

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION  
QUALITY ASSURANCE SURVEILLANCE REPORT OF RAYTHEON SERVICES NEVADA  
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE  
U.S. GEOLOGICAL SURVEY AND U.S. BUREAU OF RECLAMATION  
TRAINING RECORDS FOR  
SITE PERSONNEL CONDUCTING QUALITY-AFFECTING ACTIVITIES  
AT NEVADA TEST SITE  
SURVEILLANCE NUMBER YMP-SR-92-019  
CONDUCTED JULY 6 THROUGH 8, 1992

ACTIVITIES SURVEILLED:

DRILLING, TRENCHING, DIGGING, LOGGING, AND MAPPING BY RAYTHEON SERVICES NEVADA, YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE, U.S. GEOLOGICAL SURVEY, AND U.S. BUREAU OF RECLAMATION; AND SAMPLE MANAGEMENT FACILITY HANDLING OF CORE SAMPLES.

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## 1.0 EXECUTIVE SUMMARY

This report contains the results of the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Surveillance No. YMP-SR-92-019 of QA records of indoctrination and qualification training of personnel involved in quality-affecting activities being conducted at Nevada Test Site (NTS) by Raytheon Services Nevada (RSN), U.S. Geological Survey (USGS), U.S. Bureau of Reclamation (USBR), and the Yucca Mountain Site Characterization Project Office (YMPO). This surveillance was conducted at the Training Center, Las Vegas, Nevada, and at USGS/USBR, Denver, Colorado, and included drilling, trenching, digging, logging, and mapping activities as well as Sample Management Facility (SMF) handling of core samples. The surveillance was conducted by a team from the Yucca Mountain Quality Assurance Division (YMQAD) of the Office of Quality Assurance (OQA) in accordance with requirements of the OCRWM Quality Assurance Administrative Procedure (QAAP) 18.3, Revision 3, "Surveillance Program."

The surveillance of selected personnel training records was conducted to verify that personnel who are doing quality-affecting work have been properly indoctrinated and trained prior to performing the work. The RSN personnel were found to be complying with indoctrination and training procedures PP-02-01 and PP-02-02. The SMF YMPO Site Investigation Branch personnel were indoctrinated and trained in accordance with the requirements of Quality Management Procedure (QMP)-02-01. The USGS and USBR personnel involved in work at NTS were indoctrinated and trained to QMP-2.02, QMP-2.07, and QMP-2.08. USBR implementation of QMP-2.08 was unsatisfactory, as indicated in USGS Corrective Action Report (CAR) YM-USGS-CAR-92-07, which was issued on May 15, 1992 to USBR.

There were no deficiency documents generated as a result of this surveillance. Recommendations are included in Section 6.0 of this report.

## 2.0 SCOPE

This surveillance was intended to review and examine personnel indoctrination and training records of personnel working on drilling, trenching, digging, logging, and mapping activities at the NTS, and to verify compliance to applicable participant procedures.

## 3.0 SURVEILLANCE TEAM

The surveillance team consisted of the following:

R. H. Klemens, Surveillance Team Leader, QA Engineer, Science Applications  
International Corporation (SAIC)/YMQAD

A. E. Cocoros, Surveillance Team member, QA Engineer, MAC Technical Services/YMQAD

#### 4.0 PERSONNEL CONTACTED DURING THE SURVEILLANCE

The following personnel were contacted during the course of the Surveillance:

Joe L. Rue, RSN, Training Coordinator  
Arshad Ali, RSN, Manager Audits and Surveillances/YMPO  
Paul A. Chadwick, SAIC, Systems and Compliance Division Manager  
Alice M. Harmon, SAIC, Training Records Supervisor  
Larry Hayes, USGS, Technical Project Officer (TPO)  
Thomas Chaney, USGS, QA Manager  
James Kinney, USBR, QA Manager  
R. Scavuzzo, USBR, Civil Engineer  
M. McKeown, USBR, Principal Investigator  
Ardell Whiteside, USGS, QA Implementation Advisor  
Karen Burgess-Kohn, USGS, Training Coordinator  
Lori Knotman, USGS, Training Assistant  
Alice Lykins, USGS, QA Specialist

#### 5.0 SURVEILLANCE RESULTS

##### 1. PP-02-01, "Indoctrination and Training"

A total of 12 RSN Personnel Indoctrination/Training Records were reviewed and evaluated to determine the degree of compliance to PP-02-01, Revision 0, PIC No. 3. The following requirements were verified:

- Managers/Supervisors determine the extent and need of training for personnel based on the scope, complexity and nature of the activity and on the education, experience and proficiency of personnel.

