



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 22 1993

Carl P. Gertz, Project Manager, YMP, NV

VERIFICATION OF CORRECTIVE ACTIONS AND CLOSURE OF CORRECTIVE ACTION REQUEST  
(CAR) YM-93-001 AND CAR YM-93-002 RESULTING FROM YUCCA MOUNTAIN QUALITY  
ASSURANCE DIVISION (YMQAD) AUDIT YMP-92-24

The YMQAD staff has verified the corrective actions to CARs YM-93-001 and  
YM-93-002 and determined the results to be satisfactory. As a result, the  
CARs are considered closed.

If you have any questions, please contact either Robert B. Constable at  
794-7945 or Sam H. Horton at 794-7399.

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-2123

Enclosure:

CARs YM-93-001 and YM-93-002

~~cc w/encl:~~

K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
S. D. Johnson, PSDO/RECo, Las Vegas, NV  
J. W. Estella, SAIC, Las Vegas, NV  
Phillip Jones, M&O/TRW, Las Vegas, NV  
R. L. Maudlin, MACTEC, 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  
S. H. Horton, SAIC, Las Vegas, NV

290030

*Add: K.R. Hooks Htr Encl*  
*NH03:11*  
*WM-11*  
*102.7*

ORIGINAL  
THIS IS A RED STAMP

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

8 CAR NO.: YM-93-001  
DATE: 10/6/92  
SHEET: 1 OF 1  
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document AP-3.5Q, Revision 1		2 Related Report No. YMP-92-24	
3 Responsible Organization YMPO		4 Discussed With C. Gertz/W. Wilson/B. Cruz	
5 Requirement: AP-3.5Q, Revision 1, Paragraph 4.0, Step 4 (A), requires that if a change is scientific, design or quality-affecting, that a technical evaluation be performed by the affected participant (i.e., YMPO or other participant) per the participants' procedure or the requirements identified within Attachment 4 of AP-3.5Q.			
6 Adverse Condition: Contrary to the above, during Audit YMP-92-24, no objective evidence could be produced to show that the technical evaluations had been performed for the following Field Change Requests (FCRs):  FCR 92/089      FCR 92/092 FCR 92/058      FCR 92/061			
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 type="checkbox"/> Root Cause Determination			
13 Recommended Actions: Identify the remedial actions to be taken to correct the deficiencies note in Block 6. Investigate the program processes, activities or documentation to determine the extent and depth of similar conditions as noted in Block 6. Identify these deficiencies and provide the measures to correct them.			
7 Initiator Sam E. Horton <i>Sam Horton</i> Date <i>10/06/92</i>		14 Issuance Approved by: QADD <i>[Signature]</i> Date <i>10/8/92</i>	
15 Response Accepted QAR Date		16 Response Accepted QADD Date	
17 Amended Response Accepted QAR <i>Sam Horton</i> Date <i>12/30/92</i>		18 Amended Response Accepted QADD <i>[Signature]</i> Date <i>1/5/93</i>	
19 Corrective Actions Verified QAR <i>Sam Horton</i> Date <i>1/19/93</i>		20 Closure Approved by: QADD <i>[Signature]</i> Date <i>1/21/93</i>	

ENCLOSURE

REV. 08/91

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

CAR NO. YM-93-001  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

1.0 Corrective Action Response for CAR # YM-93-001

A. Remedial Action

For remedial purposes, an FCR Processing Checklist, as shown in Attachment 1, has been implemented to assure that the technical evaluation required in Step 4 of AP-3.5Q is included, if appropriate.

B. Investigative Action

Investigation was made of all FCRs processed since July, 1991, and then reviewing those that involved scientific, design or quality affecting changes. From this review, 15 FCRs lacking objective evidence of technical evaluation were identified. These 15 FCRs which include the four mentioned in this CAR are annotated in a copy of the Change Request Status Log Report, and is shown in Attachment 2. An analysis of these FCRs showed that: technical evaluations were performed for FCRs 92/089 and 92/092; technical evaluations were not found in the files for FCRs 92/058 and 92/061; and all of the FCRs annotated in Attachment 2 were of the urgent or minor nature and a technical evaluation was not applicable. Procedure AP-3.5Q was interpreted as not requiring a technical evaluation for FCRs of a minor or urgent nature.

