# OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

# **SEMIANNUAL**

# QUALITY ASSURANCE PROGRAM TREND REPORT

**FOR** 

**JANUARY THROUGH JUNE 1996** 

DIVISION DIRECTOR

YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION

CONCURRENCE:

**DIVISION DIRECTOR** 

8/14/96

HEADQUARTERS QUALITY ASSURANCE DIVISION

APPROVED:\_\_\_

B/14/9/

DIRECTOR

OFFICE OF QUALITY ASSURANCE

# **EXECUTIVE SUMMARY**

#### 1.0 Introduction

This report documents the semiannual analysis of deficiencies identified during implementation of the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program from January through June 1996. This report compares data from deficiencies identified during the report period and data developed from deficiencies identified during the previous year (January through December 1995). The purpose of this trend report is to document quality trends identified as a result of this semiannual analysis. Corrective action documents reviewed for this report include Corrective Action Requests (CAR), Deficiency Reports (DR), Performance Reports (PR), and Nonconformance Reports (NCR). The report also includes a review of deficiencies identified and corrected during audits and surveillances (CDA).

It should be noted that the current trending system provides for evaluation for repetitive occurrences each time a deficiency is identified. This report summarizes these specific evaluations and analyzes them for program-wide trends and comparisons to previous report periods.

This report is intended to provide insight to management into a broader picture of the effectiveness of implementation of the OCRWM QA Program. It identifies and compares problem areas to enable management to prioritize efforts for areas needing improvement.

# 2.0 Summary

There is one adverse trend discussed in this report regarding procurement activities within the U.S. Geological Survey (USGS) which was identified during an audit. Since the evaluations completed during the audit resulted in the trend being identified, no Suspected Trend Investigation Report (STIR) was initiated. There were three STIRs initiated during the report period which are described in Section 4.0 of this report. Preliminary investigation results appear to indicate no adverse trends for two of these STIRs due to dissimilarities in the deficiencies identified. Investigation of the remaining STIR is still under way.

There has been no significant increase in the number of deficiencies identified in any QA Program element during the report period. Consequently, no additional adverse trends have been identified. However, the decrease in number of deficiencies identified (Attachment #1) has not resulted in a decrease in the number of deficiencies open (Attachment #2) indicating a potential concern with timeliness of corrective action. This concern has been addressed to management of Affected Organizations via U.S. Department of Energy letter RBC-1997, dated June 22, 1996, and will continue to be

tracked through the monthly Corrective Action Document Status Report. The overall decrease in the number of deficiencies identified during this reporting period as reflected in Attachment #1, and a decrease in the percentage of deficiencies identified in the area of implementing documents over the last eighteen months as reflected in Attachment #4, are viewed as positive trends.

#### **DETAILED REPORT**

#### 3.0 General

With a full year of implementation of the revised corrective action and trending program, it is notable that the system has provided more capability in tracking, statusing, and analyzing deficiencies. This enhanced capability has provided OCRWM increased awareness of areas needing improvement as well as identifying areas of success. The trending database was made operational in July 1995. This database, coupled with enhancements to other associated databases (including audits and surveillances), now permits analysis of deficiencies identified program-wide for trending purposes.

With respect to the overall OCRWM QA Program, this report compares and trends deficiencies identified during the last twelve months (July 1995 through June 1996) in six month time frames. In the last six month time frame (January through June 1996) there were 27 CDAs. This number compares to 64 CDAs reported during the previous six month period (June through December 1995). One hundred fifty-five CARs, DRs, or PRs were issued during this report period which decreased from 240 during the previous six month period. With respect to NCRs, 46 were issued this report period as compared to 113 during the previous period.

