

U.S. DEPARTMENT OF ENERGY

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

OFFICE OF QUALITY ASSURANCE

AUDIT REPORT FOR THE AUDIT OF

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

LAS VEGAS, NEVADA

AUDIT NO. YMP-92-08

JANUARY 27 THROUGH JANUARY 30, 1992

PRIMARY ACTIVITIES EVALUATED:

- 4.0 Procurement Document Control
- 7.0 Control of Purchased Items and Services
- 8.0 Identification and Control of Items, Samples, and Data
- 10.0 Inspection
- 12.0 Control of Measuring and Test Equipment
- 13.0 Handling, Storage, and Shipping
- 14.0 Inspection, Test, and Operating Status

Prepared by: Robert B. Constable
Robert B. Constable
Audit Team Leader
Yucca Mountain Quality Assurance Division

Date: 3/25/92

Approved by: R. G. Horton For
Donald G. Horton
Director
Office of Quality Assurance

Date: 3/27/92

EXECUTIVE SUMMARY

The audit determined that Science Applications International Corporation (SAIC) is satisfactorily implementing effective Quality Assurance Program controls in accordance with their Quality Assurance Program Description and implementing procedures. Program Elements 4.0, 7.0, 8.0, 10.0, 13.0, and 14.0 were identified as effective by the audit team. Program Element 12.0, "Control of Measuring and Test Equipment," was considered to be marginally effective because of various deficiencies identified in the area of calibration.

As a result of the audit, one Corrective Action Request (CAR) was issued to document calibration certificate deficiencies. In addition, six deficient conditions identified by the audit team were corrected by SAIC prior to the post-audit meeting. Details of the CAR and deficient conditions corrected during the audit are documented in Sections 5.2 and 5.3 of this report.

1.0 INTRODUCTION

This report contains the results of the U.S. Department of Energy (DOE) Office of Civilian Radioactive Waste Management (OCRWM) Office of Quality Assurance (OQA) Quality Assurance (QA) Audit No. YMP-92-08 of the Technical and Management Support Services (T&MSS) contractor, Science Applications International Corporation (SAIC). The audit was performed by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD) during the period of January 27 through 30, 1992 at the SAIC offices in Las Vegas, Nevada. The auditors evaluated QA Program Elements 4.0, 7.0, 8.0, 10.0, 12.0, 13.0, and 14.0.

2.0 AUDIT SCOPE

The audit evaluated effectiveness of the SAIC QA Program in meeting the requirements and commitments imposed by the OCRWM. Specifically, the effectiveness of QA requirements delineated in the T&MSS Quality Assurance Program Description (QAPD) and implementing procedures were evaluated. Deficiencies identified during the previous OQA audit, No. YMP-91-06, were considered during this audit to determine effectiveness of corrective action.

The QA Program Elements evaluated during the audit are as follows:

- 4.0 Procurement Document Control
- 7.0 Control of Purchased Items and Services
- 8.0 Identification and Control of Items, Samples, and Data
- 10.0 Inspection
- 12.0 Control of Measuring and Test Equipment
- 13.0 Handling, Storage, and Shipping
- 14.0 Inspection, Test, and Operating Status

3.0 AUDIT TEAM

Robert B. Constable, Audit Team Leader, DOE/YMQAD
A. Edward Cocoros, Auditor, MAC Technical Services Company (MACTEC)/YMQAD,
Programmatic Elements 4.0 and 7.0
Mario R. Diaz, Auditor, DOE/YMQAD, Programmatic Elements 12.0 and 13.0
Charles C. Warren, Auditor, MACTEC/YMQAD, Programmatic Element 8.0
Albert C. Williams, Auditor, DOE/YMQAD, Programmatic Elements 10.0 and 14.0

4.0 PERSONNEL CONTACTED

For personnel contacted during the audit, see Enclosure 1.

5.0 AUDIT RESULTS

5.1 Program Element Effectiveness

For Program elements 4.0, 7.0, 8.0, 10.0, 13.0, and 14.0, SAIC is satisfactorily implementing effective QA Program controls in accordance with the T&MSS QAPD and implementing procedures. Effectiveness of Program Element 12.0, "Control of Measuring and Test Equipment" was considered to be marginally effective because of various deficiencies identified in the area of calibration. Calibration related deficiencies included insufficient/incorrect information entered on certificates of calibration, incorrect equipment identification numbers indicated on equipment lists, errors in tagging equipment as active/inactive, and incorrect information regarding equipment status. The majority of these deficiencies required only remedial action and were corrected during the audit. Those deficiencies not corrected during the audit were documented on a Corrective Action Request (CAR).

