, Recommendations 8, 9, and 10 of this report for details.

Microfilming (QAP 17-4)

Requirements

- Program records microfilmed on silver halide roll film use format described in ANSI/AIIM MS14 for microfilming source documents on 16mm roll film.

- A reduction ratio of 24:1 is used for 16mm roll film.

- Only polyester-based silver gelatin type film that conforms to ANSI IT9.1 is used.

- Processed microfilm are tested for the residual thiosulfate ion concentration, which do not exceed 0.014 grams per square meter in accordance with ANSI IT9.1.

- Program microfilm records have a minimum resolution of 3.6 (a quality index of 5 at the third-generation level), which is determined by the Quality Index Method as described in ANSI/AIIM MS23.

- The density on microfilm is appropriate to the type of records being filmed.

- Receipt of records to be microfilmed is documented on the Daily Microfilming Log (Attachment I).

- Paper clips, staples, bindings, or any other mechanical fasteners are removed from records to prepare them for microfilming. The edges of pages are straightened and torn areas are taped using non-reflective tape.

- Daily pre-operational maintenance activities on the microfilm camera prior to microfilming.

- 8 1/2 x 11 inch records are filmed on 16mm roll film using rotary cameras.

- The next available sequential roll number from the Microfilm Center Log is assigned to the film roll before loading. Only one number is assigned to each roll.

- The roll number is recorded on the Daily Microfilming Log, the Start of Roll Target (Attachment II) and the End of Roll Target (Attachment III).

- The Certificate of Authenticity Start Target (Attachment IV) and the Certificate of Authenticity End Target (Attachment V) are completed

- The targets in the order listed below are filmed at the beginning of each roll:

  a. Resolution Target (Attachment VI)
  b. Density Target (i.e. a blank sheet of 8 1/2 x 11 inch white paper)
  c. Start of Roll Target
  d. Certificate of Authenticity Start Target

- The targets in the order listed below are filmed at the end of each roll:

  a. Certificate of Authenticity End Target
  b. End of Roll Target
  c. Density Target
  d. Resolution Target

- Each film box is labeled with the following information:

  a. Roll number

  b. Camera identification

  c. General category of documents on the roll

  d. Participant's name

  e. The designation "Silver Master A" or "Silver Master B" to distinguish the rolls for tracking purposes

  f. The designation "Top" or "Bottom" to identify the location of the exposed film within the film unit

- The hardcopy record is forwarded for further processing according to CRWMS M&O QAP 17-5, "Program Records Management: Indexing Program Records."

- QC review of roll and frame number imprints for each roll filmed is performed. If errors are discovered during this quality review, errors are corrected by:

  a. Completing and filming a Correction Target (Attachment X), which includes a reason for the refilming

  b. Refilming the entire record(s), including any attachments

  c. Filming an End of Correction Target (Attachment XI) at the end of the refilmed pages

  d. Recording the accession number and the original roll and frame numbers, as well as the new microfilm identification, on the Daily Microfilming Log

- Review of one of the diazo rolls to verify the legibility of the microfilm images and to ensure the completeness of the rolls, is documented on the Microfilm Tracking Log.

- The diazo copy is stored in the LRC/CRF.

- The Microfilm Tracking Log is maintained.

Results of the audit are:

During the course of the evaluation, objective evidence in the form of equipment used for microfilming, Certificate of Findings, microfilming logs, actual microfilms, observation of preparation of records for microfilming, and transmittals of records, were checked for compliance. Only 16mm roll films were checked since M&O has not generated drawings. There was a recommendation regarding control of a suppliers of microfilm services; see Section 6.0, Recommendation 11.

Indexing of Program Records (QAP 17-5)

Requirements

- While Program records are in transit from one location to another, they shall be bound and secured or otherwise contained to prevent loss. Binder clips, folders, mailcarts, and other devices shall be used to secure transportation of records.

- QA records and quality records packages being processed or maintained in the CRF shall be secured, labeled, and stored in one-hour file-rated container or facilities. The container shall bear a UL label (or equivalent) certifying one-hour file protection or be certified by a person competent in the field of fire protection.

- Non-QA records and non-quality records packages being processed by CRF staff members, shall be secured, labeled, and placed in locked cabinets or locked rooms at the close of business and any other times during which CRF staff members are not in attendance.

- Privileged records not in use shall be secured in CRF restricted-access storage facility.

- CRF staff members shall keep food, beverages, and lighted smoking materials away from records and record packages and shall protect records from loss or theft.

- CRF staff members shall ensure that records or records packages that are lost or damaged and are not longer complete and/or legible while in their possession, shall be replaced, restored or recreated. If records are lost, CRF staff members shall immediately conduct a physical search. If necessary, CRF staff members shall contact the LRC for further assistance.

- Upon receipt of records at the CRF, the designated staff member prepares a Batch Sheet (Attachment I) to accompany the records throughout processing, noting all accession numbers of records received. Any comments provided by the Receipt and Handling staff (annotated on the transmittal) shall be documented on the Batch Sheet.

- The designated staff member signs and dates the transmittal and return it to the Receipt and Handling staff.

- The designated staff member performs an up-front quality review of each record/records package prior to microfilming to ensure that prescribed screening/accessioning procedures have been appropriately applied. Any discrepancies (e.g., privileged records mistakenly grouped with non-privileged records) shall be resolved with the receipt and handling staff before further processing.

- If the discrepancy results in the deletion of accession numbers, these numbers are to be tracked.

- The designated staff member separates the group of records into smaller indexing batches, assigns unique batch numbers, and records the batch information on the Batch Tracking Log (Attachment II). Records contained in a records package shall be maintained as a unit; these records are not separated into smaller batches for indexing assignments. Privileged records shall also be maintained as a unit and shall be processed separately from non-privileged.

