

YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION

SURVEILLANCE REPORT OF

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE

SURVEILLANCE NUMBER YMP-SR-91-018

CONDUCTED MAY 9 THROUGH 10, 1991

ACTIVITIES SURVEILLED:

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
REVIEW OF THE SYSTEM REQUIREMENTS, SYSTEM DESCRIPTION,
REPOSITORY DESIGN REQUIREMENTS, EXPLORATORY SHAFT
FACILITY DESIGN REQUIREMENTS, SITE CHARACTERIZATION PROGRAM
BASELINE DOCUMENTS, AND ASSOCIATED CHANGE CONTROL,
RECORDS AND PERSONNEL TRAINING.

Prepared by:

Donald J. Harris
Donald J. Harris

Surveillance Team Leader
Senior Quality Assurance Engineer
Yucca Mountain Quality Assurance Division

Date:

6/5/91

Concurred by:

Terry W. Noland
Terry W. Noland

Principal Engineer
Yucca Mountain Quality Assurance Division

Date:

6/5/91

Concurred by:

Kenneth T. McFall
Kenneth T. McFall

Quality Assurance Scientist
Yucca Mountain Quality Assurance Division

Date:

6/6/91

Approved by:

James Blaylock for
Donald G. Horton

Director
Yucca Mountain Quality Assurance Division

Date:

6/10/91

1.0 INTRODUCTION

This report contains the results of Yucca Mountain Quality Assurance Division (YMQAD) Surveillance YMP-SR-91-018 of the Yucca Mountain Site Characterization Project Office (YMPO), conducted in Las Vegas, Nevada, from May 9 through May 10, 1991, to verify compliance and effective implementation of selected YMPO implementing procedures.

2.0 PURPOSE AND SCOPE

The purpose of this surveillance was to evaluate the effectiveness of the implementation of certain YMPO quality procedures associated with the review of the System Requirements (SR), System Description (SD), Repository Design Requirements (RDR), Exploratory Shaft Facility Design Requirements (ESFDR), and Site Characterization Program Baseline (SCPB) documents, and the associated change control, records, and personnel training.

The scope of the surveillance included the following criteria and their attendant procedures:

<u>Criterion</u>	<u>Title</u>
II	Quality Assurance Program
	QMP-02-01, Revision 2, Project Office Indoctrination and Qualification Training
XI	Document Control
	QMP-03-09, Revision 2, ICN #1, Project Changes Control Board Process
	QMP-06-04, Revision 2, Project Office Document, Review, Approval and Revision Process
	AP-3.3Q, Revision 3, ICN #1, Change Control Process
	AP-1.5Q, Revision 4, Issuance and Maintenance of Controlled Documents
XVII	Quality Assurance Records
	QMP-17-01, Revision 3, Records Management: Record Source Implementation

3.0 SURVEILLANCE PERSONNEL

The surveillance was conducted by the following personnel:

Donald C. Harris, Surveillance Team Leader, Senior Quality Assurance Engineer, Harza Engineering Company/YMQAD

Terry W. Nolani, Principal Engineer, Westinghouse Electric Company/YMQAD

Kenneth T. McFall, Quality Assurance Scientist, Science Applications International Corporation/YMQAD

Susan Zimmerman, Observer, State of Nevada

Teek Verma, U.S. Nuclear Regulatory Commission, Observer, Washington D.C.

4.0 SUMMARY OF SURVEILLANCE RESULTS

The implementing procedures listed in Section 2.0 of this report were the source of questions used to conduct this surveillance. The checklists generated from these documents were used to determine compliance. The following results were obtained during the surveillance.

1. Quality Management Procedure QMP-02-01, Revision 2, Project Office Indoctrination and Qualification Training.

The Surveillance Team reviewed the training records for those personnel who were involved in the review of the SD, SR, RDR, ESFDR, and SCPB, and the subsequent processing for release.

