OFFICE OF QUALITY ASSURANCE AUDIT REPORT FOR

THE AUDIT OF

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

QUALITY ASSURANCE PROGRAM

AUDIT 90-08

CONDUCTED NOVEMBER 13 THROUGH 19, 1990

Prepared by: _____ Date: 12-06-90
Richard L. Maudlin
Audit Team Leader

Approved by: _____ Date: 12/7/90
Donald G. Horton, Director
Yucca Mountain Quality Assurance
Division

ENCLOSURE

EXECUTIVE SUMMARY

The Quality Assurance (QA) qualification audit of Science Applications International Corporation's (SAIC) QA Program and quality related activities were conducted over a one-week period in the SAIC offices located in Las Vegas, Nevada.

In the opinion of the audit team, the SAIC QA Program is adequate for initiation of quality-affecting activities. However, specific elements of the QA Program were identified as either indeterminate (due to a lack of implementation), marginally effective or ineffective. The following is a summary of those elements of the SAIC QA Program judged by the audit team to be indeterminate or marginally effective.

1. Due to the lack of sufficient implementation, the effectiveness in the areas of Criteria 8 (Identification and Control of Items, Samples, and Data); Criteria 11 (Test Control); Criteria 13 (Handling, Shipping, and Storage); Criteria 14 (Inspection, Test and Operating Status); Criteria 19 (Software Quality Assurance); and Criteria 20 (Scientific Investigation Control) could not be determined.

2. In the area of Criteria 4 (Procurement Document Control), the audit team found several disconnects within the implementing procedures related to the process for the purchase of commercial grade items. Based on these conditions found in the procedures, the area was considered marginally effective.

3. In the area of Criteria 12 (Calibration), the audit team found implementation to be ineffective. This was based on SAIC's Quality Finding Reports (QFRs) which had been written to identify deficiencies found in implementation of the program procedures. The measures that have been taken by SAIC's management to date have not appeared to satisfactorily resolved the conditions.

The results of the audit documented five (5) Corrective Action Requests (CAR) that identified conditions adverse to quality found during the course of the audit investigation. The CARs related to deficiencies found in the areas of: Indoctrination and Training (1), Procurement (1), Instructions, Procedures and Plans (1), Inspection (1), and Corrective Action (1). None of the CARs generated as a result of the audit, either collectively or individually, represent a breakdown in the QA Program. What they do represent is a need for management attention to bring the SAIC QA Program into full compliance. Nine potential CARs were resolved during the course of the audit. The details regarding the CARs and potential CARs resolved during the audit are described in this report.

It is recognized by the audit team that the SAIC QA Program has only been in effect since May 21, 1990. The audit team would like to commend SAIC's management and personnel for the effort that has been put forth in establishing the QA Program.

1.0 INTRODUCTION

This report contains the results of a Quality Assurance (QA) audit of the activities conducted by the Office of Civilian Radioactive Waste Management (OCRWM). The audit was conducted at the SAIC facilities in Las Vegas, Nevada during the period of November 13, through 19, 1990.

2.0 AUDIT PURPOSE AND SCOPE

The purpose of this qualification audit was to evaluate the adequacy and effectiveness of implementation of the SAIC Quality Assurance Program associated with the Mined Geologic Disposal System (MGDS). The audit focused on the period between May 21, 1990 (approval of SAIC's QAPD) and November 13, 1990.

The scope of the audit covered those quality affecting activities associated with the MGDS. The scope of the audit encompassed a review of applicable implementing procedures and procedure implementation. In addition, technical aspects specifically related to Meteorological Monitoring and Radiological Monitoring activities were evaluated.

The following program elements were audited to assess compliance with the SAIC's Quality Assurance Program Description (QAPD), Revision 1 and associated implementing procedures:

1.0 Organization
2.0 Quality Assurance Program
4.0 Procurement Document Control
5.0 Instructions, Procedures, Plans, and Drawings
6.0 Document Control
7.0 Control of Purchased Items and Services
8.0 Identification and Control of Items, Samples, and Data
10.0 Inspection
11.0 Test Control
12.0 Control of Measuring and Test Equipment
13.0 Handling, Shipping, and Storage
14.0 Inspection, Test, and Operating Status
15.0 Control of Nonconforming Items
16.0 Corrective Action
17.0 Quality Assurance Records
18.0 Audits
19.0 Software Quality Assurance
20.0 Scientific Investigation Control

3.0 AUDIT TEAM PERSONNEL AND OBSERVERS

Responsibility	Individual
Audit Manager	James Blaylock
Audit Team Leader	Richard L. Maudlin
Auditors	A. Edward Cocoros
	Robert B. Constable
	Kerby L. Tyger
	Mario R. Diaz
	Catherine E. Hampton
	Charles C. Warren
	Albert C. Williams
Auditors-In-Training	Thomas Rogers
	Sam Smith
Technical Specialists	Diane Harrison-Giesler
	Byron Kesner
Observers	Teak Verma US Nuclear Regulatory Commission (USNRC)
	John Buckley USNRC
	Thomas Trbovich USNRC
	John Gilray USNRC
	Phillip Niedzielski-Eichner Nye County, Nevada
	Englebrecht Von Tiesenhausen Clark County, Nevada
	Susan W. Zimmerman State of Nevada

4.0 SUMMARY OF AUDIT RESULTS

4.1 Statement of Program Effectiveness

In the opinion of the audit team, the SAIC QA Program is adequate for the initiation of quality-affecting activities. However, specific elements of the QA Program were determined as either indeterminate (due to the lack of implementation), marginally effective, or inadequate as noted below:

1. Criteria 1 (Organization) -- An organizational structure has been established and procedures put in place which adequately define the organizational responsibilities. Requirements which address interfaces, stop work, and for evaluating disputes have been adequately covered in implementing procedures. This area was considered effective for the work performed to date.

2. Criteria 2 (QA Program) -- The QA Program requirements have been adequately defined in implementing procedures. The concerns that were noted in this area have been previously identified by SAIC QA on corrective action documents. Implementation that has occurred in this area to date appears to be effective.

3. Criteria 4 & 7 (Procurement Document Control and Control of Purchased Items and Services) -- The procedural system established by SAIC for the procurement of items is detailed in six (6) individual procedures. The process was found to be fragmented and difficult to follow. Due to this problem, the controls applied to procurement documents is marginally effective.

   The procedures and implementation for the controls applied to purchased items and services appeared to be effectively implemented.

4. Criteria 5 (Instructions, Procedures, Plans and Drawings) -- The process established for the generation, review, and approval of quality related documents were considered to be effective with one exception. A deficiency was identified relating to the controls applied to vendor manuals.

5. Criteria 6 (Document Control) -- This process established for the control of documents was considered to be effective with no specific deficiencies identified.

6. Criteria 8 (Identification and Control of Items, Samples, and Data) -- Effectiveness in this area is indeterminate due to the lack of sufficient implementation.

7. Criteria 10 (Inspection) -- To date, implementation in this area has been limited to receipt inspection. Based on the objective evidence reviewed, this area was considered effective.

