



**DEPARTMENT OF ENERGY**  
 Office of Civilian Radioactive Waste Management  
 Office of Geologic Disposal  
 Yucca Mountain Site Characterization Project Office  
 P.O. Box 98608  
 Las Vegas, NV 89193-8608

WBS 1.2.11  
 QA: N/A

MAR 15 1994

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 Technical Project Officer  
 for Yucca Mountain  
 Site Characterization Project  
 Raytheon Services Nevada  
 101 Convention Center Drive  
 Phase II, Suite P-250  
 Las Vegas, NV 89109

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-94-017 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-94-03 OF RAYTHEON SERVICES NEVADA (SCP: N/A)

The YMQAD staff has evaluated the response to CAR YM-94-017. The response has been determined to be satisfactory. Verification of completion of the corrective action will be performed after the effective date provided. Any extension to this date must be requested in writing, with appropriate justification, prior to the date. Please send a copy of extension requests to Nita J. Brogan, YMQAD/QATSS, 101 Convention Center Drive, Suite 640, Las Vegas, Nevada 89109.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Kenneth T. McFall at 794-7280.

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-2432

Enclosure:  
 CAR YM-94-017

cc w/encl:  
 K. R. Hooks, NRC, Washington, DC  
 S. W. Zimmerman, NWPO, Carson City, NV  
 D. J. Tunney, RSN, Las Vegas, NV

cc w/o encl:  
 J. W. Gilray, NRC, Las Vegas, NV  
 N. J. Brogan, YMQAD/QATSS, Las Vegas, NV

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 PDR WASTE  
 WM-11 PDR

ADD: Ken Hooks

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

8 CAR NO.: YM-94-017  
DATE: 1/31/94  
SHEET: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST**

|  |  |   |  |
|--|--|---|--|
| 1 Controlling Document<br>QARD DOE/RW-0333P  |  | 2 Related Report No.<br>YMP-94-03   |  |
| 3 Responsible Organization<br>RSN PP-03-20, Revision 1   |  | 4 Discussed With<br>Ezra Wasson   |  |
| 5 Requirement: <ul style="list-style-type: none"> <li>1) PP-03-02, Para. 6.2.1.m states that present conditions at the drill site be described in the work program.</li> <li>2) PP-03-02, Para. 6.2.1.0 requires that QA records generated by the work program be identified as lifetime records.</li> <li>3) PP-03-02, Para. 6.2.3.G.2 requires that the work program require that unattended holes be covered.</li> </ul>  |  |   |  |
| 6 Adverse Condition: <ul style="list-style-type: none"> <li>1) Contrary to 1) above, a statement describing existing conditions at the drill site are not included in Revision 0 of the USW NRG-7 and USW SD-12 work programs.</li> <li>2) Contrary to 2) above, lifetime QA records are not addressed in the USW NRG-7 work program.</li> <li>3) Contrary to 3) above, the covering of unattended holes is not adequately addressed. The time from spudding to rigdown is not covered. The only time it is covered is after capping and locking.</li> </ul> |  |   |  |
| 9 Does a significant condition adverse to quality exist? Yes ___ No <u>X</u><br>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<br>If Yes, Circle One: A B C D |  |
| 11 Response Due Date:<br>Twenty 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:  |  |   |  |
| 7 Initiator<br><i>Kenneth McFall</i> Date <u>1/31/94</u>   |  | 14 Issuance Approved by:<br>QADD <i>PC Spruce</i> Date <u>2/4/94</u>  |  |
| 15 Response Accepted<br>QAR <i>Kenneth McFall</i> Date <u>3/10/94</u>  |  | 16 Response Accepted<br>QADD <i>PC Spruce</i> Date <u>3/14/94</u>   |  |
| 17 Amended Response Accepted<br>QAR _____ Date _____   |  | 18 Amended Response Accepted<br>QADD _____ Date _____   |  |
| 19 Corrective Actions Verified<br>QAR _____ Date _____   |  | 20 Closure Approved by:<br>QADD _____ Date _____  |  |

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WASHINGTON, D.C.

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DATE: 03/08/94  
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**CORRECTIVE ACTION REQUEST (Continuation Page)**

1. Corrective Action Response for CAR #YM-94-017

Item 1 A statement describing existing conditions at the drill site are not included in Revision 0 of the USW NRG-7 and USW SD-12 work programs.

A. Remedial Action:

RSN work program for USW SD-12 shall be revised by March 31, 1994 to incorporate a specific present conditions section at the drill site based on the day of the revision.

B. Investigative Action:

Active work programs shall be reviewed for compliance with the present conditions requirement. Any active programs not in compliance shall be revised by April 15, 1994.

C. Root Cause Determination: N/A

D. Corrective Action to Preclude Recurrence:

A procedure interim change (PIC) shall be issued to clarify the intent of the present condition requirement.

Item 2 Lifetime QA Records are not addressed in the USW NRG-7 work program

A. Remedial Action:

A PIC will be issued to PP-03-20 by April 15, 1994 to remove this requirement. The basis for this revision is the procedure creates the work program as the only life time QA record. The supporting QA records associated with this work program are defined in RSN PP-10-01 procedure and are listed in this procedure as life time QA records.

B. Investigative Action:

The documents generated by the work program for other boreholes have been handled as QA Records in accordance with PP-10-01. Therefore no further action is required.

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QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

- C. Root Cause Determination: N/A
- D. Corrective Action to Preclude Recurrence:  
Issuance of the PIC precludes recurrence of this deficiency.

Item 3

The covering of unattended holes is not adequately addressed. The time from spudding to rigdown is not covered. The only time it is covered is after capping and locking.

A. Remedial Action:

RSN PP-03-20, paragraph 6.2.1.g, references other pertinent information, such as item 1. Estimated depth to water table, item 2. Covering of unattended holes, item 3. Marking and identifying hole, item 4. Geologic data, and item 5. Estimated drilling time, if required. The procedure implies that other pertinent information may include optional information at the discretion of the project engineer and the upper tier documents. A review of the upper tier documents for the drilling of USW NRG-7 borehole did not locate a requirement for recording the depth to water table, the covering of unattended boreholes, or marking and identifying of hole. See D.

B. Investigative Action:

Covering of unattended boreholes is not an upper tier requirement for other existing boreholes. Covering of unattended boreholes is a safety requirement for large diameter boreholes to prevent personnel from falling into the borehole.

C. Root Cause Determination: N/A

D. Corrective Action to Preclude Recurrence:

A PIC will be issued by April 15, 1994 to clarify the intent of the requirement.

- 2. Individual responsible for corrective actions - E. L. Wright  
All corrective actions will be complete by April 15, 1994.

3. Response Approved:

Eddie L. Wright

Date: 3/8/94