C Root Cause Determination

Not Applicable

D. Corrective Action to Preclude Recurrence

The FCR Processing Checklist shown in Attachment 1 was implemented as an internal CM desk top instructions. To bring the FCRs noted in Attachment 2 into compliance, copies of technical evaluations were requested of the Participants to complete the files.

*Lt dtj 11/9/92 - EDD:BDH-829*

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

CAR NO. YM-93-001  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

CAR # YMP-93-001 (continuation)

2. Assigned Responsibility

Action	Individual	Completion
1.A	B. G. Cruz	Completed October 7, 1992
1.B	B. G. Cruz	Completed October 23, 1992
1.C	N/A	
1.D	B. G. Cruz	Completed October 30, 1992

3. Response Approved: Winifred A. Wilson Date: 11-4-92  
W. A. Wilson

FCR Processing Checklist (REV. 0)

Processor \_\_\_\_\_

FCR # \_\_\_\_\_

Date received: \_\_\_\_\_

All document impacts are listed \_\_\_\_\_

Document to be changed is properly categorized \_\_\_\_\_

Correct Processing Priority \_\_\_\_\_

Correct Change impacts \_\_\_\_\_

If applicable, correct Cost/Schedule impacts \_\_\_\_\_

Correct TPO/DD signature obtained \_\_\_\_\_

Originators procedural training concurrence \_\_\_\_\_

If applicable, prepare and distribute CEs \_\_\_\_\_

If applicable, receipt of all CEs obtained \_\_\_\_\_

Correlation between section II and section III \_\_\_\_\_

Complete and/or disposition FCR \_\_\_\_\_

CDIA prepared \_\_\_\_\_

CM Document Receipt Acknowledgment complete and signed \_\_\_\_\_

Submit original package to DRC for distribution \_\_\_\_\_

Receive original package with DRCs concurrence for site file \_\_\_\_\_

Copy package for Las Vegas file \_\_\_\_\_

Complete FCR Transmittal form, initial and date \_\_\_\_\_

If applicable, attach FCCB meeting minutes and/or CEs  
to FCR package for site file \_\_\_\_\_

Submit form to B. Cruz for initials,  
receive form from B. Cruz and send to distribution \_\_\_\_\_

OFFICE OF CIVILIAN  
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WASHINGTON, D.C.

CAR NO. YM-93-001  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

Attachment 2  
CAR YM-93-001

Annotated Change Request Status Log Report      32 pages

Copies of Related Technical Evaluations      36 pages

These documents are available for review in the YMP CM offices. Please make arrangements to see these by contacting B. G. Cruz at 794-1851



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

WBS 1.2.11  
QA: N/A

**DEC 11 1992**

Carl P. Gertz, Project Manager, YMP, NV

EVALUATION OF RESPONSES TO CORRECTIVE ACTION REQUESTS (CAR) YM-93-001, YM-93-002, AND YM-93-003 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-92-24

Reference: Ltr, Spence to Gertz, dtd 11/20/92

This letter supersedes the referenced letter.

The YMQAD staff has evaluated the responses to CARs YM-93-001 through YM-93-003. The responses have been determined to be unsatisfactory for the following reasons:

**1.0 Corrective Action Response for CAR YM-93-001**

- B. First line - Need to explain why investigations were made since July 1991 (i.e., explain the significance of that date).

Second sentence - Since there were only 15 Field Change Requests (FCR) identified, they should be specifically identified with a status matrix of each and this should be included in this CAR.

Next to last sentence - Need to clarify the difference between urgent and minor. Urgent FCRs do not necessarily waive the requirement for a technical evaluation.

