



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

WBS 1.2.9.3
 QA: N/A

JAN 19 1993

Richard E. Spence, Director, Yucca Mountain Quality Assurance Division,
 YMP, NV

AMENDED RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-93-003

Reference: Ltr, Spence to Gertz, dtd 1/5/93

Enclosed is an amended response to subject CAR. It includes a basis to implement your request that the corrective action should also address how design organizations will identify To Be Determined/To Be Verified data. If you have any questions, please contact either Bruce D. Hutchinson at 794-7936 or Betty G. Cruz at 794-1851.

WBSimecka

William B. Simecka, Director
 Engineering & Development Division

EDD:BDH-2046

Enclosure:
 Continuation Pages
 for CAR YM-93-003

- 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
 - N. J. Brogan, SAIC, Las Vegas, NV
 - B. G. Cruz, M&O/TRW, Las Vegas, NV
 - P. G. Jones, M&O/TRW, Las Vegas, NV
 - J. E. Zimmerman, M&O/TRW, Las Vegas, NV
 - T. G. Geer, M&O/Duke, Las Vegas, NV
 - R. L. Maudlin, MACTEC, Las Vegas, NV
 - R. V. Barton, YMP, NV
 - D. C. Royer, YMP, NV
 - A. V. Gil, YMP, NV
 - B. J. Verna, YMP, NV

Add: K. R. Hooks
NH03/11
wm-11
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OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

CAR NO. YM-93-003

DATE: _____

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CORRECTIVE ACTION REQUEST (Continuation Page)

1. Corrective Action Response for CAR # YM-93-003

A. Remedial Action

No remedial action is to be taken regarding the requirements documents in the current document hierarchy. These documents are shown in Attachment 1 (an annotated version of the CCB Register Report) under the "Level 2-CCB Baseline" portion of the Report. The annotations indicate applicability and status of logs. Five of the annotated documents do not include the TBD/TBV logs: ESF Subsystem Design Requirements Document, Waste Package Design Basis, SCP Exploratory Studies Facility-Vols I & III, Mined Geologic Disposal Repository Design Requirements and MGDS System Requirements. These five documents will be superseded by others currently in preparation for the new MGDS document hierarchy, as noted below in Paragraph D. The new OCRWM Document Hierarchy of requirements documents at the Program and Project levels have notations throughout the document indicating data that is of TBD nature.

B. Investigative Action

Investigation has shown that 5 of the 8 documents of a requirements or configuration data nature noted in Attachment 1 do not include the TBD/TBV logs. The status is annotated on the right hand margin of Attachment 1. The need for TBD/TBV logs is not specified in an existing document that pertains to technical document preparation such as OCRWM QAP 3.5 procedure, Technical Document Preparation. The requirement for logs should be stated in this procedure for preparing technical documents, and the responsibility for updating and maintenance of the log should be assigned to the document custodian. The need for TBD/TBV data in design documents such as drawings and design specification should apply to the design input process to reflect a flow-down from the respective Project level requirements documents.

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CORRECTIVE ACTION REQUEST (Continuation Page)

CAR# YM-93-003 (continuation)

C. Root Cause Determination

Not Applicable

D. Corrective Action to Preclude Recurrence

The corrective action is in three parts:

(1) A DAR regarding OCRWM procedure QAP 3.5, Preparation of Technical Documents, will be submitted to add the need of TBD/TBV logs for OCRWM requirement documents. The logs will take the form of summary tables that show section numbers and TBD/TBV entries. Since these are requirements documents and TBD/TBV data will be annotated in the body of the requirements document, the schedule or responsibility data is not necessary.

(2) Project level requirements documents for the new MGDS document hierarchy will include TBD/TBV data, whether the DAR noted above is approved or rejected. Project level requirements documents will also specify that design organizations incorporate the requirements for control of TBD/TBV data in their design process. The Project level documents are the Repository Design Requirements, Site Design and Test requirements, Engineered Barrier Design Requirements, ESF Design Requirements and Surface Based Test Facility Design Requirements.

(3,a) A DAR regarding AP-3.6Q will be submitted to revise paragraph 5.1.3, Requirements Traceability Identification, to delete the requirement of organizational responsibility and schedule resolution data. (3,b) After the above Project level documents have incorporated TBD/TBV data and are approved, another DAR regarding AP-3.6Q will be submitted to: delete reference to TBD/TBV logs for the reasons noted in paragraph 1.B; and clarify that the existence of such logs is verified in the CM process as complying with the Project level requirements noted in (1) above, but that TBD/TBV data is maintained by the document custodian.

