U. S. NUCLEAR REGULATORY COMMISSION
OBSERVATION AUDIT REPORT NO. 92-01
FOR THE INTERNAL AUDIT NO. HQ-92-001 OF THE OFFICE OF
CIVILIAN RADIOACTIVE WASTE MANAGEMENT HEADQUARTERS

11/13/91
William L. Belke
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste
Management

11/13/91
John T. Buckley
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste
Management

for 11/13/91
Bruce Mabrito (by telecon)
Center for Nuclear Waste
Regulatory Analyses

for 11/13/91
John Gilray (by telecon)
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste
Management

Reviewed and Approved by:
for
Kenneth R. Hooks
Repository Licensing and Quality
Assurance Project Directorate
Division of High-Level Waste
Management

1.0 INTRODUCTION

From October 15-18, 1991, members of the U.S. Nuclear Regulatory Commission (NRC) staff participated as observers on the U.S. Department of Energy (DOE) Office of Civilian Radioactive Waste Management (OCRWM) Headquarters (HQ) QA Internal Audit No. HQ-92-001 of HQ in Washington, D.C., and Yucca Mountain Site Characterization Project Office (YMPO), Division of Quality Assurance (DQA), oversight activities in Las Vegas, Nevada. The oversight activities of the YMPO DQA were included in the scope of the OCRWM HQ audit because the YMPO DQA reports directly to the OCRWM Director of the Office of Quality Assurance at OCRWM HQ.

This report addresses the effectiveness of the audit and, to a lesser extent, the adequacy of the DOE OCRWM HQ QA program.

2.0 OBJECTIVES

The objectives of the HQ internal audit were to evaluate the implementation and effectiveness of the OCRWM HQ QA program in meeting the applicable requirements of DOE/RW-0214, Quality Assurance Requirements Document (QARD), Revision 4, and DOE/RW-0215, Quality Assurance Program Description (QAPD), Revision 3. The NRC staff's objective was to gain confidence that HQ is properly implementing the requirements of the OCRWM QA program in accordance with the QARD, QAPD, and Title 10 Code of Federal Regulations (10 CFR) Part 50 Appendix B criteria.

3.0 SUMMARY AND CONCLUSIONS

The NRC staff based its evaluation of the HQ audit process and the OCRWM QA program on direct observations of the auditors, discussions with the audit team and HQ personnel, and reviews of the pertinent audit information (e.g., audit plan checklists, HQ and YMPO documents). The audit was conducted in a professional manner, and the programmatic portions of the audit were generally effective and well integrated. The audit team was well qualified in the QA discipline, and their assignment and checklist items were adequately described in the audit plan.

The NRC staff agrees with the preliminary audit team findings that OCRWM HQ has an adequate QA program for the areas that were audited with the exception of Criteria 2, 3, 4, and 7. Criteria 2, 4, and 7 are marginally effective and Criterion 3 is ineffective. Criterion 3, "Design Control" for which the HQ audit team identified as ineffective is of particular concern to the NRC staff. The NRC staff also agrees with the audit team that OCRWM HQ has made considerable progress from last year in implementing its QA program.

OCRWM management must closely monitor HQ implementation of the OCRWM QA program to ensure that future implementation is carried out in an adequate manner. The NRC staff expects to participate in this monitoring as observers and may perform its own audits at a later date to independently determine the adequacy and effectiveness of the OCRWM HQ QA program.