- D. This section should state that the FCRs identified in Section B above will be technically evaluated. Copies of these evaluations shall be completed and maintained with the corresponding FCR. An impact of those implemented FCRs that had no technical evaluation will also be performed. If impacts exist, the extent and disposition of these impacts shall be identified in this CAR.

**1.0 Corrective Action Response for CAR YM-93-002**

- A. At the end of this paragraph, a statement should be made to provide an attachment to this CAR to show this action has been or will be completed.
- D. Fourth line, delete the phrase starting with the word "submits . . . baseline," and insert, "notifies the CCB in writing of document acceptance, (d) CCB updates the technical baseline. Also, in the old (d), delete the phrase "After CCB approval" and make the rest of the statement item (e).

DEC 11 1992

Note: The CCB should not be accepting technical documents. Its function is to update the technical baseline after acceptance by the Yucca Mountain Site Characterization Project Engineering & Development Division.

1.0 Corrective Action Response for CAR YM-93-003

- D. (b) A statement should be added to take into consideration what to do in case the Office of Civilian Radioactive Waste Management does not agree.

The next to last sentence should be clarified as to where will schedule information be officially shown (proceduralized).

Amended responses are required to be submitted to this office within ten working days of the date of this letter. Send the original of your responses 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 Sam H. Horton at 794-7399.



Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:REC-1326

Enclosures:

1. CAR YM-93-001
2. CAR YM-93-002
3. CAR YM-93-003

cc w/encls:

K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
S. D. Johnson, PSDO/RECo, Las Vegas, NV  
J. W. Estella, SAIC, Las Vegas, NV  
J. H. Rusk, MACTEC, Las Vegas, NV  
A. V. Gil, YMP, NV  
B. J. Verna, YMP, NV

cc w/o encls:

J. W. Gilray, NRC, Las Vegas, NV  
N. J. Brogan, SAIC, Las Vegas, NV  
S. H. Horton, SAIC, Las Vegas, NV



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

CAR NO. YMP-93-001  
DATE: 12/15/92  
PAGE: 1 OF 4  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**1.0 Corrective Action Response for CAR # YMP-93-001**

**A. Remedial Action**

For remedial purposes, an FCR Processing Checklist, as shown in Attachment 1, has been implemented to assure that the technical evaluation required in Step 4 of AP-3-5Q is included, if appropriate.

**B. Investigative Action**

Investigation was made of all FCRs processed since July, 1991, and then reviewing those FCRs that involved scientific, design or quality affecting change. Investigation began in July 1991 because the FCCB was established on that date. From this review, 15 FCRs lacking objective evidence of technical evaluation were identified. Attachment 2 is a listing of the referenced 15 FCRs (technical evaluations are in the respective FCR files). These 15 FCRs which include the four mentioned in this CAR are shown in Attachment 2. An analysis of these FCRs showed that technical evaluations were performed for FCR 92/089 and 92/092; technical evaluation were not found in the files for FCRs 92/058 and 92/061; and all of the FCRs annotated in Attachment 2 now have technical evaluations. It was determined that there was no adverse impact from evaluations being performed subsequent to approval of referenced FCRs.

**C. Root Cause Determination**

Not Applicable

**D. Corrective Action to Preclude Recurrence**

The FCR Processing Checklist shown in Attachment 1 of this CAR will be implemented as an internal CM desk top instruction to preclude recurrence of conditions that led to CAR YM-93-001. To bring the FCRs noted in Attachment 2 into compliance, copies of technical evaluations were requested of and received from the Participants to complete the files.

*Ltr dtd 12/21/92 - EDD:BDH-1552*

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

CAR NO. YMP-93-001  
DATE: 12/15/92  
PAGE: 2 OF 4  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**Attachment 2**

Listed below are the 15 Field Change Requests referenced in Section 1.0 (B) of CAR YMP-93-001

**FCR No.**

91/082	92/061
91/088	92/063
92/043	92/072
92/046	92/073
92/053	92/080
92/058	92/089
92/059	92/092
92/060	

Technical evaluation for each FCR listed is available in respective file.