NOTE: The staff member may complete an internal batch control sheet to track these smaller indexing batches during the indexing process.

- Each indexing batch is assigned to CRF staff member to be indexed online into the Mail/Append Database.

- The designated staff member dates and initials the Batch Tracking Log to indicate batch assignment and return of completed batches.

- The designated staff member performs indexing for all assigned documents using the OCRWM Indexing Manual. All applicable information from each document shall be indexed into the Mail/Append Database, including:

  a. Bibliographic information (e.g, title, document date).

b. Programmatic data including Source Organization, Project Identification (ID), Accession Number, Microfilm Address, Work Breakdown Structure (WBS) Number, and QA Status.

c. Topical information including subject terms (Keywords), when applicable, and Abstracts (if provided by author).

d. An Access Control Code specifying the level of security for each record (e.g., "PRI" for privileged record).

e. A Retention Classification Code for each record.

- A previously accessioned record included as an attachment to a newly accessioned record or as part of a records package is not indexed a second time. Its accession number shall be cross-referenced to its respective parent record.

- When indexing records contained in a records package, the designated staff member treats the table of contents as the parent record. The transmittal or cover letter is, in turn, treated as the parent of the table of contents.

- The CRF staff member designated to perform QC review activities and track the review process generates a printout of reach batch of indexed records entered into the Mail/Append Database and perform a QC review.

- The designated staff member ensures that the records listed on the Batch Sheet are indeed contained within the batch.

- The designated staff member reviews the information entered into the Mail/Append Database against the original records to ensure that the index of each record is accurate and complete, and that it complies with the instructions in the OCRWM Indexing Manual. The staff member shall mark the printout to indicate the appropriate changes needed to correct the index in the Mail/Append Database.

- The designated staff member corrects the indexes in the Mail/Append Database as indicated on the printouts. Completed printouts may be discarded after corrections have been made. The staff member shall transfer the completed batches from the Mail/Append Database to the Records Information System (RIS) Database and record this transfer in the Batch Tracking Log.

- Upon receipt, corrected or supplemental records are indexed and entered into the RIS Database and the appropriate information from the original record (e.g., accession number, microfilm address, etc.) are referenced to provide traceability and to preserve the integrity and authenticity of the record.

- Twice a month, the designated staff member generates a listing of accession numbers entered into the RIS to account for all accession numbers assigned. This list shall be forwarded to the CRF manager for review.

- If a discrepancy is identified, the CRF Manager initiates resolution activities as follows:

  a. Reviewing the completed Batch Sheet
  b. Searching the Mail/Append Database and/or RIS
  c. Reviewing the list off deleted accession numbers
  d. Reviewing the microfilm reel and/or conducting a physical search

- If the discrepancy is resolved, necessary changes are made to the appropriate database.

- If the discrepancy remains unresolved, the CRF Manager provides documentation to senior management for further analysis.

- Access Lists for restricted storage are maintained.

Results of the Audit are:

During the course of the evaluation, the indexing of purchase orders and audit reports was reviewed for compliance. The results of the evaluation indicate satisfactory compliance with procedural requirements. A recommendation was made concerning the revision of QAP 17-5 to more accurately describe indexing procedures for records that are superseded; see Section 6.0, Recommendation 12 of this report for details.

Storage, Retrieval and Disposition of Program Records (QAP 17-6)

Requirements

- Records stored by M&O are maintained in appropriate containers in steel file cabinets, on shelving, or in safes or vaults, as appropriate.

- The Silver Master microfilm rolls are wound on cores of noncorroding materials, such as nonferrous metals or inert plastics and the microfilm storage containers are similarly made of inert materials. These containers shall be kept closed at all times.

- Diazo and silver microfilm are not be stored or transported together.

- Privileged records are secured in the LRC/CRF restricted-access storage facility separate from other records.

- Provisions are in place to prevent entry of unauthorized personnel to the storage areas.

- The designated CRF stores a second copy of the program record.

- The Project Microfilming Center (PMC) temporarily stores the processed silver microfilm awaiting shipment for permanent storage. The storage facility shall meet or exceed the requirements for temporary storage.

- Privileged records not in use are secured in the CRF restricted-access storage facility separate from other records.

- Program records maintained on microfilm rolls are filed according to microfilm address (i.e. roll and frame numbers).

- Processed microfilm rolls containing privileged records are appropriately labeled and segregated to prevent release of information.

- The archival Silver Master, denoted Silver A, is the official microfilm program record and locked in a one-hour fire-rated safe or facility for storage until transmittal to permanent storage.

- Archival Silver Master microfilm (Silver A) is transmitted to the underground storage facility within 90 days unless space constraints at the PMC dictate the need for an interim transmittal.

- The Silver A microfilm is transmitted to the underground storage facility in accordance with the following steps:

  a. The PMC staff completes a Storage Transmittal Form in duplicate indicating the type of records contained on the microfilm. The PMC staff also completes any additional documentation required by the storage facility.

b. The microfilm is shipped to the underground storage facility, and the storage facility personnel verifies receipt by returning the signed transmittal to the PMC.

- The PMC staff transmits the second Silver Master Microfilm (Silver B) to the designated CRF for storage. This master shall be used as necessary for duplication of additional diazo rolls.

- Access to program records is limited to staff whose responsibility requires it. The CRF Manager shall maintain a list of names of authorized staff members with access. The CRF Manager maintains a separate list, provided by the LRCs of personnel authorized to review privileged records. Access to privileged records is limited to Record Sources, authorized supervisory personnel, records management staff, auditors, and other personnel specifically authorized to access these records by the CRWMS M&O QA Manager. The access list is posted on the outside of the storage facilities. Authorized staff ensures that the storage facilities are locked when not in use.

