



- Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
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WBS 1.2.11
QA: N/A

MAY 09 1994

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ISSUANCE OF SURVEILLANCE RECORD YMP-SR-94-032 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) SURVEILLANCE OF THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND OPERATING CONTRACTOR (CRWMS M&O) (SCP: N/A)

Enclosed is the record of Surveillance YMP-SR-94-032 conducted by the YMQAD at the CRWMS M&O facilities in Las Vegas, Nevada, April 11 and 12, 1994.

The purpose of the surveillance was to verify closeout and implementation of the action items identified in the CRWMS M&O Design Control Improvement Plan, Revision 1, dated September 15, 1993. This surveillance was a follow-on to surveillance YMP-SR-94-01 which was performed in October of 1993 and verified those action items which were completed through October of 1993.

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 Robert B. Constable at 794-7945 or Sam H. Horton at 794-7399.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-3204

Enclosure:
Surveillance Record YMP-SR-94-032

*Add: Bill Belke H. Encl
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PDR WASTE
WM-11 PDR

MAY 09 1994

cc w/encl:

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

QUALITY ASSURANCE SURVEILLANCE RECORD

SURVEILLANCE DATA

¹ORGANIZATION/LOCATION:
Management and Operating
(M&O) Contractor, Las Vegas,
NV

²SUBJECT:
Design

³DATE: 4/11/94

⁴SURVEILLANCE OBJECTIVE:

To verify implementation of the Mined Geologic Disposal System (MGDS) Design Control Improvement Plan

⁵SURVEILLANCE SCOPE:

Review completed action items noted in the MGDS Design Control Improvement Plan and verify these action items are satisfactorily completed.

⁶SURVEILLANCE TEAM:
Team Leader:

S. Horton

Additional Team Members:

Steve Maslar

⁷PREPARED BY:

Sam Horton
Surveillance Team Leader

3-9-94
Date

⁸CONCURRENCE:

Robert Roubicek Jr.
QA Division Director

3-9-94
Date

SURVEILLANCE RESULTS

⁹BASIS OF EVALUATION/DESCRIPTION OF OBSERVATIONS:

The basis of evaluation was the implementation of the M&O MGDS Design Control Improvement Plan.

A description of the surveillance results, the individuals contacted, the documents examined, and recommendations are provided in Pages 2 through 6.

(continued)

¹⁰SURVEILLANCE CONCLUSIONS:

Based on the verification of implementation of the MGDS Design Control Improvement Plan, it was concluded the implementation generally conforms to the actions in the Plan, and the implementation was considered adequate and effective.

¹¹COMPLETED BY:

Sam Horton
Surveillance Team Leader

4/25/94
Date

¹²APPROVED BY:

Robert Roubicek Jr.
QA Division Director

5-9-94
Date

ENCLOSURE

(Block² Continued)

BASIS OF EVALUATION/DESCRIPTION OF OBSERVATIONS

1.0 EXECUTIVE SUMMARY

This surveillance was conducted to verify the closeout and implementation of the action items identified by the Management and Operating (M&O) Contractor in their MGDS Design Control Improvement Plan, Revision 1, dated September 15, 1993. This surveillance was a follow-up to surveillance YMP-SR-94-001 which was performed in October of 1993 and verified those action items that were completed through October 1993. Based on the review of the objective evidence provided by the M&O, it was determined that they have closed out the remaining action items noted in the MGDS Design Control Improvement Plan with the exception of three items. The M&O plans to carry these action items over into another formal tracking document, possibly the general Design Control Improvement Plan which is being prepared to address design improvements in the other major program design areas including Monitored Retrievable Storage and Multi-Purpose Canister. No deficiencies were identified during this surveillance. Comments regarding implementation of the Design Control Improvement Plan are documented in Section 5.0 of this report, and recommendations are included in Section 6.0.

In general, it appears that the MGDS Design Control Improvement Plan was over committed in some of its action items. This apparently guided the M&O into re-looking at more efficient ways to accomplish the action items, by providing acceptable alternatives in their weekly update status reports. This action was undertaken as opposed to having to revise the Implementation Plan each time an action item was not implemented as exactly stated in the Plan. This surveillance did not question nor sanction this approach to completing the action items.

