



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

WBS 1.2.11  
 QA: N/A

**MAR 26 1993**

Carl P. Gertz, Project Manager, YMP, NV

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-93-015 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-93-01 OF U.S. GEOLOGICAL SURVEY

The YMQAD staff has evaluated the response to the portion of CAR YM-93-015 related to revision of Administrative Procedure 5.1Q. 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, Science Applications International Corporation, Las Vegas, Nevada.

If you have any questions please contact either Robert B. Constable at 794-7945 or Richard L. Maudlin at 794-7290.

Richard E. Spence, Director  
 Yucca Mountain Quality Assurance Division

YMQAD:RBC-3397

Enclosure:  
 CAR YM-93-015

- cc w/encl:
- K. R. Hooks, NRC, Washington, DC
  - S. W. Zimmerman, NWPO, Carson City, NV
  - L. R. Hayes, USGS, Las Vegas, NV
  - S. D. Johnson, PSDO/REECo, Las Vegas, NV
  - J. W. Estella, SAIC, Las Vegas, NV
  - P. G. Jones, M&O/TRW, Las Vegas, NV
  - R. L. Maudlin, MACTEC, Las Vegas, NV
  - C. J. Henkel, EEI, Las Vegas, NV
  - A. V. Gil, YMP, NV
  - B. J. Verna, YMP, NV

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

020007

9304020182 930926  
 PDR WASTE PDR  
 WM-11

ADD: Ken Hooks

Att. Encl.  
 1 1

102.7  
 WM-11  
 NHO3

**ORIGINAL**  
THIS IS A RED STAMP

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

8 CAR NO.: YMP-93-015  
DATE: 10-22-92  
SHEET: 1 OF 2  
QA

**CORRECTIVE ACTION REQUEST**

1 Controlling Document AP 5.19Q, R2 AP5.1Q, R2		2 Related Report No. YMP-93-01	
3 Responsible Organization USGS		4 Discussed With Ardell Whiteside, R. Spangler	
5 Requirement: AP 5.19Q, Step 8b, stated in part: "Data Supplier-If IMOU and/or PIRN have no impact on controlled documents and are acceptable, sign and return original signature document... to the processor."  AP 5.19Q, Step 11, states in part: "Data Supplier-Compile and send data to the requester (send and control data per AP-5.1Q....)"  AP 5.1Q, Step 2, states in part: "YMP Participant- Submit the DPS to the appropriate participant data archive... Include a TDIF...."  AP 5.1Q, Section 3.12 states in part: "The TDIF... is used to provide input to the ATDT System. The form is included with DPSs and Data Transmittal Packages."			
6 Adverse Condition: Contrary to the above:  (A) Acquired Data has been transmitted to LANL without documented evidence of processed IMOU.  (B) Acquired Data has been transmitted to LANL without evidence of a TDIF being prepared and Data entered into the Participant Data Archive.  Example: 6-10-91 "Potential Sr-Isotope Stratigraphy High-Silica Rhyolite."  10-12-92 "Isotope Stratigraphy in the Topopah Springs High-Silica Rhyolite"			
9 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 checked="" type="checkbox"/> Root Cause Determination			
13 Recommended Actions: (A) Process IMOU and get number assigned prior to transmittal of Data  (B) Transmit Acquired Data to PDA with TDIF  (C) Evaluate status of all IMOUS between USGS and other participants. Assure all have been processed and have been assigned a number per AP 5.19Q			
7 Initiator R. L. Maudlin <i>R. Maudlin</i> Date <u>10-22-92</u>		14 Issuance Approved by: QADD <i>R. Spangler</i> Date <u>11/3/92</u>	
15 Response Accepted QAR Date		16 Response Accepted QADD Date	
17 Amended Response Accepted QAR <i>R. Maudlin</i> Date <u>02-18-93</u>		18 Amended Response Accepted QADD <i>R. Spangler</i> Date <u>2/23/93</u>	
19 Corrective Actions Verified QAR Date		20 Closure Approved by: QADD Date	

