

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

FEB 09 1995

L. Dale Foust
Technical Project Officer
for Yucca Mountain
Site Characterization Project
TRW Environmental Safety Systems, Inc.
Bank of America Center, Suite P-110
101 Convention Center Drive
Las Vegas, NV 89109

EVALUATION OF AMENDED RESPONSE, VERIFICATION OF CORRECTIVE ACTION, AND CLOSURE OF CORRECTIVE ACTION REQUEST (CAR) YM-94-071 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION'S (YMQAD) AUDIT YMP-94-01 OF THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND OPERATING CONTRACTOR (SCPB: N/A)

The YMQAD staff has evaluated the amended response, verified the corrective action to CAR YM-94-071, and determined the results to be satisfactory. As a result, the CAR is considered closed.

If you have any questions, please contact either Robert B. Constable at 794-7945 or John F. Pelletier at 794-7538.

Robert B. Constable

YMQAD:RBC-2071

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

Enclosure:
CAR YM-94-071

cc w/encl:
T. A. Wood, HQ (RW-14) FORS
~~W. G. Spraul~~, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
R. L. Robertson, M&O/TRW, Vienna, VA
Richard Jiu, M&O/Duke, Las Vegas, NV
R. P. Ruth, M&O/Duke, Las Vegas, NV

cc w/o encl:
W. L. Belke, NRC, Las Vegas, NV
D. G. Sult, YMQAD/QATSS, Las Vegas, NV

YMP-5

9502150094 950209
PDR WASTE
WM-39

PDR

10H0311
102.7
WM-11

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

8 CAR NO.: YM-94-071
PAGE: 1 OF 1
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document NLP-3-20, Revision 0, Preparation of BFD		2 Related Report No. YMP-94-01	
3 Responsible Organization M&O		4 Discussed With Lawrence Morrison	
5 Requirement: NLP-3-20, Revision 0, Paragraph 5.2.10H - The BFD shall contain a traceability matrix of all output design documents.			
6 Adverse Condition: Contrary to NLP-3-20, Revision 0, the traceability matrix in BFD, Appendix B, Attachment III, is incomplete in that the following mechanical discipline documents are omitted: <ul style="list-style-type: none"> - Installation of Belt Conveyers, BABFC0000-01717-6300-14553, Revision 00, 7/8/94. - Breathing Air Purifier, BABFAG000-01717-6300-15881, Revision 00. 			
9 Does a Significant Condition Adverse to Quality exist? Yes <u>No</u> No <u>X</u> If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E		10 Does a stop work condition exist? Yes <u>No</u> No <u>X</u> ; If Yes - Attach copy of SWO If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C	
3 Response Due Date: 20 Working Days From Issuance			
11 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			
12 Recommended Actions: 1) Incorporate the mechanical discipline documents. 2) Review all other discipline documents for inclusion in Attachment III. 3) Examine related M&O CARs relative to this issue for adverse trends.			
7 Initiator Neil D. Cox <i>Neil D. Cox</i> 8-3-94		14 Issuance Approved by: QADD <i>[Signature]</i> Date 8.5.94	
15 Response Accepted QAR <i>Neil D. Cox</i> Date 8/24/94		16 Response Accepted QADD <i>[Signature]</i> Date 8.25.94	
17 Amended Response Accepted QAR <i>John F. Hellett</i> Date 2/7/95		18 Amended Response Accepted QADD <i>[Signature]</i> Date 2.10.95	
19 Corrective Actions Verified QAR <i>John F. Hellett</i> Date 2/7/95		20 Closure Approved by: QADD <i>[Signature]</i> Date 2.10.95	

RESPONSE TO CAR NO. YM-94-071

Remedial Action:

As no additional Q documents were directly affected, other than the BFD itself, the BFD Appendix B will undergo an additional check and be revised to ensure that the two examples cited in the CAR and all Package 2C calculations, drawings, and specifications are included and in the proper location after Package 2C documents are approved and baselined. Any additional deficiencies uncovered in the checking process will be incorporated in Appendix B.

