



**Department of Energy**  
 Yucca Mountain Site Characterization  
 Project Office  
 P. O. Box 98608  
 Las Vegas, NV 89193-8608

WBS 1.2.9.3

APR 21 1992

Larry R. Hayes  
 Technical Project Officer  
 for Yucca Mountain  
 Site Characterization Project  
 U.S. Geological Survey  
 101 Convention Center Drive  
 Suite 860  
 Las Vegas, NV 89109

ISSUANCE OF CORRECTIVE ACTION REQUESTS (CARS) YM-92-028, YM-92-029, AND  
 YM-92-030 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD)  
 AUDIT YMP-92-13 OF U.S. GEOLOGICAL SURVEY

Enclosed are CARS YM-92-028, YM-92-029, and YM-92-030 generated as a result  
 of YMQAD Audit YMP-92-13.

Please identify the corrective actions to be taken and implemented to correct  
 the deficiencies. CAR Continuation Sheets and instructions for completion  
 have been provided. Send the originals of your responses to Nita J. Brogan,  
 Science Applications International Corporation, Las Vegas, Nevada. Responses  
 to the CARS are due 20 working days from the date of this letter. Extensions  
 to due dates must be requested in writing with appropriate justification  
 prior to the due dates.

If you have any questions, please contact either Robert B. Constable at  
 794-7945 or Charles C. Warren at 794-7248.

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-2986

Enclosure:  
 CARS YM-92-028, 029 and 030

cc w/encl:  
 K. R. Hooks, NRC, Washington, DC  
 S. W. Zimmerman, NWPO, Carson City, NV  
 T. H. Chaney, USGS, Denver, CO  
 C. L. Sellards, SAIC, Las Vegas, NV, 517/T-02

cc w/o encl:  
 J. W. Gilray, NRC, Las Vegas, NV  
 N. J. Brogan, SAIC, Las Vegas, NV, 517/T-12  
 D. D. Porter, SAIC, Golden, CO

9204290146 920421  
 PDR WASTE  
 WM-11 PDR  
 210011

YMP-5

ADD: Ken Hooks  
 Ltr. Encl.  
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102.7  
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**OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

8 CAR NO.: YM-92-028  
DATE: 4/14/92  
SHEET: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST**

|   |   |
|---|---|
| 1 Controlling Document<br>USGS QAPP, Revision 5 | 2 Related Report No.<br>Audit YMP-92-13 |
|---|---|

|                                    |                                       |
|------------------------------------|---------------------------------------|
| 3 Responsible Organization<br>USGS | 4 Discussed With<br>E. Gutentag, USGS |
|------------------------------------|---------------------------------------|

5 Requirement:  
USGS QAPP, Revision 5, Paragraph 12.2.1 states in part: "...each device shall have a unique identification. This identification shall be recorded on the data sheet, log, etc., with the measurement taken, to insure traceability to the measurement of the device that was used to take the measurement.

6 Adverse Condition:  
Measurements taken in the implementation of NWM-USGS-HP-23, Revision 2, related to temperature (air and water) and conductivity, do not relate the data to the specific instrument used to acquire the data.

|   |   |  |
|---|---|--|
| 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>20 Days From Issuance |
|---|---|--|

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

13 Recommended Actions:  
1. Identify whether the above mentioned adverse condition had an affect on quality-related activities.  
2. Identify these activities and provide the measures required to correct them.  
3. Investigate the program process and identify the steps necessary to prevent recurrence.

|   |  |
|---|--|
| 7 Initiator<br><i>J Blayford</i><br>Date <u>4/19/92</u> | 14 Issuance Approved by:<br><i>A.C. [Signature]</i><br>Date <u>4/20/92</u> |
|---|--|

|                                  |                                   |
|----------------------------------|-----------------------------------|
| 15 Response Accepted<br>QAR Date | 16 Response Accepted<br>QADD Date |
|----------------------------------|-----------------------------------|

|  |   |
|--|---|
| 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 |
|--|--------------------------------------|