- Search and retrieval of records are performed using the RIS computerized index. Requesters are given a hardcopy blowback from the diazo microfilm of the records requested. For records in process, photocopies of the hardcopy records are used.

- Records are retrieved for official use purposes only. Requests for retrieval are processed by designated CRF personnel for requesters from M&O Contractor staff, OCRWM program staff, and other program participants. The CRF staff prepares a periodic report of RIS retrieval activities and submits it to the OCRWM Information Management Division (IMD) Records Manager.

- Access to privileged records are limited to record sources, authorized supervisory personnel, records management staff, auditors, and other personnel specifically authorized to access these records by the CRWMS M&O QA Manager.

- The CRF staff has access to the RIS as prescribed by their job responsibilities. The CRF staff provides RIS search assistance to OCRWM program staff and participants, as requested. The CRF Manager refers requests for access to the RIS by individuals other than program staff and participants to the OCRWM IMD Director.

- Access to diazo microfilms stored in the CRF shall be limited to authorized M&O Contractor staff and program participants. The retrieval activity of diazo microfilm shall be monitored and controlled by the CRF staff.

- Retrieval at the permanent storage facilities shall be documented in accordance with contractual agreements.

- The CRF staff is responsible for storing all hardcopy documents that have been microfilmed, indexed, and quality reviewed.

- The CRF staff stores boxes containing completed hardcopy records in a controlled storage area, accessible only to authorized staff.,

- Both copies of Silver Master microfilm program records are classified as lifetime for disposition purposes.

Results of the audit are:

During the course of the evaluation, record storage areas and lists of personnel with authorized access to record storage areas, storage for hardcopy documents and microfilms in Security Archives, LRC and CRF, were verified. RIS computerized index was utilized for retrieval of records in Security Archives. Records review were limited to M&O generated documents only. There is a need to check records generated by other participants for compliance to applicable requirements, i.e. storage requirements for one-of-a-kind records at the Security Archives. QAP 17-6 could be improved; see Section 6.0, Recommendation 13 of this report for details.

YMSO: Record Services Operation (NSP-17-1)

Requirements:

- Incoming records checked to include logging and signing of incoming transmittal form, transmittal description, and page count.

- Check of records for submittal to CRF for inclusion of information such as WBS number, authentication, completeness, and correction of entries.

- Retain copy of records transmittal to CRF until records microfilmed.

- Records packages received from records sources meet acceptance criteria for submittal to CRF.

- Records segments storage includes records segment package tracking number and field records package segment log.

Results of the audit are:

Based on a check of records, logs, records segments, and records packages submitted to the CRF, the requirements of NSP-17-1 are being satisfactorily implemented. A recommendation has been identified to clarify the procedure; see Section 6.0, Recommendation 14 of this report for details.

Conclusion regarding QA Program Element 17:

CRWMS M&O management has been innovative regarding meeting the requirements for temporary storage of records by modifying a large room and getting it certified as one-hour fire resistant; however, there may be a need for improving administrative control of the room, see Section 6.0, Recommendation 15 of this report for details.

Based on the results of the evaluation, QA Program Element 17.0, "Quality Assurance Records," implementation is considered satisfactory.

18.0 AUDITS

Audits and the certification of audit personnel, were not audited as these functions were covered during the HQ portion of the audit. However, through evaluating the certification of surveillance personnel, a recommendation to revise QAP 18-1 was generated; see Section 6.0, Recommendation 16 of this report for details.

ATTACHMENT 3

LIST OF OBJECTIVE EVIDENCE REVIEWED DURING THE AUDIT

GENERAL

Compliance with selected portions of the following QAPD was audited:

CRWMS M&O QAPD, Revision 3 (A00000000-AA-06-00042-03)

QA PROGRAM ELEMENT 1.0, "ORGANIZATION"

Procedures:

Compliance with the following procedure was reviewed:

QAP-1-1, Revision 1, "Escalation of Quality Disputes"

Objective Evidence Reviewed:

CRWMS M&O Organization Chart, dated 2/12/93

Completed Quality Concerns Exit Interview forms for:

Jim Berg, 12/04/91	R. Whiten, 7/30/92	Ella Jackson, 9/30/92
Dave Reed, 12/04/91	G. Fredrickson, 10/08/92	Chris Ahlert, 11/30/92
Jeff McCleary, 1/06/92	F. E. Bupp, 10/28/92	R. Eichel, 1/21/93

QA PROGRAM ELEMENT 2.0, "QUALITY ASSURANCE"

Procedures:

Compliance with the following procedures was reviewed:

QAP-2-1, Revision 3, "Indoctrination and Training"
QAP-2-2, Revision 1, "Verification of Personnel Qualifications"
QAP-2-3, Revision 3, "Classification of Items and Determination of Quality Affecting Activities"
PCN QAP-2-3, Revision 3, P01
QAP-2-5, Revision 1, "QA Surveillances"

QAP-2-6, Revision 1, "Readiness Reviews"
PCN QAP-2-6, Revision 1, P01
QAP-2-9, Revision 0, "Development and Conduct of Training"
QLP-2-1, Revision 1, "Certification of QC Inspectors"

Objective Evidence Reviewed:

Thirty-seven personnel training files containing: Position Descriptions; training documentation (such as Training Attendance Records); verification of education; resume; and certifications, as appropriate.