8. Criteria 11 (Test Control) -- Effectiveness in this area is considered indeterminate due to the lack of implementation.

9. Criteria 12 (Control of Measuring and Test Equipment) -- The controls being applied in this area were found to be inadequate. SAIC has written several QFRs which identify lack of implementation of the procedures.

10. Criteria 13 (Handling, Shipping, and Storage) -- The process established for effectively controlling materials, parts, components, and samples were limited at this point in time. Due to the lack of implementation this area is considered indeterminate.

11. Criteria 14 (Inspection, Test, and Operating Status) -- Effectiveness in this area could not be determined due to lack of any ongoing activities.

12. Criteria 15 (Control of Nonconforming Items) -- The process for the control of nonconforming items was considered to be effective. The procedures appeared to adequately address the requirements of the QAPD.

13. Criteria 16 (Corrective Action) -- The controls being applied to corrective action appeared to be effective, except in one instance.

14. Criteria 17 (Quality Assurance Records) -- Evaluation of this area included the review of documentation packages. The results reflect that implementation is effective.

15. Criteria 18 (Audits) -- Evaluation of this area covered both audits and surveillances. The process for audits and surveillances was found to be adequately addressed in procedures and was found to be effectively implemented.

16. Criteria 19 (Software Quality Assurance) -- Due to the lack of a documented Software Quality Assurance Plan and no quality affecting software under development, effectiveness of this area was considered indeterminate.

17. Criteria 20 (Scientific Investigation Control) -- The effectiveness in this area was considered indeterminate.

In the area of Meteorological and Air Quality Monitoring, the audit team found that implementing procedures were in place and being used. However, the upper-tier plan, Environmental Field Activity Plan (EFAP) for Air Quality, is only in draft form. Also, data interpretation and analysis cannot be performed at this time due to the lack of an approved Software QA Program.

In the area of Radiological Monitoring, no activity has been implemented. Procedures are still in the process of being developed to prepare for when site activities commence.

4.2 Summary of Programmatic Activities

1. Criteria 1 -- The SAIC organizational structure is defined in the SAIC QAPD, Section 1. The audit revealed that the organizational structure is in place, that procedures adequately describe managerial responsibilities, and organizational changes are processed monthly. The elements of interface control as described in AP 5.19Q were found to be satisfactory. These areas were considered to be effectively implemented. The only areas where sufficient implementation has not occurred to evaluate effectiveness are resolution of disputes, stop work, and quality allegations. Objective evidence utilized to evaluate this area can be found in Enclosure 1 of this report.

2. Criteria 2 -- The broad overview requirements for the QA Program are described in the SAIC QAPD, Section 2, and respective implementing procedures. Other aspects of Criteria 2 that were evaluated included QA Controls, QA Grading, Management Assessment, and Indoctrination, Training and Qualification of personnel. Several personnel training and qualification packages, including those for audit and inspection personnel, were evaluated for compliance to such procedures as SP 1.21, SP 1.31, SP 1.42, and OP 1.5. The results of the review identified one instance where required training had not been completed prior to initiation of the activity. This was documented in CAR YM-91-012.

   The only area where implementation had not occurred to date is the conduct of readiness reviews. The only other condition that existed which had been previously documented on a SAIC's QFR was related to a procedure on the control of noncompliances as required by AP 5.27Q. It should be noted that SAIC has issued and is implementing a procedure for the control of nonconforming items (SP 1.23). Objective evidence reviewed to evaluate compliance in this area can be found in Enclosure 1.

3. Criteria 4 -- A review and evaluation of procedures SP 1.12, SP 1.25, SP 1.28, OP 1.4, and SP 1.43 were performed to verify implementation. The objective evidence evaluated for compliance to these procedures are referenced in Enclosure 1 to this

report. The results of the evaluation revealed that one purchase requisition did not provide justification for commercial grade items and two purchase requisitions for commercial grade items did not contain signatures and dates of approval. These conditions are documented on CAR YM-91-013.

The activities in this area were found to be marginally effective. This was attributed to the current program structure in which six (6) individual procedures have been issued for controlling the procurement process. It should be noted that SAIC's management concurred with this evaluation and has begun assessing changes to "streamline the system."

4. Criterion 5 -- A review was performed to verify that the OCRWM program requirements have been appropriately factored into the SAIC QAPD. This was accomplished by a review of Attachment "A" of Revision 0 to the SAIC QAPD and was found to be satisfactory. The preparation, review, and approval of Standard Practices (SPs), Operating Procedures (OPs), and Work Instructions (WIs) were found to be satisfactorily accomplished in accordance with SP 1.1 and SP 1.30. Verification of the document review process was accomplished by the review of Form Number T&MSS/098. SP 1.1 describes the process for Interim Change Notices (ICNs). Form Number T&MSS/099 was reviewed to verify implementation. Forms control is handled in accordance with SP 1.3 and SP 1.7. The results of the review of criteria were found to be satisfactory.

5. Criteria 6 -- Documents are controlled in accordance with the requirements specified in SP 1.34 and SP 1.35. Objective evidence in the form of a record review package for the review of the SAIC QAPD was selected to verify compliance. The review and issuance of the QAPD were found to be satisfactory. Also Form Numbers T&MSS/029, 030, and 033 were reviewed to determine compliance. Only one discrepancy was noted in this area. There does not appear to be any procedures in place which describe the process for receipt and control of vendor manuals. This is documented in CAR YM-91-014.

6. Criteria 7 -- A review of procedures SP 1.12, SP 1.25, SP 1.28, SP 1.43, OP 1.3, OP 1.4, OP 1.7 and an evaluation of the process was performed to verify implementation. A review of Procurement Documents and Supplier Qualification Packages identified in Enclosure 1 was performed to verify implementation. The results of the review of objective evidence indicate effective implementation in this area. It is recommended by the audit team that suppliers of "Commercial Grade Items" be controlled separate from those supplying quality-related items and/or services.

7. Criteria 8 -- Activities in this area have been very limited at this point in time. AP 6.3 describes the process for identification of items. Air quality monitoring filter samples are controlled by inking in a number on the filter paper. The numbers are then entered on a Particulate Sampler Data Record (PSDR), Form Number T&MSS/101/2. The filters and PSDRs are transferred to the SMF every 90 days. The activities evaluated were found to be satisfactory.

8. Criteria 10 -- Inspection is performed in accordance with SP 1.12 and SP 1.25. To date, implementation of these criteria has been limited to receipt inspection. To verify implementation, a review of applicable procedures, Receipt Inspection Reports, and other related evidence as noted in Enclosure 1 was used. There was only one deficiency noted in this area. The problem noted was "Hold For Test" tags have not been used where required. This condition has been documented on CAR YM-91-015.

   Other than the one condition noted above, implementation in this area was considered effective.

9. Criteria 11 -- SAIC test control is limited to equipment and instruments that apply to engineered items only. As of this date, there are no plans to acquire any engineered equipment or instruments. Purchases have been only off the shelf commercial grade items.