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

CAR NO. YH-93-001

DATE: 12/15/92

PAGE: 3 OF 4  
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

CAR # YM-93-001 (continuation)

2. Assigned Responsibility

Action	Individual	Completion
1.A	B. G. Cruz	Completed October 7, 1992
1.B	B. G. Cruz	Completed October 23, 1992
1.C	N/A	
1.D	B. G. Cruz	Completed October 30, 1992

3.

Response Approved:

Winfred A. Wilson  
W. A. Wilson

Date: 12/15/92

**FCR Processing Checklist (REV. 1)**

Processor \_\_\_\_\_

FCR: \_\_\_\_\_

Date received: \_\_\_\_\_

All document impacts are listed \_\_\_\_\_

Document to be changed is properly categorized \_\_\_\_\_

Correct Processing Priority \_\_\_\_\_

Correct Change impacts \_\_\_\_\_

If applicable, correct Cost/Schedule impacts \_\_\_\_\_

Correct TPO/DD signature obtained \_\_\_\_\_

Originators procedural training compliance \_\_\_\_\_

If applicable, prepare and distribute CEs \_\_\_\_\_

If applicable, receipt of all CEs obtained \_\_\_\_\_

Correlation between section II and section III \_\_\_\_\_

Complete and/or disposition FCR \_\_\_\_\_

CDIA prepared \_\_\_\_\_

CM Document Receipt Acknowledgment complete and signed \_\_\_\_\_

Submit original FCR with CDIA to DRC for distribution \_\_\_\_\_

Receive original FCR with DRCs concurrence for site file \_\_\_\_\_

Copy FCR for Las Vegas file \_\_\_\_\_

Complete FCR disposition Letter, initial and date \_\_\_\_\_

If applicable, attach FCCB meeting minutes and/or CEs  
to FCR package for site file \_\_\_\_\_

Submit info copy of FCR to CM analyst, recheck for  
completeness and create folder for Las Vegas file. \_\_\_\_\_

Submit disposition to B. Cruz for initials,  
receive dispositon from B. Cruz and send to distribution \_\_\_\_\_

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

CAR NO. YM-93-001  
DATE: 1/19/93  
PAGE: 1 OF 1  
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

QA VERIFICATION OF CORRECTIVE ACTION *by Sam Horton*

A sample of recent FCRs were reviewed to determine that a desk-top checklist was being used to ensure that technical evaluations are being performed. FCRs examined (FCRs 93/003; 93/036 and 93/085) had completed checklist in the files to ensure evaluations were performed.

In addition, a sample of 9 of the 15 FCRs identified as not having technical evaluations were also reviewed. It was verified that each of the 9 FCRs now have technical evaluations in their respective FCR file. The FCR files reviewed were: 91/082; 92/043; 92/058; 92/061; 92/063; 92/072; 92/073; 92/089; and 92/092.

Based on the verification of the actions taken, corrective action for this CAR is considered acceptable and adequate.