The individual training files examined were:

1. R. Sandifer
2. L. Engwall*
3. S. Saterlie*
4. C. Buckley
5. N. O'Connor
6. P. Gottlieb
7. T. Angus
8. E. Palelogos
9. T. Statton
10. K. Ashe
11. J. Houseworth
12. S. Nesbit*
13. M. Palmeira
14. R. Memory*
15. J. Nesbit
16. L. Lee
17. D. McAlister
18. T. Rodriguez
19. M. McGrath
20. A. Asgarian
21. G. Jacquet
22. A. Rust
23. G. Abend
24. R. Wagster
25. W. Patterson
26. L. Ashe

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27. M. Fortsch
28. D. Stahl
29. R. Memory*
30. S. Saterlie*
31. A. Bradstetter
32. S. Nesbit*
33. M. Abhold
34. E. Mann
35. J. Gardner
36. J. Verden
37. L. Bradley
38. S. Carruth
39. C. Johnson
40. L. Engwall*
41. H. Dokuzoguz

* NOTE: A total of 37 training files were reviewed. Four individuals of the first 26 were re-examined as part of the performance-based effort (27 through 41).

Lesson Plans

a) QA Indoctrination - 9/21/92, 1/14/93
b) QAP 6-1
c) QAP 16-1
d) Level II Soils
e) Level II Concrete

Instructor Certifications

M. Penovich	J. Justice	R. Justice
H. Ebner	H. Speiker	D. Mikkelson
S. Adame		

Calendar of Classroom Training Schedules

December 1992 through March 1993

Briefings

New Hire Information, 2/22/93, P. Nelson
QAP 2-1, Revision 3, 2/19/93, J. Justice
Safety, 2/2/93, R. Askaret

Instructor certification dates reviewed against Classroom Training Attendance Records from November of 1992 through January of 1993.

Memorandum

Delegation of Authority memorandum from J. Jackson to L. Foust, dated 9/30/92, to allow N. Hodgson to act in J. Jackson's behalf on 10/30/92.

QC Certification

W. Waggoner - Level II Soils; Level II Concrete
J. Hayes - Level II Soils; Level II Concrete
R. Justice - Level III

Resumes

W. Waggoner	J. Hayes	R. Justice

Letters

Letter of delegation from R. Justice to S. Triplett, dated 10/22/92, to the Level III instructor for the soils and concrete classes.

Examinations and grades for both the Level II Concrete and the Level II Soils courses, for both W. Waggoner and J. Hayes.

Corrective Action Report (CAR)-92-QAC-032

Classification

M&O Plan B00000000-AA-01-00002-00, Revision 0, "M&O Plan for Evaluating Items and Activities in the MGDS Program for Importance to Safety and Waste Isolation"

DIE B00000000-AA-09-00003, Revision 1, "ESF Starter Tunnel Steel Arch Section"

Surveillances

Surveillance Report Nos:

92-NSS-001	92-NSS-002	92-NSS-003
92-NSS-004	92-NSS-005	92-NSS-006
92-NSS-007	92-NSS-008	92-NSS-009
92-NSS-010	92-NSS-011	93-NSS-001
93-NSS-002	93-NSS-003	

QA PROGRAM ELEMENT 5.0, "INSTRUCTIONS, PROCEDURES, AND DRAWINGS

Procedures:

Compliance with the following procedures was reviewed:

QAP-5-1, Revision 1, "Preparation of M&O Quality Administrative and Implementing Line Procedures"
PCN QAP-5-1, Revision 1, P01
QAP-3-10, Revision 1, "Engineering Drawings"
QAP-3-11, Revision 1, "Design Specifications"
MGP 3-8, Revision 0, "Revision to Engineering Drawings Issued by Raytheon Services Nevada"

Objective Evidenced Reviewed:

Records packages of the following procedures reviewed for compliance with QAP 5-1.

Title/Description	Effective Date	Record Identification
QLP-2-1, Revision 0	9/25/92	NNA.921001.0038
QLP-2-1, Revision 1	10/19/92	NNA.921105.0037
NSP-6-2, Revision 0	10/23/92	NNA.921109.0082
NSP-17-1, Revision 0	8/3/92	NNA.920820.0011
NSP-6-1, Revision 0	7/22/92	NNA.920724.0050
NSP-6-1, Revision 1	1/4/93	Not in RIS
NSP-17-1, Revision 1	1/4/93	Not in RIS
NSP-6-2, Revision 1	2/22/93	Not in RIS

Procedure Change Notices:

NSP-6-1, Revision 1, P01
NSP-6-1, Revision 1, P02

Implementing Line Procedure Numbering System (Draft)

QAP-5-1, Revision 0 (superseded document)

Correspondence/Memos:

Subject	Originator	Date
Delegation of Authority	L. D. Foust	1/15/92
Authorized Records Reviewer	J. W. Frank	6/8/92
NSP-6-2 Draft NS Doc. Tracking	T. Rodriguez	8/25/92
Delegated Signature Authority for the NVSQAM	J. A. Jackson	1/20/93

FCRs:

93/046	93/072	93/082
93/101	93/122	93/136
93/162		

Job Package 93-01

QA PROGRAM ELEMENT 6.0, "DOCUMENT CONTROL"

Procedures:

Compliance with the following procedures was reviewed:

QAP 6-1, Revision 1, "Document Control"
NSP-6-1, Revision 1, "Yucca Mountain Site Office: Document and Records Operations"
PCN NSP-6-1, Revision 1, P01
PCN NSP-6-1, Revision 1, P02
NSP-6-2, Revision 0, "Nevada Document Review Tracking"
NSP-6-2, Revision 1, "Nevada Site Document Review Tracking"

Objective Evidence Reviewed:

Master Controlled Document Report 3/2/93

Document ID	Title	Rev.	Effective Date	Originator
ACD-93-001	Advanced Conceptual Design Work Plan	0	11/18/92	Dokuzoguz, H.
BAAB00000-AA-06-0000	ESF Design Group Engineering Practices Doc.	0	10/19/92	McKenzie, D.
QLP-2-1	Cert. of QC Inspectors	1	10/19/92	Sestak, D. E.