Review of the deficiency data coding indicates that OCRWM QA Program activities related to the following program elements are the largest contributors to the number of deficiencies identified:

# OCRWM QA Program Element for CARs, DRs, PRs, and CDAs (Reference Attachment 4)

Element	Description	JanJune 1996	JulDec. 1995
5	Implementing Documents	22	24
2	QA Program	17	16
.17	Records	13	9
12	Measuring and Test Equipment	7	5
3	Design Control	3	6

# Hardware Categories for NCRs

Related QA Program Element	Description	JanJune 1996
7	Control of Purchased Items (Supplier Defects)	35%
5	Implementing Documents (Work Defects)	15
12	Control of Measuring and Test Equipment	15
8	Identification and Control of Items	6
S II	Sample Control	5

#### **Deficiency Causes**

Description	<u>NCRs</u>	CARS, DRs, & PRs
Personnel	53%	44%
Implementing Documents	4	26
Reliability	24	0
Management Systems	. 0	8
Supervision	0	. 8
Training	0	4
Communications	3	3
Scientific Methods	0	2
Miscellaneous	16	5

#### 3.1 Hardware Trends

In reviewing NCRs to date, no adverse hardware trends were identified.

# 3.2 Quality Program Trends

During a recent audit of USGS, several conditions adverse to quality in the USGS procurement program were identified and documented on Corrective Action Request YMQAD-96-C004. This CAR identifies conditions adverse to quality that, when coupled with deficiencies identified previously in the USGS procurement program, constitutes an adverse trend. Corrective action for this adverse trend is being pursued through disposition of this CAR and is currently in process.

# 3.3 Suspected Trends

Three STIRs were initiated during this report period. Two STIRs were initiated by the Civilian Radioactive Waste Management System Management and Operating Contractor (CRWMS M&O) and one was initiated by the Yucca Mountain Quality Assurance Division (YMQAD).

To date, preliminary conclusions from the investigation of the STIRs initiated by the CRWMS M&O have not indicated the existence of an adverse trend. Investigation of the STIR initiated by YMQAD is ongoing. The results of this investigation will be in the next Trend Report.

STIRs issued during this report period are as follows:

Description
Recurring Out-of-Calibration M&TE
Not Following Design Control Procedures
Ineffective Corrective Action Program

No additional STIRs or adverse trends have been identified for this period as a result of the trending data evaluations performed for this report.

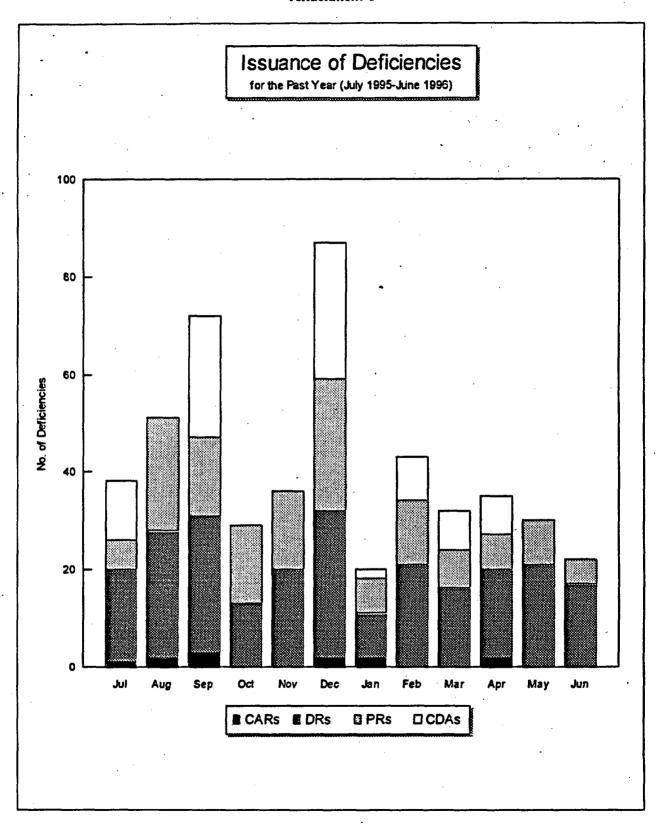
#### 4.0 Corrective Action Administration

Attachments 1, 2, and 3 show the generation and status of corrective action documents for the last year. Attachment #4 shows deficiencies identified in each program element.