4.0 AUDIT PARTICIPANTS

4.1 NRC

William L. Belke	Observation Team Leader (HQ only)
John T. Buckley	Observer (HQ only)
Kenneth R. Hooks	Observer (HQ, part time)
Pauline Brooks	Observer (HQ, part time)
Bruce Mabrito	Observer (Center for Nuclear Waste Regulatory Analyses - HQ only)
John W. Gilray	Observer (YMPO only)

4.2 DOE

Thomas E. Rogers	CER Corp.	Audit Team Leader
Fred Bearham	CER Corp.	Auditor
R. Dennis Brown	CER Corp.	Auditor
Clyde D. Morell	CER Corp.	Auditor
F. Hugh Lentz	CER Corp.	Auditor
Marc J. Meyer	CER Corp.	Auditor
Craig G. Walenga	CER Corp.	Auditor
Wayne Booth	Roy F. Weston, Inc.	Auditor
Louis Wade	Roy F. Weston, Inc.	Auditor
Robert Constable	DOE, YMPO	Auditor
Frank Kratzinger	Science Applications International Corp. (SAIC)	Auditor
Thomas J. Higgins	SAIC	Technical Specialist

4.3 State of Nevada

Susan Zimmerman	Observer

4.4 Clark County, Nevada

Englebrecht von Tiesenhausen	Observer

4.5 Nye County, Nevada

Phillip A. Niedzielski-Eichner	Observer

5.0 REVIEW OF THE AUDITED ORGANIZATION

The OCRWM HQ internal audit was conducted in accordance with OCRWM QA Administrative Procedure (QAAP) 18.2, "Audit Program," Revision 1 (effective October 15, 1990), and OCRWM QAAP 16.1, "Corrective Action Requests (CAR)," Revision 2 (effective October 15, 1990).

The NRC staff observation audit of the HQ audit was based on the NRC procedure, "Conduct of Audits" issued October 6, 1989. NRC staff observer findings are classified in accordance with this procedure. Levels 1, 2, and 3 of NRC staff Observations require a written response from DOE to be

resolved. The NRC staff findings may also include weaknesses (actions or items which are not deficiencies but could be improved), good practices (actions or items which enhance the QA program), and requests for information required to determine if an action or item is deficient. Written responses to weaknesses identified by the NRC staff will be requested when appropriate. In general, weaknesses and items related to requests for information will be examined by the NRC staff in future audits or surveillances.

5.1 Purpose/Scope of Audit

The purpose of the audit was to evaluate the implementation and effectiveness of the QA controls applied to OCRWM HQ activities affecting quality. The scope of the audit included activities associated with new site characterization, primarily based upon the revisions of the implementing procedures in effect when the particular activity was performed.

(a) Programmatic Elements

The programmatic portion of the audit utilized checklists based on the requirements in the QAPD and other applicable documents. The checklists covered QA program controls for 10 of the 19 criteria in the OCRWM QARD, which correspond to the 10 CFR Part 50 Appendix B Criteria (Criterion III of 10 CFR Part 50 Appendix B, equals Criteria 3 and 19 of the QARD). Criteria 8, 9, 10, 11, 12, 13, 14, 15 and 19 were not included in the scope of this audit since OCRWM is currently not performing activities in these areas and were previously identified as not applicable to the DOE HQ scope of work.

(b) Technical Areas

NRC technical staff were not included on the NRC observation team due to the limited technical scope of the audit. Therefore, the NRC staff did not evaluate the technical adequacy of any technical products.

5.2 Timing of the Audit

The NRC staff believes the timing of the QA audit was appropriate. The OCRWM HQ was last audited in October 1990, and even though implementation of certain areas was limited, the audit was useful to determine the adequacy of the OCRWM HQ QA program for the initiation of quality-affecting activities. Also, a number of improvements have been made in the OCRWM HQ QA program since the October 1990 audit, and it was beneficial to assess the adequacy of the improvements made to date.

