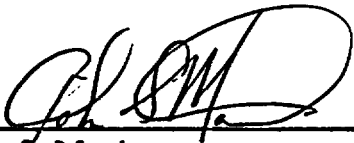



U. S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE  
AUDIT REPORT OF  
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE  
LAS VEGAS, NEVADA  
AUDIT NO. YMP-92-24  
SEPTEMBER 28 THROUGH OCTOBER 2, 1992

QUALITY ASSURANCE PROGRAM ELEMENTS EVALUATED:

- 3.0 Design Control
- 4.0 Procurement Document Control
- 5.0 Plans, Procedures, Instructions, and Drawings
- 6.0 Document Control
- 7.0 Control of Purchased Items and Services
- 15.0 Control of Nonconforming Items
- 17.0 Quality Assurance Records
- 20.0 Scientific Investigation

Prepared by:  Date: 10/26/92  
John S. Martin  
Audit Team Leader  
Yucca Mountain Quality Assurance Division

Approved by:  For Date: 10/26/92  
Donald G. Horton  
Director  
Office of Quality Assurance

## EXECUTIVE SUMMARY

This report contains the results of the U.S. Department of Energy (DOE) Office of Civilian Radioactive Waste Management (OCRWM) Audit No. YMP-92-24 of the Yucca Mountain Site Characterization Project Office (YMPO), that was conducted in Las Vegas, Nevada on September 28 through October 2, 1992. This internal audit was performed by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD) of the Office of Quality Assurance (OQA) and evaluated the implementation of eight Quality Assurance (QA) Program Elements described in the OCRWM Quality Assurance Program Description Document (QAPD), Revision 3. This was done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements.

Overall, for the QA Program Elements audited, YMPO is satisfactorily implementing an effective QA Program in accordance with the OCRWM QAPD and implementing procedures. Six of eight QA Program Elements audited, QA Program Elements 3.0, 4.0, 5.0, 6.0, 17.0 (with the exception of the "legibility of records" issue), and 20.0 are being implemented satisfactorily. However, even though QA Program Element 3.0 was determined as being implemented in an overall satisfactory manner, there was one area of this QA Program Element where implementation was found to be marginal. This area is specific to YMPO's implementation of the Configuration Management (CM) system.

There has been no implementation in the following areas to determine compliance: QA Program Elements 7.0 and 15.0.

The audit team identified four deficiencies during the course of the audit that required issuance of four OCRWM Corrective Action Requests (CARs). Of these CARs, one is considered a significant condition adverse to quality which contains three deficiencies and deals with the legibility, completeness and the correct identification of records. Three CARs deal with different aspects of the CM system and are (1) technical evaluations of Field Change Requests (FCRs) not being performed, (2) failure to provide the scheduled resolution of data to be verified and (3) the Configuration Control Board (CCB) not processing drawings and specifications as procedurally mandated.

In addition, ten deficiencies were identified and corrected by YMPO as a result of the audit. Details of the issued OCRWM CARs and corrected deficient conditions are found in Sections 6.1 and 6.2 of this audit report.

In addition to the above, it should be mentioned that the YMQAD audit team appreciated the cooperativeness and professional attitude exhibited by the YMPO staff during the conduct of this audit.

## 1.0 INTRODUCTION

This report contains the results of the DOE OCRWM OQA QA Audit No. YMP-92-24 of YMPO conducted at Las Vegas, Nevada on September 28 through October 2, 1992. This audit was performed in accordance with approved audit plan (Reference: Correspondence OQA:MRD-5059, dated August 20, 1992).

## 2.0 AUDIT SCOPE

This audit, evaluated the effectiveness of the YMPO QA Program in meeting the requirements and commitments imposed by OCRWM. This was done by verifying implementation of QA requirements delineated in the OCRWM QAPD and implementing procedures.

YMPO activities associated with the following QA Program elements were audited:

### QA Program Elements

- 3.0 Design Control
- 4.0 Procurement Document Control
- 5.0 Plans, Procedures, Instructions, and Drawings
- 6.0 Document Control
- 7.0 Control of Purchased Items and Services
- 15.0 Control of Nonconforming Items
- 17.0 Quality Assurance Records
- 20.0 Scientific Investigation

The following QA Program element was not audited since YMPO has no activity to which this element applies:

### 19.0 Computer Software

The Objective evidence of each QA Program Element reviewed during the audit, is detailed in Enclosure 4.

## 3.0 AUDIT TEAM AND OBSERVERS

The list of audit team members, the QA Program elements or technical activity they evaluated, and observers can be found in Enclosure 1.

#### 4.0 AUDIT MEETINGS AND PERSONNEL CONTACTED

The pre-audit conference was held at YMPO facilities in Las Vegas, Nevada, on September 28, 1992. Daily coordination meetings were held with YMPO management and staff, and daily audit team/observers meetings were held to discuss issues and potential deficiencies. The audit was concluded with a post-audit conference at the YMPO facilities in Las Vegas, Nevada, on October 2, 1992. A list of auditors, observers, and personnel contacted during the audit is included in Enclosure 2. The list includes an indication of those who attended the pre- and post-audit conferences.

#### 5.0 SUMMARY OF AUDIT RESULTS

##### 5.1 Program Effectiveness

Overall, YMPO is satisfactorily implementing an effective QA program in accordance with the OCRWM QAPD and implementing procedures. Six of eight QA Program elements audited, QA Program Elements 3.0 "Design Control," 4.0 "Procurement Document Control," 5.0 "Plans Procedures, Instructions, and Drawings," 17.0 "Quality Assurance Records" (with the exception of the "legibility of records" issue), and 20.0 "Scientific Investigation," are being implemented satisfactorily. However, even though QA Program Element 3.0 was determined as being implemented in an overall satisfactory manner, there was one area of this QA Program element where implementation was found to be marginal. The area which was found to be marginal is specific to YMPOs implementation of the CM system.

Implementation of QA Program Elements 7.0, "Control of Purchased Items and Services," and 15.0, "Control of Nonconforming Items" could not be determined due to lack of activity in the areas cited.

##### 5.2 Programmatic Audit Activities

Details of programmatic audit activities are included as Enclosure 3 of this report.

##### 5.3 Summary of Deficiencies

The audit team identified a total of 14 deficient conditions during the course of the audit. Ten of these conditions were considered minor in nature requiring only remedial actions and were corrected by YMPO as a result of the audit. Four deficiencies resulted in the issuance of four CARs. A synopsis of the issued deficiencies and the deficiencies corrected are included in Sections 6.1 and 6.2 of this audit report.

## 6.0 SYNOPSIS OF DEFICIENCIES

### 6.1 Corrective Action Requests

The OCRWM CARs listed below were issued as a result of the audit. An information copy of each CAR is provided as Enclosure 5 of this report.

YM-93-001 - Administrative Procedure (AP)-3.5Q, Revision 1, "Field Change Control Process," Paragraph 4.0, Step 4 (A), requires that a technical evaluation be performed for changes that are scientific, design or quality-affecting in nature. During review of FCRs, four FCRs were found for which a technical evaluation would be required, however; no documented evidence could be provided to indicate that these technical evaluations were performed.

YM-93-002 - AP-5.24Q, Revision 0, "Preparation and Submittal of As-Built Drawings and Specifications," Paragraph 4.0, Step 5, Note, require the submittal of as-built drawings and specifications from the affected participants to the CCB for incorporation into the technical baseline. In addition, the CCB is required to notify the Architect Engineer (A/E) of the CCB's acceptance of the as-built drawings and specifications, and the CCB Secretary is required to send as-builts to the Local Records Center (LRC) and the Document Control Center (DCC).