Document Distribution Report by Holder 3/3/93

Holder: Sandifer, R. M. Title: Advanced Conceptual Design Work Plan
Document ID: ACD-93-0001, Revision 0, Effective Date 11/18/92, Copy No. 101467.1

Distribution Report by Controlled Document 3/3/93

Document ID:	QLP-2-1, Revision 1	NSP-17-1, Revision 1
	NSP-7-1, Revision 0	NSP-6-2, Revision 1

Document Distribution Report by Holder, 2/25/93

Holder: Yang Hang Title: ESF Design Group Engineering Practices Document
Document ID: BAAB00000-AA-06-0000, Effective Date 10/19/93

Controlled Document Holder Copy Nos. verified for compliance with distribution requirements:

Copy No.	Document Holder	Document ID/Revision
101431	C. T. Statton	ACD-93-0001, Revision 0
101467	R. M. Sandifer	"
101556	K. K. Bhattacharyya	"
101390	Larry Engwall	BAAB00000-AA-06-0000, Revision 0
101729	Manny Debon	"
15	Angie Rust	"
101739	Yang Hang	"
100556	J. A. Jackson	NSP-6-2, Revision 1
101264	J. D. Verden	"
101431	C. T. Statton	"
101673	Fred Arth	"
7	J. A. Jackson	NSP-17-1, Revision 1
10	B. G. Cruz	"
101673	Fred Arth	"
20	S. H. Horton	"
3	J. A. Jackson	QLP-2-1, Revision 1
101673	Fred Arth	"
11	S. H. Horton	"
4	B. R. Justice	MGP-7-1, Revision 0
101737	Angie Rust	"

Controlled Document Package for MGP-7-1, Revision 0

PCN QAP-6-1, Revision 1, P01, P02, and P03

Records package for the cancellation of NSP-17-3, NSP-17-2, and NSP-17-13, 10/6/92, Record ID: NNA.921015.0004

DCARs 9/17/92 to Cancel/Void NSP-17-3, NSP-17-2, and NSP-17-1

Controlled Document Instruction, 1/4/93, to Cruz, B. G., Copy No. 4, NSP-6-2, Revision 0, Decontrolled from controlled distribution.

Document Review Tracking Status 2/26/93

QA PROGRAM ELEMENT 15.0, "CONTROL OF NONCONFORMING ITEMS"

Objective Evidence Reviewed:

CRWMS M&O QAPD, Revision 3, CRWMS M&O QAPD, Section 15, DOE/RW-0214, Revision 3, OCRWM QARD, Section 15
REECo letter 580-01-216, dated 1/21/93, transmitting an NCR to TRW for disposition

QA PROGRAM ELEMENT 16.0, "CORRECTIVE ACTION"

Procedures:

Compliance with the following procedures was reviewed:

QAP-16-1, Revision 0, "Corrective Action Report"
PCN QAP-16-1, Revision 0, P01
QAP-16-2, Revision 0, "Stop Work"
QAP-2-4, Revision 1, "Quality Assurance Program Status and Trend Reporting"

Objective Evidence Reviewed:

Corrective Action Request Nos:

93-MG-C-002	93-QL-C-005	93-QL-C-006
93-QL-C-007	93-QL-C-008	93-MG-C-009
93-QL-C-010		

QA PROGRAM ELEMENT 17.0, "QUALITY ASSURANCE RECORDS"

Procedures:

Compliance with the following procedures was reviewed:

QAP-17-1, Revision 2, "Program Records Management: Record Source Responsibilities"
QAP-17-2, Revision 0, "Program Records Management: Receipt and Handling of Program Records Packages"
PCN QAP-17-2, Revision 0, P01
PCN QAP-17-2, Revision 0, P02

QAP-17-4, Revision 0, "Program Records Management: Microfilming Program Records"
PCN QAP-17-4, Revision 0, P01
QAP-17-5, Revision 0, PCN No. QAP-17-5, Revision 0, P01, "Program Records Management: Indexing Program Records"
PCN QAP-17-5, Revision 0, P01
PCN QAP-17-5, Revision 0, P02
QAP-17-6, Revision 0, PCN No. QAP-17-6, Revision 0, P01, "Program Records Management: Storage Retrieval and Disposition of Program Records"
PCN QAP-17-6, Revision 0, P01
NSP-17-1, Revision 1, "Yucca Mountain Site Office: Document and Records Center: Record Services Operations"

Objective Evidence Reviewed:

3M Model 222 Densitometer PTL No. Y881, Calibrated by REECo on 7/16/92, calibration due on 7/16/93
Baush & Lomb Microscope
Rotary Camera Test Chart ANSI/AIIM MS17-1983
NIST-SRM 1010a Microcopy Resolution Test Chart
Kodak Intelligence Reliance 2000, Rotary Camera for 16mm film set at 24:1 reduction ratio "Betty"
KODAK IMAGELINK HQ Microfilm 3461 (ESTAR Thin Base) specification
Certificate of Findings, Methylene Blue test according to ANSI Standard PH4.-1985 for Residual Thiosulfate Content from Micro D International:

Microfilm Rolls	Certified
91126, Top	2/1/93
91104, Bottom	1/4/93
91108, Top	1/11/93

Project Microfilm Center Log of Roll Numbers

Roll Number 91124, 1/26/92 through 91140, 3/2/93

Microfilm Rolls reviewed for required "targets," frame number imprints, legibility, labels, and correction

