

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE PROGRAM QUARTERLY TREND REPORT

FOR

APRIL 1993 THROUGH MARCH 1994

SUBMITTED BY:



DIVISION DIRECTOR
YUCCA MOUNTAIN SITE CHARACTERIZATION

CONCURRENCE:



DIVISION DIRECTOR
HEADQUARTERS QUALITY ASSURANCE DIVISION

APPROVED:



DIRECTOR
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EXECUTIVE SUMMARY

1.0 INTRODUCTION

Quality Assurance Procedure (QAP) 16.3, QA Program Trend Evaluation, Revision 0, requires that the OCRWM Office of Quality Assurance evaluate, at quarterly intervals, all significant Corrective Action Requests (CARs) and YMSCO Nonconformances Reports (NCRs) issued within the last twelve months. The purpose of this trend evaluation is to determine if any adverse trends or generic adverse trends are evident in the OCRWM QA Program and take prompt corrective action where such trends exist.

This report covers the period from April 1, 1993 through March 31, 1994 and evaluates all significant CARs reported by HQQAD and YMQAD during this period. This evaluation incorporates new data from CARs issued during the quarter January 1994 through March 1994. Since the requirements for trending NCRs was not addressed until issuance of QAP 16.3, Revision 0, only those NCRs from January 1, 1994 through March 31, 1994 were evaluated for adverse trends.

2.0 SUMMARY

A total of Seventeen (17) CARs and Eight (8) NCRs were evaluated during the reporting period. One adverse trend was evident during the evaluation of NCRs. Details of this adverse trend are discussed in Section 4.0 of this report.

It should be noted that CARs YM-93-040, and YM-93-070 were excluded from evaluation since they were the subject of an adverse trend identified during an evaluation of trends addressed in the Trend Report covering the period from July 1992 through June 1993.

See Table 1, Data Used for Trend Evaluation, for a list of CARs and NCRs evaluated.

3.0 STATUS OF PREVIOUSLY REPORTED TRENDS

CAR YM-93-070 which was generated as a result of an adverse trend identified on 07/14/93, is still open pending implementation of corrective action. As of the date of this report, completion of corrective action is scheduled for 06/30/94.

4.0 CURRENT ADVERSE TRENDS

There were four NCRs (YMPO-94-0009 dated 2/94, YMPO-94-0012 dated 2/94, YMPO-94-0013 dated 2/94, and YMPO-94-0015 dated 3/94) which were issued within the last three months that reflect an adverse trend related to the packaging, storing, and preservation of samples. CAR YM-94-032 was generated as a result of this adverse trend.

5.0 PROBLEMS CONSTITUTING CURRENT ADVERSE TRENDS

During a period between 02/14/94 and 03/08/94, four NCRs were generated as a result of failure to implement the required actions necessary to package, store and preserve the integrity of the samples collected during drilling processes at the Yucca Mountain Site. Two NCRs (YMPO-94-0009 and YMPO-94-0015) related to samples not being stored in accordance with the principle investigators specifications. One NCR (YMPO-94-0012) identified that borehole cuttings were not properly bagged and that borehole cuttings were contaminated with lexan shavings. One NCR (YMPO-94-0013) reflected that ESF borehole was not properly sealed and allowed water to contaminate sample.

6.0 SUMMARIES OF IDENTIFIED CAUSES AND ACTIONS REQUIRED TO CORRECT CURRENT ADVERSE TRENDS

The cause or causes of the conditions identified in the above referenced NCRs is not clear at this time. Part of the responsibilities of the affected organization will be to evaluate the conditions identified in the associated NCRs and determine and document the root cause(s). The recommended actions that should be taken to resolve the current adverse condition include but are not limited to: (1) investigate and evaluate the symptomatic conditions identified in the NCRs to determine the root cause(s), (2) the procedural process for Packaging, storing, and preservation of samples should be evaluated to determine why it is not effective in controlling the process, (3) review of personnel training should be performed to determine the effectiveness of the training and responsible individuals understanding of the requirements, and (4) once the root cause for the deficiency has been determined and a course of corrective action to prevent recurrence has been established, management should implement a rigorous monitoring program (surveillances) to determine effectiveness, over time, of the action(s) taken to resolve the condition and prevent recurrence.