Contrary to these requirements, the CCB failed to: (1) notify the A/E of acceptance of the as-built drawings and specifications for Trench 14, (2) Trench 14 drawings and specifications were not sent to the LRC, and (3) the Trench 14 as-built drawings and specifications were not shown within the technical baseline as being as-built.

YM-93-003 - AP-3.6Q, Revision 1, "Configuration Management," Paragraph 5.1.3.2, requires that data that has not been verified or validated per NUREG 1298 or is dependent on software that has not been validated, be identified and tracked in the same manner as "to be determined data." Paragraph 5.1.3.1 requires that "to be determined data" have a scheduled resolution date and be tracked in a log associated with the document which contains the data to be verified.

Contrary to these requirements, document YMP/CM-006, Revision 2, does not delineate the scheduled resolution date of data to be verified.

YM-93-004 - QAPD, Revision 3, Section 17.0, Paragraph 17.3, requires that documents designated to become records be legible, identifiable, accurate, complete, reproducible, microfilmable, and appropriate to the work accomplished.

Contrary to these requirements, records were identified which were illegible, incomplete and identified incorrectly.

CAR YM-93-004 is being issued as a significant condition adverse to quality.

## 6.2 Deficiencies Corrected During the Audit

Conditions adverse to quality that are considered isolated in nature and requiring only remedial action can be corrected during the audit without issuance of a CAR. The following conditions adverse to quality were identified and corrected during the audit:

1. AP-5.32Q, Paragraph 7.0, requires that the Test Planning Request be part of the records package for Test and Planning Packages (TPPs). In review of Records Package NNA.920420.0026, it was found that the Test Planning Request had not been submitted with TPP 92-02 upon transmittal to the Central Records Facility (CRF). This was resolved by supplementing the records package to include the request. No other completed TPPs reviewed were found to be deficient.
2. The QAPD, Section 17.0, Paragraph 17.3, requires that a list of signatures and initials be maintained identifying personnel authorized to authenticate records. During the course of the audit, it was learned that this list had not been maintained by YMPO management. In resolution of this deficiency management collected the signatures and initials of those personnel currently not on the list who are authorized to authenticate records.
3. Quality Management Procedure (QMP)-03-09, Paragraph 5.0, Step 16A, requires that the CCB Secretary ensure that delegation of authority letters be on file for change control documentation and be attached to the records package prior to submittal. In review of change request record packages, it was noted that the delegation of authority letters were not within the records package or on file. In resolution of this, the required delegation of authority letters were produced and the change request packages were modified to incorporate the authorization.

4. AP-3.5Q, Paragraph 5.0, Step 3b, requires that an FCR History Form be placed within job packages (JPs) detailing the changes. In review, JP-92-7 and JP-92-8 were found not to contain the History Form. These JPs were corrected by the addition of the History Form as required. A review of fifty percent of the remaining FCRs which would require the generation of a History Form revealed this deficiency to be isolated. In addition, in review of AP-3.5Q, it was noted that the procedure did not contain Attachment 5 as referenced within the procedure. In resolution, an Interim Change Notice (ICN) was approved to add Attachment 5 (reference ICN No. 2, to AP-3.5Q).
5. AP-3.5Q, Paragraph 5.0, Step 3, Note (a), requires that CM assign and place FCR designator in the right hand margin adjacent to the change bar for field changes initiated to JPs. Review of FCRs 92/137 and 92/144 provided evidence that this requirement had not been accomplished. Upon identification of this deficiency by the audit team, the CCB Secretary revised all FCRs for which this requirement applied. In follow-up, further review was performed to gain confidence that this deficiency was corrected. The results of this review were found to be satisfactory.
6. AP-1.10Q, Paragraph 5.0, Step 1, requires that the Project Manager provide a schedule for completion of draft study plans. During the course of the audit, no schedule could be produced. Based upon discussions with YMPO management, it was determined that the schedule was not needed, and subsequently, the requirement for a schedule for draft study plans was deleted by approved ICN No. 1 to AP-1-10Q.
7. AP-5.19Q, Paragraph 5.0, Step 16, requires that upon completion of an Interface Memorandum of Understanding (IMOU), that the Interface Control Working Group representative contact, among others, Field Operations (FO) to determine impact to program level documents. In review of closed IMOUs, it was determined that FO had not been contacted for their input. Discussions with YMPO management and the Management and Operations (M&O) support staff indicated that for the IMOUs reviewed, and any closed within the past year, that input from FO was not required. Subsequently, AP-5.19Q has been revised to eliminate contacting FO on a mandatory basis to an as-needed basis (reference approved ICN No. 2 to AP-5.19Q).
8. QMP-04-03, Paragraph 5.0, Step 12, requires the approval of Technical Directives (TD) by the Project Manager. In review of TDs, one TD (RSN-92-006 transmitted by letter EDD:JTD-5326) was found in which the Project Manager's approval was not obtained prior to issuance. In review of twenty-

eight TDs, this was the only one issued without Project Manager approval; and was reissued with the Project Managers approval prior to the post-audit meeting.

9. AP-5.3Q, Paragraph 5.0, Step 20, requires that the Reference Information Base (RIB) Administrator submit draft RIB Information Items to the CCB in accordance with QMP-03-09. During the course of the audit, it was noted that QMP-03-09 was an incorrect reference and that the correct reference was AP-3.3Q. In resolution, YMPO Management initiated and had approved an ICN to revise AP-5.3Q to indicate the correct reference (reference ICN No. 1 to AP-5.3Q).
10. AP-3.6Q, Paragraph 5.3.1.1, requires that the Configuration Information System (CIS) provide the ability to identify, in a Configuration Item (CI) cross-reference, all data that affects a CI. During the audit, it was discerned that this could not be accomplished as the CIS had not been set up to handle all data that effects a CI. Management of YMPO evaluated whether or not the CI cross reference was needed and decided at present time, this information is not required of the CIS. Based on this, ICN No. 3 to AP-3.6Q was approved to delete this requirement.

## 7.0 RECOMMENDATIONS

During the audit, several areas were identified within the YMPO program where there were opportunities for improvement. The following recommendations are offered for YMPO management consideration:

1. During the course of this audit, the CM implementation process was determined to be marginal. This conclusion is substantiated by the number of deficiencies detected within the CM system by the audit team. In addition, it is felt that the CM process that currently exists is cumbersome to implement based on too many procedures, self imposed requirements, and too many process scenarios. Based upon current conditions, two recommendations are provided.

Simplify the CM implementation process by: combining procedures where feasible; reducing self imposed requirements; and amplify the definition of minor change so as to reduce the amount of paper work and personnel required to accommodate change.

Realign the focus of CM to managing configured items first, followed by the associated documentation of that item. Utilize the classification of item process as a baseline for items to be included in the CIS (Technical Baseline).



In follow-up to these recommendations, the thought that must be expressed, is that it appears that the YMPO is expending more on the management of paper than on the management of configured items. The focus of CM must lie with configured items and not in the management of a system that will not serve the end purpose of providing a system that is readily understandable and implementable.

2. In preparation for the audit, the audit team evaluated numerous procedures dealing with the implementation of field work activities. As noted in the CM area, it appears that the process for controlling field activities is also overly complicated based on the nature, complexity and importance of a particular field activity. It is recommended that YMPO review the implementation of field work APs (AP-5.21Q, -5.32Q, -5.48Q and -6.22Q) and combine these APs, as appropriate, to simplify the process.
3. In auditing the implementation of AP-1.18Q by the audit team, several areas within the procedure were noted where it was felt improvement could be realized. These recommendations were discussed with records management personnel during the audit and are included here for further consideration:

Provide a methodology or system of ensuring that Yucca Mountain Site Characterization Project (YMP) personnel who are leaving the project or changing jobs submit in-process records contained in their working files to management for completion or to the LRC for retention.