<u>Name</u>	<u>AP-1.5Q</u>	<u>QMP-06-04</u>	<u>QMP-03-09</u>	<u>AP-3.3Q</u>
Howard Adkins		X		
H. K. Elder		X		
Vince Iorii		XO		
W. A. Wilson		XO		
R. S. Waters		X		
C. McCullough		XO		
John Estella		XO		
T. Bjerstedt		X		XO
Sam Matthews	X		X	
Nancy Voltura			X	
Robert Barton			X	
Max Blanchard			X	
D. C. Dobson				X
B. C. Fogdall				X
Mary Thompson				X
George D. Dymmel				X
Edward H. Petrie				X
Suzan Jones		X		
Wendy Dixon		X		
Pete Karnoski		X		
Robert Harpster		X		

CODE: X = Training acceptable
 XO= Training unacceptable

Based on the results of the examination of the training records, a Corrective Action Request (CAR), YM-91-054 was initiated. The Completion of Reading Assignment form (YMP-028), reflected that QMP-06-04, Revision 2, was read after the performance of the reviews on the documents for the following personnel:

Vince Iorii (SD, SR)	W. A. Wilson (SD, SR, and ESFDR)
John Estella (RDR)	C. McCullough (SCPB)

In addition, T. W. Bjerstedt prepared a Change Request (CR), form Y-AD-082, for the SCPB in accordance with Administrative Procedure AP-3.3Q with no evidence of training to AP-3.3Q in the training records file.

2. QMP-03-09, Revision 2, (N 1, Project Change Control Board Process

The Surveillance Team verified tracking numbers were assigned to the CR for the following documents: SR-91/048, RDR-91/049, SD-91/050, SCPB-91/052, and ESFDR-91/055.

The Surveillance Team verified that the Change Control Board (CCB) chairperson choose an alternate method of processing the documents in accordance with the procedure, Step 2. Therefore, the CCB members performed a QMP-06-04 review in lieu of the formal CCB evaluation. The Change Directive (CD), form Y-AD-057, and Change Evaluation Summary (CES), form Y-AD-058, were initiated for each document. It was noted the CES form was prepared by the CCB secretary with a statement, "No formal CCB evaluation was performed." The reason being that all CCB members had previously performed a review/comment on the document during the QMP-06-04 review. The Change Evaluation (CE) form, Y-AD-056, was not initiated due to the alternate method of processing specified by the CCB chairperson.

3. AP-3.3Q, Revision 3, Change Control Process

The Surveillance Team verified that the CR form and Change Impact Checklist form were initiated and submitted by the Division Directors (DDs) to the CCB secretary for the documents being surveilled.

The Surveillance Team verified that the change classification was in accordance with Classification of Changes, Attachment 4 of the procedure. It was determined that the Technical Project Officers (TPOs) nor the DDs have identified affected controlled documents by completing form Y-AD-100, "Affected Document Notice" as of May 10, 1991. Therefore, the affected documents have not had a CR initiated against them for modification or development.

4. QMP-06-04, Revision 2, Project Office Document, Review, Approval and Revision Process

The Surveillance Team verified that the reviewers of the documents recorded their comments on Document Review Sheets (DRSs), the Subject

Matter Expert (SME) dispositioned all major and minor comments, and the reviewers indicated the acceptance of the comments and signed Section III of the DRS cover sheet indicating incorporation of the comments into the document.

The Surveillance Team verified that secondary reviewers assigned the reviews and the reviewing organization manager completed Section II of the document review cover sheet, form YMP-039.

The Surveillance Team verified that the SME had accepted the final document prior to submittal for document approval by signing or initialing and dating the DRSS and the document review cover sheet, and the DRSS were properly completed including the required signatures and/or "N/A," as appropriate.

5. AP-1.5Q, Revision 4, Issuance and Maintenance of Controlled Documents

The Surveillance Team verified that the document custodian obtained document identification numbers. The document and identification numbers are SR-YMP/CC-0010, Revision 0; SD-YMP/CC-012, Revision 0; RDR-YMP/CC-0011, Revision 0; ESFDR-YMP/CC-0013, Revision 0; and SCPB-YMP/CM-0011, Revision 0.