*Sam Horton*  
*Jan. 19, 1993*

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

8 CAR NO.: YM-93-002  
DATE: 10/6/92  
SHEET: 1 OF 1  
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document AP-5.24Q, Revision 0		2 Related Report No. YMP-92-24	
3 Responsible Organization YMPO		4 Discussed With C. Gertz/W. Wilson/B. Cruz	
5 Requirement: AP-5.24Q, Revision 0, Paragraph 4.0, Step 5 and Step 5 Note, require the submittal of as-built drawings and specifications from the affected participants to the CCB for incorporation into the technical baseline. In addition, the CCB is required to notify the Architect Engineer (A/E) of the CCB's acceptance of as-built drawings and specifications, and the CCB Secretary is required to send as-builts to the LRC and the DCC.			
6 Adverse Condition: Contrary to the above, during Audit YMP-92-24, the following deficient conditions were identified:  1. Trench 14 as-built drawings and specifications were submitted to the CCB but were not shown in the technical baseline as being as-built.  2. The CCB did not notify the A/E of the CCB's acceptance of Trench 14 as-built drawings and specifications.  3. The Trench 14 as-built drawings and specifications were not sent to the LRC (however, investigation has provided evidence that they were sent to the DCC).			
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 type="checkbox"/> Root Cause Determination			
13 Recommended Actions: Identify the remedial actions to be taken to correct the deficiencies note in Block 6. Investigate the program processes, activities or documentation to determine the extent and depth of similar conditions as noted in Block 6. Identify these deficiencies and provide the measures to correct them.			
7 Initiator Sam E. Horton <i>Sam Horton</i> Date 10/06/92		14 Issuance Approved by: QADD R.C. Spence Date 10/8/92	
15 Response Accepted QAR Date		16 Response Accepted QADD Date	
17 Amended Response Accepted QAR <i>Sam Horton</i> Date 12/20/92		18 Amended Response Accepted QADD <i>R.C. Spence</i> Date 1/5/93	
19 Corrective Actions Verified QAR <i>Sam Horton</i> Date 1/19/93		20 Closure Approved by QADD <i>R.C. Spence</i> Date 1/21/93	

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

CAR NO. YM-93-002  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

1.0 Corrective Action Response for CAR # YM-93-002

A. Remedial Action

Remedial action will be taken regarding the Trench 14 as-built drawings and specifications. The CCB will handle these documents in accordance with AP-5.24Q, Preparation and Submittal of As-Built Drawings and Specifications, and notify the A/E of the CCB's acceptance of these documents.

B. Investigative Action

Investigation has shown that this has been a one-time occurrence. The Trench 14 as-built drawings and specifications were submitted to the CCB in June, 1992. Since there were no applicable CM procedures regarding these documents, they were sent to the FCCB. The FCCB submitted the documents to the DRC as additional records to the corresponding Job Package. Two procedures apply to as-built drawing: AP-5.24Q and AP-6.22. The AP-6.22Q, Job Package and Completion Records, requires as-built drawings and specifications to be submitted by the A/E to the DRC. AP-5.24Q is applicable to Participants and A/Es, and requires as-built drawings and specifications to be submitted to the CCB. These two procedures are not identified as CM procedures.

C. Root Cause Determination

Not Applicable

*Ltr dtd 11/9/92 - EDD:BDH-829*

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

CAR NO. YM-93-002  
DATE: \_\_\_\_\_  
PAGE: \_\_\_\_\_ OF \_\_\_\_\_  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

CAR # YM-93-002 (continuation)

**D. Corrective Action to Preclude Recurrence**

AP-5.24Q will be revised to replace the current text in Step 5 and the Step 5 Note with text that includes the following sequence: (a) A/E and Participants submit as-built documents to EDD/YMPO for acceptance; (b) EDD/YMPO notifies the A/E of document acceptance or rejection; (c) after EDD/YMPO acceptance of documents, A/E submits a change request for incorporation of documents into the technical baseline; (d) After CCB approval, A/E submits documents to DRC for distribution and the LRC for records turnover. Also, the current text in Step 9, AP-6.22Q will be revised to cite AP-5.24Q as the link to as-built drawings rather than AP-6.22Q.

**2. Assigned Responsibility**

Action	Individual	Completion
1.A	B. G. Cruz	By December 11, 1992
1.B	B. G. Cruz	Completed October 30, 1992
1.C	N/A	
1.D	J. T. Gardiner	DAR will be submitted by December 18, 1992

3. Response Approved: W. B. Simecka Date: 11/6/92  
W. B. Simecka





**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

**DEC 11 1992**

Carl P. Gertz, Project Manager, YMP, NV

EVALUATION OF RESPONSES TO CORRECTIVE ACTION REQUESTS (CAR) YM-93-001, YM-93-002, AND YM-93-003 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-92-24

Reference: Ltr, Spence to Gertz, dtd 11/20/92

This letter supersedes the referenced letter.

