



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

NOV 01 1995

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TRW Environmental Safety Systems, Inc.
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REISSUANCE OF SURVEILLANCE RECORD YMP-SR-96-001 RESULTING FROM
YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION'S (YMQAD) SURVEILLANCE
OF THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT
AND OPERATING CONTRACTOR (CRWMS M&O) (SCPB: N/A)

Ref: Ltr, Spence to Foust, dtd 10/27/95

Enclosed is the reissuance of the record of Surveillance YMP-SR-96-001 conducted by the YMQAD at the CRWMS M&O facilities in Las Vegas, Nevada, October 9-12, 1995. The Surveillance Record is being reissued to include the signature of the surveillance Team Leader.

The purpose of the surveillance was to verify implementation of the corrective actions associated with Deficiency Reports YMQAD-95-D004, YMQAD-95-D005, and YMQAD-95-D006.

This surveillance is considered completed and closed as of the date of this letter. A response to this surveillance record and any documented recommendations is not required.

If you have any questions, please contact either Mario R. Diaz at 794-7974 or Stephen R. Maslar at 794-7762.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:MRD-374

Enclosure:
Surveillance Record
YMP-SR-96-001

YMP-5

9511080045 951101
PDR WASTE
WM-11 PDR

102.7
WM-11
MADZ

L. Dale Foust

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cc w/encl:

D. A. Dreyfus, HQ (RW-1) FORS
 R. W. Clark, HQ (RW-3.1) FORS
 T. A. Wood, HQ (RW-14) FORS
~~W. G. Spraul~~ NRC, Washington, DC
 C. J. Henkel, NEI, Washington, DC
 W. L. Belke, NRC, Las Vegas, NV
 R. R. Loux, NWPO, Carson City, NV
 Cyril Schank, Churchill County Commission, Fallon, NV
 D. A. Bechtel, Clark County Comprehensive, Las Vegas, NV
 J. D. Hoffman, Esmeralda County, Goldfield, NV
 Eureka County Board of Commissioners,
 Yucca Mountain Information Office, Eureka, NV
 Lander County Board of Commissioners, Battle Mountain, NV
 Jason Pitts, Lincoln County, Pioche, NV
 V. E. Poe, Mineral County, Hawthorne, NV
 P. A. Niedzielski-Eichner, Nye County, Chantilly, VA
 L. W. Bradshaw, Nye County, Tonopah, NV
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 T. H. Chaney, USGS, Denver, CO
 C. K. Van House, YMQAD/QATSS, Las Vegas, NV
 A. W. Rabe, YMQAD/QATSS, Las Vegas, NV

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bcc w/ encl:

S. R. Maslar, YMQAD/QATSS, Las Vegas, NV

W. E. Barnes, YMSCO, NV

bcc w/o encl:

S. J. Brocoum, YMSCO, NV

W. J. White, YMSCO, NV

R. L. Craun, YMSCO, NV

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

QUALITY ASSURANCE SURVEILLANCE RECORD

SURVEILLANCE DATA

¹ ORGANIZATION/LOCATION: Civilian Radioactive Waste Management System Management and Operating Contractor (CRWMS M&O) Bank of America Building Las Vegas, NV	² SUBJECT: Verification of Closeout Actions for Deficiency Reports (DR) Yucca Mountain Quality Assurance Division (YMQAD) YMQAD-95-D004, D005 and D006	³ DATE: October 9 through 12, 1995
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⁴SURVEILLANCE OBJECTIVE:
Verification of corrective actions to closeout DRs, YMQAD -95-D004, -D005 and -D006.