ENCLOSURE

REV. 08/91

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

8 CAR NO.: ~~WD-93-015~~ <sup>10-22-92</sup>  
DATE: 10-22-92  
SHEET: 2 OF 2  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

13 Recommended Action(s) (continued)

- (D) Evaluate all Data Transmitted to date and determine:  
(1) is there a valid IMOU for transmittal of this data  
(2) has data been transmitted to PDA via TDIF prior to being sent to participant
- (E) Determine cause of condition and what action would be taken to preclude recurrence

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

CAR NO. YM-93-015  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

1. **YMP-USGS CORRECTIVE ACTION RESPONSE FOR CAR # YM-93-015**

- A. **Remedial Actions** - Remedial actions are not necessary for Corrective Action Request (CAR) YM-CAR-93-015.
- B. **Investigative Action** - In order to examine the extent of the potential deficiency, the YMP-USGS has reevaluated the requirements of AP-5.19Q and AP-5.1Q; investigated various types of data releases; and coordinated and confirmed the results of the evaluation with the USGS Interface Control Working Group Representative (ICWG), USGS Data Management Coordinator, and Deputy Director of Regulatory and Site Evaluation Division, Yucca Mountain Project Office.

AP-5.19Q only applies to the identification, development, approval, control, and changes to Level C & D interfaces. This procedure addresses the control and release of a very specific type of data. An appropriate application of AP-5.19Q is when a product from one Level C and/or D system is requested as input to another Level C and/or D system or subsystem. A product can be defined as a final data package that is formal input to another investigation that can not proceed without the information (data) provided. For example, soil and rock properties data must be provided to RSN prior to the design of the surface facilities. AP-5.19Q does not apply to the collegial exchange of scientific information.

AP-5.1Q is utilized to control and ensure technical data to support the license application for repository construction are complete and retrievable. Technical data are defined in AP-5.1Q as data resulting from data acquisition or data development activities. Acquired technical data are further defined to be data that have been recorded and checked. Developed technical data are the results of reducing, analyzing, or interpreting acquired data. AP-5.1Q addresses the control and release of these specific types of data. AP-5.1Q does not apply to the data exchange cited in the CAR because the data were raw and unchecked. AP-5.1Q requires that data be checked before they are submitted to the Participant Data Archive (PDA).

There are additional types of data and data releases that do not fall under the control of AP-5.1Q or AP-5.19Q. Investigative actions have identified various types of data releases and their controls. It has been determined that the exchange of information cited in YM-CAR-93-015 fall under a category of preliminary scientific exchange. This type of scientific exchange is specified in Study Plan (SP) 8.3.1.4.2.1. The SP Section 1.1 (Information to be obtained and how that information will be used) states in part, "Some of the data necessary to determine rock correlation and spatial variability in this study plan is similar to data being collected at Los Alamos National Laboratory (Study 8.3.1.3.2.1, Mineralogy, petrology and rock chemistry of transport pathways; Study 8.3.1.3.2.2, History of mineralogical and geochemical alteration of Yucca Mountain). Likewise, geological interpretations from this study are essential

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

CAR NO. YM-93-015  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(continuation sheet)

1. YMP-USGS CORRECTIVE ACTION RESPONSE FOR CAR # YM-93-015 (Continued)

B. Investigative Action (Continued) -

for adequate characterization of the transport pathways being investigated elsewhere. Therefore, we envision close communication and information exchange with scientists at Los Alamos in areas of potential overlap (mineralogy, petrology and diagenesis) so that data sets collected by each group are unique and complementary."

During DOE Audit 93-01 discussions, the YMP-USGS stated that an AP-5.19Q IMOU existed to address scientific exchanges between the USGS and Los Alamos National Laboratory (LANL). Subsequent investigations confirmed that the draft IMOU to control this exchange was canceled by the USGS ICWG Representative and therefore was never fully approved. During the approval process it was determined that the IMOU was inappropriate.