5.2 Corrective Actions Requests

One CAR, YM-92-020, was issued as a result of the audit. This CAR documents noncompliance with the T&MSS QAPD and Standard Practice Procedure SP 1.28, "Control of Purchased Items and Services," in the area of information required to be included on Certificates of Calibration. An information copy of CAR YM-92-020 is included in Enclosure 4.

5.3 Corrective Action Taken During the Audit

The following deficient conditions requiring only remedial action were corrected during the audit by SAIC personnel:

1. An adverse condition was noted during the audit relative to Paragraph 7.8 of Section 7.0 of T&MSS QAPD, Revision 4, in that contrary to the requirement of the QAPD, interfaces which were to be established to ensure that specific types of recommended dispositions for a supplier generated Nonconformance Report were to be referred to T&MSS for approval, had not been referenced in any T&MSS QA implementing procedures. SP 1.28, Revision 5, ICN 2, issued with an effective date of January 21, 1992, corrected this deficiency.
2. T&MSS Work Instruction WI-RM-702, Revision 4, "Near Field Continuous Air Sample Operation," required that records package segments be prepared in accordance with SP 1.36, "Records Management: Record Source Implementation," within 10 days of completing continuous air sampler filter exchanges. T&MSS personnel were not preparing records package segments within the 10-day requirement nor did they intend to prepare these segments until a composite of filters was accumulated. This condition was corrected during the audit by the issuance of Interim Change Notice (ICN) No. 1 to WI-RM-702, to remove the 10-day requirement for preparation of records package segments.

3. T&MSS SP 1.25, Revision 4, "Acceptance of Items and Services," requires that partial shipments be documented on Receiving Inspection Reports (RIRs) by recording the word "partial" in the quantity received column. Contrary to this requirement, one RIR for Purchase Order (PO) 920437-94 did not indicate "partial" when a partial shipment was received and one RIR for PO 920431-94 did not have "partial" entered in the required column. These deficient RIRs were corrected to comply with procedural requirements prior to completion of the audit.
4. T&MSS Organization Procedure OP 1.8, Revision 2, "Certification of Inspection Personnel," requires that completion of training, testing, and/or experience and proposed method of qualification for inspectors be documented on T&MSS 144/1 forms. Contrary to these requirements, two of three Level III inspectors that were certified by experience, did not have this experience documented on their T&MSS 144/1 form. Corrections to T&MSS 144/1 Forms were made prior to the completion of the audit.
5. SP 2.4, Revision 4, "Control of Measuring and Test Equipment," Paragraph 5.1.5.1, states in part, "...The M&TE Custodian establishes an M&TE List. The M&TE List shall include as a minimum: identification number, calibration frequency, calibration due date, equipment accuracy." The following items/elements were found not in compliance with these requirements and were corrected as indicated:
 - a. The serial numbers of B-G-A Probes identification (ID) numbers 03353 and 03354 did not coincide with those shown on the Measuring and Test equipment (M&TE) List. The numbers were checked against files and the M&TE List was corrected accordingly.
 - b. A review of Certificates of Calibration for balances with ID nos. 03104 , 03310, and 16516 were found not to meet the tolerance for accuracy as prescribed in the M&TE List. After reviewing their history files and verifying that no work had been done with balances, the items were requalified for nonquality-affecting activities.
 - c. Calibration frequency and calibration due dates for the following ID numbers on the M&TE List were missing: 16358, 16497, 01515, 20001, 20002, 03373, 03374, 03385, 03386, 16432, 16428, and 09312. Missing calibration information for this equipment was checked, verified and incorporated in the M&TE List. The M&TE List was updated during the audit and ICN 3 to SP 2.4, Revision 4 was issued to clarify the minimum required information for the M&TE List.
6. SP 2.4, Revision 4, Paragraph 7.1 states, "The Responsible Manager submits the following QA records within 10 working days in accordance with SP 1.36:
 1. Technical basis for the extension of calibration frequencies as developed in Section 5.6..."