⁵ SURVEILLANCE SCOPE: Review objective evidence associated with implementation of corrective actions for DRs YMQAD-95-D004, -D005 and -D006.	⁶ SURVEILLANCE TEAM: Team Leader: S. R. Maslar Additional Team Members: None
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⁷ PREPARED BY: <u>S. R. Maslar</u> Surveillance Team Leader <u>10/9/95</u> Date	⁸ CONCURRENCE: <u>N/A</u> QA Division Director Date
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SURVEILLANCE RESULTS

⁹BASIS OF EVALUATION/DESCRIPTION OF OBSERVATIONS:
See Page(s) 2-5

¹⁰SURVEILLANCE CONCLUSIONS:
See Page(s) 5

¹¹ COMPLETED BY: <u>S. R. Maslar</u> Surveillance Team Leader <u>10/26/95</u> Date	¹² APPROVED BY: <u>[Signature]</u> for QA Division Director <u>10-26-95</u> Date
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Block 9 (continued) BASIS OF EVALUATION/DESCRIPTION OF OBSERVATIONS:

This surveillance was conducted from October 9 through 12, 1995, in the Bank of America Building, Las Vegas, Nevada, to verify implementation of the previously accepted corrective actions for YMQAD-95-D004, -D005 and -D006. During a recent audit conducted on the CRWMS M&O's Waste Package Design effort, three DRs were generated to identify deficiencies as follows:

YMQAD-95-D004 noted that none of the design analysis resulting from waste package Advanced Conceptual Design activities will be subject to Quality Assurance Requirements and Description Document, DOE/RW/0333P, Revision 4, requirements based on CRWMS M&O Quality Assurance Procedure (QAP) 2-0, Revision 2, "Control of Activities," evaluation forms.

YMQAD-95-D005 noted that design analysis did not include all calculations such that any qualified individual could review the analysis without recourse to the originator.

YMQAD-95-D006 noted that the checking of Design Analysis did not provide objective evidence that the analyses were checked for completeness and technical adequacy.

Prior to this surveillance, corrective action responses were received and accepted by YMQAD. Objective evidence of completion of the corrective actions were documented for each DR by CRWMS M&O Mined Geologic Disposal System (MGDS) Development.

Details associated with the review of each DR verification package are as follows:

1. YMQAD-95-D004

Letter LVMGAMS.10/95-149, dated 10/6/95, transmitted the notification to YMQAD that the actions associated with YMQAD-95-D004 were complete. The letter included a package of objective evidence. A review of the objective evidence in conjunction with MGDS Development personnel discussions determined that all required actions were completed as previously identified by MGDS Development, except that QAP-2-0 has not been revised and minimal QA requirements in the area of design control were included on the QAP-2-0 evaluation sheets for the two scoping analyses. It was noted that two Procedure Action Requests (PAR) were sent out for action to the manager responsible for the procedure with no acceptance of the proposed changes to procedure QAP-2-0. This condition was corrected prior to the post surveillance conference with an acknowledgment that the procedure would be modified to include the proposed changes. The DR will remain open until procedure QAP-2-0 is revised and issued and additional QA requirements are included in the evaluation sheets for the two scoping analyses. The

corrective actions associated with closure of the DR were incomplete and are rejected. The formal rejection with a revised date for corrective action closure and verification is contained in the QA DR file for YMQAD-95-D004.

Objective evidence reviewed was as follows:

- Revised QAP-2-0 Project Activity Evaluations for the following scoping studies.
 - BB0000000-01717-2200-00026 REV 01 Perform Criticality, Thermal, Structural, and Shielding Scoping Analysis
 - BB0000000-01717-2200-00031 REV 01 Perform Probabilistic Waste Package Concept Scoping Analyses
- PARs for QAP-2-0, Rev. 2, and transmittal letter dated August 18, 1995 - acceptance forms provided during the surveillance.

2. YMQAD-95-D005

Letter LV.MG.AMS.10/95-150 dated 10/6/95 transmitted the notification to YMQAD that the actions associated with YMQAD-95-D005 were complete. The letter included a package of objective evidence that implemented all of the MGDS Development commitments. A review of the objective evidence in conjunction with MGDS Development personnel discussions determined that all required actions were completed as previously identified by MGDS Development except that procedure QAP-3-9, Revision 5, "Design Analysis" has not yet been revised. It was noted that a PAR was sent out for action to the manager responsible for the procedure with no acceptance of the proposed change to procedure QAP-3-9. This condition was corrected prior to the post surveillance conference with an acknowledgment that the procedure would be modified to include the proposed change. This DR will remain open until the change is made to procedure QAP-3-9. The corrective actions associated with closure of the DR were incomplete and are rejected. The formal rejection with a revised date for corrective action closure and verification is contained in the QA DR file for YMQAD-95-D005.