TABLE 1: DATA USED FOR TREND EVALUATION

CAR Number	CAR Issue Date	Response. Org.	Adverse Condition
YM-93-040	04/93	M&O	Procedures do not provide criteria for determining the method of design verification.
YM-93-045	04/93	M&O	No evidence provided to reflect that the CRF storage facility has been evaluated to store "one-of-a-kind" records/items.
YM-93-055	07/93	REEC0	Supplier evaluation and testing was not performed for items purchased from suppliers of commercial-grade materials which will be used in work important to radiological safety and waste isolation.
YM-93-062	07/93	M&O	Specification YMP-025-1-SP09 and Item Specification 02165, 02310, and 03361 unclear on definition of commercial grade for quality affecting procurements.
YM-93-063	07/93	M&O	NCRs dispositioned "Use As Is" and closed without any technical justification. NCRs dispositioned "Use As Is" based on documentation from unqualified suppliers.

CAR Number	CAR Issue Date	Response. Org.	Adverse Condition
YM-93-064	07/93	M&O	A specification allows a deficiency to be corrected without the issuance of an NCR.
YM-93-070	07/93	M&O	Repetitive deficiency regarding implementing procedures not addressing upper tier requirements and implementing procedures inadequate or non-existent for quality affecting activities. (Generated as a result of an Adverse Trend from previous quarterly evaluation)
YM-93-072	07/93	M&O	TBV identifier omitted from drawings when revised.
YM-93-073	07/93	M&O	Drawings associated with Change Directive 93/405 do not list all applicable quality affecting design inputs.
YM-93-086	08/93	YMP	Quality affecting work being assigned prior to the issuance of a Technical Directive. QMP-04-02 not being implemented for processing interagency agreements.
YM-94-002	10/93	M&O	No objective evidence that detailed documentation exists to support derived requirements in the SD&TRD, the ESFRD, and the SBTRD.
YM-94-005	11/93	LLNL	Approved procedures to conduct quality affecting activities were not being implemented by LLNL personnel while conducting video logging activities at borehole NRG-2B.

CAR Number	CAR Issue Date	Response. Org.	Adverse Condition
HQ-93-022	5/93	PNL	Inadequate use of technical procedures; use of unapproved procedures.
HQ-93-023	5/93	PNL	Records maintained in individual files for longer than 90 days.
HQ-94-004	3/29	M&O	M&O did not verify education and experience for two QA auditors prior to performing quality affecting work and verification of highest level of education not performed for two personnel.
HQ-94-006	3/29	M&O	M&O concurred with responses to CAR 93-QL-003 without considering root cause and planned remedial actions. Verification of corrective action inadequate. M&O CARs 93-QN-C-027 and 045 did not address investigative action.
HQ-94-008	3/29	M&O	M&O audit and surveillance reports did not contain all objective evidence to support reviews and interviews during audits.

NCR Number	NCR Issue Date	Response. Org.	Non-conformance
YMPO-94-0004	1/94	RSN	Boreholes not secured as required.
YMPO-94-0006	2/94	M&O	Failing grout cubes for cement grouted rock bolts.
YMPO-94-0009	2/94	USGS	Core samples not stored to PI specifications.
YMPO-94-0010	2/94	M&O	No inspection documentation for compressive test reports for fibercrete. Conflict with construction documentation.
YMPO-94-0012	3/94	LANL	Two bags of ream cuttings, intervals 386.0-387.0, from borehole UZW UZ-14 were not properly bagged. Ream cuttings from borehole UE-25 UNZ-39 were contaminated with lexan shavings.
YMPO-94-0013	3/94	USGS	ESF borehole, ESF-AL 1, interval 11.7'-12.2', was improperly sealed and allowed water to contaminate sample.
YMPO-94-0015	3/94	USGS	Core samples from borehole UE-25 NRG 7/7A were not stored to PI specifications.
YMPO-94-0024	3/94	M&O	Rockbolt grout not meeting unit weight requirements.