- Prior to performing any quality-affecting activity, the employee shall be indoctrinated to implementing procedures, regulations, the Quality Assurance Program Description Document, and job responsibilities and authority.
- Indoctrination is accomplished by the use of a mandatory reading list, classroom presentations, video presentations, self-study, or other instructional methods.
- Lesson Plans or outlines are concurred with through the signatures of the qualified instructor who prepared them, a technical peer or manager, and the Training Coordinator.
- Records for classroom and on-the-job training includes objectives, name of instructor, attendees, dates of attendance, and results of training proficiency evaluations.
- Self-study is used to satisfy indoctrination/training requirements. Delinquent self-study forms are reported by follow-up notices to the individual's manager/supervisor.
- New or revised procedures or documents are evaluated for additional employee indoctrination/training.

It was verified that all of the above requirements are being effectively implemented by RSN personnel.

2. PP-02-02, "Personnel Selection"

Twelve RSN Personnel Indoctrination/Training Records were reviewed and evaluated to determine the degree of compliance to PP-02-02, Revision 0, Procedure Interim Change (PIC) No. 1. The following requirements were verified:

- The Manager/Supervisor evaluates the education and experience of direct subordinates against the requirements established for the position and performs annual proficiency evaluations.
- The Manager, Human Resources, is responsible for verifying the relevant education and experience of RSN employees of the YMP.
- Position Descriptions are developed and maintained by Human Resources, and signed and dated by the applicable Manager or Supervisor.

- The applicable Manager/Supervisor performs Proficiency Evaluations on an annual basis.

It was verified that all of the above requirements are being effectively implemented by RSN personnel.

Verification of Training Prior to Work Initiation at RSN

<u>Name</u>	<u>Procedure Required</u>	<u>Date Indoctrinated</u>	<u>Work Initiated</u>
C. Clark	PP-10-01	01/16/92	05/27/92
D. Cunningham	PP-10-01	11/12/91	11/18/91
R. Olson	PP-10-02	09/03/91	06/01/92
D. Putnam	PP-10-01	11/14/91	11/14/91
S. Ricks	QAP-10.1(Y)	06/11/92	NONE
S. Ricks	QAP-15.1(Y)	05/22/92	NONE

Verification of Training Prior to Work Initiation at SMF

USBR PROCEDURE BTP-SMF-

<u>Name</u>	002		008		0013	
	<u>Trained</u>	<u>Worked</u>	<u>Trained</u>	<u>Worked</u>	<u>Trained</u>	<u>Worked</u>
J. Doyle	05/15/91	5/19/92	05/15/91	5/27/92	09/18/91	5/19/92
F. Baird	09/17/91	5/19/92	09/17/91	5/27/92	10/31/91	5/19/92
M. Edwards	N/A	N/A	10/31/91	5/27/92	10/31/91	5/19/92
B. Harrison	05/05/91	5/19/92	N/A	N/A	09/18/91	N/A
C. Henson	02/19/92	5/22/92	02/19/92	7/16/92	02/19/92	5/22/92
R. Morris	04/27/92	5/19/92	04/24/92	6/22/92	04/24/92	5/19/92

3. QMP-02-01, "Project Office and SMF Indoctrination and Qualification Training"

A review and evaluation of personnel indoctrination/training records of YMPO and SMF employees was completed to determine compliance to QMP-02-01, Revision 5. The following requirements were verified:

- The Supervisor evaluates employee qualifications against the requirements of the employee's position description and documents the evaluation on a Position Qualification Form.

- The Supervisor assigns the employee's initial and baseline training and indoctrination, and documents on a Training Assignment Sheet.
- Indoctrination covers general criteria, QA Program Elements and job responsibilities and authority, where applicable.
- The Training Manager develops a document matrix relating each individual to the specific baseline requirements that the Supervisor established.
- Employees complete assigned training within assigned completion date.
- Training Manager obtains document statement from the Personnel Department attesting to completion of verification of education and experience.
- Supervisor documents additional training on Training Assignment Sheets. Assignment completion date shall not exceed the date established by the Supervisor.
- Training Manager enters completion of training assignments into the tracking system, issues completion of Reading Assignment Document and verifies that the employees training is completed prior to their performing quality-affecting work.

It was verified that all of the above requirements are being effectively implemented by YMPO and SMF employees.

4. USGS-QMP-2.02, USGS-QMP-2.07, and USGS-QMP-2.08, "Personnel Qualifications"

The evaluation of the implementation of USGS-QMP-2.02, Revision 5, USGS-QMP-2.07, Revision 1, and USGS-QMP-2.08, Revision 1, was conducted by reviewing objective evidence and dialogue with USGS, GEO MATRIX, and USBR assigned personnel.