Objective evidence reviewed was as follows:

- PAR for QAP-3-9, IOC LV.WP.JRM.09/95.307, one page with PAR attached, dated 9/14/95, by John R. Massari (acceptance forms provided during the surveillance).
- Revision 1 of "Analysis of Degradation Due to Water and Gases in MPC," DI BB0000000-01717-0200-00005 REV. 01, 23 total pages, effective 9/29/95, by J. Kevin McCoy.

- Revision 1 of "Initial Waste Package Probabilistic Criticality Analysis: Uncanistered Fuel," DI B00000000-01717-2200-00079, Revision 01, 98 total pages, effective 10/6/95, by John R. Massari
- First three pages (sign-off sheets) of Revision 1 of "Initial Waste Package Probabilistic Criticality Analysis: Multi-Purpose Canister with Disposal Container," DI B00000000-01717-2200-00080, Revision 01, effective 10/6/95, by John R. Massari

3. YMQAD-95-D006

Letter LV.MG.AMS.10/95-151, dated 10/6/95, transmitted the notification to YMQAD that the actions associated with YMQAD-95-D006 were complete. The letter included a package of objective evidence that implemented all of the MGDS Development commitments. A review of the objective evidence in conjunction with MGDS Development personnel discussions determined that all required actions were completed as previously identified by MGDS Development.

Objective evidence reviewed was as follows:

- Interoffice Correspondence, LV.MG.AMS., 8/95-129 .
- "Checking/Review by Project Checking Group (SCPB: N/A)," from A. M. Segrest , dated 8/21/95 (2 pages).
- Nevada Line Procedure, NLP-3-28, Rev. 0, "Checklists for Design Products," dated 8/11/95 (3 pages).
- "Design Analysis Checklist," from the MGDS Design Guidelines Manual, Rev. 01, 5/29/95 (5 pages).
- BB0000000-01717-0200-00003, REV. 00A, Copy of Design Analysis Cover Sheet, Checker's signature and date added thereto (single sheet).
- Copy of Design Analysis Review Summary, Cover Sheet, and Review Record sheets for each of the following updated Design Analyses (3 sheets each):
 - B00000000-01717-0200-00005 Rev. 01, 9/29/95
 - B00000000-01717-2200-00079 Rev. 01, 10/6/95
Review verified error corrections
 - B00000000-01717-2200-00080 Rev. 01, 10/6/95
Review verified error corrections

Personnel contacted during this surveillance were:

A. M. Segrest, M&O, MGDS Development Manager
H. A. Benton, M&O, Waste Package Manager
J. J. Clark, M&O, MGDS, Staff
David Stahl, M&O, Waste Package Materials Manager

Block 10 (continued) SURVEILLANCE CONCLUSIONS:

Based on the review of objective evidence presented, implementation of corrective actions for DRs YMQAD-95-D004, and -D005 are rejected until the QAP changes can be verified as being completed. These rejections are documented in the pertinent files of each DR. YMQAD-95-D004 also needs to have the issue of QA design controls applied to scoping analysis work resolved. DR YMQAD-95-D006 is considered acceptable and closed. This surveillance noted that three PARs were issued but not formally acted upon by the manager responsible for the procedure at the time of the surveillance. This condition was corrected during the surveillance with acceptance of each PAR and a commitment to revise the applicable procedure. However, the procedures need to be revised prior to final verification and closeout of YMQAD-95-D004 and -D005.

Recommendation:

A recommendation is made to MGDS Development that a tracking system be developed for PARs such that assurance can be provided that each PAR is acted upon in a timely manner.