91137 completed 2/25/93 with correction
91130 completed 2/9/93
91128 completed 2/3/93

Microfilm Tracking Logs document microfilm roll resolution, density and residual thiosulfate results dates roll sent to National Underground Storage (NUS), CRF, and the following information:

Roll No.	Date Silvers to Processor	Date Microfilm Diazos QC'ed	Corrections
91103	1/4/93	1/5/93	yes
91104	12/4/92	1/4/93	no
91123	1/26/93	1/27/93	yes
91124	1/26/93	1/27/93	no
91125	1/27/93	1/28/93	*
91126	1/28/93	1/29/93	*
91127	2/2/93	2/2/93	*
91137	2/26/93	**	yes

* not checked
** in-process awaiting Methylene Blue Test results

The density of microfilm is 1.0 to 1.20, as stated in ANSI/AIIM MS23-1991, Paragraph 5.1.4 for Group 3 documents pencil and ink drawings, faded printing and very small printing, such as footnotes at the bottom of a printed page.

Daily Microfilming Logs

Microfilm Roll	Completed	No. of pages
91137	2/25/93	3
91103	12-22-92	3

Class 350 2-hour fire rated vaults

CRF 5th Floor Bank of America where three cabinets were marked "privilege records" for all participants.
PMC for hard copies awaiting microfilming
Security Archives for storing Silver Halide Master "B"
PMC for Silver Masters"A" and "B" prior to sending to NUS and Security Archives

Silver Master "A," Roll Numbers 91138 through 91125, Top Cabinet 14 Rolls,
Silver Master "B," Roll Numbers 91127 through 91137, Bottom Cabinet 12 Rolls,
Note: Films were wound on noncorroding material (plastic), appropriately labeled, and stored.

Safe Access Authorization Lists:

PMC, 1/25/93
CRF 5th Floor, 9/21/92
LRC System 80, 6/8/92 and Files Access List, 2/17/93
Security Archives, 8/27/92, required Personnel Identification Number (PIN) before access is given to those on the list.

Storage Transmittal Sheet (Attachment I)

To: National Underground Storage (NUS)
Date: 2/26/93
From: Kim L. Quinnell
Microfilm Rolls: Silver Masters "A" Roll Numbers 91103 through 91124
Note: The above is the first transmittal that PMC sent to NUS. Prior to February 1993 HQ sent the Silver Masters "A" to the NUS.

Transmittal Records:

To	Trans'l/ Date	Microfilm Roll
DOE/HQ	822, 9/1/92	91037 through 91058, Silver "A"
CRF	823, 9/1/92	91037 through 91058, Silver "B"
LVLRC	804, 8/21/92	91055, 91057 through 91064, Diazo
DOE/HQ	954, 1/20/93	91059 through 91102, Silver "A"
TRW/Kau	955, 1/28/93	91059 through 91102, Silver "B"
LVLRC	877, 10/20/92	91080 and 91081, Diazo

Checked the system for retrieval of the following documents:

Document	Record ID (RIS)	Roll Number	I.D.	Location at Security Archives
92-NSS-001	NNA.9205707.004	91034-1132/1135	2334	40-E-085*
92-NSS-002	NNA.930201.0010	91130-3672/3675	2334	40-E-085*
92-NSS-003	NNA.920605.0073	91042-2500/2503	2342	40-E-095*
92-NSS-012	NNA.921118.0014	91095-2863/2867	2449	206-BM-054

* Note: Boxes of hardcopy documents were verified for correct information.

Work Order, dated 1/19/93 for retrieval of Box ID No. 2419 from Security Archives
Retrieval Requests Week Ending 3/3/93
Verified the following at the Security Archives:

Two Boxes labeled Silver Master "B" Rolls Numbers 91081 through 91102, and 91059 through 91080

Indexing for the following records:

LANL Purchase Request Nos.

N0843	V6185	V6200
B54132	B54141	B55381
M3586	M3653	M3661
M3667	M4153	M4169

Yucca Mountain Site Characterization Project (YMP) Audit Report Package Nos.

YMP-92-01
YMP-92-02
YMP-92-03

Incoming Transmittal Log (Area 25) Documents

JP 92-03, DRC 009 (3 examples)
JP 92-11, DRC 011
JP 92-2, DRC 005
JP 92-20, DRC 026

Records packages to CRF (Area 25)

JP 91-2, DRC 002, JP 91-1, DRC 001

Records Package Segment Log (Area 25)

Records Transmittal Forms

NNA 920312.0203-0206
NNA 920706.0034-0036
NNA 920812.0020
NNA 921104.0043-0073
NNA 930104.0035-0045

Transmittal Log Packages

MO 92-212-C
MO 92-00232
MO 93-00104
MO 92-4J
MO 92-00627

Transmittal forms from LRC to Records Source for change, conversion or additions.

93-00319
92-00649
93-00451

Access list for records area, dated 2/8/93

Access list for Privileged Records, dated 2/17/93

ATTACHMENT 4

INFORMATION COPIES

OF

CORRECTIVE ACTION REQUESTS

ORIGINAL
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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

8 CAR NO.: YM-93-034
DATE: 3/11/93
SHEET: 1 OF 1
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
M&O QAPD, Revision 3	Audit YMP-93-07

3 Responsible Organization	4 Discussed With
M&O	J. Brackett/J. Jackson

5 Requirement:

The M&O QAPD, Revision 3, Paragraph 2.1.2 states in part, "This QAPD details the M&O organizational structure, quality-affecting responsibilities, interfaces...." Paragraph 2.1.4 states, "M&O Implementing Line Procedures are used to control quality-affecting activities where detailed implementing instructions are restricted to an M&O geographic location or an individual M&O functional area."