Documentation requesting extensions of calibration frequencies were not submitted within 10 working days:

1. Nos. 09056, 09058, 09059, 09060, and 09225 memo dated January 6, 1992;
2. Nos. 03104, 03310, and 16516 memo dated November 6, 1991;
3. wind sensor at NTS Area 60 memo dated May 22, 1991; and
4. No. 09239 - memo dated January 20, 1992

Upon discovery of this deficiency, the records were sent to the Local Records Center on a transmittal form dated January 29, 1992. These were the only instances found during the audit where extensions of calibration frequencies were documented on memos.

5.4 Audit Details

For details of items and activities examined during the audit, see Enclosures 2 and 3.

6.0 RECOMMENDATIONS

1. When procedures are developed to allow examination of interfaces between T&MSS QAPD requirements and those reflected in implementing procedures, SAIC personnel should promptly evaluate the effectiveness of interfaces for Criteria 4 and 7 involving T&MSS procedures SPs 1.25, 1.28, and OPs 1.3, 1.4, and 1.7.
2. T&MSS/SAIC should develop a system that permits obtaining information about any piece of M&TE utilizing the unique equipment ID number instead of the PO number. This is important because the majority of POs contain multiple items and therefore, it is often difficult to obtain records for a single items.
3. Storage requirements for M&TE should be required to cross-reference or address manufacturer's recommendations.
4. Memos such as the ones issued to document requests for extension of calibration frequencies should have unique identification numbers for traceability purposes.

7.0 ENCLOSURES

- Enclosure 1: T&MSS Personnel Contacted During The Audit
- Enclosure 2: Audit Details
- Enclosure 3: Objective Evidence Reviewed During The Audit
- Enclosure 4: Information Copy of CAR

ENCLOSURE 1

PERSONNEL CONTACTED DURING THE AUDIT

OCRWM AUDIT NO. YM-92-08
T&MSS PERSONNEL CONTACTED

<u>NAME</u>	<u>PRE-AUDIT MEETING</u>	<u>CONTACTED DURING AUDIT</u>	<u>POST-AUDIT MEETING</u>
S. Baron		X	
R. Bostian	X	X	
D. Chandler	X		X
J. Clark	X	X	X
L. Croft	X	X	X
G. Donaldson		X	X
J. Dunham	X		X
V. Ford			X
J. Gonzales	X	X	X
J. Harper	X	X	X
M. Harris	X		X
J. Jacobson	X		X
K. Johnson			X
J. Kapton		X	
A. Keyes	X	X	X
F. Lofftus		X	
W. MacNabb	X		
J. Nelson	X		X
W. Osenbaugh	X	X	X
J. Prince	X	X	X
G. Prowell		X	
R. Rinderman	X	X	X
P. Rogers	X		
J. Ryan		X	
C. Sorensen	X	X	X
R. Spooner			X
A. Temple		X	
J. Weaver	X		

ENCLOSURE 2
AUDIT DETAILS

AUDIT DETAILS

The following is a summary of programmatic activities evaluated during the audit. A list of objective evidence reviewed for these activities, including procedure titles, is contained in Enclosure 3.

4.0 Procurement Document Control

The evaluation of this element was conducted by reviewing objective evidence and interviewing SAIC/T&MSS personnel relative to the following QA requirements documents:

- o SP 1.28, Revision 5
- o OP 1.4, Revision 3

Ten Purchase Requisitions (PRs) developed since the last audit were reviewed for the following attributes: processing in accordance with SP 1.28, Revision 5 and OP 1.4, Revision 3, specifically such items as identification of quality classification, adequate identification of the scope of work, identification of qualified suppliers, requirements for inclusion of commercial catalog descriptions, adequate commercial-grade justification statements, inspection requirements, technical and QA requirements, and adequate QA, technical, and finance department reviews. The 10 POs resulting from these PRs and supporting objective evidence, were reviewed for the following attributes:

- o POs were being processed in accordance with SP 1.28, Revision 5 and OP 1.4, Revision 3.
- o POs were consistent with the corresponding PRs.
- o Documented reviews and approval of Procurement Documentation Review Checklists.
- o Approval signatures on the PO by appropriate technical and QA personnel.
- o Procurement packages contained the required documents.

Based on the sample of PRs and POs reviewed, Procurement Document Control was found to be implemented effectively.