10. Criteria 12 -- The requirements for Calibration are specified in SP 2.4. During the course of the audit it was observed that the requirements of the procedure were not being appropriately implemented. As a result, it was identified to the audit team that SAIC had written several QFRs which documented this condition. Since a review of the QFRs revealed that they adequately addressed the audit teams concerns, no CAR was written. Implementation in this area was considered inadequate.

11. Criteria 13 -- Procedures which specify requirements for the shipping, handling and storage of purchased items are described in SP 1.28, SP 1.12, SP 1.25, WI-RM-113, WI-RM-114, and WI-RM-141. There was only one piece of equipment found in storage. This equipment was identified as "NUMELEC" NU114 ALPHA SPECTROMETER. No problems were observed in this area. Due to the lack of sufficient implementation, this area was considered indeterminate.

12. Criteria 14 -- The requirements for inspection and test are defined in SP 1.25. The only activities that have occurred to date were those described under Criteria 10. No testing has been performed to date. This area was considered indeterminate.

13. Criteria 15 -- The control of nonconforming items is accomplished in accordance with SP 1.23. A review of the objective evidence referenced in Enclosure 1 was performed to verify implementation of the requirements in SP 1.23. The results revealed that compliance in this area was satisfactory.

14. Criteria 16 -- The process for Corrective Action is specified in SP 1.22 and SP 1.37. No activity has occurred in the area of Stop Work. Implementation of the requirements of SP 1.37 was accomplished by the review of evidence referenced in Enclosure 1 of this report. The results of the review noted a deficiency regarding the evaluation of QFRs for significance. This condition was documented on CAR YM-91-016.

    Aside from this one deficiency, implementation was considered satisfactory. The audit team would like to make a recommendation which applies to both Criteria 15 and 16. The logs currently used by the SAIC Quality Assurance Department are manual. These logs do not allow for effective statusing. It is recommended that SAIC develop and implement a computerized system of logging. A computerized logging system will increase the effectiveness of and responsiveness to the corrective action system. In addition to providing input for the trending process, computerized logs will allow the QA staff to status management via periodic reports.

15. Criteria 17 -- The processing and control of records are accomplished in accordance with SP 1.36 and WI-REC-001. Objective evidence as noted in Enclosure 1 of this report was used to verify compliance. The results of the review in this area revealed that implementation was satisfactory.

16. Criteria 18 -- Activities related to the performance of audits and surveillances are addressed in procedures OP 1.1, OP 1.2, OP 1.5, and SP 1.21. Audit and surveillance report as noted in Enclosure 1 were reviewed to verify compliance with the above procedures. The results revealed that compliance was satisfactory.

17. Criteria 19 -- To date there has been no software developed to perform quality related activities. SAIC does not have an approved SQAP as of the date of this audit. Subsequently, no implementation could be verified in this area.

18. Criteria 20 -- A review and evaluation of planning documents were not performed at this time due to the fact that no planning documents have been prepared since the approval of the SAIC QA Program. The planning documents which address the areas of Meteorological, and Radiological Monitoring are the responsibility of the Yucca Mountain Project Office for control. The only planning document within SAIC control is the

Environmental Field Activity Plan (EFAP). In a review of this document it was found that the document was issued only in "Draft" form. This problem has been previously identified on Standard Deficiency Report (SDR) 398.

Limited work has occurred in the meteorological and air quality area since the approval of the SAIC QA Program. What work has occurred, compliance with instructions was found to be satisfactory with one exception. This condition was resolved prior to concluding the audit. As of this date, the only meaningful work that has occurred in the area of Radiological Monitoring is the preparation of Work Instructions. As a result of the audit, implementation of procedures for the control of activities related to Air Quality, Meteorological, and Radiological Monitoring is considered indeterminate.

4.3 Summary of Technical Activities

1.0 Meteorological/Air Quality Monitoring

The Air Quality/Meteorological Monitoring Programs were technically reviewed for consistency with the T&MSS Quality Assurance Program Description (QAPD), the Environmental Field Activity Plan (EFAP) for Air Quality, the Meteorological Monitoring Plan, and the implementing Work Instructions.

Only those T&MSS documents dated between May 21, 1990, and the present (the time frame of the audit) were considered in support of the technical evaluations presented in this summary.

Activities conducted under both the Meteorological and the Particulate Sampling programs are generally in accordance with approved Work Instructions, the EFAP-Air Quality, and the Meteorological Monitoring Plan.

However, as specified in SDR No. 398, the EFAP-Air Quality is still not approved (i.e., not a controlled document). This open SDR should be remedied as soon as possible, since many of the requirements of sample design and frequency (specified in 40 CFR 58) are incorporated into the EFAP but not into the lower-level implementing Work Instructions.

40 CFR 58, Appendix B, specifies 13 operational procedures for PSD Air Monitoring Programs. A summary of the audit's technical results and a list of the objective evidence examined is included with the description of the operational procedure:

1. **Selection of methods, analyzers, or samplers:** Adequate - but could only be evaluated for the particulate sampling program and the meteorological instrumentation. This technical evaluation is based on an examination of the equipment specification list, status reports, the equipment maintenance and repair records, and completed particulate sampler acceptance test forms.

2. **Training:** Adequate - Personnel are qualified for their assigned positions, and training records are complete. This technical evaluation is based on a review of training records of environmental monitoring program personnel (Ms. Monica Dussman, Task Manager; Mr. Joe Conway, Field Technician; Mr. Peter Luthiger (closed file); and Mr. Steve Cameron), and interviews with Ms. Dussman.

3. **Installation of Equipment:** The required acceptance inspection, installation and calibration procedures were completed for the particulate samplers and the meteorological monitoring equipment. Gaseous pollutant monitoring equipment has not yet been installed.

   For the meteorological monitoring and particulate sampling programs for this technical evaluation were based on an examination of complete Particulate Sampler (or other appropriate) Test Forms, and entries in the Air Quality Logbook, which is kept in Building 4522, Area 25, at the Nevada Test Site (see WI-MET-001 for the appropriate T&MSS form listing).

4. **Selection and control of calibration standards:** Could not be evaluated - gaseous pollutant monitoring program not in effect.

5. **Calibration:** Addressed under programmatic Criteria 12. Certain calibration requirements for meteorological instrumentation were verified during the field portion of the audit on November 15, 1990 (e.g., placement of the North directional stake for wind direction measurements, uses of calibration tags, etc.). In addition, Particulate Sampler Calibration Check Forms (T&MSS/105/2) were reviewed for the particulate sampling program.

6. **Zero/span checks and adjustments of automated analyzers:** Not yet applicable nor evaluated.

7. **Control checks and their frequency:** Adequate. This technical evaluation is based on a review of Calibration Documentation forms (for both Particulate and Meteorological instruments). Control checks for the particulate monitoring program were evaluated by reviewing the filter cartridge

preparation procedures with the Field Technician and examination of the Filter Weight Log Book (T&MSS/104/2), and examination of calibration records for the balance used in weighing the filters.

8. Control limits for zero, span and other control checks, and respective corrective actions when such limits are surpassed: Not yet applicable nor evaluated.