Format for Corrective Action Response

The CAR response shall include the following information:

1. Corrective Action Response for CAR # \_\_\_\_\_
  - A. Remedial Action - Actions taken to correct specific deficiencies noted.  
(Required for all CARs)
  - B. Investigative Action - Actions taken to determine the extent of the condition.  
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
  - C. Root Cause Determination - Identification of the root cause of the condition.  
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
  - D. Corrective Action to Preclude Recurrence - Actions taken to address the root cause and preclude recurrence of the condition.  
(Required for all significant conditions adverse to quality or any Condition Adverse to Quality if requested by OQA)
2. For each action above, identify the name of the individual assigned responsibility for completion and the anticipated (or actual, if complete) completion date.
3. Response Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
Responsible Manager

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

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| CAR NO. | _____          |
| DATE:   | _____          |
| PAGE:   | _____ OF _____ |
|         | QA             |

**CORRECTIVE ACTION REQUEST (Continuation Page)**

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U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

8 CAR NO.: YM-92-029  
DATE: 4/14/92  
SHEET: 1 OF 2  
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document  
USGS-YMP-QMP-3.04

2 Related Report No.  
AUDIT YMP-92-13

3 Responsible Organization  
USGS

4 Discussed With  
K. W. Causseaux/ T. Chaney

5 Requirement:  
YMP-USGS-QMP-3.04, Rev 1, Technical Review of Publications, effective 10/27/86, Section 7.0 Records Management states "The document and its supporting documents shall be submitted to the USGS Records Processing Center in accordance with QMP-17.01".  
  
NOTE: It is recognized that the current revision of QMP-3.04 is revision 3, with modification M2.

6 Adverse Condition:  
In some instances, major comments from reviewers are not in Record Package Segments.  
  
DISCUSSION  
  
For example, the complete comments by Alan Flint regarding his technical review of publication "Geohydrology and evapotranspiration at Franklin Lake Playa", Inyo County, California: U.S.G.S Open-File Report 90-356 by J.B. Czarnecki were not in the Record Package Segment for this publication.  
  
NOTE: The comments were found in a file that was being held by USGS with a note indicating that the documents in this file were not to be transmitted to the Central Records Facility.  
  
These comments had been removed from the records segment package because the comments were on a draft copy of the document rather than on a memo or Comment Resolution Sheet and USGS management had decided to remove draft copies of

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If Yes, Circle One: A B C

10 Does a stop work condition exist? Yes \_\_\_ No X; if Yes - Attach copy of SWO  
If Yes, Circle One: A B C D

11 Response Due Date:  
20 days from issuance

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

13 Recommended Actions:  
Investigate to determine the extent of the deficiency.  
Correct deficiencies found.

7 Initiator  
R. E. POWE *RE Powe* Date *4/14/92*

14 Issuance Approved by:  
QADD *R.C. Spence* Date *4/20/92*

15 Response Accepted  
QAR Date

16 Response Accepted  
QADD Date

17 Amended Response Accepted  
QAR Date

18 Amended Response Accepted  
QADD Date

19 Corrective Actions Verified  
QAR Date

20 Closure Approved by:  
QADD Date

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WASHINGTON, D.C.

8 CAR NO.: YM-92-029  
DATE: 4/14/92  
SHEET: 2 OF 2  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

6 Adverse Condition (continued)  
documents from the records file.

USGS-YMP-QMP-3.04 Revision 3 requires use of a Comment Resolution Form to document major comments, therefore there should be no reason to take any further action to prevent the practice of documenting major comments within the body of the draft document.

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CAR NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

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U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

8. CAR NO.: YM-92-030  
DATE: 4/14/92  
SHEET: 1 OF 2  
QA

**CORRECTIVE ACTION REQUEST**

|   |  |
|---|--|
| 1 Controlling Document<br>YMP-USGS-QMP-6.01, R5 | 2 Related Report No.<br>Audit Report YMP-92-13 |
|---|--|

|                                       |                                |
|---------------------------------------|--------------------------------|
| 3 Responsible Organization<br>USGS QA | 4 Discussed With<br>Tom Chaney |
|---------------------------------------|--------------------------------|

5 Requirement:  
Paragraph 5.5.2 states, "Revisions of documents that contain changes affecting quality shall be distributed to the recipients prior to the implementation of that change, except when other provisions for change control are made for a given document type, such as in QMP-5.01, Preparation of Technical Procedures."