Responsible Individual: Robert Saunders
Date of Completion: 11/1/94

Extent of Deficiency:

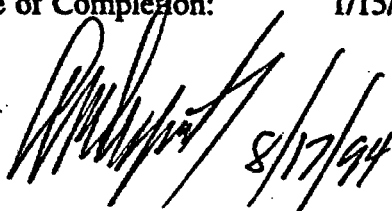
Of the 228 calculations, drawings, and specifications listed in the Scope of Work, Specification 01014 for Package 2C, we have found 3 drawings, 1 specification and 1 calculation which were not listed in Appendix B. One drawing and 1 specification had an incorrect DI portion of the document identifier (an editorial error). Two drawings were listed in the incorrect CI.

Additionally, there are other discrepancies within the BFD. Refer to M&O CAR No. 94-QN-C-040 for further details.

Corrective Action to Preclude Recurrence:

A Natural Working Group focusing on the BFD will be formed to ensure the process we use are effective, satisfy the requirements of the QARD, and that the production of the BFD can proceed in a timely and efficient manner. The Natural Working Group will be charged to produce recommendations to revise our current process of documenting our design inputs to help preclude recurrence of the type of errors addressed in CAR No. YM-94-071 and any other CARs related to this issue. Formal recommendations of the working group will be incorporated into the M&O procedures as appropriate.

Responsible Individual: Alden Segrest
Date of Completion: 1/15/95



8/17/94

8/17/94

LV.ESSB.GH. 8/94-736

VERIFICATION OF CORRECTIVE ACTION FOR CAR YM-94-071

The YMQAD Staff reviewed the corrective action for CAR YM-94-071 and determined the results to be unsatisfactory because the commitments for this CAR were not completed as described.

The BFD shall contain a traceability matrix of all output design documents. Contrary to this commitment there has been a change in the method of tracing design inputs from the BFD to Requirements Allocation Analyses. Therefore, the Remedial Action for this CAR is no longer applicable and a new response must be provided.



John F. Pelletier

1/26/95

Date



TRW Environmental
Safety Systems Inc.

101 Convention Center Drive
Suite P-110
Las Vegas, NV 89109
702.794.1800

WBS 1.2.6
QA: N/A

Contract #:DE-AC01-91RW00134
LV.ESSB.GH.02/95-531

February 2, 1995

Mr. Wesley E. Barnes
Project Manager
Yucca Mountain Site Characterization Project
U. S. Department of Energy
P.O. Box 98608
Las Vegas, Nevada 89193-8608

Attention: R. E. Spence

Dear Mr. Barnes:

Subject: Amended Response To CAR No. YM-94-071 (SCP#:N/A)

The initial Remedial Action response to the subject CAR is no longer applicable because of the results of the Corrective Action to Preclude Recurrence. We intend to revise the system for design input control and tracking in accordance with the recommendations of the Natural Working Group. The recommendations from that group have been completed. We now intend to proceed as follows:

1. Drawing and Specification Inputs Lists for ESF Design Package 2C have been completed. They show the traceability between the ESFDR and the design products (through Requirements Allocation Analyses, Design Analyses, and Determination of Importance Evaluations).
2. The BFD matrices A and B will not include 2C traceability.
3. Affected QA procedures (QAPs 3-8, 3-9, and 3-10) have been revised as appropriate to reflect the recommendations of the natural working group and have an implementation date of February 3, 1995.

The affected procedure revisions are completed.

Responsible individual:	Item 1 - Complete
	Item 2 - Complete
	Item 3 - Complete

LV.ESSB.GH.02/95-531

February 2, 1995

Page 2

If you have any questions, please contact Alden Segrest at 794-1924.