5.3 Examination of Programmatic Elements

The programmatic checklists covered the QA program controls for the 10 criteria or programmatic elements listed below:

1.0 Organization
2.0 Quality Assurance Program
3.0 Design Control
4.0 Procurement Document Control
5.0 Instructions, Plans, Procedures, and Drawings
6.0 Document Control
7.0 Control of Purchased Items and Services
16.0 Corrective Action
17.0 Quality Assurance Records
18.0 Audits

The following programmatic elements were not included in the scope of the audit since OCRWM HQ currently has no activities to which these elements apply:

8.0 Identification and Control of Materials, Parts, Components, and Samples
9.0 Control of Processes
10.0 Inspection
11.0 Test Control
12.0 Control of Measuring and Test Equipment
13.0 Handling, Storage, and Shipping
14.0 Inspection, Test, and Operating Status
15.0 Control of Nonconforming Items
19.0 Computer Software

The NRC staff observed the audit team's evaluation of selected programmatic elements of the OCRWM HQ QA program. Only portions of some elements were observed. Therefore, some deficiencies identified by the audit team were not observed by the NRC staff. Such deficiencies will not be discussed in detail in this report.

(a) Organization (Criterion 1)

YMPO

The audit consisted of interviews with the Quality Concerns Manager and a Quality Concerns Interviewer, a review of QAAP 1.2, "OCRWM Quality Concerns Program," a review of the Quality Concern File, and a review of the qualification and training files of personnel working on the Quality Concerns Program. The auditor looked at eight quality concern packages to determine how concerns were documented, investigated, tracked, reported, and resolved. The quality concern investigation process is thorough and provides good controls for protecting the confidentiality of the concern originator. The auditor concluded that the overall Quality Concerns Program is being effectively implemented and managed in accordance with procedural requirements. No deficiencies were identified. The audit of this area was effective and the implementation was adequate.

(b) Quality Assurance Program (Criterion 2)

OCRWM HQ

This portion of the audit focused on evaluating objective evidence of the establishment of QA program controls for quality-affecting activities and QAPP 2.9, "QA Program Trend Evaluation and Reporting." Due to the recent release of Revision 3 of QAAP 2.9, issued September 2, 1991, OCRWM personnel stated that there was insufficient time to collect and process trending data. It was indicated that previous issues of QAAP 2.9 were not practical and could not be implemented. The OCRWM QA staff stated that a quarterly trending analysis will be implemented in the near future. Consequently, the checklist questions pertaining to trending could not be evaluated, and this area was considered indeterminate due to lack of implementation.

The failure to perform trending analyses was noted as a "weakness" by the NRC staff in its Observation Audit Report for the October 1990 DOE audit of OCRWM (ref. Linehan to Shelor letter dated March 15, 1991). The audit team found that once again, as required by QAAP 2.9, no trending analyses had been performed. This was a repetitive finding noted during the October 1990 audit. Also, as with the previous audit, HQ personnel are knowingly in noncompliance with their procedural requirements.

The audit team leader indicated that this finding will be combined into a generic CAR for Criterion 2 under the section for program implementation instead of Criterion 5, since there were several other examples where procedures were knowingly not followed. It was also noted that since this finding had little effect on activities affecting quality, Criterion 2 would be classified as "marginally effective."

Regardless of the classification, the NRC staff is concerned with the fact that HQ personnel knowingly violate their procedural requirements without providing documented justification for doing so. The NRC staff feels that this indicates inadequate concern for the quality effort. DOE should take effective measures to correct this apparent lack of concern for quality.

It was noticed that for the OCRWM QA and other organizations, several positions were vacant. However, the lack of personnel to occupy these positions did not appear to have an adverse impact on QA program implementation.

Qualification and training packages for 5 audit team leaders, 11 auditors, 9 surveillance personnel, 6 technical specialists, and 4 software QA personnel were reviewed to determine compliance with Quality Management Procedure (QMP) 02-02, "Qualification of QA Program Audit Personnel." The sample selected by the auditor was representative of personnel that recently have participated in

performing audits on the Yucca Mountain Project. The auditor determined that: (1) qualification and training packages contained the required training assignments; (2) the training had been accomplished; (3) in most cases, qualification forms were adequately filled out; (4) evidence of verification of education and experience was in the file; and (5) there was evidence that a re-review of personnel was performed periodically to determine that qualifications and proficiency were acceptably maintained.