Reference records which have been previously transmitted to the CRF by placing the accession number within the table of contents, in lieu of submitting the same record numerous times.

## 8.0 LIST OF ENCLOSURES

- Enclosure 1: Audit Team Members and Observers
- Enclosure 2: Personnel Contacted During the Audit
- Enclosure 3: Audit Details
- Enclosure 4: Objective Evidence Reviewed During the Audit
- Enclosure 5: Information Copies of Corrective Action Requests

ENCLOSURE 1

AUDIT TEAM MEMBERS AND OBSERVERS

AUDIT TEAM:

<u>Name</u>	<u>Title/Organization</u>	<u>QA Program/Element Assignment</u>
John S. Martin	Audit Team Leader, YMQAD	3.0
Amelia I. Arceo	Auditor, YMQAD	15.0 and 17.0
Neil D. Cox	Auditor, YMQAD	5.0, 6.0 and 20.0
Sam H. Horton	Auditor, YMQAD	3.0
Robert H. Klemens	Auditor, YMQAD	4.0 and 7.0
John R. Matras	Auditor, YMQAD	3.0 and 20.0
Thomas Vandel	Auditor, YMQAD	20.0

OBSERVERS:

Donald G. Horton	DOE, Director, Office of Quality Assurance
John Gilray	U. S. Nuclear Regulatory Commission (NRC)
Bruce Mabrito	Director, Quality Assurance Southwest Research Institute (SRI)/NRC
Engelbrecht Von Tiesenhausen	Representative, Clark County

## ENCLOSURE 2

### PERSONNEL CONTACTED DURING THE AUDIT

<u>Name</u>	<u>Organization/Title</u>	<u>Pre-Audit</u>	<u>Contacted During Audit</u>	<u>Post-Audit</u>
Adkins, H. E.	SAIC/ERP	X		
Arceo, A. I.	YMQAD, Auditor	X		X
Barton, R. V.	YMPO, Tech. Manager	X	X	X
Beall, K.	SAIC/FTS, APM	X		
Bjerstedt, T.	YMPO, Geologist, RSED		X	
Blanchard, M.	YMPO, Deputy Project Mgr.	X	X	X
Boak, J.	YMPO, Branch Chief, TA			X
Bostian, R. S.	SAIC, APM			X
Bowlinger, S. K.	M&O, Group Leader, DRC		X	
Caselli, T.	M&O, Records Spec.		X	
Cox, N. D.	YMQAD, Auditor	X		X
Crawley, R.	YMPO, Phys. Sci.	X	X	
Cruz, B.	M&O, Manager, Specialty Eng.	X	X	X
Diaz, M. R.	YMPO/YMQAD, QA Eng.			X
Distel, W.	M&O, Project Geologist		X	
Dixon, W. R.	YMPO, Director, POCD	X	X	
Dyer, R. J.	YMPO, Director, RSED	X	X	X
Ebner, H.	M&O, Manager, Document Control		X	
Estella, J. W.	SAIC, Staff Adviser	X	X	X
Gandi, J. G.	YMPO, IRM Mgr.	X	X	X
Gertz, C. P.	DOE/OGD/YMPO, Project Mgr.	X	X	X
Gil, A. V.	YMPO, Staff RSED	X	X	
Gilray, J.	NRC, Observer	X		X
Grant, T.	SAIC, JPRC		X	
Harper, J. B.	SAIC, Manager T&MSS QA			X
Harris, D.	YMQAD		X	
Helms, R. G.	SAIC, Senior Staff	X	X	X
Horton D. G.	DOE, Director, OQA	X		X
Horton S. H.	YMQAD, Auditor	X		X
Houston, C. J.	M&O, FCCB Secretary		X	
Iorii, V.	YMPO, Project Control Mgr.	X	X	X
Jerome, K.	M&O, Records Clerk		X	
Jiu, R.	M&O, CM Support		X	
Jones, S.	YMPO, Branch Chief, Reg. Inter.	X		X
Keener, K.	M&O, Manager, DCC		X	
Kettell, R. A.	YMQAD		X	
Klemens, R. H.	YMQAD, Auditor	X		X
Lee, L.	M&O, Manager, Records	X	X	X
Mabrito, B.	SRI/NRC, Observer	X		
Martin, J. S.	YMQAD, ATL	X		X
Matras, J. R.	YMQAD, Auditor	X		X

PERSONNEL CONTACTED DURING THE AUDIT  
(Continuation Page)

<u>Name</u>	<u>Organization/Title</u>	<u>Contacted</u>		
		<u>Pre-Audit</u>	<u>During Audit</u>	<u>Post-Audit</u>
McCarthy, R.	SAIC, Manager, Training			X
Mikkelson, D. A.	M&O, Staff, CCB	X	X	
Moore, S. L.	M&O, Staff PPD	X		X
Mukherjee, J.	YMPO, General Engineer		X	
Newbury, C. M.	YMPO, Act. Dep. Dir. RSED	X	X	
Pendelton, M.	M&O, Sr. Project Geologist		X	
Petrie, E. H.	YMPO, Branch Chief, ESF		X	X
Phillips, G.	YMPO, Contracting Officer	X	X	
Rehkop, C.	YMPO, Admin. Officer	X	X	X
Richard, J.	M&O, Staff, CCB		X	
Roberts, T.	M&O, Records Spec.		X	
Roberts, P.	M&O, Project Office Liaison		X	X
Rodgers, R.	M&O, Coordinator	X		
Royer, D.	YMPO, Branch Chief, Systems		X	
Savino, J.	SAIC/T&MSS, Sr. Seismologist		X	
Simecka, W. B.	YMPO, Director, EDD	X	X	
Simmons, A. M.	YMPO, Tech. Data. Mgr. RSED	X	X	X
Smith, S.	SAIC, Manager, Test and Planning		X	
Spence, R. E.	YMQAD, Director, YMQAD	X	X	
Sullivan, T.	YMPO, Phys. Sci. RSED		X	
Thompson, M.	M&O, CM support	X		
Tiesenhansen, E. V.	Clark Cnty., Observer	X		X
Valentine, M.	YMPO, Gen. Eng.	X		X
Vandel, T. E.	YMQAD, Auditor	X		X
Verna, B.J.	YMPO/EDD, Gen. Eng.	X	X	X
Williams, D. R.	YMPO, Act. Branch Chief SI	X	X	X
Wilson, W.	YMPO, Manager, Site	X	X	X
Zimmerman, J.	M&O, Manager, PPD	X	X	X

APM = Assistant Project Manager  
DRC = Document Records Center  
EDD = Engineering and Development Division  
ERP = Environmental and Regional Programs  
ESF = Exploratory Studies Facility  
FCCB = Field Change Control Board  
FTS = Field Test Support  
IRM = Information Resource Manager  
JPRC = Job Package Records Coordinator  
OGD = Office of Geologic Disposal  
PPD = Plans and Procedures Department  
POCD = Project Office Control Division  
RSED = Regulatory and Site Evaluation Division  
SI = Site Investigations Branch  
TA = Technical Analysis Branch  
T&MSS = Technical and Management Support Services

## ENCLOSURE 3

### AUDIT DETAILS

The enclosure contains a detailed summary of the evaluations performed by the programmatic auditors. A list of objective evidence reviewed is contained in Enclosure 4 including the full document identification number, revision number, and title for plans and procedures identified below.