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CORRECTIVE ACTION REQUEST (Continuation Page)

CAR YM-93-003 (Continuation)

2. Assigned Responsibility

Action	Individual	Completion
1.A	N/A	
1.B	T. C. Geer	Completed October 30, 1992
1.C	N/A	
1.D (1)	T. C. Geer	Submit DAR recommendation to OCRWM by February 28, 1993
1.D (2)	T. C. Geer	Complete by April 30, 1993
1.D (3,a)	B. G. Cruz	Submit DAR by Feb 28, 1993
1.D (3,b)	B. G. Cruz	Submit DAR by May 31, 1993

3. Response Approved: W.B. Simecka Date: 4/19/95
W. B. Simecka

OCB RECEIPT REPORT

PROJECT NUMBER	DOCUMENT TITLE	REV. NUMBER	CHANGE NUMBER	EFFECTIVE DATE	RESPONSIBLE ORGANIZATION
PCB - Level 1 - INFO ACCEPTED					
E/RW-0043	OCRM Program Management System Manual	04	DCP-037	07/31/91	PCB
E/RW-0223	Program Change Control Procedure (PCCP)	04	DCP-037	03/31/92	PCB
E/RW-0313P	YMP Site Characterization Project Plan	00	DCP-041	01/28/92	PCB
E/RW-0334	Physical System Requirements - Overall System	00	DCP-044	01/17/92	EDO
E/RW-0319	Physical System Requirements - Store Waste for SCP Conceptual Design	00	DCP-046	01/17/92	EDO
E/RW-0253	Program Cost and Schedule Baseline (PCSB)	02	DCP-050	01/14/92	PCB
E/RW-0335	Interim Approach to MRS Facility Design	00	DCP-051	01/22/92	PCB
E/RW-0270P	Waste Management System Description (WMSD)	01	DCP-054	02/06/92	EDO
E/RW-0264	Waste Management System Requirements (WMSR) Vol. I	02	DCP-056	02/06/92	EDO
E/RW-0268P	Waste Management System Requirements (WMSR) Vol. IV	02	DCP-056	02/06/92	EDO

Level 2 - OCB Baseline

LOGS EXIST (?)

YMP/CH-0006	Exploratory Shaft Facility Subsystem Design Requirements Document (ESF SDRD) for Title IX ***	02	90/023	10/24/90	EDO
YMP/CH-0007	Technical Requirements for the Yucca Mountain Site Characterization Project Surface - Based Testing	07	92/088	06/15/92	EDO
YMP/CH-0008	Yucca Mountain Site Description (Basis for SCP Chapter 8)	00	91/015	04/10/91	RSED
YMP/CH-0009	Conceptual Design of a Repository (Basis for SCP Chapter 8)	00	91/016	04/10/91	EDO
YMP/CH-0010	Waste Package Design Basis (Basis for SCP Chapter 8)	00	91/017	04/10/91	EDO

NO

YES

N/A

N/A

NO

OCB REGISTER REPORT

DOCUMENT NUMBER	DOCUMENT TITLE	REV. NUMBER	CHANGE NUMBER	EFFECTIVE DATE	RESPONSIBLE ORGANIZATION	
Level 2 - OCB Baseline						
YMP/CH-0011	Yucca Mountain Site Characterization Program Baseline	09	92/140	09/12/92	M&O	<u>LOGS EXIST (?)</u> YES
YMP/CH-0015	YMP Cost and Schedule Baseline	03	92/031	02/26/92	PCB	N/A
YMP/CH-0016	Yucca Mountain Site Characterization Project Exploratory Studies Facility - Title I Technical Baseline. **** Vols I and III	00	92/082	06/15/92	EDO	NO
YMP/CH-0017	Yucca Mountain Mined Geologic Disposal System Description*****	01	92/106	07/15/92	EDO	N/A
YMP/CH-0018	Yucca Mountain Mined Geologic Disposal Repository Design Requirements*****	00	92/105	07/15/92	EDO	NO
YMP/CH-0019	Yucca Mountain MGDS Exploratory Studies Facility Design Requirements*****	01	92/103	07/16/92	EDO	YES
YMP/CH-0020	Yucca Mountain MGDS System Requirements Document*****	01	92/132	09/21/92	EDO	NO
OCB Controlled						
YMP/CC-0001	Work Breakdown Structure, Index and Dictionary - Annex II to the Project Management Plan *	N/A	93/033	10/28/92	M&O	
YMP/CC-0002	Reference Information Base, Version 4.000	06	92/079	07/09/92	RSED	
YMP/CC-0004	Yucca Mountain Project Quality Assurance Level Assignment (QALA) Records	02	00	06/21/89	RSED	
YMP/CC-0006	Environmental Management Plan	00	91/027	01/18/91	P&OCD	
YMP/CC-0007	Systems Engineering Management Plan	03	91/042	04/10/91	EDO	



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WBS 1.2.11
QA: N/A

JAN 05 1993

Carl P. Gertz, Project Manager, YMP, NV

EVALUATION OF RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-93-003 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-92-24

The YMQAD staff has evaluated the response to CAR YM-93-003. The response has been determined to be unsatisfactory because in Section D, "Corrective Action to Preclude Recurrence," the proposed corrective action is to revise Office of Civilian Radioactive Waste Management (OCRWM) procedure Quality Assurance Procedure (QAP) 3-5, to add the need for To Be Determined/To Be Verified/To Be Resolved (TBD/TVB/TBR) logs for OCRWM requirements documents. However, QAP 3-5 is internal to OCRWM and is not applicable to the design organizations that are required to identify TBD/TVB/TBR data in design documents generated by them. The corrective action for this CAR should also address how the design organizations (Raytheon Services Nevada and Management and Operating Contractor) will identify TBD/TVB/TBR data under their program. This may be accomplished by having the Yucca Mountain Site Characterization Project Office direct the design organizations to ensure that controls for the identification of TBD/TVB/TBR data be included in their applicable procedures.

An amended response 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 Sam H. Horton at 794-7399.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1744

Enclosure:
CAR YM-93-003

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
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