Two deficiencies were noted where six employees had completed the required reading and training assignments after the audits were performed; and two qualification packages had changes noted on the required employees training assignments by an unauthorized individual. These two minor deficiencies were documented in a CAR.

The NRC staff, through observing the qualification records, also determined that the personnel were adequately qualified to perform their assigned tasks in accordance with QMP-02-02, Revision 3. The training and qualification records included personnel who participated in audit No. HQ-92-001 of OCRWM HQ.

Based upon the observations, the auditors conducted a sufficiently detailed investigation for the portions audited. Appropriate questions were asked from the audit checklist and objective evidence was presented and reviewed. Due to insufficient evidence to evaluate trending and other examples of willingly not following established procedures, implementation of this criterion as noted above, is considered marginally effective. The audit of this criterion was effective.

(c) Design Control (Criterion 3)

OCRWM HQ

The auditor and technical specialist interviewed personnel from the OCRWM Office of Systems and Compliance (OSC) to determine what quality affecting documents have been initiated or completed since the last audit in October 1990. Based on this interview, the development process for the "Physical System - Store Waste," and "Physical System - Transport Waste" was selected for the audit sample. In addition, the technical specialist reviewed the "System Requirements - Overall," "Physical Systems - Exploratory Studies Facility" and "Programmatic Requirements" documents.

Based on the interviews with OSC personnel and reviews of the above documents, three procedural deficiencies were identified by the auditor and technical specialist. First, Title II Design is proceeding for Initiative I Casks under the transportation program without an approved and issued baseline document in place i.e., the Waste Management Systems Requirements Document - Volume II (WMSR). The WMSR baseline document was never issued; and therefore, the physical system requirements

for transportation were not being controlled as required. The CAR for this audit finding was to be issued as a Level 1 CAR.

The second deficiency was that, although OSC had improved its control of documentation in the implementation of QAAP 3.1, "Technical Document Review," reviewers did not always conduct their reviews in accordance with the review instructions and acceptance criteria for the "Physical System Requirements Functional Analysis" documents as required by QAAP 3.1.

Lastly, as required by QAAP 3.6, the Branch Chief of the Configuration Management Branch did not identify the respective Branch Chiefs for the specific input documents and their assignments were not placed on the master list of controlled input sources.

The audit team was well prepared and knowledgeable in the requirements of which they were auditing and persistent in their interviews and document reviews. The auditors used the published checklists effectively during the audit process, and the audit in the area of Design Control was observed to be effective. The NRC staff agrees with the audit team's conclusion that the implementation of the QA program for Design Control was ineffective.

(d) Instructions, Procedures, Plans, and Drawings (Criterion 5)

OCRWM HQ

An item was added to the audit checklist to verify the system in place to ensure that revisions made to the QARD, QAPD, AND QAAPs do not lessen the commitments previously made to NRC. The auditor verified that when a document is revised, the document package is accompanied with a document checklist. This document checklist contains a line item to remind the document reviewer to consider whether the document revision(s) meet "regulatory requirements." While the line item does not specifically require the reviewer to check for any lessening of commitments, the intent is there. The NRC staff brought the recent revisions to the QARD and QAPD (Interim Change Notices (ICN) 4.1, Change 1.0, and ICN 3.1, Change 2.0) to the attention of OCRWM QA management where the revised definition to what the QA program was applicable to was inconsistent with the 10 CFR Part 60 definition. OCRWM QA management explained that the purpose of this revision was to incorporate the intent of NUREG-1318 pertaining to radiological safety and not be inconsistent with the 10 CFR Part 60 regulations. DOE agreed to review ICNs 4.1 and 3.1 to ensure these changes are consistent with the 10 CFR Part 60 definition of what the QA program should apply to.

The audit of this criterion appeared effective and the programmatic implementation appeared adequate.