#### QA Program Element 3.0, "Design Control"

The evaluation of this QA Program element was accomplished by auditing the following activities: Project CCB Process, Change Control Process, Field Change Control Process, CM, Interface Control, Hold Control, Preparation and Submittal of As-Built Drawings and Specifications, and Document Reviews Performed by Engineering and Development.

Presently, YMPO describes and implements the CM system through the use of six procedures: QMP-03-09, AP-3.3Q,-3.5Q,-3.6Q,-5.20,-5.24. Through the utilization of these procedures YMPO manages the Project CCB, Change Control, Field Change Control, CM, Hold Control, and Preparation and Submittal of As-Built Drawings and Specifications.

In evaluation of the CM system, 20 Change Requests, 22 FCRs, four JPs, six Program Level Documents were examined along with the processes that initiated these documents to determine overall compliance to the procedures listed above. The results of the evaluation included the initiation of three CARs YM-93-001, YM-93-002, and YM-93-003. In addition, four other deficiencies were identified during the audit process. These deficiencies were corrected prior to the post-audit exit (reference Item Nos. 3, 4, 5, and 10 in Section 6.2 of the audit report).

In examination of each of these deficiencies it appears that they are unrelated, and as such indicate that no major programmatic problem exists. Also, it does not appear that the end product has been affected at present time. However, as a result of this audit, implementation of the CM system appears marginal and the audit team has recommended that the CM system be evaluated by YMPO management. These recommendations are included in Section 7.0 of the audit report.

Interface control was evaluated to determine compliance with AP-5.19Q. This examination included the review of 15 IMOU's to determine compliance to procedural prerequisites. The results of this review identified one deficiency which resulted in a procedure change and is described in Section 6.2, Item No. 7, of the audit report.

Document reviews performed by the EDD are performed to accept the final design documents as issued by the A/E and are accomplished using BTP-EDD-002. Examination of four drawings and one specification was performed to determine compliance. The results of this examination indicate that EDD is satisfactorily implementing BTP-EDD-002.

Overall implementation of QA Program Element 3.0 was found to be satisfactory. However, in regards to implementation of the CM system, it was determined to be marginal.

#### QA Program Element 4.0, "Procurement Document Control"

Evaluation of this QA Program element was based on questioning key personnel and the examination objective evidence to determine compliance with selected requirements taken from implementing procedures dealing with procurement, technical directives, JPs, and Work Requests.

In interviews with the YMPO Contracting Officer, it was learned that, to date, the only procurements made by YMPO since the last audit of May 1992, have been for non-quality affecting work. As such, implementation of QMP-04-02 could not be determined.

Discussions with the Assistant Deputy Manager relative to technical directives letters (TDLs) and technical directives (TDs), revealed that QMP-04-03 was being implemented by YMPO. To verify implementation, a sample of 28 TDs and TDLs were reviewed for procedural compliance. Of this number, one quality-affecting deficiency was found as previously discussed in Section 6.2, Item 8 of this audit report. Based upon the sample taken and follow-up by YMPO management, it was determined that this condition was isolated in nature and warranted no further action at this time.

A review of JPs was accomplished to determine compliance with AP-5.21Q. In performing this review five JPs were examined for JP Log maintenance, format in accordance with the JP outline, identification of appropriate personnel, stipulation of quality requirements, and required approvals for the point in time in which each document existed. As a result of these reviews, implementation was found to be in compliance with the approved procedure.

Discussions with the YMPO Site Manager revealed that at the present time, AP-5.39Q has not been implemented.

Based on the above, the audit team has determined that overall implementation of QA Program Element 4.0 is satisfactory for the procedures that have been implemented to date.

#### QA Program Elements 5.0, "Instructions, Procedures, Plans, and Drawings" and 6.0, "Document Control"

QA Program Elements 5.0, "Instructions, Procedures, Plans, and Drawings," and 6.0, "Document Control," were audited simultaneously. The working files for a total of 24 new, revised, or changed documents were reviewed for compliance with procedural requirements for accomplishing document actions. The procedures for controlling the activities were in transition. Prior to July 1, 1992, the principal procedures for QA Program Element 5.0 and part of QA Program Element 6.0 were AP-6.1Q, Revision 3, with ICN No. 1, and QMP-06-04, Revision 4, with ICNs 1, 2, and 3. After July 1, 1992, the following Quality Assurance Procedures (QAP) became effective: QAP 3.5, QAP 5.1, and QAP 6.2.

Of the 24 documents previously mentioned, 20 document actions were under the implementation of QMP-06-04 and three were under the implementation of QAP 6.2. One document (AP-5.28Q) was canceled under procedure QMP-06-04. Each document action was found to be in compliance with the applicable procedural requirements.

The control of project forms was reviewed by determining compliance with AP-1.17Q. Forms manuals were examined in three locations: the Plans and Procedures Department (PPD) Reference Library, the YMPO Library, and the Training Center Library. In addition, the process of forms development, change, and distribution was observed. A sample of five APs (listed in Enclosure 4) were found to identify the correct forms to be used.

The implementation of AP-1.5Q was investigated. It was found that each issued document in the sample of 24 were reviewed and approved. A computer based tracking system identified the appropriate document holders and their responses to transmittal notices (forms) as required by procedure. Two sets of Quality Management Procedures (QMP) manuals in the QA Support Group library and the YMPO library, were found to be up-to-date.

No implementation of procedures QAP 3.5 and QAP 5.1 had been completed; therefore, compliance could not be determined.

Overall, implementation of QA Program Elements 5.0 and 6.0 were found to be satisfactory.

#### QA Program Element 7.0, "Control of Purchased Items and Services"

Interviews with the Director, YMQAD revealed there has been no implementation in this area. No new or modified procurements for services have taken place since the last YMPO audit (May of 1992). Further, discussions with the author of the new procedure for performing supplier evaluations and maintaining the OCRWM Qualified Suppliers List revealed that QMP-07-04 is being replaced, and a draft of the new replacement procedure is currently being reviewed at OCRWM Headquarters.

Based on the above, implementation of QMP-07-04 could not be determined during the course of this audit.

#### QA Program Element 15.0, "Control of Nonconforming Items"

AP-5.27Q and QMP-15-01 have not been implemented to date; therefore, implementation of this element could not be determined during the course of this audit.

#### QA Program Element 17.0, "Quality Assurance Records"

Verification of implementation of QA Program Element 17.0 was accomplished by the performance of personal interviews and documentation reviews.

Personal interviews with Division Directors and Record Sources (RSs) were conducted to determine their cognizance of procedural requirements and responsibilities as delineated in AP-1.18Q. These interviews provided positive evidence of an overall working knowledge relative to requirements of RSs.

Documentation reviews consisted of a review of records and records packages identified in Enclosure 4 of this report to verify that RSs had completed, prepared, protected, submitted, and corrected record discrepancies, if required, in accordance with AP-1.18Q. Except for the deficiencies as previously discussed in Section 6.2, Item Nos. 1 and 2 and those identified on CAR-YM-93-004, AP-1.18Q is being satisfactorily implemented.

CAR YM-93-004 is being issued as a significant condition adverse to quality. This is as a result of illegible records within the records system being previously identified as a deficient condition within CAR YM-91-065.

While it has always been an upper-tier requirement for records to be legible, it was realized that certain "one-of-a-kind records," with portions which were illegible, should be retained. This was only to be utilized for unique records where these illegible portions could not be transcribed or enhanced, and it was thought that those portions which were legible would be of benefit to the YMPO. However, in allowance of a system to provide a means by which these unique records could be transmitted to the CRF, it has become standard practice among DOE and the participants to abuse the system.