C. Root Cause Determination - The requirements of AP-5.19Q were misunderstood by YMP-USGS staff.

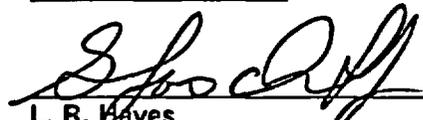
D. Corrective Action to Preclude Recurrence - 1) The YMP-USGS QA Manager and the YMP-USGS Data Management Coordinator have received clarification of the requirements pertaining to AP-5.1Q and AP-5.19Q from YMPO officials. 2) Through involvement with this CAR the investigator is aware that future written communications should have a statement such as, "data are preliminary and should not be used in quality affecting work".

2. For each action above, identify the name of the individual assigned responsibility for completion and the anticipated (or actual, if complete) completion date.

T.H. Chaney completed investigative actions November 3, 1992.

P.W. McKinley completed investigative actions November 4, 1992.

3. Response Approved:

  
For L. R. Bayes  
Chief, Yucca Mountain Project Branch  
Date 12/1/92

  
T. H. Chaney  
YMP-USGS Quality Assurance Manager  
Date 12/1/92



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

WBS 1.2.11  
QA: N/A

JAN 25 1993

QA RECEIVED

JAN 20 1993

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

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-93-015 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-93-01 OF U.S. GEOLOGICAL SURVEY (USGS)

The YMQAD staff has evaluated the response to CAR YM-93-015. The response to Parts A, B, and C has been determined to be unsatisfactory because:

1. Part A states that there is no remedial action necessary. Based on Items 2 through 3 below, USGS must provide remedial actions to resolve the noted conditions described in CAR YM-93-015.
2. Part B of your response states in part: (1) that a product can be defined as a final data package that is formal input to another investigation, that cannot proceed without the information (data) provided; (2) Administrative Procedure (AP) 5.19Q does not apply to the collegial exchange of scientific information; (3) AP-5.1Q does not apply to the data exchange as cited in the CAR because it is considered raw data and is unchecked; and (4) the exchange cited in the CAR falls under the category of preliminary scientific exchange.

The definitions (i.e., final data package, collegial exchange, and preliminary scientific exchange) for the data which you provided to Los Alamos National Laboratory (LANL) can not be found in either AP-5.1Q or AP-5.19Q.

AP-5.1Q is explicit as to its applicability for the control of technical data. AP-5.1Q, Section 1.1 (Purpose) states: "This procedure establishes requirements and assigns responsibilities for the control and transfer of Yucca Mountain Site Characterization Project (YMP) technical data. Data control and transfer begin at data acquisition, through measurement by YMP Participant Staff, . . . or any other means except for data generated outside the YMP." Section 2.0 (Applicability) states in part: "This procedure applies to the Yucca Mountain Site Characterization Project Office (YMPO) and all YMP Participants who acquire, manipulate, or disseminate technical data."

Based on the statement above, any technical data in any form shall comply with the controls specified in AP-5.1Q. Any interpretations to the intent of the requirements in YMPO APs must be established in writing by those who have authority to make the interpretations. AP-5.1Q is clear that data shall be controlled at the beginning of data acquisition. There are no stipulations that data need not be controlled until after the participant makes the decision that it is complete and is checked as stated in AP-5.1Q, Section 3.3 (Data Acquisition). USGS should take immediate action to transmit the data referenced in CAR YM-93-015 to the Participant Data Archive via a Technical Data Information Form as required by AP-5.1Q.

Part B of your response states in part that the data transferred to LANL was unchecked. It appears that another potential violation exists in that the data transferred to LANL was not checked as required by AP-5.1Q, Section 3.3 (Data Acquisition). If this is the case, USGS should take the necessary action to document this condition adverse to quality and implement the necessary corrective action.

3. Part B of your response states in part that AP-5.19Q only applies to the identification, development, approval, control, and changes to Level C and D interfaces. This procedure addresses the control and release of a very specific type of data.

AP-5.19Q, Section 3.3 (Informational/Organizational Interface) states in part: "An informational interface, also referred to as an organizational interface, is a controlled process used to officially request, document, and transfer information between various YMP organizations (Participant) that must share and/or transfer information. This information is usually technical in nature (e.g., scientific data) and is used in technical studies . . . ."