(e) Document Control (Criterion 6)

YMPO

The auditor reviewed the overall review process of the Lawrence Livermore Laboratory and Lawrence Berkley Laboratory Software QA Program against the requirements of QMP-06-04, "Project Office Document Development, Review, Approval, and Revision Process." The auditor determined and documented on a CAR that: QA personnel were not consistently documenting the review criteria, there were insufficient review records, and reviews in some cases were limited.

The audit of this area was effective and the implementation was adequate.

(f) Corrective Action (Criterion 16)

OCRWM HQ

The NRC staff observed and documented several weaknesses with regard to Criterion 16 during the October 1990 DOE audit of the OCRWM QA program. These weaknesses were in the areas of root cause analyses and timely closure of conditions adverse to quality.

The CAR files were looked at by the NRC staff to ascertain corrective actions taken by OCRWM for the weaknesses the NRC staff had identified during the October 1990 DOE audit. Root cause was also noted as a concern during the NRC staff review of the QARD (ref. Linehan to Shelor letter dated October 3, 1990). Of the 11 CARs written during the October 1990 audit, the NRC observer reviewed seven of these to verify the timeliness of closure and whether root cause analyses had been performed. All seven CARs had been closed out in a reasonable time frame with an excellent detailed root cause analyses. The NRC staff recommends that DOE and their program participants follow the methodology used by OCRWM for root cause analyses.

DOE explained that proposed revisions to the corrective action procedure are in process to delete the current Severity Levels 1, 2, and 3. Severity Levels 1 and 2 will be combined and be regarded as significant conditions adverse to quality and will also require trending. Severity Level 3 will be regarded as a condition adverse to quality and not require trending. This condition will essentially be considered isolated in nature and a minor deficiency requiring only remedial corrective action.

Given the DOE rationale and explanation for root cause analyses and significant conditions adverse to quality versus conditions adverse to quality, the NRC staff was able to better understand the reason for the proposed changes. The NRC staff indicated that it will probably accept the DOE response to the NRC QARD concern on root

cause analyses (ref. Shelor to Linehan letter dated August 21, 1991, Supplement 1). Based on the information obtained for this criterion, the audit of this area was effective, and the implementation is adequate.

YMPO

Sixteen CAR packages were reviewed to determine whether effective action was being taken to disposition and resolve CARs in a timely manner. The auditor also reviewed the process for documenting and reporting the status of outstanding CARs. Overall, the auditor found that CARs were being correctly processed in a complete and accurate manner in accordance with QAAP 16.1.

(g) Quality Assurance Records (Criterion 17)

OCRWM HQ

The audit of this criterion consisted of interviews with the OCRWM and Quality Records Center (QRC) staff, and a review of quality records to evaluate the procedural compliance with QAAP 17.1, "QA Records Management," and the associated Implementing Line Procedure (ILP), 12.17.01. The QRC is managed by Koh Systems Incorporated (KOH) which has responsibility for receiving and processing QA records from OCRWM and transmitting completed records packages to the Central Records Facility for permanent storage.

The auditors interviewed the QRC staff and verified through documented evidence that proper procedural controls and provisions were established to control QA records. Two minor areas of procedural noncompliance were noted and were immediately corrected. The noncompliances were outcards to control records were not being used as required by ILP 12.17.01 and, the authorization list for those personnel authorized to view records was not posted on the entry door to the QRC.

The KOH QRC staff demonstrated a sound and thorough knowledge of the procedural requirements and the implementation of these requirements.

Through the auditor's interviews with the the OCRWM HQ QA staff, it was revealed that QA records are not routinely being transmitted to the QRC within ten work days of generation, approval, receipt, or acceptance as required by QAAP 17.1. This audit finding was combined with the generic CAR under Criterion 2. OCRWM management recognizes that there is currently a problem in meeting the ten day requirement, and intends to remove it during the next revision to QAAP 17.1 and require records to be transmitted in a timely fashion. The NRC staff suggests this revision be commensurate with the intent of NQA-1-1989, Supplement 17S-1, Paragraph 3.2 (d) which states, "a method for submittal of completed records to the storage facility without unnecessary delay".