In the conduct of the audit, it was found that the statement, "I have reviewed this record/records package and it is adequate for its intended purpose. All blanks are intentional. Any illegible, uncorrected, or incomplete information does not impact future, in-process, or completed work," is being utilized "carte blanche" for records and not just for those unique "one-of-a-kind records" which contained deficiencies which would not meet the requirements of the QAPD.

Three Records Package Segments (RPSs) generated in accordance with AP-6.22Q, were verified at the Field Operations Center (FOC) to ensure that protection is provided for the RPSs while being stored at the DRC. The DRC presently utilizes a two-hour fire rated vault where the RPSs are retained until preparation of the final records packages. Access to records is limited to those personnel listed on the Access Authorization List, dated 9/16/92. The DRC maintains a DRC RPS Log which identifies the DRC number, date received, RPSs title, Record Source and organization who transmitted the RPSs and is responsible for the final package. The RPSs are identified by utilizing a unique DRC number and segregated into individual folders. At the time of this audit, 19 tracking numbers had been assigned; however, there has been no completed JP records packages to date. Based on this, it was determined that there is insufficient implementation of AP-6.22Q to determine satisfactory implementation.

In addition to the above, during the course of the audit there were several areas where it was believed that the records management system could be improved or enhanced. These recommendations are detailed within Section 7.0 of this audit report.



Based upon personnel interviews and the objective evidence reviewed during the audit, it is determined that other than the significant deficiency identified, QA Program Element 17.0 is being implemented in a satisfactory manner.

#### QA Program Element 20.0, "Scientific Investigation"

This QA Program element was evaluated by auditing the following activities: study plans, test planning, technical assessments, evaluation of ongoing activities and the management of the technical data bases. In addition, interviews of associated personnel were conducted. An attempt was made to audit Peer Review activity; however, no quality-affecting reviews had been accomplished since the last audit.

The review and approval of the study plan process was evaluated by reviewing an approved study plan. Documentation of the review and comment process included headquarters assigned reviewers whose handling and resolution differed from that as prescribed by the requirements of procedure AP-1.10Q. It was, however, determined that headquarters procedurally imposed practices, were being followed and considered contributory to an acceptable review for study plans. The study plan is now complete, has been approved and authenticated as a QA record, and placed in the LRC. The review comment and resolution activities resulted in a large number of comments and included a resolution meeting; the process results appear adequate, procedurally controlled, and culminated in an acceptable document.

With the exception of the corrected deficiency noted within Section 6.2, Item No. 6 implementation of AP-1.10Q was found to be satisfactory.

AP-5.32Q implementation was verified by review of TPP 92-02 for the drilling of Vertical Seismic Profile (VSP) Unsaturated Zone (UZ)-16 borehole which was found to be prepared, reviewed and approved in accordance with AP-5.32Q. Along with the TPP review, evaluation of procedure BTP-RSE-001 was also performed using the same VSP UZ-16 Borehole package. The results of this review found the implementation of BTP-RSE-001 to be acceptable.

Technical assessment was evaluated utilizing QMP-02-08. A review of a completed and authenticated records package titled, "Data Qualification Erosion Rates at Yucca Mountain," was performed. Review of the records package for the documentation and resolution of comments demonstrated satisfactory compliance to QMP-02-08.

AP-5.1Q, -5.2Q, and -5.3Q verification was performed relative to YMPO responsibilities. Presently, YMPO responsibilities for these procedures are primarily high level management with the participants performing the work functions. As such, questions pertaining to the overall process implementation were presented. As a result of this line of questioning, one procedural deficiency was found relating to an inaccurate procedural reference and is noted with Section 6.2, Item No. 9.

Overall implementation of QA Program Element 20.0 was found to be satisfactory except for the areas as noted.

ENCLOSURE 4

OBJECTIVE EVIDENCE REVIEWED DURING THE AUDIT

The following is a list of supporting material evaluated for compliance with procedures:

QA Program Element 3.0, "Design Control"

Procedures utilized:

QMP-03-09, Rev. 3, ICN Nos. 1, 2, and 3, "Project Change Control Board Process"  
AP-3.3Q, Rev. 4, "Change Control Process"  
AP-3.5Q, Rev. 1, "Field Change Control Process"  
AP-3.6Q, Rev. 0, ICN Nos. 1, 2, and 3, "Configuration Management"  
AP-5.19Q, Rev. 2, ICN Nos. 1 and 2, "Interface Control"  
AP-5.20Q, Rev. 0, ICN Nos. 1 and 2, "Hold Control"  
AP-5.24Q, Rev. 0, "Preparation and Submittal of As-Built Drawings and Specifications"  
BTP-EDD-002, Rev. 1, "Criteria for Document Reviews Performed by the Engineering and Development Division"

Documents Reviewed:

Change Requests Identification Numbers (I.D. Nos.)

92/048	92/059
92/088	92/149
92/050	92/107
92/077	92/101M
92/051	92/098
92/019	92/121
91/060	91/112
92/093	91/097
91/100	92/104
92/106	92/004

Field Change Requests I.D. Nos.

92-113	92-042
92-114	92-072
92-137	92-099
92-144	92-126
92-092	92-117
92-097	92-119

92-089	92-136
92-011	92-115
92-053	92-078
92-057	92-091
92-060	92-148

Job Packages I.D. Nos.

91-9	92-3
92-7	92-8

Project Level Documents

YMP/CM-0019, Dated 7/2/92, "Exploratory Studies Facility Design Requirements"  
YMP/CC-0016, Rev. 4, "Records Management Plan"  
YMP/CM-007, Rev. 7, "Technical Requirements for Yucca Mountain Site Characterization Project  
Surface Based Testing"  
YMP/CC-0009, Rev. 4, "Design Plan"  
YMP/CM-0011, Rev. 8, "Site Characterization Program Baseline"  
YMP/CC-0001, Dated 9/1/92, "Work Breakdown Structure and Dictionary"

Interface Memorandum of Understanding I.D. Nos.

330019	630001
330001	330002
330009	330013
330014	330015
330016	660003
660001	660017
660020	630004
330011	

Drawings

YMP-025-9-CIVIL-PL102, Rev. 0  
YMP-025-9-CIVIL-GP102, Rev. 0  
YMP-025-9-CIVIL-PR102, Rev. 0  
YMP-025-9-CIVIL-PR103, Rev. 0

Specification

YMP-025-9-SP07, Rev. 0

Other Documents Reviewed:

Change Request Status Log

CCB Register

CAR YM-92-055

Document Action Request No. 671

RSN BFD-001, Rev. 0, Basis for Design

QA Program Element 4.0, "Procurement Document Control"

Procedures utilized:

QMP-04-02, Rev. 0, ICN No. 1, "Yucca Mountain Project Office Procurement Actions"

QMP-04-03, Rev. 0, "Technical Directives"

AP-5.21Q, Rev. 3, ICN No. 1, "Field Work Activation"

AP-5.39Q, Rev. 0, "Technical Field Work Request"

Documents Reviewed:

Technical Letters of Direction/Technical Directives I.D. Nos.

92-1707	92-1305
92-4490	92-5423
92-2905	92-4484
92-1266	92-5429
92-3062	92-4504
92-2966	92-5445
92-3405	92-5034
92-4528	92-5557
92-4369	92-4475
92-5326	92-4535
92-1307	92-4502
92-5410	92-1320
92-1270	92-4487
92-5422	92-1580

Transmittal Letters

EDD:EHP-1320	EDD:JMR-1580
EDD:JMR-1582	EDD:DHG-2776
YMP:RAL-1307	YMP:RAL-1270
YMP:RAL-1305	YMP:RAL-1266
YMP:RAL-4369	EDD:AVG-4535
YMP:AVG-4528	EDD:JTG-5326
RSED:JTG-5326	RSED:AMS-2966
YMP-RVB-5429	YMP:ECR-5410

Job Packages I.D. Nos.