9. Calibration and zero/span checks for multiple range analyzers: Not yet applicable nor evaluated.

10. Preventive and remedial maintenance: Adequate - records indicate that preventive maintenance occurs on a regularly scheduled basis, and remedial maintenance occurs in a timely fashion. The technical evaluation was based on a review of the Preventive Maintenance Log, Preventive Maintenance Status Reports, and interviews with the Task Manager and Field Technician.

11. Recording and validating data: Adequate - records indicate that meteorological data are recorded on tape with backup. Once data are transported from the site to the Project Office, an initial check is made to ensure that they are reading correctly. This technical evaluation is based on an interview with the Task Manager and Mr. Grover Prowl.

12. Data quality assessment (precision and accuracy): Instruments are periodically calibrated and the monitoring systems are independently audited on a regularly scheduled basis. However, because neither statistical summaries nor data interpretation is being performed, it is difficult to assess data quality.

    Use of the In-house Meteorological Monitoring Station System Audit Form (T&MSS/134/2) became effective 9/90. This program is currently in place, but a scheduled audit has not yet occurred. Although an assessment of data quality proved inconclusive, the prescribed independent calibration of instruments is being performed and noted in the Air Quality Logbook.

13. Documentation of quality control information: Adequate. Addressed by examining entries in the Air Quality Log Book and the above mentioned T&MSS forms.

At this time it is premature to draw any conclusion as to the effectiveness of the Air Quality and Meteorological Monitoring Programs. The installation of the gaseous pollutant monitoring network is necessary to complete the ambient air quality monitoring effort prescribed in the EFAP-Air Quality.

Effectiveness of these monitoring programs can only be judged through a review of the collection and evaluation of data. Only raw data from particulate samplers and the meteorological monitoring program are being collected at this time. All data summary/ interpretation activities are currently on hold pending approval of the Software QA Plan.

Finally, one of the primary goals of these programs is to provide data inputs to the radiological monitoring program. Specifically, these inputs are used in calculations of a concentration parameter for assessing radiological impacts. Because software development has not occurred and statistical and data interpretation activities are on hold, dispersion modeling using the collected air quality and meteorological data is on hold. Consequently, the effectiveness of these programs is indeterminate at this time.

2.0 Radiological Monitoring

As a result of this audit of the technical activities based on the Radiological Monitoring Plan (RMP), Rev. 0, there were no deficiencies identified. However, there are two recommendations which are described later in this section. In general, there appeared to be a good attitude by the technical personnel in meeting quality assurance objectives. As of this date, there has been little site activity. The primary emphasis has been placed on procedural development so that when activities commence, the program is in place. As a result, effectiveness could not be evaluated due to the lack of implementation of the technical activities.

Objective evidence examined to during the course of the technical evaluation listed in Enclosure 1 of this report. Based on the objective evidence evaluated and interviews with staff, the following conclusions are noted:

1. The technical staff appeared to be qualified for the work that they were doing based both on records and responses provided to technical questions. Personnel appeared to be knowledgeable of procedural requirements.

2. The technical procedures were adequate, although effectiveness could not be evaluated due to lack of implementation.

3. The RMP (a Project Office document) includes the Scientific Investigation Plan for radiological monitoring activities. The RMP is also a support document for scientific investigation plans which produce nonradiological data to support radiological activities which are prepared by other participants. The Operation Procedures and Work Instructions implement the RMP. The interface between the SPs and WIs and the RMP could be strengthened.

Recommendations for the technical activities based on the Radiological Monitoring Plan are as follows:

1. Review and evaluate the planned interface between NRAD/EPA and SAIC, and the training of NRAD/EPA personnel who will be involved with the data collection beginning January 1991. (Prior to start of data collection activities.)

2. Since the RMP is a Project Office document, it should be a management document containing the requirements for the conduct of the Radiological Monitoring Program, not a technical document specifying "how" to perform the monitoring. The RMP should be rewritten as a requirements document at the Project Office level and SAIC should prepare an implementation document (e.g., Study Plan) describing how those requirements will be satisfied and implemented by the participant. The WIs and SPs would then reference the implementing document. This would strengthen the interface between the RMP and the WIs and SPs.

4.4 Summary of Audit Findings

A total of five (5) CARs were generated as a result of this audit. Information copies of the CARs are attached as Enclosure 3 to this report. A synopsis of CARs is presented in Section 6.0 of this report. Additionally, included in this report is a brief summary of potential CARs that only required remedial action and were resolved during the audit.

5.0 AUDIT MEETINGS

5.1 Pre-audit Conference

A pre-audit conference with key staff was conducted at 9:00 a.m. at the SAIC facilities in Las Vegas, Nevada, on November 13, 1990. The purpose, scope, and proposed agenda for the audit were presented and the audit team and observers were introduced. A list of those attending is attached as Enclosure 2.

5.2 Persons Contacted During the Audit

(See Enclosure 2 for a list of those persons contacted during the audit.)

5.3 Post-audit Conference

The post-audit conference was conducted at 3:00 p.m. on November 19, 1990 at the SAIC facility in Las Vegas, Nevada. A synopsis of the CARs identified during the course of the audit were presented to SAIC management and staff. A list of those attending the post-audit conference is attached as Enclosure 2.

5.4 Audit Status Meeting

Audit status meetings were held with the SAIC TPO and his staff and the SAIC QA Manager each morning of the audit. A status of how the audit was progressing and identification of potential deficiencies and/or comments were discussed.

6.0 SYNOPSIS OF CORRECTIVE ACTION REQUESTS AND POTENTIAL CARs CORRECTED DURING THE AUDIT

6.1 Corrective Action Requests

YM-91-012 Personnel in the Radiological Field Program are performing quality affecting activities without receiving some of the required training.

YM-91-013 Purchase Requisitions for commercial grade items do not, in all cases contain the justification and/or the signature and date of the APM.

YM-91-014 No procedure(s) exist for the control of submittal, identification, distribution and maintenance of vendor manuals.

YM-91-015 A review of procurement packages revealed that "Hold for Test" tags had not been utilized as required by procedure for items that have been received, inspected, and require testing.

YM-91-015 SAIC Quality Finding Reports (QFRs) identified conditions which by definition should have been designated as serious or significant conditions.

6.2 Concerns Corrected During the Audit

1. Checklists of surveillance SR-90-007 did not contain source information related to the attributes checked during the surveillance and the results, (i.e., sat, unsat, N/A), as required by procedure OP 1.2. The checklist in question was reviewed by SAIC staff and the appropriate information was entered to correct the observation.

2. The designation of a M&TE custodian by the T&MSS Assistant Project Manager and the QA Manager had not been accomplished as required by procedure SP 2.4, para. 4.0. Prior to concluding the audit, a M&TE custodian was named in order to initiate, administer and coordinate the M&TE program.

3. QA records returned to the record source are required to be protected after work hours as required by procedure SP 1.36, para. 5.4.1. A record package was returned to the Manager of the Radiological Field Programs Department on Friday, November 16, 1990. The auditor requested documented evidence to be produced after the weekend to attest that the QA records package was protected accordingly and such document was provided on November 21, 1990.