During this part of the audit, the NRC staff had the opportunity to overview the OCRWM criteria and requirements for designating what becomes a QA record. The QA records requirements are derived from the QARD/QAPD and detailed in the implementing procedure QAAP 17.1. The NRC staff took exception to the QA records definition in Revision 4 of the QAPD (ref. Linehan to Shelor letter dated December 3, 1990, Concern # 3). The NRC staff finds the DOE response (ref. Shelor to Linehan letter dated August 21, 1991, Supplement 1) acceptable based on observing the QA records program implemented during this audit. However, the terminology to determine what documents are considered QA records still appears too general and may be subject to misinterpretation in the future. For example, it is unclear whether NRC/DOE QA meeting minutes should be kept as QA records or just be maintained as records (at this time, they are just maintained as records). The NRC staff presented this matter to DOE for its attention and suggested that a more explicit definition of what a QA record should consist of be considered to prevent any future misinterpretations.

The auditors were well prepared, thorough, and displayed acceptable knowledge of the procedures applicable to the receipt and storage of QA records. The NRC staff agrees with the audit team's preliminary conclusion that implementation of the procedures under Criterion 17 is adequate. Further, the NRC staff believes that the audit of this criterion was effective.

(h) Audits (Criterion 18)

OCRWM HQ

The audit of Criterion 18 began with a review of the qualification of audit personnel and lead auditor qualifications. The auditor verified from the certification records that all OCRWM HQ Lead Auditors met the minimum requirements of NQA-1-1989, had demonstrated proficiency since last certified, and met other OCRWM requirements. Other audit checklist questions regarding Lead Auditors and Technical Specialists were answered through a 100 percent verification of objective evidence. No deficiencies were identified.

The audit program including surveillances, as described in QAAP 18.2, "Audit Program," served as the basis for Part 2 of the Criterion 18 audit checklist. Initially, there was difficulty in obtaining objective evidence to clearly show where changes in the audit schedule had been made; however, OCRWM QA was able to provide the objective evidence. Audit schedules were reviewed quarterly, updates were accomplished for calendar year 1991, and justification for changes in the surveillance schedule were presented.

The auditor utilized the audit checklist, obtained the required objective evidence, and carefully reviewed the available

documentation. The audit of the OCRWM HQ audit/surveillance program was effective and the implementation appeared adequate.

5.4 Conduct of Audit

The QA and programmatic technical portions of the audit were productive and performed in a professional manner. The audit team was well prepared and demonstrated a sound knowledge of the OCRWM QA program. The audit checklists included the important controls addressed in the QARD reflected through the QAPD and QAAPs. The audit team used the comprehensive checklists effectively during the interviews with personnel and review of documents. In general, the audit team was persistent in their interviews, challenging responses when necessary. The Audit Team Leader separated major from minor findings, combined findings of a similar nature when appropriate, and interfaced in a professional manner between the audit team members and DOE personnel in order to conduct the audit. Observers were kept informed during the entire audit.

5.5 Qualification of Auditors

The qualification of the QA auditors on the audit team were reviewed by the NRC staff and were found to be acceptable based on meeting the requirements of QMP-02-02, the YMPO procedure for qualifying auditors.

5.6 Audit Team Preparation

The auditors and technical specialist were well prepared in the areas they were assigned to audit and knowledgeable in the QARD, QAPD, and implementing procedures. Overall, Audit Plan HQ-92-001 was complete and included: (1) the audit scope; (2) a list of audit team personnel; (3) a list of the audit activities; (4) the audit notification letter; (5) the QAPD; (6) the QA and technical programmatic checklists; and (7) the past audit report.