7.0 Control of Purchased Items and Services

Evaluating the implementation of this element was performed in part during the evaluation of Criteria 4, 10, and 13 while reviewing QA procedures SP 1.25, Revision 4, SP 1.28, Revision 5, and OP 1.4, Revision 3. The implementation of the T&MSS QAPD, Revision 4, Section 7.0, and QA procedures OP 1.3, Revision 3, and OP 1.7, Revision 3, were also evaluated as part of Criterion 7.0. The supplier evaluation methods, checklists, and reports documentation were evaluated, and compliance with OP 1.3 was verified. The implementation of OP 1.7 was

verified by reviewing objective evidence of the maintenance of the Quality Supplier Lists 91-04, Revision 0, dated 10/15/91 and 92-01, Revision 0, dated 1/6/92. The lists were reviewed quarterly and were revised as required quarterly and between quarterly revisions when needed. The implementation of Criterion 7.0 was considered to be effective.

8.0 Identification and Control of Items, Samples, and Data

Compliance with the T&MSS QAPD and implementing procedures for the identification and control of items, samples, and data was evaluated. Because of the limited scope of work being performed by T&MSS, the evaluation was restricted to equipment used in support of meteorological and radiation monitoring activities; continuous air sampling for radiation monitoring; and data produced from meteorological monitoring activities. A sample of equipment at the Nevada Test Site was examined to verify that identification and traceability of this equipment was in compliance with the requirements of the QAPD and implementing procedures. Identification and control of near and far field continuous air sample was examined to verify compliance to T&MSS Work Instructions (WIs), and a sample of meteorological data was reviewed to evaluate compliance to T&MSS SPs and WIs. With exception of one area of noncompliance with WI-RM-702 regarding timely preparation of records package segments, all activities were found to be in compliance with specified requirements. This area of noncompliance was corrected prior to completion of the audit and Criterion 8 was considered to be effective.

10.0 Inspection

Primarily two procedures implement the requirements of this criteria. The procedures are SPs 1.25, and 1.28. Audit activities verified there were no engineered items procured from July 1, 1991 to January 27, 1992. During this period, there were 37 POs written for the purchase of items or services which have a QA rating. Eleven of the 37 (30%) were reviewed for content required by the procedure. This included reviewing the RIR and the Basis for Acceptance of Services (BAS). Also verified, was the inspection and hold area which consisted of a locked room on the fourth floor in the office services area. Seven suppliers that furnished items or services were identified on the QSL. Audit activity also verified five inspection personnel are members of the T&MSS QA organization, are qualified, and are independent of organizational unit responsible for the activity being inspected. Criterion 10 is being effectively implemented.

12.0 Control of Measuring and Test Equipment

Measuring and Test Equipment (M&TE) and Operating Equipment (OE) lists provided by SAIC M&TE custodian were used to verify that procedural requirements were reflected in calibration documentation. With exception of the deficiencies listed in Section 5.3 of the Audit Report that were corrected during the audit, and the calibration certificate deficiencies documented on CAR YM-92-020, control and documentation of M&TE and OE were found to be in compliance with procedural requirements. Because of the various deficiencies identified, Criterion 12 was considered marginally effective.

13.0 Handling, Storage, and Shipping

RIRs associated with nine POs were reviewed to verify compliance to procedural requirements for RIRs, Certificates of Conformance, hold for testing conditions, and conditions requiring issuance of nonconformance reports.

Segregated areas for nonconforming items identified as M&TE and used for calibration activities were reviewed. All documentation, conditions, and areas reviewed were found to comply with procedural requirements.

14.0 Inspection, Test, and Operating Status

Procedures containing the requirements for this criteria from T&MSS QAPD include SP 1.22, Revision 1, SP 1.23, Revision 4, SP 1.25, Revision 4, SP 1.37, Revision 4, and SP 2.4, Revision 4. Audit activities verified that these procedures provided for identification of the status of inspection and test activities to ensure that required inspections and tests are performed and that unacceptable items are not inadvertently installed, used or operated. The procedures also make provisions for the use of status indicators and give authority to personnel to attach and remove the status indicators. These indicators are the "QA Hold" tag from SP 1.23, Exhibit 2 and the "Accept/Hold for Test" tag from SP 1.25, Exhibit 4. Implementation of SP 1.23 was verified by assuring the attachment of "QA HOLD" tags to equipment in the hold area. Implementation of SP 1.25 could not be verified. To the extent audited, Criterion 14 is being implemented effectively.