All M&O personnel contacted were very helpful and well prepared to answer the checklist questions associated with this surveillance. The M&O provided two personnel who acted as coordinators and escorts. A special note of appreciation to Mr. R. E. Wagster and Mr. P. G. Jones for their efforts and support during this surveillance.

It is noted that three independent observers were present during this surveillance. These individuals were Ms. Susan Zimmerman of the State of Nevada, Mr. William Belke of the Nuclear Regulatory Commission, and Mr. Tom Colandrea of the Nuclear Energy Institute, representing the Nuclear Utilities.

2.0 SCOPE

Surveillance YMP-SR-94-032 was conducted at the M&O facilities in Las Vegas, Nevada on April 11 and 12, 1994. This surveillance verified the closeout of the 23 remaining items in the MGDS Design Control Improvement Plan that had not been verified by the previous surveillance YMP-SR-94-001. The action items as stated in the Plan that were examined during this surveillance were: B6, D2, F1, F2, F3, F4, G4, G5, I1, I3, J1, J3, L2, L3, M1, M3, N2, O1, O2, P1, P2, Q2, and Q3.

The surveillance reviewed objective evidence, supporting documentation, and involved interviews with M&O personnel to verify the implementation and closeout of each action item that was identified as completed by the M&O. It is noted that the three action items that remain open at the time of this report are items O1, O2, and L2 (b & c). As noted above, these items will be tracked via another tracking mechanism if this MGDS Design Control Improvement Plan is closed out by the M&O.

3.0 SURVEILLANCE TEAM

Sam H. Horton, Surveillance Team Leader, Quality Assurance Technical Support Services and Stephen R. Maslar, Surveillance Team Member, Quality Assurance Technical Support Services.

4.0 M&O PERSONNEL CONTACTED DURING SURVEILLANCE

Alden M. Segrest, MGDS Development Manager
Betty G. Cruz, Manager, Specialty Engineering
Michael J. McGrath, Manager, Configuration Management
Thomas C. Geer, Manager, Systems Engineering
Kenneth J. Ashlock, System Engineering-Requirements
Stanley D. Bailey, MGDS Development Integrator
John J. Salchak, Design Supervisor ESF Surface Facilities
Jerry L. Naaf, Design Supervisor ESF Subsurface Facilities
Gerard Heaney, Design Control Engineering Supervisor
Peter S. Hastings, Determination of Importance Evaluation Manager
Phillip G. Jones, MGDS Development System Integrator
Celister J. Houston, Engineering Support Specialists
Mary Woods, Engineering Document Control
Robert B. Justice, Quality Engineering Support Manager
Richard Jiu, Technical Staff
Michael F. Penovich, Training Manager

5.0 SURVEILLANCE RESULTS

During this surveillance, each of the 23 action items as noted in Section 2.0 was reviewed in conjunction with their commitments noted in the MGDS Design Control Improvement Plan, Revision 1. The reviews consisted of an evaluation of the objective evidence supporting closure of each action item. Action items O1, O2 and L2 remain open and were verified as incomplete. The remaining 20 action items were verified as complete. It is noted that some of the actions taken to close these items were not as stated in the Plan. However, the alternative action taken as described in each of the weekly status reports appeared to be acceptable. Comments concerning those items that fit into the predescribed category are discussed below.

1. **Action F3** Design Packages 1B and 2A were "grandfathered" relative to the use of the existing procedures QAPs 3-8, 3-9, and 3-10 to develop these design packages. Therefore, the commitment to implement new procedure NLP-3-18 was not performed as stated in the action item. However, after reviewing the rationale for using the existing procedures, it was concluded this item is acceptable without further action.

2. **Action J3** This action item called for conformance reviews to be performed with involvement from the Regulatory, Quality Assurance, and System Engineering organizations. At the time this action item was established, the M&O had procedure QAP-3-2 in place by which to carry out conformance reviews. Since that time, this procedure has been changed to "Design Verification" which currently includes the controls to have the above representation and involvement in the design verification process. This alternative approach to resolving the action item, appears to be acceptable in that design reviews are being used as conformance reviews.

