



Department of Energy

Washington, DC 20585

QA: L

MAY 23 1997

L. D. Foust, Technical Project Officer  
For Yucca Mountain Site  
Characterization Project  
TRW Environmental Safety Systems, Inc.  
1180 Town Center Drive, M/S 423  
Las Vegas, NV 89134

VERIFICATION OF CORRECTIVE ACTIONS AND CLOSURE OF DEFICIENCY REPORT  
(DR) YM-96-D-084, YM-96-D-085, YM-96-D-088 AND YM-96-D-090 RESULTING FROM  
OFFICE OF QUALITY ASSURANCE (OQA) AUDIT YM-ARC-96-18 OF SANDIA  
NATIONAL LABORATORIES

The OQA staff has verified the corrective actions to DRs YM-96-D-084, YM-96-D-085,  
YM-96-D-088, and YM-96-D-090 and determined the results to be satisfactory. As a result, the  
DRs are considered closed.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or  
Henry T. Greene at (702) 794-1498.

Donald G. Horton, Director  
Office of Quality Assurance

OQA:JB-1600

Enclosures:

- 1. DR YM-96-D-084
- 2. DR YM-96-D-085
- 3. DR YM-96-D-088
- 4. DR YM-96-D-090

cc w/encls:

- T. A. Wood, DOE/HQ (RW-55) FORS
- J. O. Thoma, NRC, Washington, DC
- S. W. Zimmerman, NWPO, Carson City, NV
- B. R. Justice, M&O, Las Vegas, NV
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- W. L. Belke, NRC, Las Vegas, NV
- H. T. Greene, OQA/QATSS, Las Vegas, NV
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- R. W. Clark, DOE/OQA, Las Vegas, NV

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WASHINGTON, D.C.**

**ORIGINAL**  
 Performance Report  
 Deficiency Report  
 NO. YM-96-D084  
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**PERFORMANCE/DEFICIENCY REPORT**

1 Controlling Document: <b>QARD, Revision 5</b>	2 Related Report No. <b>Audit YM-ARC-96-18</b>
3 Responsible Organization: <b>SNL</b>	4 Discussed With: <b>Nina Garcia, Eloise James</b>

5 Requirement/Measurement Criteria:

Section 17.2.4, A. states, "Corrections to QA records including documents which will become QA records shall include the initials or signature of the person authorized to make the correction and the date the correction was made."

6 Description of Condition:

SNL procedure for QA records does not meet the requirements of the QARD for the correction of QA records.

QAIP 17-1, Revision 02, Section 4.4 states in part "Records created by Record Sources which do not meet the requirements for corrections shall be processed into the records management system through the completion of an SNL YMP Record/Record Package Deficiency and Justification Form."

Several QA records have been accepted using this method. However, several corrections have been made without showing the signature or initials and date of the person authorized to make them.

Examples are: RMS SL #150478, 150533, 150505 (Record Package)  
SNL-96-D2 (Deficiency Document)

7 Initiator <b>Mario R. Diaz</b> <i>Mario Diaz</i> Date <b>8/1/96</b>	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
--	---

10 Recommended Action: (Not required for PR)

1. Modify the pertinent SNL procedure in order to comply with this requirement.
2. Review other QA records to evaluate compliance with this requirement and make appropriate corrections of deficient records. Provide objective evidence of review, evaluation, and corrective actions.

11 QA Review: <b>QAR Mario R. Diaz</b> <i>Mario Diaz</i> Date <b>8-1-96</b>	12 Response Due Date <b>20 working days from issuance</b>
--	--

13 Affected Organization QA manager Issuance Approval: (QAR for PR)	
Printed Name <b>R.E. SPENCE</b>	Signature <i>Robert B. Spence</i> Date <b>8.7.96</b>

22 Corrective Action Verified <b>QAR</b> <i>[Signature]</i> Date <b>5/19/97</b>	23 Closure Approved by: (N/A for PR) <i>[Signature]</i> Date <b>5/21/97</b>
--	--

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**PERFORMANCE/DEFICIENCY REPORT RESPONSE**

14 Remedial Actions:

See Continuation Page.