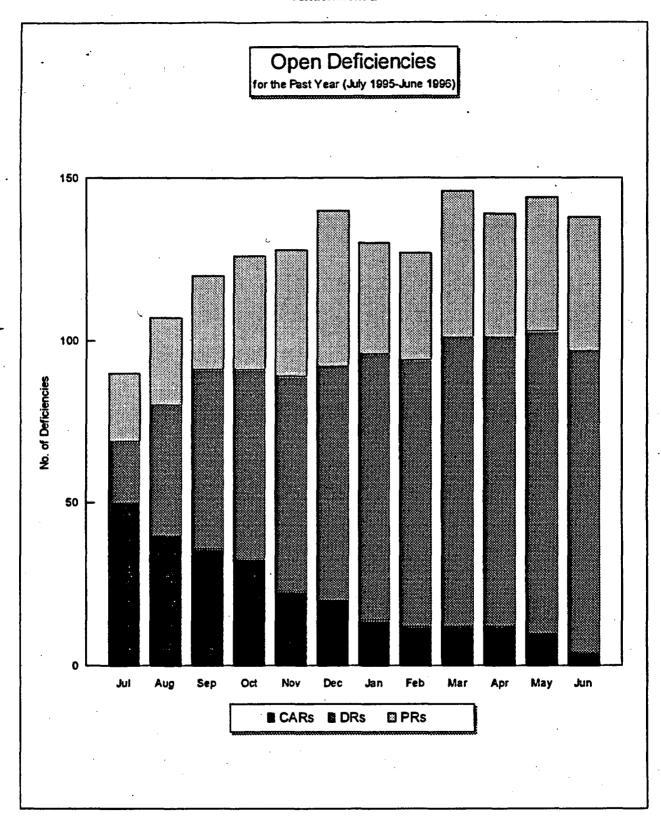
#### 5.0 Attachments

- 1. Issuance of Deficiencies
- 2. Open Deficiencies
- 3. Nonconformance Reports
- 4. Deficiencies by Program Element

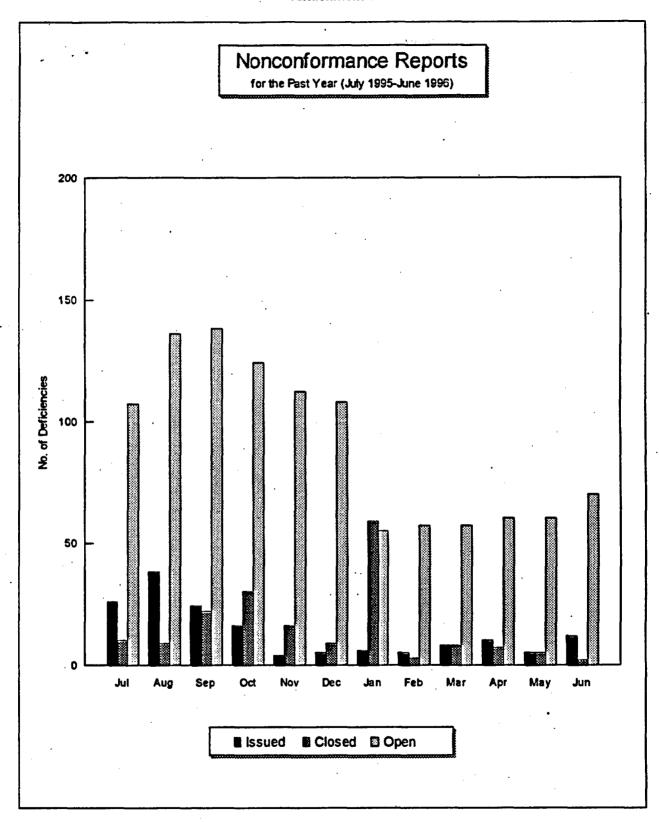
Attachment 1



Attachment 2



# Attachment 3



Attachment 4