The Surveillance Team verified that an approved Change Directive (CD), form Y-AD-057, was completed for each of the documents requiring approval through the Yucca Mountain Site Characterization Project (YMP) CCB; the document custodian completed the Controlled Document Issuance Authorization (CDIA), form Y-AD-077, with the required information, signature, and date for each of the documents; and submitted the documents to Document Control for distribution. It was noted that the Document Transmittal Form from the document holders had not been received as of May 10, 1991.

6. QMP-17-01, Revision 3, Records Management: Record Source Implementation

The Surveillance Team determined that none of the records generated during the processing of the SD, SR, RDR, ESFDR, or SCPB had been authenticated by the records source and submitted to the Local Records Center (LRC).

5.0 PERSONNEL CONTACTED DURING THE COURSE OF THE SURVEILLANCES

Bonnie Fogdall, Configuration Management Specialist, Technical & Management
Kevin Harbert, Configuration Management Division Manager, T&MSS
George D. Dymmel, Systems Branch Chief, YMPO
Kenneth Beal, Assistant Project Manager, Project Management, T&MSS
Russ Riding, Plans and Procedures Division (PPD) Manager, T&MSS
J. M. Davenport, Senior Engineer, T&MSS

R. R. Schneider, Manager, Systems Engineering Department, T&MSS
Elaine Spangler, PPD, T&MSS
Paul Chadwick, Training Department
John Waddell, Assistant Project Manager, Technical Support, T&MSS

6.0 MEASURING AND TEST EQUIPMENT USED DURING THE SURVEILLANCE

There was no measuring and/or test equipment used during the course of the surveillance.

7.0 SURVEILLANCE TEAM EVALUATION

It is the Surveillance Team consensus that the YMPO QA Program was implemented satisfactorily for processing the SD, SR, RDR, ESFDR, and SCPB documents through the CCB process. Even though the CCB chairperson provided an alternate method for document analysis, the document reviews were satisfactory, except that four reviewer's training files had objective evidence that the required training for QMP-06-04, Revision 2 (the QMP in effect at the time the reviews were accomplished), was in fact accomplished after the document was reviewed. The records generated during the processing of these documents were not authenticated as of May 10, 1991, therefore, not transmitted to the LRC.

8.0 SYNOPSIS OF DEFICIENCY

The following CAR was generated as a result of this surveillance.

YM-91-054, QMP-02-01, Project Office Indoctrination and Qualification Training, Step 8 requires, "All personnel performing activities affecting quality shall be trained to the applicable document(s) governing the work to be performed." Contrary to the above requirement, V. F. Iorii, W. A. Wilson, J. W. Estella, and C. McCullough performed reviews to QMP-06-04, Revision 2 (effective February 20, 1991 through May 28, 1991), prior to completing their reading assignment for Revision 2 of the procedure. T. W. Bjerstedt prepared AP-3.3Q, CR form Y-AD-082 for the SCPB without AP-3.3Q being identified on his training assignment form or objective evidence of his completion of reading the assignment.

9.0 RECOMMENDATIONS

1. Revise QMP-03-09, Revision 2, Project Change Control Board Process
 - a. Define the alternate method utilized on the SD, SR, RDR, SCPB, and ESFDR for change document evaluation and impact analysis requirements, as determined by the CCB chairperson in accordance with

the procedure, Step 2. The CCB chairperson defined a QMP-06-04 review by the CCB members in lieu of the process defined in the procedure. Consequently, no change evaluation forms were prepared by each CCB member and apparently no impact analysis was performed by the CCB secretary.

- b. Revise the process to allow the affected participants (TPO/DD) to use an approved document, but not an effective document to identify on the Affected Document Notice (ADN), form Y-AD-100 the documents impacted by the approved document, and the schedule for revising those documents. Then have the CCB members initiate the Change Evaluation (CE), form Y-AD-056 and the CCB secretary prepare the CE Summary (CES) form Y-AD-058 with the summary of the CE form evaluation and the impact analysis. At that time, based on the impact analysis, either assign an effective date to the approved document or hold the document until any identified adverse impact is resolved.