15 Extent of Condition: (Not required for PR)

Based on the fact that no SNL records have been rejected and sent back to SNL for corrections of the correction of records (e.g. initials, dates, etc.), this deficiency appears to be limited in scope. Completion of the review process identified in Block 14, Remedial Action, will provide further evidence of the scope of the deficient condition but based on the apparent scope and the relatively minor nature of the deficiency, there is no reason to conduct a root cause determination.

16 Root Cause Determination: (Not required for PR)

Required  Yes  No

17 Action to Preclude Recurrence: (Not required for PR)

Required  Yes  No

18 Corrective Action Completion Due Date:

October 1, 1996

19 Response by:

Initial

Amended

*For 1-6-96 OS F 222*

Date 9/7/96

Phone 818-0671 <sup>525</sup>

20 Response Accepted

QAR

*N/A*

Date

21 Response Accepted (N/A for PR):

AOQAM

*N/A*

Date

*9/15/96 Brady to Spence*

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PR/DR CONTINUATION PAGE

**BLOCK 14 - REMEDIAL ACTIONS:**

The RMS SL#s identified above will be reviewed for the extent of the condition within each document or package. Record sources will be contacted to make corrections as necessary. The Participant Data Archive (PDA) staff will make appropriate changes per the designation letter of July 25, 1996 and/or verify that any changes previously made by them are correct and fall within the confines of the letter. If corrections are required for records previously submitted to the Records Processing Center, processing of a superseding record will be required of the record source. Other individual records and record packages that have been processed by the SNL Records staff but have not yet been submitted to the Records Processing Center (RPC) will be carefully re-reviewed and identified corrections will be properly completed prior to submittal.

QAIP 17-1, Revision 02 has been revised to clarify how "Administrative Corrections" may be made and how corrections must be indicated. This change is in the review process now.

The SNL YMP Record/Records Package Deficiency and Justification Form has been modified to remove the capability to use the form to document corrections. The section on "completeness" had the following selection option removed, "\_\_\_\_ All corrections are reviewed and determined intentional." This change is part of the revision of QAIP 17-1 which is currently in the review process.

The SNL records staff was briefed on July 29, 1996 regarding the fact that use of the form to accomplish "blanket" records corrections is not acceptable. As of July 29, 1996, they no longer will allow the use of or accept submitted forms utilizing the selection option, "\_\_\_\_ All corrections are reviewed and determined intentional." on the form. Completed.

SNL/CRWM Management signed a memorandum to file on July 25, 1996 designating the Participant Data Archive (PDA) Staff as approved to make administrative changes per verbal direction of the Record Source/Principal Investigator. This is a clarification of the presumed role of Record Source "designee" in the responsibility section of the procedure (copy of memorandum attached). This memo serves as retroactive approval to the effective date of QAIP 17-2, Revision 02, "Participant Data Archive (PDA)". Completed.

Records Management personnel attended an implementation briefing on QAIP 17-1, Revision 02, "record correction" process and on the QAIP 17-3, Revision 02, "record review and acceptance" process.



**Sandia National Laboratories**

Operated for the U.S. Department of Energy by  
Sandia Corporation

Albuquerque, New Mexico 87185-1330

date: July 25, 1996

WBS:1.2.5.3.5.

1.2.11.

to: File

QA

from:

*M.C. Brady*  
M.C. Brady  
YMP Project Lead

subject: Delegation of Authority for Participant Data Archive Staff for Procedure Implementation of QAIP 17-2, Rev 02 "Participant Data Archive (PDA)" (SCPB:NA)

This memo serves to clarify and provide Delegation of Authority for Sandia Participant Data Archive (PDA) personnel to act as "designee" for YMP Principal Investigators (PI's) for the following procedure activities within QAIP 17-2, Rev. 02.