4. The SAIC Audit Schedule did not contain the organizations that were going to be audited as required by procedure OP 1.1, para. 5.1.2.d. A revised schedule was issued November 16, 1990 containing this type of information.

5. Contrary to the requirements of WI-AQ-001, site logbook entries covering maintenance activities were not being transmitted to the Local Records Center (LRC) within 10 working day of completing the entry. Prior to completion of the audit, WI-AQ-001 was revised to indicate that site logbooks were records rather than each entry. Also requirements were established which require that site logbook be submitted to the LRC every ninety days. All past logbook entries have been submitted to the LRC.

6. It was noted during the audit that Purchase Order No. 14-910054 was "voided" after issuance, however, the related procedure, SP 1.28, Rev 2, only addresses voiding of a Purchase Requisition. ICN No. 1 was approved and issued on 11/19/90 revising SP 1.28 to address the process for voiding Purchase Orders.

7. At the time of the audit, procedural controls did not exist which would assure that procurement activities would terminate when a supplier was removed from the Qualified Suppliers List (QSL) subsequent to issuance of the purchase order. As a result, Purchase Order No. 14-910054 remained in effect until 11/09/90, even though the supplier was removed from the QSL on 09/25/90. ICN No. 1 was approved and issued on 11/19/90 revising SP 1.28 to

provide controls for terminating suppliers who have active purchase orders and have been removed from the QSL. In addition, the audit team determined that no services or items were procured from the affected supplier after their removal from the QSL.

8. The procedure for Receipt Inspection, SP 1.25, Rev 2, specifies that a Nonconformance Report (NCR) will be generated for damaged items identified during receipt inspection. Receipt Inspection Report (RIR) No. 14-910062-1A identified "creases" found in the air filters received. However, this condition was documented and accepted on the RIR instead of being documented on an NCR as required. ICN No. 1 was approved and issued on 11/19/90 revising SP 1.25 to provide instructions and parameters for identifying and accepting these conditions on an RIR in lieu of an NCR.

9. Based upon the requirements of SP 1.23, several deficiencies were noted in the area of "Nonconformance Control." These deficiencies included: (a) inadequate logging system, (b) application of inappropriate hold tags resulting in the exclusion of information, and (c) lack of adequate flow down from the procedure to the NCR form. Prior to the conclusion of the audit, all of the noted conditions had been satisfactorily corrected.

7.0 REQUIRED ACTIONS

Responses to each CAR (delineated in Section 6.0) are due within the time frame stated in Block 10 of each CAR, as detailed in the CAR transmittal letter. Upon responses, and satisfactory verification of all remedial and correction actions, the CARs will be closed and SAIC will be notified (by letter) of the closure.

ENCLOSURE 1

LIST OF OBJECTIVE EVIDENCE

CRITERIA 1

1. T&MSS Personnel Organization Status as of 11/01/90

2. Interoffice Memos, Roberts to Bostian to T&MSS staff dated 08/01/90, 09/05/90, 10/08/90, and 11/06/90

3. T&MSS/034/1 T&MSS Organizational Change dated 10/02/90

4. T&MSS/035/1 T&MSS QA Classification dated 07/27/90

5. T&MSS/036/1 T&MSS Job Change effective 07/01/90

6. IMOUs 66003, 66015, and 63019

CRITERIA 2

1. Basic Requirements Matrix Document, Rev 4, dated 10/22/90 for OCRWM QARD

2. Basic Requirements Matrix Document, Rev 4, dated 10/22/90 for NQA 1, 1989

3. Basic Requirements Matrix Document, Rev 2, dated 10/15/90 for NRC Standard Review Plan

4. DOE Letter C. Gertz to TPOs dated 03/15/90, subject, "Implementation of NUREG 1318 Procedures ... Procedures AP 6.17Q and AP 5.28Q"

5. QA Grading Report YMPO-EDD002, Rev 0

6. QA Grading Report YMPO-RSE-003, Rev 0

7. QA Grading Report YMPO-QAG001, Rev 0

8. Interoffice memo, J.B. Harper to Distribution, dated 06/07/90, subject, "Assessment"

9. Management Assessment Plan submitted by Assessment Leader, W.A. Ruhlman and approved to J. Harper and J. Nelson

10. Letter J. Harper to J. Nelson, Serial JBH:sb:M90-0422, dated 06/21/90

11. Personnel records for twenty six (26) persons including six (6) Auditors/Lead Auditors identified in the report titled, "Summary of Programmatic Activities":

J. Nelson	W. McNabb	J. Harper
J. Doyle	K. Gilkerson	S. Nolan
G. Fasno	W. Jacobs	K. Shank
C. Turn	M. High	C. Roberts
M. Smith	K. Moore	J. Ryan
W. Clark	J. Conway	G. Powell
M. Dussman	D. Rhode	K. Hodges
A. Temple	K. Wirtz	J. Carlson
C. Roe	G. Williams	A. Kirk
J. Narron	C. Tung	C. Roberts

12. QFR Status Report, SDR Status Report, NCR Status Report, Surveillance Report Status Log, and Internal Audit Log

CRITERIA 4

1. Purchase Requisition No's 5581268, 5591128, 5515997, 5557084, 5580891, 5581271, 5591116, and 5581020

2. Purchase Order No's 14-910055, 14-910062, 14-910074, 14-910075, 74-910080, 14-910076, 14-910056, 14-910068, 14-910054, and 14-910085

3. Qualified Suppliers Lists 90-03, Rev 9 and 90-04, Rev 4

4. Reviewed the following vendors from the QSL: Amersham, Whatman Lab, Wedding & Associates Inc., Princeton Gamma Tech.

CRITERIA 7

1. Purchase Order No's 14-910055, 14-910062, 14-910074, 14-910075, 74-910080, 14-910076, 14-910056, 14-910068, 14-910054, and 14-910085

2. Certificate of Conformance for P.O. No 14-910055 (Traceable to Solution #R9/50/61 and R9/50/62)

3. Certificate of Conformance for P.O. No 14-910074 (Traceable to the PO)

4. QSL 90-03, Rev 9 and 90-04, Rev 4
   Change Notices to QSL:
   10/17/90 - Added "Belfort" for calibration services (Affected QSL 90-04, Rev 0)
   10/26/90 - Added "Aartec" to QSL 90-04, Rev 1
   Qualified Supplier Evaluation Files:
   General Physics, Ametec, Amersham, Belfort Instrument, John Fluke, Ringold Metrology, TMA/Eberline, Pacific Northwest Lab, and Rotronics Instrument Corp.