NOTE: Recommendation "b" would allow the CCB members to respond to items "f" and "h" in Section II, Evaluation, of the CE form and the CCB secretary to prepare the CES impact analysis with a degree of accuracy. Currently, it appears the process allows a document to be used on a management risk basis.

2. Combine QMP-03-09 and AP-3.3Q into one procedure with a defined methodology for processing CCB controlled documents.
3. Develop an AP to define the process methodology for the YMPO to initiate task (work) assigned to the participant similar to AP-3.5Q, Field Work Activation. This surveillance found that preparation and review of the documents performed by the participants was initiated and controlled by letters and verbal direction from YMPO.

10.0 REQUIRED ACTIONS

Response to the CAR delineated in Section 8.0 of this report is due within the time frame stated in Block 10 of the CAR, as detailed in the CAR transmittal letter. Upon response and satisfactory verification of all remedial and corrective actions, the CAR will be closed and the YMPOAD will notify T&MSS by letter of the closure.

INFORMATION COPY

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

14CAR NO.: YM-91-054
 DATE: 6/4/91
 SHEET: 1 OF 2
 QA
 WBS No.: _____

CORRECTIVE ACTION REQUEST

1 Controlling Document QAPD, Revision 3, QMP-02-01	2 Related Report No. YMP-SR-91-018
---	---------------------------------------

3 Responsible Organization YMPO	4 Discussed With K. Beal, G. Dymmel, R. Riding
------------------------------------	---

10 Response Due 30 days Not. date	11 Responsibility for Corrective Action E. H. Petrie	12 Stop Work Order Y or N N
--------------------------------------	---	--------------------------------

5 Requirement:

1. QAPD, Section 2.1.9 states in part, "Personnel assigned to perform activities that affect the quality of an item or activity will receive appropriate indoctrination and training prior to performing work...."
2. QMP-02-01, Step 8 states in part, "All personnel performing activities affecting quality shall be trained to the applicable document(s) governing the work to be performed...."

6 Adverse Condition:

1. Contrary to the above requirements, reviews were performed to QMP-06-04, Revision 2 (effective February 20, 1991 through May 28, 1991), prior to documenting Read Training of QMP-06-04, Revision 2 on "Completion of Reading Assignment" form T-AD-143. The following personnel reviewed the identified documents prior to reading QMP-06-04, Revision 2.

Name:	Document Titles and Review Date:	Completed T-AD-143 for QMP-06-04, Revision 2:
V. F. Iorii	SR/SD-3/12/91	4/1/91
W. A. Wilson	SR/SD-3/12/91, ESFDR 3/21/91	3/28/91
J. W. Estella	RDR-3/6/91	3/28/91
C. McCullough	SCPB-3/24/91	4/26/91 (Con't)

7 Recommended Action(s):

1. Re-train personnel on the importance of maintaining their training assignments current and ensuring that they are qualified prior to performing quality affecting activities. (Con't)

8 Initiator D. J. Harris <i>D. J. Harris</i>	Date: <u>6-5-91</u>	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: <i>[Signature]</i> Date: <u>6/5/91</u>
--	------------------------	---	---

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted: QAR _____ Date _____	17 Closure Approved By: OQA _____
--	--------------------------------------

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

CAR NO.: YM-91-054
DATE: 6/4/91
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

6 Adverse Condition (continued)

2. Contrary to the requirements, T. W. Bjerstedt prepared and signed AP-3.3Q, Change Request, form Y-AD-082 for the SCPB, without AP-3.3Q being identified on his Training Assignment form (baseline) or objective evidence of Completion of Reading Assignment for AP-3.3Q in the training file.

7 Recommended Action(s) (continued)

2. Re-evaluate T. W. Bjerstedt Training Assignment form YMP-027 to ensure it meets the requirements for his current assignments.