ENCLOSURE 3
OBJECTIVE EVIDENCE

OBJECTIVE EVIDENCE REVIEWED DURING THE AUDIT

PLANS:

T&MSS QAPD, Revision 4, Quality Assurance Program Description

PROCEDURES/INSTRUCTIONS:

T&MSS SP 1.22, Revision 1, Stop Work Order
T&MSS SP 1.23, Revision 4, Nonconformance Reporting
T&MSS SP 1.25, Revision 4, Acceptance of Items and Services
T&MSS SP 1.28, Revision 5, Control of Purchased Items and Services
T&MSS SP 1.37, Revision 4, Deficiency Reporting System
T&MSS SP 2.2, Revision 2, Scientific Investigation Control
T&MSS SP 2.4, Revision 4, Control of Measuring and Test Equipment
T&MSS SP 2.5, Revision 2, Maintenance and Control of Operating Equipment
T&MSS OP 1.3, Revision 3, Supplier Evaluation
T&MSS OP 1.4, Revision 3, Review and Verification of Procurement Documents
T&MSS OP 1.7, Revision 3, Development and Maintenance of Qualified Supplier List
T&MSS WI-MET-002, Revisions 2, Operation and Performance Checks of MET Monitoring Equipment
T&MSS WI-MET-003, Revision 1 & 2, Instructions for Processing Current Data
T&MSS WI-RM-702, Revision 4, Near Field Continuous Air Sampler Operation
T&MSS WI-RM-703, Revision 1, Far Field CAS Operation

PURCHASE REQUISITIONS:

5707173/39	5707947/39	5707944/39	5707650/39
5707655/39	5707769/39	5707683/39	5707152/39
5732958/39	5707676/39		

PURCHASE ORDERS:

920590-94	920244-94	920422-94	920045-94
920431-94	920427-94	920533-94	880137-54
920541-94	920434-94	920558-94	920268-94
920534-94	920013-94	920585-94	920586-94
920602-94	920326-94	920572-94	910078-65
920405-94			

QUALIFIED SUPPLIER LIST (QSL):

QSL 91-04, Revision 0, dated 10/15/91

QSL 92-01, Revision 0, dated 1/6/92

SUPPLIER EVALUATION REPORTS:

Alnor Nuclear Corp.
Oak Ridge Detection Lab.
Reuter Stokes
SAIC Environmental Application Div.
VWR Scientific

Ludlum Measurement Inc.
RAD Elec. Inc.
Ringards Metrology
Teledyne Isotopes
Teledyne Geotech

MISCELLANEOUS:

M&TE List dated 1/24/92
OE List dated 1/24/92
SP 1.28, Revision 5, ICN 2, Effective Date 1/31/92
QSL Change Notice, Effective Date 91-04, Revision 1, dated 10/22/91
8 copies of TMSS/002/5, Procurement Document Review Checklist (Commercial Grade)
2 copies of TMSS/008/5, Procurement Document Review Checklist (other than Commercial Grade)
10 copies of TMSS/004/1, Qualified Supplier List
10 copies of TMSS/005/1, Qualified Supplier List Index
10 copies of TMSS/006/1, Qualified Supplier List (QSL)
5 copies of TMSS/007/1, Procurement Document Review Log
10 copies of TMSS/016/4, Supplier Evaluation Report
10 copies of TMSS/017/1, Supplier Evaluation Checklist Cover Sheet
3 copies of TMSS/018/8, Supplier Evaluation Checklist
4 copies of TMSS/019/1, Supplier, Evaluation Checklist Calibration Services
10 copies of TMSS/094/1, Basis of Acceptance of Services
J. K. Prince memorandum to R. Rinderman, dated January 25, 1992, requesting the removal of Pacific Northwest Laboratories (PNL) from the QSL.
T&MSS Organizational Chart (1/10/92)
QA Receiving Log
Training Attendance Record (Lesson Plan No. 91012, Revision 0)

EQUIPMENT (ITEMS):

Rockwell Totalizer, Barcode 20162
Kurtz Flow Calibrator, Barcode 20071
BP Transducer, Barcode 17942

Canberra Alpha Beta, Barcode 20210
Sartorius Balance, Barcode 16516

CONTINUOUS AIR SAMPLES:

FF 21, 1/13/92 to 1/23/92
FF 25, 1/13/91 to 1/20/92
NF 6, 1/14/92 to 1/21/92
NF 11, 1/7/92 to 1/14/92
NF 67, 1/7/92 to 1/14/92

FF 23, 1/13/92 to 1/20/92
FF 28, 1/3/92 to 1/9/92
NF 6, 1/7/92 to 1/14/92
NF 11, 1/14/92 to 1/21/92
NF 67, 1/14/92 to 1/21/91