6 Adverse Condition:

Contrary to the above, the M&O QAPD, Section 15.0, "Control of Nonconforming Items" does not address QAPD, Section 2.0 requirements. The M&O, acting as the A/E for the YMPO, has responsibility for the disposition of NCRs. Implementing procedures describing details of this activity were not in place during the audit.

9 Does a significant condition adverse to quality exist? Yes___ No X_ If Yes, Circle One: A B C	10 Does a stop work condition exist? Yes___ No X_; If Yes - Attach copy of SWO If Yes, Circle One: A B C D	11 Response Due Date: 20 Working Days from Issuance

12 Required Actions: ☒ Remedial ☐ Extent of Deficiency ☐ Preclude Recurrence ☐ Root Cause Determination

13 Recommended Actions:

7 Initiator Gerard Heaney G. Heaney Date 3-11-93	14 Issuance Approved by: QADD [signature] Date 3/15/93
15 Response Accepted QAR Date	16 Response Accepted QADD Date
17 Amended Response Accepted QAR Date	18 Amended Response Accepted QADD Date
19 Corrective Actions Verified QAR Date	20 Closure Approved by: QADD Date

REV. 08/91

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OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

8 CAR NO.: YM-93-036
DATE: 3/11/93
SHEET: 1 OF 3
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
CRWMS M&O QAP 5-1, Revision 1, PCN P01	Audit YMP-93-07

3 Responsible Organization	4 Discussed With
CRWMS M&O-Nevada	R. Justice/T. Redding/F. Arth

5 Requirement:

QAP 5-1, Revision 1, PCN P01

1. Paragraph 5.3.2 states in part, "Each QAP/ILP shall be distributed by the responsible manager using an interoffice memo to the reviewing managers with a PRR. The PRR shall be completed with review instructions/criteria (see Attachment III, Standard Review Criteria) for performing the review...."

   Paragraph 5.2.1 of Revision 0 stated in part, "The development manager shall submit the draft procedure with review instructions/criteria to the manager of each interfacing organization...."

   (Continued on next page)

6 Adverse Condition:

The CRWMS M&O, Nevada Operations has not been implementing QAP 5-1. Example are:

1. There were no review criteria for the review of NSP-6-2, Revision 0, and NSP-17-1, Revision 0. The Document Review Records, "Review Instruction/Criteria Prepared by:" blocks were signed and dated; however, no review criteria were found in the records package. Furthermore, the review/instructions criteria was not identified on Block 7 of a Procedure Review Record for QLP-2-1, Revision 1.

   (Continued on next page)

9 Does a significant condition adverse to quality exist?	10 Does a stop work condition exist?	11 Response Due Date:
Yes X No ___ If Yes, Circle One: A (B) C	Yes ___ No X ; If Yes - Attach copy of SWO If Yes, Circle One: A B C D	20 Working Days from Issuance

12 Required Actions: [X] Remedial [X] Extent of Deficiency [X] Preclude Recurrence [X] Root Cause Determination

13 Recommended Actions:

1. Correct the examples identified.
2. Investigate to determine if there are similar deficiencies.
3. Determine root cause(s) and take action to preclude recurrence.

7 Initiator	14 Issuance Approved by:
A. I. Arceo Amelia I. Arceo 3/15/93 Date	QADD K. C. Spence Date 3/15/93
15 Response Accepted	16 Response Accepted
QAR Date	QADD Date
17 Amended Response Accepted	18 Amended Response Accepted
QAR Date	QADD Date
19 Corrective Actions Verified	20 Closure Approved by:
QAR Date	QADD Date

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6 CAR NO.: YM-93-036
DATE: 3/11/93
SHEET: 2 OF 3
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

5 Requirements (continued)

2. Paragraph 5.3.10 states in part, "The responsible manager shall finalize training requirements and the effective date of the QAP/ILP on the QAP/ILP Training Coordination Sheet. If formal classroom training is required, the Training Manager shall be consulted concerning the effective date... If formal classroom training is not required, the training recommendation shall be documented by the responsible manager on the QAP/ILP Training Coordination Sheet and sent to the Training Manager for tracking."

3. Paragraph 5.5.2.A states in part, "Changes in the QAP/ILP revision shall be designated by change bars in the retyped QAP/ILP...."

4. Paragraph 5.5.4.C states, "The Document Control Center shall distribute the cancellation notice and a revised Table of Contents in accordance with QAP 6-1."

   Paragraph 5.7.3 states in part, "After approval, the PCN shall be given to the Document Control Center for distribution to all manual holders in accordance with QAP 6-1. The PCN shall be distributed with an updated Table of Contents...."

5. Paragraph 5.8.5 states in part, "Memos documenting the QAP/ILP review due to changes in upper documents shall be submitted to the LRC in accordance with QAP 17-1."

6. Section 6 states in part, "Documents generated as a result of this procedure shall be collected and maintained in accordance with QAP 17-1... As a minimum, the following shall be considered program records and shall be submitted through the Local Records Centers Program Records: Procedure Review Records and non-mandatory comments with distribution memo and a copy of the draft submitted for review...."

6 Adverse Condition (continued)

2. a. There was no QAP/ILP Training Coordination Sheet for NSP-6-2, Revision 0, "Nevada Site Document Tracking."

   b. The QAP/ILP Training Coordination Sheet for QLP-2-1, Revision 1, "Certification of QC Inspectors"

      1) was not signed and dated by the Responsible Manager in the Preliminary Training Requirements Determination block, and

      2) the Final Determination of Training Requirements block was not filled in.