The YMQAD staff has evaluated the responses to CARs YM-93-001 through YM-93-003. The responses have been determined to be unsatisfactory for the following reasons:

**1.0 Corrective Action Response for CAR YM-93-001**

- B. First line - Need to explain why investigations were made since July 1991 (i.e., explain the significance of that date).

Second sentence - Since there were only 15 Field Change Requests (FCR) identified, they should be specifically identified with a status matrix of each and this should be included in this CAR.

Next to last sentence - Need to clarify the difference between urgent and minor. Urgent FCRs do not necessarily waiver the requirement for a technical evaluation.

- D. This section should state that the FCRs identified in Section B above will be technically evaluated. Copies of these evaluations shall be completed and maintained with the corresponding FCR. An impact of those implemented FCRs that had no technical evaluation will also be performed. If impacts exist, the extent and disposition of these impacts shall be identified in this CAR.

**1.0 Corrective Action Response for CAR YM-93-002**

- A. At the end of this paragraph, a statement should be made to provide an attachment to this CAR to show this action has been or will be completed.
- D. Fourth line, delete the phrase starting with the word "submits . . . baseline," and insert, "notifies the CCB in writing of document acceptance, (d) CCB updates the technical baseline. Also, in the old (d), delete the phrase "After CCB approval" and make the rest of the statement item (e).

DEC 11 1992

Note: The CCB should not be accepting technical documents. Its function is to update the technical baseline after acceptance by the Yucca Mountain Site Characterization Project Engineering & Development Division.

1.0 Corrective Action Response for CAR YM-93-003

- D. (b) A statement should be added to take into consideration what to do in case the Office of Civilian Radioactive Waste Management does not agree.

The next to last sentence should be clarified as to where will schedule information be officially shown (proceduralized).

Amended responses are required to be submitted to this office within ten working days of the date of this letter. Send the original of your responses 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 Sam H. Horton at 794-7399.



Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1326

Enclosures:

1. CAR YM-93-001
2. CAR YM-93-002
3. CAR YM-93-003

cc w/encls:

K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
S. D. Johnson, PSDO/REEC, Las Vegas, NV  
J. W. Estella, SAIC, Las Vegas, NV  
J. H. Rusk, MACTEC, Las Vegas, NV  
A. V. Gil, YMP, NV  
B. J. Verna, YMP, NV

cc w/o encls:

J. W. Gilray, NRC, Las Vegas, NV  
~~N. J. Brogan, SAIC, Las Vegas, NV~~  
S. H. Horton, SAIC, Las Vegas, NV

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

CAR NO. YMP-93-002  
DATE: 12/15/92  
PAGE: 1 OF 3  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**1.0 Corrective Action Response for CAR # YMP-93-002**

**A. Remedial Action**

- Remedial action will be taken regarding the Trench 14 as-built drawings and specifications. The CCB will handle these documents in accordance with AP-5.24Q, Preparation and Submittal of As-Built Drawings and Specifications, and notify the A/E of the CCB's acceptance of these documents. The CCB Register has been updated to reflect the current status of these As-Built Drawings and the A/E has been notified of the status. Aperture card range for these As-Built Drawings in the LRC is 9000008954 through 9000008961.

**B. Investigative Action**

Investigation has shown that this was a one-time occurrence. The Trench 14 as-built drawings and specifications were submitted to the CCB in June, 1992. Since there were no applicable CM procedures regarding these documents, they were sent to the FCCB. The FCCB submitted the documents to DRC as additional records to the corresponding Job Package. Two procedures apply to as-built drawing: AP-5.24Q and AP-6.22. The AP-6.22Q, Job Package and Completion Records, requires as-built drawings and specifications to be submitted by the A/E to the DRC. AP-5.24Q is applicable to Participants and A/Es, and requires as-built drawings and specifications to be submitted to the CCB. These two procedures are not currently identified as CM procedures.

