

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
QUALITY ASSURANCE PROGRAM QUARTERLY TREND REPORT
FOR
THIRD QUARTER OF FY 1995

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EXECUTIVE SUMMARY

1.0 Introduction

This is the trend report for the third quarter of FY 1995. It covers the period from July 1994 to June 1995. The purpose of the trend report is to identify and evaluate trends for corrective actions taken in the past 12 months. The corrective action documents reviewed in this report include Corrective Action Requests (CAR) issued by Headquarters Quality Assurance Division and the Yucca Mountain Quality Assurance Division and Nonconformance Reports (NCR) issued by the Yucca Mountain Site Characterization Office.

This report includes the change initiated in the last trend report in that all CARs have been coded for trending, not just the significant CARs. The scope of the next trend report will be altered even more as it will be the first report to cover the period of time since the issuance of Administrative Procedure AP-16.3Q, "Trend Evaluation and Reporting.". The presentation of conclusions in this and the next few reports is expected to be somewhat developmental.

As a point of direction, this report is intended to be a means of providing some insight for management into a broader picture of how effective the Quality Assurance (QA) program is by categorizing the corrective actions being identified. Much of this report identifies general averages to enable prioritization in areas of improvement. Such comments in the report may be useful in providing direction to the program, although specific actions may not be identified.

2.0 Summary

There were no adverse trends identified in the reporting period. The review of NCRs showed that most were due to failure to implement a procedure. Some emphasis on reducing supplier problems is also needed. Review of CAR activities also indicated that most are due to failure to implement a procedure. The review also showed that emphasis on corrective action for the design process has produced a substantial improvement.

DETAILED REPORT

3.0 Status of Previously Reported Trends

There were no CARs for adverse trends that were open as of the last trend report.

4.0 Current Adverse Trends

The analysis of data is split between the NCRs and CARs. There were 82 "Q" NCRs during the last year, and 131 CARs. Listings of these documents have been submitted to the documents center and are available upon request. No adverse trends were identified during this period as discussed below.

4.1 "Q" Nonconformance Reports

The following table shows the generation of "Q" NCRs for the last year.

"Q" NCR Generation

| | | |
|--------------|-----|-----------|
| 1994 | Jul | 2 |
| | Aug | 0 |
| | Sep | 2 |
| | Oct | 2 |
| | Nov | 8 |
| | Dec | 3 |
| 1995 | Jan | 5 |
| | Feb | 13 |
| | Mar | 14 |
| | Apr | 6 |
| | May | 19 |
| | Jun | 8 |
| Total | | 82 |

The data continues to show a noticeable increase in NCRs beginning in November 1994. This is expected as construction activities increased with the advancement of the Tunnel Boring Machine. This increase is not considered to be an adverse trend, but to be indicative of the corrective action system response to an increased number of activities.

Over half of the NCRs relate to the QA program element on control of services, i.e., control of construction. These deficiencies are largely due to not following procedure. Another sizable portion is caused by manufacturing problems. These figures are similar to prior reports, so no adverse trends were apparent. These two areas should receive continued emphasis by construction management.

4.2 Corrective Action Requests

The table below shows the CAR generation for the last 12 months. There was a noticeably higher generation rate in July, August, and September of 1994 (about twice the average). This is primarily the result of completion of significant design activities by the Civilian Radioactive Waste Management System Management and Operating contractor during the completion of design activities associated with Design Package 2C. This peak does not represent a trend which needs to be addressed beyond what was identified in the related audits.

CAR Generation

| | All | Significant Conditions |
|----------------|-------------|------------------------|
| Jul-94 | 28 | 11 |
| Aug-94 | 21 | 5 |
| Sep-94 | 22 | 3 |
| Oct-94 | 9 | 4 |
| Nov-94 | 6 | 3 |
| Dec-94 | 11 | 1 |
| Jan-95 | 2 | 1 |
| Feb-95 | 3 | 0 |
| Mar-95 | 7 | 1 |
| Apr-95 | 3 | 0 |
| May-95 | 6 | 2 |
| Jun-95 | 13 | 4 |
| Total | 131 | 35 |
| Average | 10.9 | |

No adverse trends were identified in this data.

The review of the CAR data coding shows the following QA program elements to be the largest contributors:

| QA Program Element | % |
|--------------------------|----|
| 3 Design Control | 31 |
| 2 QA Program | 9 |
| 17 Records | 8 |
| 16 Corrective Action | 8 |
| 5 Implementing Documents | 7 |

The large portion relating to design control reflects the emphasis in the project activities and QA oversight a year ago. Of the 71 CARs identified in July, August, and September, 8 remain open. There have been one seventh as many design related CARS in the last six months as the preceding six months. Therefore, closure activities associated with those CARs has had a positive effect on the design process. This last quarter has also indicated some improvement in the processes which control implementing procedures.

The following chart displays organizations versus the secondary trend code defined in Quality Assurance Procedure QAP 16.3. The three largest are:

Secondary Trend Code

| | No. | Percent |
|--------------------------------|------------|----------------|
| Failure to Implement Procedure | 62 | 47% |
| Inadequate Procedure | 22 | 17% |
| Design Deficiency | 16 | 12% |
| Other | 31 | 24% |
| TOTAL | 131 | 100% |

These figures are essentially unchanged from prior reports. More than half of the CARs are due to failure to implement a procedure correctly. This coding category does not include errors due to inadequate procedures or lack of knowledge/skill. These are errors that could have been avoided if procedure compliance had been a priority. Attention to procedural detail would be good for management to emphasize. This type of a category is often higher than others, but there is an indicated need for improvement.

5.0 Problems Constituting Current Adverse Trends

No adverse trends have been identified during this period.

6.0 Summary of Identified Causes and Actions Required to Correct Current Adverse Trends

No adverse trends exist.