AP-5.19Q does not make any reference to the specific type of data you refer to in your response. USGS should take immediate action to finalize the Interoffice Memorandum of Understanding between USGS and LANL for the exchange of technical data.

4. Part D of your response discusses the use of a statement regarding preliminary data. This is not consistent with current requirements. Neither AP-5.1Q nor AP-5.19Q discuss preliminary data.

Based on the YMPO-approved requirements stated in the AP-5.1Q and AP-5.19Q, USGS should take immediate action to bring the transmittal of technical data, as referenced in CAR YM-93-015, into compliance with these requirements or request a revision to AP-5.1Q and AP-5.19Q to be consistent with present practices.

JAN 25 1993

It is requested that USGS management reevaluate their response in light of the aforementioned options, and respond indicating the action taken.

An amended response to Parts A, B, and C is required to be submitted to this office within ten working days of the date of this letter. Send the original of your response to Nita J. Brogan, Science Applications International Corporation, Las Vegas, Nevada. If an extension to the due date is necessary, it must be requested in writing, with appropriate justification, prior to that date.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Richard L. Maudlin at 794-7290.



Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1856

Enclosure:  
CAR YM-93-015

cc w/encl:  
K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
T. H. Chaney, USGS, Denver, CO  
R. W. Craig, USGS, Las Vegas, NV  
B. J. Verna, YMP, NV  
A. V. Gil, YMP, NV

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

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

CAR NO. YM-93-015  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(Continuation Page)

**1. YMP-USGS CORRECTIVE ACTION RESPONSE FOR CAR #YM-93-015**

- A. Remedial Actions - Remedial actions are not necessary for Corrective Action Request (CAR) YM-CAR-93-015 because AP-5.1Q is to be modified.
- B. Investigative Action - In order to examine the extent of the potential deficiency, the YMP-USGS has re-evaluated the requirements of AP-5.19Q and AP-1Q; investigated various types of data releases; and coordinated and confirmed the results of the evaluation with the USGS Interface Control Working Group Representative (ICWG), USGS Data Management Coordinator, and Deputy Director of Regulatory and Site Evaluation Division, Yucca Mountain Project Office.

AP-5.19Q only applies to the identification, development, approval, control and changes to Level C&D interfaces. This procedure addresses the control and release of a very specific type of data. An appropriate application of AP-5.19Q is when a product from one Level C and/or D system is requested as input to another Level C and/or D system or subsystem. A product can be defined as a final data package that is formal input to another investigation that can not proceed without the information (data) provided. For example, soil and rock properties data must be provided to RSN prior to the design of the surface facilities. AP-5.19Q does not apply to the collegial exchange of scientific information.

AP-5.1Q is utilized to control and ensure technical data to support the license application for repository construction are complete and retrievable. Technical data are defined in AP-5.1Q as data resulting from data acquisition or data development activities. Acquired technical data are further defined to be data that have been recorded and checked. Developed technical data are the results of reducing, analyzing, or interpreting acquired data. AP-5.1Q addresses the control and release of these specific types of data. AP-5.1Q does not apply to the data exchange cited in the CAR because the data were raw and unchecked. AP-5.1Q requires that data be checked before they are submitted to the Participant Data Archive (PDA).

There are additional types of data and data releases that do not fall under the control of AP-5.1Q or AP-5.19Q. Investigative actions have identified various types of data releases and their controls. It has been determined that the exchange of information cited in YM-CAR-93-015 fall under a category of preliminary scientific exchange. This type of scientific exchange is specified in Study Plan (SP) 8.3.1.4.2.1. The SP Section 1.1 (Information to be obtained and how that information will be used) states in part, "Some of the data necessary to determine rock correlation and spatial variability in this study plan is similar to data being collected at Los Alamos National Laboratory (Study 8.3.1.3.2.1, Mineralogy, petrology and rock chemistry of transport pathways; Study 8.3.1.3.2.2, History of mineralogical and geochemical alteration of

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

CAR NO. YM-93-015  
DATE: \_\_\_\_\_  
SHEET: \_\_\_\_\_ OF \_\_\_\_\_

**CORRECTIVE ACTION REQUEST**  
(Continuation Page)

**1. YMP-USGS CORRECTIVE ACTION RESPONSE FOR CAR #YM-93-015 (Continued)**

**B. Investigative Action (Continued) -**

Yucca Mountain). Likewise, geological interpretations from this study are essential for adequate characterization of the transport pathways being investigated elsewhere. Therefore, we envision close communication and information exchange with scientists at Los Alamos in areas of potential overlap (mineralogy, petrology and diagenesis) so that data sets collected by each group are unique and complementary."