5.7 Audit Team Independence

The audit team members did not have prior responsibility for performing the activities they investigated. Although the audit team members consisted of DOE contractor personnel, members of the team had sufficient independence to carry out their assigned functions in a correct manner without adverse pressure or influence. Since this was an internal audit, the NRC staff believes sufficient independence of audit team members was demonstrated.

5.8 Review of Previous Audit Findings

(a) All 11 CARs from the previous audit of OCRWM HQ in October 1990, were satisfactorily closed prior to this audit.

(b) The NRC staff did not identify any Observations relating to deficiencies in either the audit process or the OCRWM QA program.

(c) Based on discussions between the State of Nevada and NRC staff, the State of Nevada observations from the previous audit appeared to have been resolved during this audit.

5.9 Summary of NRC Staff Findings

(a) The NRC staff did not identify any observations relating to deficiencies in either the audit process or the other elements of OCRWM QA program implementation.

(b) Weaknesses

There were several examples where DOE personnel knowingly did not follow procedures without documenting the authority or justification to do so.

At the audit entrance meeting, there was no presentation from DOE to explain the activities and work accomplished since the previous audit. Since the audit observers are not part of the audit scoping process, this presentation would have been beneficial to the audit observers in order to determine whether the audit team has selected the proper sample and scope from which the audit is based on. This matter was also addressed in the recent NRC Audit Observation Reports for Sandia and Lawrence Livermore National Laboratories. (This item was a consensus of the NRC staff, State of Nevada, and Clark County, Nevada observers).

Other than the DOE QA management attendance at the daily audit team briefings, DOE line management for the most part, did not attend these daily team briefings. For future audits, the NRC staff recommended that all involved management attend these meetings in order to gain a better appreciation and understanding of the audit process and implementation of their QA program. (This item was also a consensus of the NRC staff, State of Nevada, and Clark County, Nevada observers).

There appeared to be a lack of understanding of the procedures for sending QA records to the QRC by certain of the OCRWM Office of Systems and Compliance staff. This lack of understanding was evidenced by the inability to explain the use of the required transmittal form that is to be used when transmitting QA records to the QRC, and the inability to identify exactly those records that are considered QA records and require transmittal to the QRC.

(c) Good Practices

A daily status of all observations, potential CARs, completed portions of the audit, and audit criterion effectiveness (where appropriate) was maintained during the course of this audit. In addition, a computerized handout delineating the audit results summary for each area audited listed the associated findings or positive attributes for a particular area. This method proved to be an effective tool to track the exact status and progress of the audit for both the auditors and the observers.

The NRC staff observers received the audit plan and audit notebook in ample time prior to the audit to allow for adequate preparation.

The annual Management Assessment of the status and effectiveness of the QA program effort appears to be headed in the proper direction with the support from senior DOE management in tracking and resolving the Assessment Team's recommendations.

The QRC staff demonstrated sound and thorough knowledge of the procedures applicable to the receipt and processing of QA records. The QRC staff took immediate corrective action to correct any deficiencies identified by the auditors.

OCRWM should recommend their program participants follow the manner in which OCRWM uses for their root cause analyses.

5.10 Summary - DOE Audit Team Findings

The audit team identified five potential CARs written against the OCRWM QA program. These CARs are as follows:

(a) No objective evidence existed to document training for two of the Management Assessment Team members prior to performance of the assessment. (Criterion 2)

(b) Several examples of OCRWM personnel willingly not following their implementing procedures demonstrates a lack of discipline regarding proper implementation of the DOE OCRWM QA program. (Criterion 3)

(c) Title II Design is proceeding with Initiative I Casks under the transportation program with no approved and issued technical baseline document in place. (Criterion 3)

(d) Reviewers performing the QAAP 3.1 review of the Physical Systems Requirements Store Waste Document, did not conduct their reviews in accordance with the review instructions and acceptance criteria. (Criterion 3)

(e) The Branch Chief, Configuration Management Branch, did not identify the Branch Chiefs for the specific input documents, and the assignments were not identified on the master list of controlled input sources. (Criterion 3)