92-1	92-4
92-5	92-8
92-12	

Procurement Documents

Interagency agreement with the Bureau of Reclamation (Department of the Interior), dated 8/1/92  
Interagency agreement with the Bureau of Land Management (Right of Way Agreement), effective 10/31/92  
Updated Science Applications International Corporation Statement of Work to remove work which has been transitioned to the M&O, dated 6/1/92  
Transfer from Department of Energy Chicago-Contract with the University of Texas, Bureau of Economic Geology, for the curation of core taken under other programs outside Yucca Mountain, dated 8/14/92

Other Documents Reviewed:

Memorandum on Removal of QA Grading References, dated 7/29/92  
QA Records Transmittal/Receipt Acknowledgement, on Interagency Agreement No. DE-AI08-88ET44802, dated 6/4/92

QA Program Element 5.0, "Instructions, Procedures, Plans, and Drawings"

Procedures utilized:

AP-6.1Q, Rev. 3, ICN Nos. 1, 2, and 3, "Project Office Document Development, Review, Approval and Revision Control"  
QMP-06-04, Rev. 4, ICN No. 1, "Project Office Document Development, Review, Approval and Revision Processes"  
QAP 3.5, Rev. 2, "Technical Document Preparation"

QAP 5.1, Rev. 4, "Quality Assurance Program Procedures"  
QAP 6.2, Rev. 0, "Document Review"

**Documents Reviewed:**

QMP-02-01, Rev. 6, "Project Office Indoctrination and Qualification Training"  
QMP-02-09, Rev. 1, "Development and Conduct of Training," ICNs 1, 2, and 3  
QMP-06-04, Rev. 4, "Project Office Document Development, Review, Approval, and Revision Processes"  
ICNs 1, 2, and 3  
AP-1.10Q, Rev. 5, "Preparation, Review, Approval and Revision of SCP Study Plans"  
ICN 1  
AP-1.18Q, Rev. 1, "Records Management: Las Vegas Record Source Responsibilities"  
ICN 1  
AP-5.1Q, Rev. 2, "Control and Transfer of Technical Data on the Yucca Mountain Site Characterization Project," ICN 1  
AP-5.2Q, Rev. 3, "Technical Information Flow To and From the Yucca Mountain Site Characterization Project Technical Data Base"  
AP-5.19Q, Rev. 2, "Interface Control," ICN 1  
AP-5.28Q, Rev. 2, "Quality Assurance Grading" (cancellation of procedure)  
AP-5.32Q, Rev. 2, "Test Planning and Implementation Requirements," ICNs 1, 2, and 3  
AP-6.3Q, Rev. 1, "Procedure for Requesting Samples for Examination at Yucca Mountain Site Characterization Project Sample Management Facility"  
AP-6.4Q, Rev. 2, "Procedure for the Submittal, Review, and Approval of Requests for Yucca Mountain Project Geologic Specimens"  
AP-6.22Q, Rev. 0, "Job Package Completion and Records"  
BTP-QAD-001, Rev. 0, "Document Reviews," ICN 1  
BTP-SMF-008, Rev. 3, "Field Logging, Handling, and Documenting Borehole Samples"  
BTP-SMF-013, Rev. 1, "Staging, Packaging, and Documenting Neutron-Access Borehole Samples"  
YMP/CC-0016 Rev. 4, "Records Management Plan"  
YMP/CM-0007, Rev. 7, "Technical Requirements for the Yucca Mountain Site Characterization Project Surfaced Based Testing"  
YMP/CM-0011, Rev. 7, "Site Characterization Program Baseline"  
YMP/CM-0017, Rev. 1, "The Yucca Mountain Mined Geologic Disposal System Description"  
YMP/CM-0018, Rev. 1, "Yucca Mountain Mined Geologic Disposal System Repository Design Requirements"  
YMP/CM-0019, (Dated 7/2/92), "Exploratory Studies Facility Design Requirements"  
YMP/CM-0020, Rev. 1, "Yucca Mountain Mined Geologic Disposal System Requirements"  
YMP/92-25, Rev. 0, "Assessment Team Classification of Items Management Plan"

QA Program Element 6.0, "Document Control"

Procedures utilized:

AP-1.5Q, Rev. 6, ICN No. 1 and 2, "Issuance and Maintenance of Controlled Documents"  
AP-1.17Q, Rev. 1, ICN No. 1, "Forms Control"

Quality Management Procedures Manuals reviewed at:

YMPO Library, No. 18  
YMQAD Support Library, No. 63

Forms Manuals Reviewed:

PPD Reference Library, No. 57  
YMPO Library, No. 2  
Training Center Library, No. 11

Correct Forms Verified for Procedures

AP-1.5Q, Rev. 6, ICN Nos. 1 and 2, form No. YMP-061-R1, "Controlled Document Issuance Authorization, dated 7/24/92

AP-1.18Q, Rev. 1, ICN No. 1, form No. YMP-091,R1, "Transmittal/Receipt Acknowledgement" with Continuation Sheet, dated 8/3/92

AP-3.3Q, Rev. 4, form Nos. YMP-024-R3, "Change Request," dated 10/30/91; YMP-031-R0, "Change Impact Checklist," dated 4/5/91; YMP-036-R0, "Change Documentation Continuation Page," dated 4/23/91; and, YMP-025-R2, "Affected Document Notice" with Continuation Page, dated 10/30/91

AP-5.1Q, Rev. 2, ICN No. 1, form No. YMP-023-R1, "Technical Data Information Form," 4 Pages, dated 3/20/92

AP-6.1Q, Rev. 3, ICN No. 1, form Nos. YMP-108-R0, "Document Action Request," dated 7/1/92; YMP-007-R3, "Interim Change Notice" with Continuation Sheet, dated 7/1/92; YMP-054-R1, "Document Approval Sheet," dated 7/1/92; YMP-109-R0, "Document Review Record," dated 7/1/92; and YMP-110-R0, "Document Review Record Comment Sheet," dated 7/1/92

**QA Program Element 7.0, "Control of Purchased Items and Services"**

Procedures utilized:

QMP-07-04, Rev. 2, "Supplier Evaluation/Qualified Supplier List"

**QA Program Element 15.0, "Control of Nonconforming Items"**

Procedures utilized:

AP-5.27Q, Revision 1, "Control of Nonconforming Items"

QMP-15-01, Revision 2, ICN No.1, "Control of Nonconformances"

**QA Program Element 17.0, "Quality Assurance Records"**

Procedures utilized:

AP-1.18Q, Rev. 1, ICN No. 1, "Records Management: Las Vegas Record Source Responsibilities"

AP-6.22Q, Rev. 0, "Job Package Records Package"

AP-5.21Q, Rev. 3, ICN No. 1, "Field Work Activation"

AP-5.32Q, Rev. 2, ICN Nos. 1, 2, and 3, "Test Planning and Implementation Requirements"

AP-1.10Q, Rev. 5, ICN Nos. 1 and 2, "Preparation, Review, Approval, and Revision of SCP Study Plans"

The following QA Record/Records Packages were reviewed:

RSED:USC-5559, dated 9/11/92, and RSED:USC-5819, dated 9/28/92, "Status of Test Planning Packages (Site Characterization Plan:NA)"