During DOE Audit 93-01 discussions, the YMP-USGS stated that an AP-5.19Q IMOU existed to address scientific exchanges between the USGS and Los Alamos National Laboratory (LANL). Subsequent investigations confirmed that the draft IMOU to control this exchange was canceled by the USGS ICWG Representative and therefore was never fully approved. During the approval process it was determined that the IMOU was inappropriate.

**C. Root Cause Determination -** The requirements of AP-5.19Q were misunderstood by YMP-USGS staff and its relationship to AP-5.1Q are not clear.

**D. Corrective Action to Preclude Recurrence -** 1) The YMP-USGS QA Manager and the YMP-USGS Data Management Coordinator have received clarification of the requirements pertaining to AP-5.1Q and AP-5.19Q from YMPO officials. 2) Through involvement with this CAR the investigator is aware that future written communications should have a statement such as, "data are preliminary and should not be used in quality affecting work." 3) Submit a DAR to YMPO to clarify AP-5.1Q.

**2. For each action above identify the name of the individual assigned responsibility for completion and the anticipated (or actual, if complete) completion date.**

T. H. Chaney completed investigative actions November 3, 1992.

P. W. McKinley completed investigative actions November 4, 1992.

DAR submitted to YMPO, letter Hayes to Gertz, January 25, 1993. DAR accepted or rejected by YMPO, and an ICN issued March 1, 1993.

**3. Responses Approved:**

  
\_\_\_\_\_  
L.R. Hayes, Chief, Yucca Mountain Project Branch

2/5/93  
Date

  
\_\_\_\_\_  
T.H. Chaney, YMP-USGS Quality Assurance Manager

2/5/93  
Date

*Sta. del 2/5/93*



# United States Department of the Interior

GEOLOGICAL SURVEY  
BOX 25046 M.S. ~~425~~  
DENVER FEDERAL CENTER  
DENVER, COLORADO 80225



IN REPLY REFER TO:

INFORMATION ONLY

January 25, 1993

Carl P. Gertz, Project Manager  
Yucca Mountain Project Office  
U.S. Department of Energy  
P.O. Box 98518  
Las Vegas, NV 89193-8518

ATTENTION: Russ Dyer, Director,  
Regulatory and Site Evaluation Division

SUBJECT: Transmittal of Document Action Request Regarding AP 5.1Q

Enclosed please find a document control request (DAR) concerning Administrative Procedure AP 5.1Q, Control and Transfer of Technical Data on the Yucca Mountain Site Characterization Project.

Sincerely,

L. R. Hayes, Technical  
Project Officer, Yucca  
Mountain Project Branch

MHM/LRH/aa  
Enclosure

cc: T. H. Chaney  
P. W. McKinley  
A. W. Whiteside  
M. H. Mustard  
A. M. Simmons

YMP-108-R1  
11/30/92

# YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT DOCUMENT ACTION REQUEST (DAR)

Page 1 of 2  
Date \_\_\_\_\_ DAR No. \_\_\_\_\_

Signatures on this document represent signers' acknowledgement that the applicable procedure has been read, understood, and complied with.

## SECTION I - ACTION REQUEST

1. DOCUMENT TITLE: CONTROL AND TRANSFER OF TECHNICAL DATA ON THE YM SITE CHARACTERIZATION PROJECT	2. DOCUMENT NO.: AP 5.1Q	3. REV/ICN: (current) REV. 2/ICN 1	4. <input checked="" type="checkbox"/> Q <input type="checkbox"/> NON-Q
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5. TYPE OF ACTION REQUESTED:  Develop New Document  Change Existing Document  Cancel Document  
 Review Only (attach document)

6. DESCRIPTION OF ACTION REQUESTED:  
SEE ATTACHED

7. DOCUMENTS AFFECTED:  
N/A

8. REASON FOR ACTION REQUEST:  
To provide the allowance for the collegial exchange of data prior to data being checked and entered into TDE.  
  