CRITERIA 10

1. Purchase Requisition No's 5581268, 5591128, 5515997, 5557084, 5580891, 5581271, and 5559997

2. Purchase Order No's 14-910055, 14-910062, 14-910074, 14-910076, 14-910028, 14-910054, 14-910065, 14-910078

3. Receipt Inspection Reports (RIR) No's 14-910028-1A, 14-910062-1A, 14-910054-1A, 14-910050-1A, 14-910065-1A, 14-910065-1B, 14-910065-1C, 14-910074-1A, 14-910076-1A, 14-910078-1A

CRITERIA 15

1. NCR Log T-QA-093 dated 06/90

2. NCR No's 90-001, 90-002, 90-003, 90-004, 90-005, 90-006, 90-007

3. Hold Tag No's 90-001 (1), 90-002 (1,2,3, and 4), 90-003 (1,2, and 3)

CRITERIA 16

1. T&MSS Stop Work Log

2. QA Deficiency Reporting System Status Log

3. Quality Finding Reports (QFRs) 90-001, 90-004, 90-006, 90-010, 90-013, 90-014, 90-15, 90-029

CRITERIA 17

1. Database printouts: TM-0154 dated 07/30/90, TM-0237 dated 10/03/90, TM-0293 dated 11/12/90, TM-0141 dated 07/17/90, and TM-0183 dated 08/16/90

2. Records Package Segments: TM-0019 dated 06/05/90, TM-0027 dated 06/08/90, TM-0108 dated 06/15/90, TM-0080 dated 06/18/90, TM-0089 dated 06/15/90, and TM-0094 dated 06/19/90

3. LRC Access Authorization List dated 09/20/90

4. Two (2) hour fire rated safe UL Rating Class 350

5. Record Packages:
   14-91-0028-65 Purchase Order/Belfort Instruments
   NNA. 900830.0068 dated 08/27/90 AP 2.4 Rev 0
   NNA. 900821.0003 dated 08/15/90 BTP-SMF-006
   PO-14-9100-62 Purchase Order-In Process

6. Final Reports: NNA 900808.0038

CRITERIA 18

1. Audit Schedule dated 11/16/90

2. Audit Record Packages for audits: A-90-001, A-90-002, A-90-003, and A-90-004

3. Surveillance Records Packages for surveillances: SR-90-003 and SR-90-006

CRITERIA 20

1. Site Logbook

RADIOLOGICAL MONITORING

1. "Radiological Monitor Instruction Manual."

2. Table of Contents/Revision Control Sheet, effective 9/25/90, which lists planned and completed procedures.

3. "Purchase Requests Status," as of 9/28/90.

4. "Radiological Monitoring Instruction Manual," controlled copy no. 27, Rev. 0, dated 8/24/90, RM 228, Valley Bank Center.

5. "Radiological Monitoring Instruction Manual," controlled copy no. 8, Rev. 0, dated 8/24/90, located at building 4522, NTS.

6. "Radioactive Source Log," located in the Radioactive Materials Cabinet, Health Physics Trailer, NTS.

7. "Source Material Inventory," data sheet, located in the Radioactive Materials Cabinet, Health Physics Trailer, NTS.

8. NWBETA Coding Form, dated 4/20/89, received from EPA November 1990.

9. "PU in Soil Samples," dated 8/7/86, received from EPA November 1990.

10. LTR (10/8/90): Sorensen to REECo, RAMATROL, transmitting source leak check results; CDS. YMS:L90-4593, with 2 enclosures. Encl. 1: 4th Quarter Leak Check Forms; Encl. 2: 4th Quarter RAMATROL Analysis.

11. LTR (8/30/90): Sorensen to REECo, RAMATROL, transmitting source leak check results; SWW. YMS:L90-4184, with 4 enclosures. Encl. 1: 2nd Quarter Leak Check Forms; Encl. 2: 2nd Quarter RAMATROL Analysis; Encl. 3: 3rd Quarter Leak Check Forms; Encl. 4: 3rd Quarter RAMATROL Analysis.

12. Receipt Inspection form, T&MSS/040/2, RI#000-093090, for receipt of Ra-226 solutions R95062 and R95061.

13. Amersham Certificates of Calibration for receipt of Ra-226 solutions R95062 and R95061.

14. Packing Sheet for receipt of Ra-226 solutions R95062 and R95061.

15. RAMATROL Incoming Radioactive Material Checklist for receipt of Ra-226 solutions R95062 and R95061.

16. Receipt Inspection records for Cs-137 source, bar code no. 03047.

17. WI-RM's-101, 104, -105, -113, -116, -139, -141, -142, -143, -150, -151, -153, -197, 18), -312, -702. SP's 1.10, 1.12, 1.30.

ENCLOSURE 2

AUDIT 90-08
SAIC QUALIFICATION AUDIT

PERSONNEL CONTACTED

NAME	ORGANIZATION	TITLE	CONTACTED PRE-AUDIT	CONTACTED DURING AUDIT	CONTACTED POST-AUDIT
Andrews, William R.	SAIC/T&MSS	Transp Dept Mgr .	X		
Ashton, John D.	SAIC/T&MSS	Sys Analysis Sftwr	X		
Beall, Ken	SAIC/T&MSS	Actng APM/Proj Mgr	X		
Bean, Elaine	SAIC/T&MSS	Supv/Doc Control	X		
Beck, Colleen	DRI	Archaeology	X		
Beers, R. H.	SAIC/T&MSS	Acting APM	X		X
Blaylock, James	DOE/YMP	QA Engineer	X		X
Blue, Jacalie	SAIC/T&MSS	Info Sys Mgr	X		X
Bostian, R. S.	T&MSS/APM	APM	X	X	X
Buckley, John T.	NRC	QA Engineer	X		
Caldwell, Henry H.	T&MSS/P&O	Staff Advisor	X	X	X
Caldwell, Joseph R.	MACREC	QA Consultant	X		
Cardenas, Elsa B.	SAIC/T&MSS	Clerk			X
Chandler, D. K.	SAIC/T&MSS	Asst Project Mgr	X	X	X
Clark, James E.	SAIC/T&MSS	QA Liaison	X		
Cocoros, Anthony E.	MACTEC	Sr QA Specialist	X		X
Constable, Robert B.	DOE/YMP	QA Engineer	X		X
Conway, Z. Joseph	SAIC/T&MSS	Site Technicial		X	
Davis, Allen F,	SAIC	Lakeville, MD		X	
Diaz, Mario R.	DOE/YMP	QA Engineer	X		X
Dunham, Joseph F.	SAIC/T&MSS	Staff Advisor	X		X
Dussman, Monica M.	SAIC/T&MSS	Dept Mgr EFPD	X	X	X
Ebner, Hans	SAIC/T&MSS	Manager DRC	X	X	X
Estella, John W.	SAIC/T&MSS	Staff Advisor	X	X	X
Fasano, Gregory	SAIC/T&MSS	Senior Scientist			X
Foley, Michael I.	T&MSS/PM	Staff Advisor to PM	X		X
Frey, William	SAIC/T&MSS	User Svcs Mgr	X		X
Gilkerson, K. O.	SAIC/T&MSS	QA Verification	X	X	X
Gilray, John	NRC	On-Site Resident	X		X
Gonzales, Roger	SAIC/T&MSS	Dep APM Res Mgr	X	X	X
Hampton, Catherine E.	DOE/YMP	QA Specialist	X		X
Harper, James B.	T&MSS/QA	QA Manager	X	X	X
Harris, Michael W.	SAIC/T&MSS	Mgr/Reg Studies	X	X	
Harrison-Giesler, D.	DOE/YMP	Materials Enginer	X		X
Hedden, Judith A.	SAIC/T&MSS	Personnel Admin	X		
Hodges, Kristi	SAIC/T&MSS	QA Specialist		X	
Horton, Donald G.	DOE/YMP	Director, OQA	X		X
Johnson, Kent B.	SAIC/T&MSS	QA Program Leader	X	X	X
Johnson, S.	SAIC/T&MSS	Personnel Admin	X		
Kamna, Marilyn	SAIC/T&MSS	Art Advisor	X		
Kesner, Byron T.	MACTEC	Environmental Spec	X		X
Kimble, Robert L.	SAIC/T&MSS	Regional Studies	X		X
King, Jerry L.	SAIC/T&MSS	Asst Project Mgr	X		X