NNA.920420.0026, and NNA.920420.0027, TPP-92-2, Drilling of VSP Drill Hole UZ-16

NNA.920810.0001, Job Package JP 92-3, Drilling of VSP Drill Hole UZ-16

Job Package Records List, dated 7/9/92, Drilling of VSP Drill Hole UZ-16 Job Package JP 92-3

NNA.920320.0002, NNA.920320.0003, and NNA.920728.0078, Job Package JP 92-4, Drill Pad and Access Road Construction for VSP Drill Hole UZ-16

NNA.920928, TPP 92-09, Characterization of the Saturated-Zone Ground-Water Flow System, C-Well Complex, Including Supporting Correspondence

NNA.920807.0076, Job Package JP 92-12, Quaternary Faulting within the Site Area Job Package 92-12 Job Package Records List, dated 8/13/92



NNA.920807.0066, Study Plan 8.3.1.17.4.5, Detachment Faults at or Proximal to Yucca Mountain

NNA.920911.0243, Heater Test Duration Necessary to Meet Mission 2001 Plan Objectives

NNA.920420.0051, AP-1.18Q, Revision 0, "Records Management: Las Vegas Record Source Implementation"

**Records Package Segments:**

RPS.0385, TPP 92-03 including BTP-RSE-001 Evaluation Record Package

RPS.0349, Preparation of JP 91-2, Trench 14

RPS.0357, Preparation of JP 91-9

**Records Package Segments Reviewed at DRC:**

DRC-011, JP 92-12

DRC-009, JP 92-3

DRC-003, JP 92-5

**Completed Transmittal/Receipt Acknowledgement Forms:**

Change Request 92/096, dated 9/17/92

Transmittal of Technical Directive Participation in the Effort to Determine the Heater Test Duration Necessary to Meet Mission 2001 Plan Objectives, 9/1/92

RSN Technical Directive No. RSN-92-005, 8/17/92

Quality Assurance Procedure QAP-6.2, Reviews letter dated 8/3/92

Cancellation of QMP 06-04 and Review of YMPO Branch Technical Procedure BTP-EDD-003, Rev. 0, 8/3/92

Approved Test Planning Package TPP 92-09, 9/18/92

**QA Program Element 20.0, "Scientific Investigation"**

**Procedures utilized:**

AP-1.10Q, Rev. 5, "Preparation, Review, and Approval of SCP Study Plans"

AP-5.32Q, Rev. 2, "Test Planing and Implementation Requirements"

AP-5.1Q, Rev. 2, "Control and Transfer of Technical Data on the Yucca Mountain Site Characterization Project"

AP-5.2Q, Rev. 3, "Technical Information Flow To and From the Yucca Mountain Site Characterization Project Technical Data Base"

AP-5.3Q, Rev. 1, "Information Flow Into The Project Reference Information Base"

BTP-RSE-001, Rev. 0, "Evaluation of Ongoing Activities"  
QMP-02-08, Rev. 1, "Technical Assessment Review"  
ILP-22.3.1, Rev. 1, "DOE/HQ Review of Study Plans"

**Documents Reviewed:**

Study Plan 8.3.1.17.4.5, Rev. 0, "Detach Faults at or Proximal to Yucca Mountain"  
Technical Assessment Report No. SC.BWD.8/92-103, "Data Qualification-Erosion Rates at Yucca Mountain"  
Reference Information Base, Version 4, Revision 6  
YMP-053-R0, Rev. 2, "YMP Technical Data Management Plan"  
YMP/CC-0016, Rev. 4, "YMP Records Management Plan"  
Project Technical Data Catalog, June 30, 1992  
YMP/91-39, "Yucca Mountain Site Characterization Project Technical Data Base Handbook"  
Letter, Gertz to Loux, State of Nevada, 2/27/92, Data Transmittal Package  
YMP/92-26, Rev. 0, "Yucca MSCP Technical Data Management Transition Plan Draft"  
YMP-SR-92-021, Quality Assurance Surveillance Report of SNL Data Submittals into the Technical Data Base  
YMP/91-37, Rev. 0, Preliminary SAR for the "YMP Exploratory Studies Facilities and Site Characterization Program,"  
RIB 1.2.10, Site Characteristics, Geophysics, In Situ Stress Near Exploratory Studies Facility

**Technical Data Information Forms**

TM000000001992.001	TM000000001992.004
GS920408312272.002	GS910208312312.003
GS910508312312.005	GS911208312271.011
GS911208312293.001	GS920208312312.005

**Test Planning Package I.D. No.**

92-02

ENCLOSURE 5

INFORMATION COPIES OF CORRECTIVE ACTION REQUESTS

ORIGINAL  
THIS IS A RED STAMP

<b>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</b>		8 CAR NO.: <u>YH-93-001</u> DATE: <u>10/6/92</u> SHEET: <u>1</u> OF <u>1</u> QA
<b>CORRECTIVE ACTION REQUEST</b>		
1 Controlling Document AP-3.50, Revision 1		2 Related Report No. YH-92-24
3 Responsible Organization WFO	4 Discussed With C. Gerts/W. Wilson/B. Cruz	
5 Requirement: AP-3.50, Revision 1, Paragraph 4.0, Step 4 (A), requires that if a change is scientific, design or quality-affecting, that a technical evaluation be performed by the affected participant (i.e., WFO or other participant) per the participants' procedure or the requirements identified within Attachment 4 of AP-3.50.		
6 Adverse Condition: Contrary to the above, during Audit YH-92-24, no objective evidence could be produced to show that the technical evaluations had been performed for the following Field Change Requests (FCRs): <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div>FCR 92/089 FCR 92/058</div> <div>FCR 92/092 FCR 92/061</div> </div>		
8 Does a significant condition adverse to quality exist? Yes ___ No <u>X</u> If Yes, Circle One: A B C	10 Does a stop work condition exist? Yes ___ No <u>X</u> ; 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: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input type="checkbox"/> Root Cause Determination		
13 Recommended Actions: Identify the remedial actions to be taken to correct the deficiencies note in Block 6. Investigate the program processes, activities or documentation to determine the extent and depth of similar conditions as noted in Block 6. Identify these deficiencies and provide the measures to correct them.		
7 Initiator Sam E. Norton <i>Sam Norton</i> Date <u>10/6/92</u>	14 Issuance Approved by: QADD <i>[Signature]</i> Date <u>10/6/92</u>	
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	

ENCLOSURE 5

INFORMATION COPIES OF CORRECTIVE ACTION REQUESTS  
(Continuation)

ORIGINAL  
THIS IS A RED STAMP

<b>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</b>		6 CAR NO.: <u>YM-92-002</u> DATE: <u>10/6/92</u> SHEET: <u>1</u> OF <u>1</u> QA
<b>CORRECTIVE ACTION REQUEST</b>		
1 Controlling Document AP-5.24Q, Revision 0		2 Related Report No. YM-92-24
3 Responsible Organization YMP	4 Discussed With C. Gertz/W. Wilson/B. Cruz	
5 Requirement: AP-5.24Q, Revision 0, Paragraph 4.6, Step 5 and Step 5 Note, require the submittal of as-built drawings and specifications from the affected participants to the CCB for incorporation into the technical baseline. In addition, the CCB is required to notify the Architect Engineer (A/E) of the CCB's acceptance of as-built drawings and specifications, and the CCB Secretary is required to send as-builts to the LRC and the DCC.		
6 Adverse Condition: Contrary to the above, during Audit YM-92-24, the following deficient conditions were identified: <ol style="list-style-type: none"> <li>1. Trench 14 as-built drawings and specifications were submitted to the CCB but were not shown in the technical baseline as being as-built.</li> <li>2. The CCB did not notify the A/E of the CCB's acceptance of Trench 14 as-built drawings and specifications.</li> <li>3. The Trench 14 as-built drawings and specifications were not sent to the LRC (however, investigation has provided evidence that they were sent to the DCC).</li> </ol>		
9 Does a significant condition adverse to quality exist? Yes <u>  </u> No <u>X</u> If Yes, Circle One: A B C	10 Does a stop work condition exist? Yes <u>  </u> No <u>X</u> ; 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: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input type="checkbox"/> Root Cause Determination		
13 Recommended Actions: Identify the remedial actions to be taken to correct the deficiencies noted in Block 6. Investigate the program processes, activities or documentation to determine the extent and depth of similar conditions as noted in Block 6. Identify these deficiencies and provide the measures to correct them.		
7 Initiator Sam H. Norton <i>Sam H. Norton</i> Date <u>10/04/92</u>	14 Issuance Approved by: QADD <i>R.E. Lopez</i> Date <u>10/18/92</u>	
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	