 Additional Material Attached

10. RELATED REPORT NUMBER:  
CAR YM-93-015

11. REQUESTED BY:  
TOM CHANEY  
USGS  
Print Name (303)-236-1418  
Organization Phone No.  
*Martha H. Mustard* 1-25-93  
Signature Date  
for T.H. Chaney

9. DELIVERABLE DUE DATE:  
02/15/93

## SECTION II - ACTION INITIATION

12. REQUEST:  Approved  Rejected | 13. MAJOR CHANGES:  Yes  No | 14. PRIORITY:  Immediate  Hold

15. MODIFICATION METHOD:  ICN  Revision  Cancel  N/A | 16. CCB ACTION:  Yes  No

17. TRAINING RECOMMENDATION:  Self-Study  Classroom Trng.  N/A  
 Other \_\_\_\_\_

18. COMMENTS

19. PREPARER ASSIGNED:

20. RESPONSIBLE DIRECTOR:  
\_\_\_\_\_  
Signature Date

## SECTION III - ACTION CONCURRENCE

21. PROJECT CONTROL BRANCH CHIEF CONCURRENCE:  
Request  Approved  Rejected  
\_\_\_\_\_  
Signature Date

COMMENTS:

## SECTION IV - ACTION REVIEW

22. TRAINING REQUIREMENTS:  N/A\*  Yes - Number of Days Required for Trng.: \_\_\_\_\_  
COMMENTS:

\* Requires Justification in Comment Section

23. Training Officer/Training Manager:  
\_\_\_\_\_  
Signature Date

24. CRWMS M&O PLANS AND PROCEDURES (DAR Completion)  
\_\_\_\_\_  
Signature Date

## 6. DESCRIPTION OF ACTION REQUESTED:

The following statements in AP-5.1Q, Rev. 2 need to be clarified. These statements also appear in AP-5.1Q, Rev. 3, Draft D.

### Section 1.0 Purpose

current wording: Data control and transfer begin at data acquisition, through measurement by YMP Participant staff, procurement through subcontractors, interagency agreements, or any other means except for data generated outside the YMP.

suggested change: Data control begins at the completion of data acquisition. Data are obtained through measurements by YMP Participant staff, procurement through subcontractors, interagency agreements, or any other means except for data generated outside the YMP.

### Section 3.0 Definitions

#### 3.3 Data Acquisition

current wording: Data acquisition is complete when the data have been recorded and checks can be performed to determine that the data have been acquired according to applicable technical procedures and instrumentation used in collection was operating properly.

suggested change: Data acquisition is complete when the data have been recorded and checks have been performed to determine that the data have been acquired according to applicable technical procedures and instrumentation used in collection was operating properly.

c:\memos\jan93\dar.jan



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

WBS 1.2.11  
QA: N/A

MAR 10 1993

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

VERIFICATION OF CORRECTIVE ACTION OF CORRECTIVE ACTION REQUEST (CAR) YM-93-015  
RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION AUDIT YMP-93-015 OF  
U.S. GEOLOGICAL SURVEY (USGS)

Verification has been completed on the remedial actions for CAR YM-93-015 (i.e., issuance of a Document Action Request and reissuance of the data in question as "Preliminary"). Based on the verification, no further action on the part of USGS is necessary at this time. The revision to Administrative Procedure (AP) 5.1Q is the responsibility of Yucca Mountain Site Characterization Project Office (YMPO) and as such, will be tracked through them. A letter will be written to YMPO personnel indicating the actions necessary to prevent recurrence. However, CAR YM-93-015 will remain open until AP-5.1Q is revised and an evaluation performed to determine the change and its affect on USGS's processing of data.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Richard L. Maudlin at 794-7290.