NAME	ORGANIZATION	TITLE	CONTACTED PRE-AUDIT	CONTACTED DURING AUDIT	CONTACTED POST-AUDIT
Kirk, Ann R.				X	
Lee, Lynda J.	T&MSS/RMD	Supv MDC	X	X	X
Low, James	SAIC/T&MSS	Dept Mgr Info Sys	X		X
Marchand, Robert	SAIC/T&MSS	Mgr Sys & Comm	X		
Martin, Jennifer G.	SAIC/T&MSS	Property Coord		X	
Matthews, S.	SAIC/T&MSS	Config Mgr		X	
McCann, Edward W.	SAIC/T&MSS	Deputy Mgr Env	X	X	X
McNabb, William V.	SAIC/T&MSS	Deptuy Project Mgr	X	X	X
Narron, J. R.	SAIC/T&MSS	QA Specialist		X	
Nelson, John H.	T&MSS/TPO	Project Manager/TPO	X	X	X
Niedzielski-Eichner, P.	Nye County	Observer	X		
Niles, Penny A.	SAIC/T&MSS	Integration	X		
Nolan, S.	SAIC/T&MSS	QA Specialist		X	
Pane, T.	SAIC/T&MSS	Records Mgt Assist		X	
Powell, G.	SAIC/T&MSS	Meterologist		X	
Prince, J. K.	SAIC/T&MSS	Health Physics	X	X	X
Rhode, David	DRI	Asst Res Prof	X		X
Rodgers, Thomas E.	CER	QA Engineer/AIT	X		X
Ryan, James F.	SAIC/SEES	Procurement	X	X	
Smith, Samuel R.	Weston	QA Engineer	X		
Sorensen, Dennis C.	T&MSS/RFPD	Mgr RFPD		X	X
Spangler, Elaine L.	SAIC/T&MSS	Tech Coordinator	X		X
Spink, John	SAIC	Lakeville, MD	X		
Standish, Paul N.	SAIC/T&MSS	Engineer			X
Statler, Jan	T&MSS/RMD	Manager RMD	X		
Stephenson, Alan R.	SAIC/T&MSS	Gen Serv Dept Mgr		X	
Tacelli, Arlene	SAIC/T&MSS	Supv LRC	X	X	
Tappen, Jeffrey	SAIC/T&MSS	Engr Transp Dept	X		
Taylor, Charles	SAIC/T&MSS	QA Specialist		X	
Tiesenhasuen, E.	CCCP	Observer	X		
Therien, John	SAIC/T&MSS	QA Intergration	X		X
Thomas, Wanda F.	SAIC/T&MSS	Resource Mgmt	X		X
Tompkins, A.	SAIC/T&MSS	Radiological Spec		X	
Trbevich, Thomas C.	NRC	QA Engineer	X		
Tyger, Kerby L.	MACTEC	Sr QA Spec	X		X
Verden, Janice D.	SAIC/T&MSS	Dept. Mgr. RMD	X	X	X
Verma, Tilak	NRC	QA P.M.	X		
Voegele, Michael D.	SAIC/T&MSS	Tech Dir	X		
Warren, Charles C.	MACTEC	Sr QA Spec	X		X
Weaver, Jeff	T&MSS/R&LS	Dep Asst Proj Mgr	X		X
Weston, Jim	SAIC/T&MSS	Deputy APM	X		X
Williams, Albert C.	DOE/YMP	General Engineer	X		X
Witham, D.	SAIC/T&MSS	Sr Radio Chemist	X		
Wolverton, K.	SAIC/T&MSS	QA Engineer		X	

ENCLOSURE 3

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

14CAR NO.: YM-91-012
DATE: 11/27/90
SHEET: 1 OF 2
QA
WBS No.: N/A

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
QAPD	Audit 90-08

3 Responsible Organization	4 Discussed With
SAIC	D. Sorensen

10 Response Due	11 Responsibility for Corrective Action	12 Stop Work Order Y or N
12/27/90	D. Sorensen	N

5 Requirement:

QAPD, Revision 1, Paragraph 2.2.11 states in part, "T&MSS personnel assigned to perform activities that affect quality shall receive appropriate training prior to performing work."

SP 1.31, Revision 2, Paragraph 5.2.2 states in part, "Responsible manager assigns training (per T&MSS 027/4) the individual is expected to accomplish when it has been determined they will be performing quality affecting work. This will be done prior to execution of the initial qualification evaluation."

Paragraph 5.3, Training on New and Revised Procedures. Paragraph 5.3.1 and 5.3.2 states in part, "As new procedures are issued, determine which staff members, if any, should be trained on the procedure. As revised procedures are issued, determine which staff members, if any, must be trained on the revisions: Training shall be assigned if the procedure that has been

6 Adverse Condition:

Personnel in the Radiological Field Program Department are performing quality affecting activities without receiving some of the required training as determined by the initial training form or as determined by additional training requested by the responsible manager on September 11, 1990. Furthermore, the training program at this time does not require to document the revision and/or changes affecting the documents used for training. Therefore, it is very difficult in some cases to verify or attest to this information.

7 Recommended Action(s):

8 Initiator	Date:	9 Severity Level -	13 Approved By:	Date:
M. R. Diaz	11/16/90	1☐ 2☐ 3☒	OQA James Blaylock for	11/21/90

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:	17 Closure Approved By:
QAR _____ Date _____	OQA _____

OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

CAR NO.: YM-91-012
DATE: 11/27/90
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

5 Requirements (continued)

revised was previously identified as part of the employee's required training. In such a case, the training must be completed prior to the performance of quality affecting work using the procedure, or within 30 calendar days, whichever is sooner."

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

14CAR NO.: YM-91-013
DATE: 11/27/90
SHEET: 1 OF 1
QA
WBS No.: N/A

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
SP 1.43, Revision 0 (8/10/90)	Audit 90-08

3 Responsible Organization	4 Discussed With
SAIC	J. Harper

10 Response Due	11 Responsibility for Corrective Action	12 Stop Work Order Y or N
12/27/90	J. Harper	N

5 Requirement:

1. SP 1.43, Section 5.1 requires the identification and justification for commercial grade items to be delineated on a document suitable for attachment to the Purchase Requisition.