3. **Action D2** "To be Determined (TBD)/To Be Verified (TBV) tracking system has been implemented as stated by the M&O. The tracking system at this time is not updated to show realistic completion dates for TBD/TBV actions. Some actions were estimated for completion over one year ago and continue to remain open. There is no follow-up to notify responsible personnel when the required actions are overdue. Some action items do not identify a responsible individual for completing the action. The status report dated April 11, 1994, shows that there are 23 overdue TBDs, three of which were closed after the scheduled completion date. A total of 20 TBDs are now overdue. The same report shows that 75 TBVs are overdue with 13 being closed after the scheduled completion date. There are now a total of 62 TBVs that are open and overdue for closure. It is also noted that the input sheets for the status report were not available for TBD numbers 125, 126, and 127.

4. **Action N2** This action item was to implement changes noted during the completion of action item N1. Action item N2 was closed with no changes implemented based on a re-assessment of the changes identified in N1. The closure of items N1 and N2 do not clearly represent the actions taken by the M&O.
5. **Action I2** This action item was tied into action item I1. Action item I1 was properly implemented and closed out by the M&O. Action item I2 identifies a specific person as the point of contact for all Corrective Action Requests (CAR) responses for MGDS. This identified individual no longer performs this function.
6. **Action M1** This action item required that a MGDS Design Process Guidelines Manual be prepared containing numerous identified subjects. The subject of "Transmittal of Design Out-puts," which is listed as one of the items to be included, is not included in this manual at this time.
7. **Action J1** This action item is complete and was properly implemented. However, in further review, it was determined that action J1 relates back to action item C3 which was previously closed. The actions stated as completed by C3 are confusing in that Quality Assurance responsibilities and on-going actions are not properly stated and are not completely in accordance with current quality practices.
8. **Action P1** This action was closed as complete. A review of the original action item states that root cause analysis would be performed for each CAR related to the design control process. The action item was closed out by performing root cause analysis on only two specific CARs.
9. **Action P2** This action item was closed out as complete. The action was to perform a root case analysis for each design related CAR. In practice, a root cause analysis is performed only on CARs that have been determined to be significant in nature. The root cause analysis now being performed, is informal with statements of the probable cause and what actions are required to fix the condition. There is no formal methodology by which root cause analysis is performed.

DOCUMENTATION REVIEWED

Status Update Letters of M&O Design Control Improvement Plan from A. M. Segrest to D. G. Horton, dated March 11; March 18; March 25, and April 4, 1994.

M&O Procedures QAP 2-3, Revision 6; QAP 3-1, Revision 4/draft; QAP 3-2, Revision 4 and Revision 5/draft; QAP 3-5, Revision 5; QAP 3-10, Revision 3; NLP-3-13, Revision 0; and NLP-3-18, Revision 1.

RSN Basis for Design document, Revision 3.

M&O Basis for Design document, Revisions 1 and 3.

M&O Configuration Control Board Register for Level III documents.

Document Control Action Request, dated 3/17/93, for RSN Basis for Design.

Design Drawings: BABB00000-01717-2100-20009-00 North Portal Site Plan, BABBAD000-01717-2100-22400-00, Shop Building Floor Plan; YMP-025-1MING-MG-121, Revision 3.

Specification 6300-15190, (R00) Mechanical Identification.

M&O Letters

LV.MG.PGT.03/94-090 dated 4/4/94

LV.SES.BGC.1/94-022 dated 1/19/94

LV.SES.BGC.10/93-826 dated 12/3/93

CAR Action Status Report, dated 4/11/94 and CARs 94-QN-C-001, 011 and 014.

TBV Status Report, dated 4/11/94 and TBVs 004, 005, and 025.

TBDs 089, 090, 091, 092, and 093.

MGDS Design Process Guidelines Manual, Revision 0.

MGDS Organization Chart.

6.0 RECOMMENDATIONS

For those items noted in Section 5.0 of this report, it is recommended that the M&O provide an addenda to the MGDS Design Control Improvement Plan indicating exactly what was done to close out the item. In order to have a complete package, this up-dated information should be condensed into the plan for record purposes.

Specific to Action Item D2, the M&O is strongly encouraged to up-date the TBD/TBV tracking System to show current status, identify responsible individuals and realistic need dates. Follow-up on overdue action items should be performed. The input data sheets for all TBD/TBVs need to be on file to support original input data for the report and for sign-off showing completion of the action item.