**C. Root Cause Determination**

Not Applicable

*Ltr dtd 12/21/92 - EDD:BDH-1552*

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**CORRECTIVE ACTION REQUEST (Continuation Page)**

**CAR # YM-93-002 (continuation)**

**D. Corrective Action to Preclude Recurrence**

CAR# YM-93-002 was written on 10/06/92 identifying deficient conditions relating to Trench 14 as-built drawings and specifications. The controlling document identified as AP-5.24Q Revision 0. Subsequently, AP-5.24Q Revision 1 was issued with an effective date of 11/16/92. This revision (Rev 1) removed the requirements for:

- a) CCB acceptance of as-built drawings and specifications
- b) CCB notification to the A/E of acceptance of as-builts
- c) CCB forwarding as-built to LRC and DRC

Thus no remedial action is necessary.

However, in order to identify how the Configuration Management Technical Baseline is updated, two additional steps, (8 & 9) will be added to Section 5.0 of AP-5.24Q, in which the Configuration Management Organization (CMO), is notified in writing of the document acceptance, and the Technical Baseline updated.

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**CORRECTIVE ACTION REQUEST (Continuation Page)**

CAR #YM-93-002 (continuation)

AP-5.24Q will be submitted for revision to include the following revised text:

"A/E	Step 8	Notify CM Change Control Board Secretary, in writing, of document acceptance
CMO	Step 9	Modify Project Technical Baseline, by updating Change Request Status Report and CCB Register"
Action	Individual	Completion
1.A	B. G. Cruz	By December 11, 1992
1.B	B. G. Cruz	Completed October 30, 1992
1.C	N.A.	
1.D	J. T. Gardiner	DAR will be submitted by December 18, 1992.

3. Response Approved:

WBS Date: 12/15/92  
W. B. Simecka

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CORRECTIVE ACTION REQUEST (Continuation Page)

VERIFICATION OF CORRECTIVE ACTION TO THE AMENDED RESPONSE  
BY QUALITY ASSURANCE (Sam Houston)

The latest version of the CCB Register was checked against the below listed Trench 14 design documents to verify their inclusion into the Register and the revisions noted were accurate.

SPECIFICATIONS

02120-Rev. 2  
02110-Rev. 2  
02200-Rev. 1  
02222-Rev. 2  
02223-Rev. 2  
02224-Rev. 2  
02230-Rev. 2

RSN DRAWINGS

HN-025-MVT-C1.2-Rev. 2  
HN-025-MVT-C2.1-Rev. 1  
HN-025-MVT-C4.1-Rev. 1  
HN-025-MVT-T1.1-Rev. 1  
JS-025-CST-C1.1-Rev. 1

The above noted and specs. were included in the CCB Register, and all revision numbers were accurate.

A copy of the Document Action Request (DAR) that requested changes to AP-5.24 Q, (to accommodate Section D of the CAR) was reviewed to determine its verbage reflected the verbage as stated in the CAR. It was determined the correct verbage is included in the DAR. In addition, it was verified that subitems a, b, & c of Section D of the <sup>SH 1/15/93</sup> CAR were removed from the procedure as noted by the CAR. (Rev. 1 of SH 1/15/93)

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CORRECTIVE ACTION REQUEST (Continuation Page)

REFERENCE DAR NO. 709, dtd. 12/9/92 for proposed revision.

In addition, it was verified the Charge Control Board (CCB) did notify the Architect/Engineer (A/E) of CCB's acceptance of the Trench 14 Design Documents. The A/E was also notified of the status of these documents. Reference letter from L.D. Foust, Manager Nevada Site, MFO to S Horton, dtd. 1/18/93, WBS. - 1.2.9.3.1

*Sam Horton*  
*Jan 18, 1993*