ENCLOSURE 5

INFORMATION COPIES OF CORRECTIVE ACTION REQUESTS  
(Continuation)

<b>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</b>		<b>THIS IS A RED STAMP</b>
<b>CORRECTIVE ACTION REQUEST</b>		8 CAR NO. <u>YH-93-003</u> DATE <u>10/6/92</u> SHEET <u>1</u> OF <u>1</u> QA
1 Controlling Document AP-3.6Q, Revision 1		2 Related Report No. YMP-92-24
3 Responsible Organization NEO	4 Discussed With C. Gerts/B. Cruz	
5 Requirement: AP-3.6Q, Revision 1, Paragraph 3.1.3.2 requires that data that has not been (1) verified or (2) validated per NUREG 1298 or (3) is dependent on software that has not been validated, is identified and tracked in the same manner as to be determined data (TBD).  Paragraph 3.1.3.1 requires that to be determined data (TBD) must have a scheduled resolution date and be tracked in a log associated with the document which contains the data to be verified.		
6 Adverse Condition: Contrary to the above; Table 1 (page TBV-3) of Document YMP/CH-0006, Revision 2, does not delineate a scheduled resolution of data to be verified.		
9 Does a significant condition adverse to quality exist? Yes <u>No</u> X If Yes, Circle One: A B C	10 Does a stop work condition exist? Yes <u>No</u> 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: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input type="checkbox"/> Root Cause Determination		
13 Recommended Actions: Identify the remedial actions to be taken to correct the deficiency note in Block 6. Investigate the program processes, activities or documentation to determine the extent and depth of similar conditions as noted in Block 6. Identify these deficiencies and provide the measures to correct them.		
7 Initiator Sam E. Horton <i>Sam Horton</i> Date <u>10/6/92</u>	14 Issuance Approved by: OADD <i>PC. Palmer</i> Date <u>10/6/92</u>	
15 Response Accepted QAR Date	16 Response Accepted OADD Date	
17 Amended Response Accepted QAR Date	18 Amended Response Accepted OADD Date	
19 Corrective Actions Verified QAR Date	20 Closure Approved by: OADD Date	

ENCLOSURE 5

INFORMATION COPIES OF CORRECTIVE ACTION REQUESTS  
(Continuation)

ORIGINAL  
THIS IS A RED STAMP

<b>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</b>		8 CAR NO.: <u>YM-92-004</u> DATE: <u>10/6/92</u> SHEET: <u>1</u> OF <u>2</u> QA
<b>CORRECTIVE ACTION REQUEST</b>		
1 Controlling Document QAPD, Revision 3, and AP-1.18Q, Revision 1		2 Related Report No. YMP-92-24
3 Responsible Organization NPO	4 Discussed With C. Gerts	
5 Requirement: <p>QAPD, Revision 3, Section 17.0, Paragraph 17.3, states in part: "Documents designated to become records are to be legible, identifiable, accurate, complete, reproducible, microfilmable, and appropriate to the work accomplished."</p> <p>AP-1.18Q, Revision 1, Paragraph 5.6, states in part: "Prepare the individual records or records package in accordance with Appendix A...." Appendix A, Item 1, requires that draft documents be stamped "DRAFT" on their first page of the draft document.</p>		
6 Adverse Condition: <p>Contrary to the above, the following records deficiencies were found:</p> <p>Records or portions of records were illegible:</p> <p style="margin-left: 40px;">NNA 920807.0066, Study Plan 8.3.1.17.4.5 NNA 920807.0076, Job Package 92-12</p> <p>Records package was incomplete (missing pages):</p> <p style="margin-left: 40px;">NNA 920807.0076, Job Package 92-12</p> <p>Record not identified correctly (not stamped "DRAFT"):</p> <p style="margin-left: 40px;">NNA 920807.0066, Draft Study Plan 8.3.1.17.4.5 (Continued)</p>		
9 Does a significant condition adverse to quality exist? Yes <u>X</u> No <u>    </u> If Yes, Circle One: A B C	10 Does a stop work condition exist? Yes <u>    </u> No <u>X</u> ; 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: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input checked="" type="checkbox"/> Root Cause Determination		
13 Recommended Actions: <p>Identify the remedial actions to be taken to correct the deficiencies noted in Block 6. Investigate the program processes, activities or documentation to determine the extent and depth of similar conditions as noted in Block 6. Identify these deficiencies and provide the measures to correct them.</p> <p>(Continued)</p>		
7 Initiator Amelia J. Arceo <i>[Signature]</i> Date <u>10/6/92</u>	14 Issuance Approved by: QADD <i>[Signature]</i> Date <u>10/8/92</u>	
15 Response Accepted QAR Date <u>          </u>	16 Response Accepted QADD Date <u>          </u>	
17 Amended Response Accepted QAR Date <u>          </u>	18 Amended Response Accepted QADD Date <u>          </u>	
19 Corrective Actions Verified QAR Date <u>          </u>	20 Closure Approved by: QADD Date <u>          </u>	

ENCLOSURE 5

INFORMATION COPIES OF CORRECTIVE ACTION REQUESTS  
(Continuation)

<b>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</b>	<b>8 CAR NO.</b> <u>TM-93-004</u> <b>DATE:</b> <u>10/6/92</u> <b>SHEET:</b> <u>2</u> <b>OF</b> <u>2</u> <b>QA</b>
<b>CORRECTIVE ACTION REQUEST (Continuation Page)</b>	
<p><b>6 Adverse Condition (continued)</b></p> <p><b>DISCUSSION:</b></p> <p>While it has always been an upper-tier requirement for records to be legible, it was realized (CAR TM-91-065) that certain "one of a kind records" with portions which were illegible, should be retained. This was only to be utilized for unique records where these illegible portions could not be transcribed or enhanced, and it was thought that those portions which were legible would be of benefit to the Project. However, in the allowance of a system to provide a means by which these unique records could be transmitted into the Records Center, it has become standard practice among DOE and Participants to abuse the system.</p> <p>In the conduct of this audit, it was found that the statement, "I have reviewed this record/records package and it is adequate for its intended purpose. All blanks are intentional. Any illegible, uncorrected, or incomplete information does not impact future, in-process, or completed work" is being utilized "carte blanche" for records and not just for those unique "One of a kind records" which contained deficiencies which would not meet the requirements of the QAPD and NQA-1.</p> <p><b>13 Recommended Action(s) (continued)</b></p> <p>Identify the cause of the condition and the planned corrective action to prevent recurrence.</p> <p><b>NOTE:</b> Response to the above must include and consider all participants as the deficiencies, as detected herein, is considered Project-wide.</p>	