A detailed description of attributes relative to personnel qualification which were included in QMP-2.02, Revision 5 and QMP-2.08, Revision 1, Paragraphs 5.2, 5.3, 5.4, and 6.2.

Specific attributes reviewed included:

- Position Descriptions exist for USGS personnel assigned to quality-affecting activities and were submitted to the TPO.

- Resumes containing education and experience are prepared and verified and the verifications are documented.
- Employees qualification relative to experience, education and training were evaluated, documented and sent to the TPO.
- The Privacy Disclosure Record is maintained current.
- The required records are maintained only by the TPO.

It was verified that all of the above attributes were being effectively implemented for the USGS and GEO MATRIX personnel.

The USBR implementation of QMP-2.08, Revision 1, was unsatisfactory in that USBR QMP-03 does not provide for the following requirements required by Quality Assurance Requirements Document, Revision 4, Section 2.0 and USGS-QMP-2.08.

- The Position Descriptions do not require reference to education and experience requirements for the position nor the approval by USGS management.
- Requirements for the verification of an individual's actual education and experience are not required to be documented by contractor's management.
- Attachment 1 does not refer to the approval by management of the qualification of the individual. It only verifies that the individual is in the position. There is no requirement in the procedure for the forwarding of the qualification statement to the USGS TPO.
- There is no reference to compliance with the provisions of the Privacy Act of 1974 and the Privacy Act System of Records, and no requirement that relative records shall be maintained by the TPO office.

Thomas Chaney, USGS QA Manager, stated that corrective action for these items is being pursued by the USGS, relative to CAR YM-USGS-CAR-92-07, which was issued by USGS to USBR on May 15, 1992. The CAR was reviewed to assure adequacy and correctness and was found to be satisfactory in covering the above deficiencies.

A detailed description of attributes relative to indoctrination and training which were checked are included in USGS QMP-2.07, Revision 1, Paragraphs 5.1 and 5.5.

Specific attributes reviewed included:

- The documentation of the completion of the following:
  - Orientation and Indoctrination Assignments
  - Technical Procedures Instructions
  - Reading Assignments
  - Records of Classroom Training Sessions
  - Videotape Instruction Assignments
- The documentation of training sessions included the required headings.
- An evaluation of training understanding was performed and documented by YMP-USGS Management.

It was verified that all of the above attributes were being effectively implemented by USGS, GEO MATRIX, and USBR personnel.

Verification of Training Prior to Work Initiation by USGS

<u>NAME</u>	<u>PROCEDURE REQUIRED</u>	<u>DATE TRAINED</u>	<u>WORK INITIATED</u>
Gale Abend	HP62, R0	09/10/91	09/10/91
J. Dishart	HP62, R0	02/19/92	04/04/92
J. Dishart	HP229, R0	02/18/92	04/01/92
Joe Hevesi	HP62, R0	07/09/91	07/11/91
Dan Soeder	HP62, R0	07/09/91	07/17/91
Allen Flint	HP62, R0	07/11/91	09/10/91

Verification of Training Prior to Work Initiation by GEO MATRIX

<u>Name</u>	<u>GP-01</u>		<u>GP-07</u>		<u>GP-15</u>	
	<u>Trained</u>	<u>Worked</u>	<u>Trained</u>	<u>Worked</u>	<u>Trained</u>	<u>Worked</u>
B. Swan	11/07/91	(1)	11/07/91	(1)	12/27/91	(1)
M. Angell	12/27/91	(1)	12/27/91	(1)	12/27/91	(1)
J. Wesling	11/07/91	11/21/91	11/07/91	(1)	12/27/91	3/25/92
T. Bullard	12/27/91	(1)	12/27/91	(1)	12/27/91	(1)

(1) NONE TO DATE



Verification of Training Prior to Work Initiation by USBR

<u>NAME</u>	<u>PROCEDURE REQUIRED</u>	<u>DATE TRAINED</u>	<u>WORK INITIATED</u>
R. Scavaggio	USBR-7221-89	02/27/92	03/04/92
J. Darnell	USBR-7221-89	02/25/92	03/04/92
B. Baca	USBR-7221-89	11/29/91	03/04/92
B. Richardson	USBR-7221-89	03/03/92	03/04/92
T. Strauss	USBR-7221-89	03/05/92	03/05/92
A. Beneavidez	USBR-7221-89	03/25/92	03/25/92

6.0 RECOMMENDATION

The USGS should encourage the USBR management to establish and use a matrix depicting the available training documents or other materials versus the assignment of training requirements for individuals.

Consideration should be given to an additional review of the adequacy and implementation of USBR Procedure QMP-2.03, "Personnel Selection," on a future audit or surveillance.