2. SP 1.43, Section 5.2.2 requires the requester's APM to "indicate approval and verification of the statements made by signing and dating the description document."

6 Adverse Condition:

1. Purchase Requisition #5602921 for commercial grade items does not have the justification attached as required.

2. Justifications for commercial grade items were attached to Purchase Requisitions #5544376 and #5591128. However, the justifications were not signed and dated by the APM.

7 Recommended Action(s):

1. Review affected Purchase Requisitions (in addition to the above) and provide justifications as required.
2. Provide procedural changes and/or training to prevent recurrence.

8 Initiator	Date:	9 Severity Level -	13 Approved By:	Date:
K. L. Tyger		1☐ 2☒ 3☐		
Kelly L. Tyger	11/19/90		OQA James Blaylock for	11/21/90

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:	17 Closure Approved By:
QAR _____ Date _____	OQA _____

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

14CAR NO.: YM-91-014
DATE: 11/27/90
SHEET: 1 OF 1
QA
WBS No.: N/A

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
SAIC QAPD, Revision 1	Audit 90-08

3 Responsible Organization	4 Discussed With
SAIC	J. Harper

10 Response Due	11 Responsibility for Corrective Action	12 Stop Work Order Y or N
12/27/90	D. Chandler	N

5 Requirement:

SAIC QAPD, Revision 1 states in part, "Paragraph 5.1.1. Instructions, Procedures, Plans, or Drawings (as applicable) shall be prepared.... Paragraph 5.1.2. These documents shall be reviewed, approved, distributed...."

6 Adverse Condition:

Contrary to these requirements, no procedure exists to control the submittal, identification, control, distribution, and up-dating of vendor manuals currently identified in quality related work instructions for work performed on quality related equipment.

7 Recommended Action(s):

Issue a Standard Practice Procedure to control vendor technical manuals and vendor technical information.

8 Initiator	Date:	9 Severity Level -	13 Approved By:	Date:
R. B. Constable	11/19/90	1☐ 2☐ 3☒	OQA James Blaylock for	11/21/90

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:	17 Closure Approved By:
QAR _____ Date _____	OQA _____

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

14CAR NO.: YM-91-015
DATE: 11/27/90
SHEET: 1 OF 1
QA
WBS No.:

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
SP 1.25, Revisions 1 and 2	Audit 90-08

3 Responsible Organization	4 Discussed With
SAIC	J. Harper

10 Response Due	11 Responsibility for Corrective Action	12 Stop Work Order Y or N
12/27/90	J. Harper	N

5 Requirement:

SP 1.25, Revisions 1 and 2, Paragraph 5.5.2 states, "Complete the "Hold for Test" tag, Ref. Exhibit 7, and attach to item. Annotate the RIR remarks section to indicate "Hold for Test" tag attached."

6 Adverse Condition:

A review of Procurement Packages (i.e., #14-910056 and #14-910074) revealed that "Hold for Test" tags have not been utilized for items that have been received, inspected, and require testing. (Note: The inspector concurred that the tags had not been used.)

7 Recommended Action(s):

1. Identify those items that have been accepted and require "Hold for Test" tags. Apply the tags and annotate the RIR.
2. Re-emphasize the requirement to the inspectors.

8 Initiator Date:	9 Severity Level -	13 Approved By: Date:
K. L. Tyger Kerby L. Tyger 11/19/90	1☐ 2☐ 3☒	OQA James Blaylock for 11/21/90

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:	17 Closure Approved By:
QAR _____ Date _____	OQA _____

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

14CAR NO.: YM-91-016
DATE: 11/27/90
SHEET: 1 OF 2
QA
WBS No.: N/A

CORRECTIVE ACTION REQUEST

1 Controlling Document	2 Related Report No.
SP 1.37, Revision 1	Audit 90-08

3 Responsible Organization	4 Discussed With
SAIC	J. Harper

10 Response Due	11 Responsibility for Corrective Action	12 Stop Work Order Y or N
12/27/90	J. Harper	N

5 Requirement:

SP 1.37, Paragraph 5.0, number 4, QA Manager, "Evaluate whether the finding constitutes a significant condition adverse to quality in accordance with criteria established below:

a. A significant or serious breakdown in any portion of the quality assurance program.

6 Adverse Condition:

QFR 90-001, Revision 0 and Revision 1, QFR 90-013, 90-014, and 90-015 identified conditions which fulfill the above cited definition but were not identified as significant conditions.

NOTE:

QFR 90-001, Revision 0 and Revision 1 was written to identify an average 39.1 failure rate for training records.

Block 8 of the QFR stated, "Documentation deficiencies were noted in all surveilled departments. Files are incomplete and forms are inconsistently used." Response to QFR (Nelson 6/11/90) stated, "It can neither be satisfactorily demonstrated nor verified that T&MSS personnel are fully trained to perform quality affecting

7 Recommended Action(s):

8 Initiator	Date:	9 Severity Level -	13 Approved By:	Date:
Catherine Hampton		1☐ 2☒ 3☐	QQA James Blaylock	11/21/90
Catherine Hampton	11/19/90			

15 Verification of Corrective Action:

16 Corrective Action Completed and Accepted:	17 Closure Approved By:
QAR _____ Date _____	QQA _____

OFFICE OF CIVILIAN
RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

CAR NO.: YM-91-016
DATE: 11/27/90
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

6 Adverse Condition (continued)

activities."

QFR 90-013, 90-014, and 90-015 were written to document the deficiencies identified as a result of surveillance SR-90-006. The surveillance summary (dated 10/4/90) identified that the "overall program is insufficient to meet the requirements of the T&MSS QAPD."

cc w/encl:
C. P. Gertz, HQ (RW-20) FORS
J. W. Gilray, NRC, Las Vegas, NV
K. R. Hooks, NRC, Washington, DC
Tilak Verma, NRC, Washington, DC
R. R. Loux, NWPO, Carson City, NV
S. W. Zimmerman, NWPO, Carson City, NV
E. V. Tiesenhausen, Clark County, NV
Phillip Niedjielski-Eichner, Nye County, NV
R. J. Herbst, LANL, Los Alamos, NM
H. P. Nunes, LANL, Los Alamos, NM
L. J. Jardine, LLNL, Livermore, CA
R. K. Damm, LLNL, Livermore, CA
R. E. Lowder, MACTEC, Las Vegas, NV
J. H. Rusk, MACTEC, Las Vegas, NV
R. L. Maudlin, MACTEC, Las Vegas, NV
M. A. Fox, REECo, Las Vegas, NV
R. F. Pritchett, REECo, Las Vegas, NV
R. L. Bullock, RSN, Las Vegas, NV
M. J. Regenda, RSN, Las Vegas, NV
J. B. Harper, SAIC, Las Vegas, NV
W. V. McNabb, SAIC, Las Vegas, NV
C. H. Prater, SAIC, Las Vegas, NV
T. E. Blejwas, SNL, 6310, Albuquerque, NM
R. R. Richards, SNL, 6310, Albuquerque, NM
D. H. Appel, USGS, Denver, CO
L. R. Hayes, USGS, Denver, CO