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-2912

Enclosure:  
CAR YM-93-015

Larry R. Hayes

-2-

MAR 10 1993

cc w/encl:

K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
T. H. Chaney, USGS, Denver, CO  
R. W. Craig, USGS, Las Vegas, NV  
R. L. Maudlin, MACTEC, Las Vegas, NV

cc w/o encl:

J. W. Gilray, NRC, Las Vegas, NV

~~N. J. Brock, SAIC, Las Vegas, NV~~

D. D. Porter, SAIC, Golden, CO  
P. G. Jones, M&O/TRW, Las Vegas, NV  
A. V. Gil, YMP, NV  
A. M. Simmons, YMP, NV  
B. J. Verna, YMP, NV



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

WBS 1.2.11  
QA: N/A

**MAR 10 1993**

Carl P. Gertz, Project Manager, YMP, NV

TRANSFER OF RESPONSIBILITY FOR RESOLUTION OF CORRECTIVE ACTION REQUEST (CAR)  
YM-93-015 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION AUDIT  
YM-93-01 OF U.S. GEOLOGICAL SURVEY (USGS)

Based on recent meetings with representatives of USGS and the Regulatory & Site Evaluation Division (RSED), it has been determined that the remaining actions (i.e., revision of Administrative Procedure (AP) 5.1Q) regarding CAR YM-93-015, are considered the responsibility of the RSED. As a result of these meetings, representatives of RSED agreed that AP 5.1Q needed to be revised to properly clarify when technical data is required to be controlled.

A copy of CAR YM-93-015 is enclosed for your action. Please provide the corrective action completion date indicating when you anticipate that the revision to AP 5.1Q will be completed and approved. Response to this letter is due within ten working days of the date of this letter. Send the original of your response to Nita J. Brogan, Science Applications International Corporation, Las Vegas, Nevada.

If you have any questions, please contact either Robert B. Constable at 794-7945 or Richard L. Maudlin at 794-7290.

A handwritten signature in cursive script, appearing to read "R. E. Spence".

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-2914

Enclosure:  
CAR YM-93-015

Carl P. Gertz

-2-

MAR 10 1993

cc w/encl:

K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
S. D. Johnson, PSDO/REECo, Las Vegas, NV  
J. W. Estella, SAIC, Las Vegas, NV  
P. G. Jones, M&O/TRW, Las Vegas, NV  
R. L. Maudlin, MACTEC, Las Vegas, NV  
A. V. Gil, YMP, NV  
A. M. Simmons, YMP, NV  
B. J. Verna, YMP, NV

cc w/o encl:

J. W. Gilray, NRC, Las Vegas, NV  
T. H. Chaney, USGS, Denver, CO

~~W. B. Bogan, SAIC, Las Vegas, NV~~

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

CAR NO. YM-93-015  
DATE: 03/17/93  
PAGE: 1 OF 1  
QA N/A

**CORRECTIVE ACTION REQUEST (Continuation Page)**

1) Corrective Action Response for CAR #YM-93-015

A. Remedial Action - Responsible organization - USGS

The data transmittal letter, subject: Isotope Stratigraphy in the Topopah Spring High-Silica Rhyolite, from Zell Peterman to Dave Broxton and Dave Vaniman dated October 12, 1992, will be modified by USGS to include the words "data are preliminary and should not be used in quality affecting work." The original letter will be rescinded and the modified letter reissued. This action is considered the Remedial Action in response to the subject CAR.

B. N/A

C. N/A

D. Corrective Action to Preclude Recurrence - Responsible organization - YMPO/TDM

The YMPO Technical Data Manager has the responsibility of preparing an Interim Change Notice (ICN) to AP 5.1Q which will closely define the terms Raw Data, Preliminary Data, Acquired Data, and <sup>AMS</sup> ~~Derived~~ <sup>Developed</sup> Data. 3/16/93

2) Completion Date - April 30, 1993

3) Responsible Manager J. Timothy Sullivan Date 3/17/93

*Ltr dtd 3/22/93 - RSED:AMS-3263*