Sincerely,



for L. Dale Foust
Assistant General Manager, Nevada Site
Technical Project Officer

cc:

G. S. Abend, M&O, Las Vegas, NV

G. Heaney, M&O, Las Vegas, NV

P. G. Jones, M&O, Las Vegas, NV

for B. R. Justice, M&O, Las Vegas, NV

J. L. Naaf, M&O, Las Vegas, NV

R. P. Ruth, M&O, Las Vegas, NV

and R. M. Sandifer, M&O, Las Vegas, NV

R. S. Saunders, M&O, Las Vegas, NV

now A. M. Segrest, M&O, Las Vegas, NV

R. E. Spence, YMSCO, Las Vegas, NV

D. Sult, QATSS, Las Vegas

Project File No.102.01.1

LVRPC

LDF:GH:cam

CORRECTIVE ACTION VERIFICATION FOR YM-94-071

1. Reviewed and verified the following drawing and specification inputs lists for ESF Design Package 2C have traceability to the ESFDR.

BAB000000-01717-6300-01501, Rev. 03	Subsurface General Construction
BABEAB000-01717-6300-02165, Rev. 06	Rockbolts & Accessories
BABEAD000-01717-2100-40110, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 1 of 7
BABEAD000-01717-2100-40111, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 2 of 7
BABEAD000-01717-2100-40112, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 3 of 7
BABEAD000-01717-2100-40113, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 4 of 7
BABEAD000-01717-2100-40114, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 5 of 7
BABEAD000-01717-2100-40115, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 6 of 7
BABEAD000-01717-2100-40116, Rev. 01	TS North Ramp Excavation Layout Profile - Sheet 7 of 7
BABEAD000-01717-2100-40120, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 1 of 10
BABEAD000-01717-2100-40121, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 2 of 10
BABEAD000-01717-2100-40122, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 3 of 10
BABEAD000-01717-2100-40123, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 4 of 10

BABFA0000-01717-2100-41130, Rev. 01

TS North Ramp
Ventilation Brackets
Elevations, Details

BABE00000-01717-6300-03362, Rev. 01

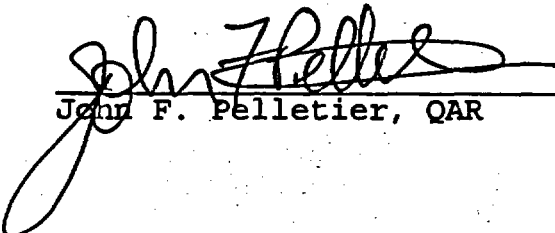
Dry Process
Shotcrete

BABE00000-01717-6300-03363, Rev. 01

Wet Process
Shotcrete

2. No verification needed.
3. Reviewed the recommendations of the natural working group presented in the presentation by Matthew J. Gomez and Larry R. Morrison on 11/16/94.

Reviewed and verified that Quality Assurance Procedures (QAPs) 3-8 Rev 5, 3-9 Rev 5, and 3-10 Rev 5, have been revised to reflect the recommendations of the natural working group.


John F. Pelletier, QAR

2/7/95
Date

BABEAD000-01717-2100-40124, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 5 of 10
BABEAD000-01717-2100-40125, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 6 of 10
BABEAD000-01717-2100-40126, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 7 of 10
BABEAD000-01717-2100-40127, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 8 of 10
BABEAD000-01717-2100-40128, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 9 of 10
BABEAD000-01717-2100-40129, Rev. 01	TS North Ramp Excavation Layout Plan - Sheet 10 of 10
BABEAB000-01717-2100-40152, Rev. 01	TS North Ramp Ground Support - Category 1 Elevation and Section
BABEAB000-01717-2100-40153, Rev. 01	TS North Ramp Ground Support - Category 2 Elevation and Section
BABEAB000-01717-2100-40154, Rev. 01	TS North Ramp Ground Support - Category 3 Elevation and Section
BABEAB000-01717-2100-40155, Rev. 01	TS North Ramp Ground Support - Category 4 Elevation and Section
BABEAB000-01717-2100-40156, Rev. 01	TS North Ramp Ground Support - Category 5 Elevation and Section
BABEAB000-01717-2100-40157, Rev. 01	TS North Ramp Rockbolt & Accessories Details
BABFA0000-01717-2100-41121, Rev. 01	TS North Ramp Cable Tray Supports Elevation, Details, Sect.