METEOROLOGICAL DATA FILES:

A 02061	A 02141	A 02201	A 02271
A 03131	A 03281	A 04101	A 04241
A 05081	A 05221	A 06041	

M&TE (BY BARCODE NO.):

01578	03093	0180	09068
09064	09231	09240	03353
00768	03104	03310	16516
16429	01509	01510	01511
17908	20197	21098	20199
09063	03098	03233	16431
16432	17904	17921	17922
17923	17924	17943	17946
17947	17950	17951	

RIRS FOR THE FOLLOWING PURCHASE ORDERS:

920434-94	920068-94	920516-94	920586-94
920013-94	920326-94	910078-94	920405-94
920431-94	920327-94	920373-94	920422-94
920429-94	920437-94	920541-94	920601-94
920610-94			

CALIBRATION RECALL LETTERS (BY DATES):

1/24/92	12/20/91	11/25/91	10/25/91
---------	----------	----------	----------

EXTENSIONS TO CALIBRATION (BY BARCODE NO./DATES):

09058, dated 1/6/92
09059
09060
09056
09225
03104, dated 11/6/91
03310
16516
09239, dated 1/20/92
Wind Sensors at NTS 60, dated 5/22/91

PERSONNEL CERTIFICATION RECORDS (T&MSS 144/1):

F. Lofftus	R. Rinderman	S. Nolan	J. Ryan	A. Temple
------------	--------------	----------	---------	-----------

ENCLOSURE 4
INFORMATION COPY OF CAR
(BLANKS ON CAR FORM ARE INTENTIONAL)

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

8 CAR NO.: YM-92-020
DATE: 2/5/92
SHEET: 1 OF 2
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document T&MSS QAPD, Revision 4		2 Related Report No. Audit 92-08	
3 Responsible Organization SAIC		4 Discussed With D. Sorensen/G. Donaldson	
5 Requirement: T&MSS QAPD, Revision 4, Section 12, Paragraph 12.2.B states in part, "Calibration standards shall have accuracy greater than the equipment being calibrated." T&MSS Standard Practice Procedure SP 1.28, Revision 5, Page 27, Section 1100, states in part, "The (Calibration) Certificate shall contain the following: a. SAIC Purchase Order number. c. Name of person responsible for performing the calibration. j. If the item to be calibrated has a multiple range of operations, the certificate shall show at least five points of calibration... (con't)			
6 Adverse Condition: Several requirements to be recorded on the Certificate of Calibration of various M&TE are missing. Most of the calibration certificates do not contain the accuracy of the Standard(s) used for the calibration. Without this information, it is not possible to verify and attest that this accuracy is greater than the equipment that was calibrated. Additionally, the Certificates of Calibration for the following M&TE ID numbers did not contain the information required by items a, c, j, n, and p of Section 5 above. 09064*, 01578, 03353, 17919, 17948 * The certificate for this instrument contained 4 sheets of paper. Only three were traceable to the instrument.			
9 Does a significant condition adverse to quality exist? Yes ___ No <u>X</u> If Yes, Circle One: A B C		10 Does a stop work condition exist? Yes ___ No <u>X</u> ; if Yes - Attach copy of SWO If Yes, Circle One: A B C D	
11 Response Due Date: 20 working days from issuance			
12 Required Actions: <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Extent of Deficiency <input checked="" type="checkbox"/> Preclude Recurrence <input checked="" type="checkbox"/> Root Cause Determination			
13 Recommended Actions:			
7 Initiator M. Diaz 1/30/92 <i>M. Diaz</i> Date <u>2-5-92</u>		14 Issuance Approved by: QADD <i>RC</i> <i>[Signature]</i> Date <u>2/5/92</u>	
15 Response Accepted QAR _____ Date _____		16 Response Accepted QADD _____ Date _____	
17 Amended Response Accepted QAR _____ Date _____		18 Amended Response Accepted QADD _____ Date _____	
19 Corrective Actions Verified QAR _____ Date _____		20 Closure Approved by: QADD _____ Date _____	

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

8 CAR NO.: YM-92-020
DATE: 2/5/92
SHEET: 2 OF 2
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

5 Requirements (continued)

- n. Procedure/instruction with revision, used to perform the calibration.
- p. Statement that the item calibrated is within the specified accuracy in all operating ranges."

6 Adverse Condition (continued)