

**FY 1996 OCRWM QA Management Assessment**

**Preliminary Report for the  
U. S. Geological Survey  
Yucca Mountain Project Branch Segment**

**Performed by**

**Quality Service Associates, Inc.**

**for the**

**Office of Civilian Radioactive Waste Management**

**Contract No. DE-AC-01-96RW00316**

**June 17, 1996**

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**Introduction:** The FY 1996 QA Management Assessment is an integrated assessment of OCRWM and its major participants. The QA Management Assessment has two principal objectives: (1) evaluate the status, adequacy, and implementation effectiveness of OCRWM's Quality Assurance Program, and (2) identify areas where improvement is needed.

A final report summarizing the results of the integrated QA Management Assessment and conclusions drawn by the assessment team with regard to the adequacy and effectiveness of the OCRWM Quality Assurance Program will be provided to the OCRWM Director at the conclusion of all assessments. Preliminary reports consisting of an executive summary of the observations and recommendations identified during the individual assessments are also provided to the OCRWM Director after each assessment.

This preliminary report summarizes the observations and recommendations identified during the assessment of the U.S. Geological Survey (USGS), Yucca Mountain Project Branch.

**On-site Assessment Dates:** April 8-11, 1996, in Denver, Colorado.

**Assessment Team:** Wayne E. Booth

**Conclusions:** Based on the attributes evaluated during this assessment the USGS QA Program is determined to be adequate and effective with the exception of the Corrective Action Program. The USGS Corrective Action Program is unable to correct deficiencies in a timely manner and therefore is considered to be ineffective. This problem was also identified in the FY 1994 QA Management Assessment.

**Previous QA Management Assessment Recommendations:** The previous QA Management Assessment for FY 1994 was comprehensive and the assessment team was comprised of USGS senior managers and contractor specialists. USGS management could not demonstrate implementation of the recommendations provided by the FY 1994 QA Management Assessment.

**Executive Summary of Observations and Recommendations:** The following attributes were assessed to determine Quality Assurance Program adequacy and effectiveness at USGS.

1. ***Effectiveness of Procedural Implementation:***

**Observation:** USGS has developed administrative procedures to implement the programmatic requirements of OCRWM's Quality Assurance program. The number of

these administrative procedures are declining as they are being replaced by OCRWM generic administrative procedures. USGS continues to make improvements to enhance readability. Some implementation problems, however, have been identified during audits and surveillances.

Procedure changes are made by issuing separate paper called "procedure modifications." Procedure modifications are placed in the front section of each procedure rather than incorporating the change into the text. Several modifications can be made before the changes are actually incorporated into the body of the procedure. This method of changing procedures is outdated and awkward for the user to implement and, therefore, could cause implementation problems.

USGS has also developed technical procedures to implement actual scientific investigation activities. These procedures appear to adequately cover the scientific activities being performed by USGS and their implementation is verified during surveillances.

**Recommendation No. 1:** It is recommended that an alternate method for issuing procedure changes be used to make the changed procedure easier to use and implement. The method should incorporate the changed wording into the body of the procedure.

**2. *Adequacy and Effectiveness of QA Training:***

**Observation:** The formal QA training program consists of classroom training and self-study training focussing on the implementation requirements of the QA Program.

Classroom training was determined to be adequate for major QA program changes and new employees. However, this method of training has not been used in FY 1996 because of staff reductions and lack of major QA programmatic changes. The self-study program is being used and it is considered adequate under the current circumstances.

The training program is continually supplemented by QA Implementation Specialists assigned to the line organization. In addition to their other responsibilities, the QA Implementation Specialists provide one-on-one QA training to Principal Investigators.

**Recommendations:** None

**3. *Adequacy and Effectiveness of the Corrective Action Program:***

**Observation:** The ability to correct deficiencies in a timely manner at USGS continues to be a major concern.

A recent audit by the Office of Quality Assurance identified problems with the corrective action record keeping system and with the timeliness of corrective action responses. The last two management assessments (FY 1994, FY 1993) identified similar problems that included "late evaluation" "late responses", and "failure to implement timely corrective action." The FY 1994 QA Management Assessment judged the USGS Corrective Action Program to be "ineffective" and provided several meaningful recommendations to correct the problem. No action was taken in regard to the recommendations.

This QA management assessment determined that little or no improvement has been made over the past year. The significance of this matter was discussed with the new USGS Chief, Yucca Mountain Project Branch, and his senior staff. The need for senior management attention was recognized.

**Recommendation No. 2:** The FY 1994 QA Management Assessment provided sound recommendations for improving the Corrective Action Program at USGS. It is recommended that those recommendations be evaluated for immediate implementation.

**4. *Effectiveness of QA program application to OCRWM program elements considered critical to mission success:***

**Observation: (USGS Surveillances)** The FY 1994 QA Management Assessment identified the surveillance program as a QA program strength by providing detailed and well supported surveillances that identified critical areas for improvement. USGS conducted approximately nine surveillances in 1995. These surveillances were judged to be thorough and meaningful. Line managers commented that the surveillance program was a useful management tool to ferret out problems and keep up with documentation requirements.

The FY 1996 reduction in USGS's scope of work caused a significant reduction in the level of QA oversight (surveillances). Consequently, only one surveillance was conducted in 1996 and only one more is planned. Field work will continue through the end of the year in the areas of matrix testing, gas and water chemistry, and ESF structural and surface mapping. The planned surveillance does not appear to adequately cover the scope of field work currently underway.

**Recommendation No. 3: (USGS Surveillances)** It is recommended that the USGS QA Manager evaluate the nature and scope of field work currently in-progress and planned for FY 1996. Then establish and implement a surveillance program, consistent with the importance of the work, to ensure comprehensive evaluation of important field work.

5. ***Adequacy of resources and personnel provided to achieve and assure quality:***

**Observation:** The FY 1996 budget reductions have impacted the USGS Quality Assurance Program particularly in the area of QA Implementation Specialists. QA Implementation Specialists functionally report to the line organization. QA Implementation Specialists provide support to Principal Investigators by assisting them with implementation of the QA Program in a more effective and efficient manner. This permits the Principal Investigator to focus more time on actual scientific investigation activities. The FY 1994 and FY 1993 QA Management Assessments recognized the use of QA Implementation Specialists as a significant QA program strength. Budget reductions significantly curtailed the use of QA Implementation Specialists. The impact of this action will most likely be seen as an increase in administrative deficiencies during future audits and surveillances.

The resources available to the QA Manager have also been significantly reduced as a result of the FY 1996 budget reductions. The need to increase field surveillances, close deficiencies, and respond to the Procurement Action Plan (YMQAD-96-C004) and other deficiencies resulting from the March 1996 YMQAD audit will create even more strain on these resources.

**Recommendation No. 4:** It is recommended that USGS senior management ensure that additional technical work scope authorizations for FY 1996 are accompanied by additional funding for related QA support.

**Programmatic/Hardware Deficiencies:** No programmatic or hardware deficiencies were identified during this assessment.