6 Adverse Condition:  
Contrary to the above requirement, the following documents were not issued prior to their implementation date:

| DOCUMENT NO.       | EFFECTIVE DATE | DOCUMENT TRANSMITTAL NOTICE DATED |
|--------------------|----------------|-----------------------------------|
| QAPP-01, R5, ICN-8 | 03/12/91       | 03/13/92                          |
| QMP-17.03          | 11/05/90       | 04/18/91                          |
| QMP-1.01, R3-M1    | 10/15/91       | 10/16/91                          |
| QMP-2.01, R2-M1    | 10/08/91       | 10/16/91                          |
| QMP-2.01, R2-M2    | 10/15/91       | 10/16/91                          |
| QMP-2.02, R5-M1    | 10/15/91       | 10/16/91                          |
| QMP-2.07, R1-M3    | 10/15/91       | 10/16/91                          |
| QMP-3.04, R3-M2    | 10/15/91       | 10/16/91                          |
| QMP-3.05, R3-M1    | 10/15/91       | 10/16/91                          |
| QMP-3.07, R3-M2    | 10/15/91       | 10/16/91                          |
| QMP-3.10, R2-M1    | 10/15/91       | 10/16/91                          |

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| 7 Initiator<br>Cynthia H. <i>Graves</i><br>Date <u>4/14/92</u> | 14 Issuance Approved by:<br>QADD <i>A.C. Spruce</i><br>Date <u>4/16/92</u> |
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8 CAR NO.: YM-92-030  
DATE: 4/14/92  
SHEET: 2 OF 2  
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

6 Adverse Condition (continued)

|                 |          |          |
|-----------------|----------|----------|
| QMP-3.11,R1-M1  | 10/15/91 | 10/16/91 |
| QMP-3.13,R1-M1  | 10/15/91 | 10/16/91 |
| QMP-4.01,R3-M3  | 10/15/91 | 10/16/91 |
| QMP-5.01,R4-M1  | 10/15/91 | 10/16/91 |
| QMP-5.02,R3-M1  | 10/15/91 | 10/16/91 |
| QMP-5.03,M1     | 10/15/91 | 10/16/91 |
| QMP-5.04        | 10/15/91 | 10/16/91 |
| QMP-5.05,R2-M1  | 10/15/91 | 10/16/91 |
| QMP-7.01,R3-M3  | 10/15/91 | 10/16/91 |
| QMP-15.01,R4-M3 | 10/15/91 | 10/16/91 |
| QMP-18.01,R6-M2 | 10/15/91 | 10/16/91 |
| QMP-18.02,R4-M3 | 10/15/91 | 10/16/91 |
| QMP-2.08,R4-M1  | 11/13/91 | 11/13/91 |
| QMP-4.01,R3-M4  | 11/13/91 | 11/13/91 |
| QMP-17.01,R4-M6 | 11/13/91 | 11/13/91 |
| QMP-17.03,R0-M2 | 11/13/91 | 11/13/91 |
| QMP-3.03,R3-M1  | 03/12/91 | 03/12/92 |
| QMP-4.02,R3-M1  | 03/12/91 | 03/12/92 |
| GP-01, R2       | 07/29/91 | 08/06/91 |
| GPP-11, R1      | 09/05/91 | 09/10/91 |
| HP-23, R2       | 10/30/91 | 10/31/91 |
| HP-45, R2       | 10/30/91 | 10/31/91 |
| HP-116, R1      | 10/30/91 | 10/31/91 |
| HP-233T, R0     | 12/06/91 | 12/06/91 |

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Responsible Manager

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RADIOACTIVE WASTE MANAGEMENT  
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CAR NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

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