   NOTE: Item b. was resolved on 3/2/93 by resubmitting corrected QAP/ILP Training Coordination Sheet to NNA.921105.0037 records package.

3. Changes to NSP-6-1, Revision 1, and NSP-17-1, Revision 1 were not indicated by change bars. The CRWMS M&O had decided that change bars were not needed when the revision was so extensive that the revision constituted a complete revision; however, the CRWMS M&O had not revised QAP 5-1 to reflect current practice.

4. The Document Control Center distributes Cancellation Notices and Procedure Change Notices without Table of Contents. There is no Table of Contents for implementing procedures.

5. There was no documented evidence indicating that ILPs were reviewed for impact when upper-tier documents are changed.

6. a. Records packages for the development of implementing procedures NSP-6-1, Revision 1, "Yucca Mountain Site Office: Document and Records Center: Document Control Operations" and NSP-17-1, Revision 1, "Yucca Mountain Site Office: Document and Records Center: Records Services Operations" were not submitted to the LRC.

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RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

6 CAR NO.: YM-93-036
DATE: 3/11/93
SHEET: 3 OF 3
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

6 Adverse Condition (continued)

b. Record package for QLP-2-1, Revision 1 did not contain the draft procedure submitted for review.

NOTE: Item a. was resolved on 3/3/93 by transmittal of records packages to the LRC and Item b. was resolved on 3/8/93 by transmittal of the draft procedure to the LRC.

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WASHINGTON, D.C.

8 CAR NO.: YM-93-037
DATE: 3/12/93
SHEET: 1 OF 2
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
CRWMS M&O QAPD, Revision 3	Audit YMP-93-07
3 Responsible Organization	**4 Discussed With**
CRWMS M&O-Nevada	L. D. Foust, J. Jackson

5 Requirement:

CRWMS M&O QAPD, Revision 3, Section 5.1 states in part:

"....The M&O Quality Administrative Procedures (QAPs) and Implementing Line Procedures (ILPs) incorporate the committed requirements from the applicable sections of the QARD. QA ensures that all applicable quality assurance requirements are addressed prior to approval...."

6 Adverse Condition:

The CRWMS M&O Implementing Line Procedures (ILPs) do not meet some of the requirements of the CRWMS M&O QAPD and in some instances do not reflect current practice. Examples of ILPs that are inadequate or do not reflect current practice that were found during Audit YMP-93-07 are:

1. NSP-6-1, Revision 1, PCNs P01 and P02, Yucca Mountain Site Office: Document Control and Records Center: Document Control Operations

   Paragraph 5.1.6.1 states, "Upon receipt of an approved master of a design document revision, the DRC staff shall destroy all hard copies of the superceded or obsolete (old) documents, including applicable incorporated change documents."

   CRWMS M&O personnel were not destroying the hard copies of the superceded or obsolete document. Instead they are marking the copies as obsolete and keeping them for reference by field personnel. The documents are removed once the activity associated with the Job Package is completed and the Job Package is submitted to the Central Records facility. The ILP needs to be revised to reflect this current practice.

9 Does a significant condition adverse to quality exist? Yes X No ___ If Yes, Circle One: A (B) C	10 Does a stop work condition exist? Yes ___ No X ; If Yes - Attach copy of SWO If Yes, Circle One: A B C D	11 Response Due Date: 20 work days from issuance

12 Required Actions: [X] Remedial [X] Extent of Deficiency [X] Preclude Recurrence [X] Root Cause Determination

13 Recommended Actions:

1) Correct the deficiencies identified; 2) Screen other ILPs to determine the extent of the deficiency; 3) determine if M&O personnel are sufficiently trained regarding working to approved procedures and what to do if a procedure needs to be revised; 4) determine root cause(s); and 5) take action to prevent recurrence.

7 Initiator J. Blaylock/R. Powe Date 3/15/93	14 Issuance Approved by: QADD Date 3/15/93
15 Response Accepted QAR Date	16 Response Accepted QADD Date
17 Amended Response Accepted QAR Date	18 Amended Response Accepted QADD Date
19 Corrective Actions Verified QAR Date	20 Closure Approved by: QADD Date

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OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

8 CAR NO.: YM-93-037
DATE: 3/12/93
SHEET: 2 OF 2
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

6 Adverse Condition (continued)

2. NSP-17-1, Revision 1, Yucca Mountain Site Office: Document and Records Center; Record Services Operations

   a. CRWMS M&O QAPD, Revision 3, Section 17.6 states in part, "Records are controlled from the time they are completed until they are stored in predetermined locations that meet the requirements of the OCRWM QARD. The storage procedure includes:
   .....
   f. The method for maintaining control of and accountability for records removed from the storage area...."

   NSP-17-1, Revision 1, does not provide a method for controlling documents in temporary storage that are returned to the Record Source.

   b. NSP-17-1, Revision 1, paragraph 5.1.8.1 states in part, "....The DRC records vault complies with applicable QA requirements to prevent loss, damage from moisture, temperature, pressure, excessive light, electromagnetic fields, and other hazards.

   NSP-17-1 does not provide acceptance criteria for the prevention measures required, e.g. there is no criteria for what contitutes excessive light, electromagnatic fields, or other hazards.

3. General, all ILPs

   CRWMS M&O QAPD, Revision 3, Section 2.1.2 states in part, "This QAPD details the M&O organizational structure, quality-affecting responsibilities, interfaces...." and Section 2.1.4 states in part, "M&O Implementing Line Procedures are used to control quality-affecting activities where detailed implementing instructions are restricted to an M&O geographic location or individual functional area...."

   M&O ILPs do not reference interfacing Yucca Mountain Site Characterization Project Office Administrative Procedures such as AP 3.5Q and AP 6.17Q.

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