Section 4.2 PDA Staff Responsibilities clearly states "Assisting the PI with preparation of data release" and "Assisting the Record Source in compilation of data sets as record packages" however, specific procedure activities were not defined. To provide this clarification and to document approval of the completion of these activities I submit this clarification to the record.

Specific procedure activities which may be completed by the PDA staff per verbal direction of the PI are:

- fill out Appendix A - PDA Data Set Opening Index Form's
- fill out Appendix B - PDA Data Set Segment Submittal Form's
- fill out Appendix C - PDA Data Set Segment Inventory Form's
- fill out Appendix D - PDA Data Set Status Tracking Form's
- fill out, sign as "checked by", Appendix F - Technical Data Information Form (TDIF)
- fill out Appendix H - SNL/PDA Computer Magnetic Tape Tape Properties

This memo also serves to provide retroactive Delegation of Authority to the effective date of this procedure as the original intent of the term "designee" as part of the PI Responsibilities was to include the Participant Data Archive staff.

YMP: 1.2.5.3.5 and 1.2.11;PM;QA;Participant Data Archive, Delegation of Authority  
YMP CRF

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Your response cannot be accepted based on the following:

Compliance to procedural requirements is the basis for this adverse condition. However, your answer does not address this topic. Additionally, the designation letter of July 25, 1996, applies only to those records processes in accordance with QAIP 17-2, Revision 2. It does not cover those records related to QAIP 17-1, Revision 2, and/or QAIP 17-3, Revision 3.

No effort is made to review additional QA records packages to verify compliance. One of the requirements from the QARD states that "individuals creating QA records shall ensure that the QA records are accurate, complete, appropriate to the work accomplished and identifiable to the item(s) or activity(ies) to which they apply."

Your statement about records already being accepted by the Records Processing Center (RPC) indicates that the records are in good shape. This is inaccurate and misleading based on the fact that the implementing procedure for the RPC personnel is YAP-17.1Q, Rev. 0, which establishes that they are not responsible to ensure that the QA records packages accepted by them meet and comply with all the requirements of the QARD and associated implementing procedures. This responsibility belongs to the Record Source or Affected Organization. Their acceptance is related to the records being authenticated, transmitted using a Table of Contents and the total amount of pages being accurate.

Based on all of the above, root cause plus corrective action to preclude recurrence are required and should also be part of your response.

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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

SEE AMENDED RESPONSE CONTINUATION PAGE

15 Extent of Condition: (Not required for PR)

SEE AMENDED RESPONSE CONTINUATION PAGE

16 Root Cause Determination: (Not required for PR)

Required  Yes  No

SEE AMENDED RESPONSE CONTINUATION PAGE

17 Action to Preclude Recurrence: (Not required for PR)

Required  Yes  No

SEE AMENDED RESPONSE CONTINUATION PAGE

18 Corrective Action Completion Due Date:

SEE AIR CONTINUATION PAGE

19 Response by:

Initial  
 Amended

SEE AIR CONTINUATION PAGE  
Date \_\_\_\_\_ Phone \_\_\_\_\_

20 Response Accepted

OAR Wario Lou

Date 10-15-96

21 Response Accepted (N/A for PR):

AOQAM James B. Day  
RES

Date 10/18/96

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YM-96-D084 Amended Response

Block 14. Remedial Actions:

The RMS SL#s identified above will be reviewed for the extent of the condition within each document or package. Record sources will be contacted to make corrections as necessary. The Participant Data Archive (PDA) staff will make appropriate changes per the designation letter of July 25, 1996 and/or verify that any changes previously made by them are correct and fall within the confines of the letter. If corrections are required for records previously submitted to the Records Processing Center, processing of a superseding record will be required of the record source. Other individual records and record packages that have been processed by the SNL Records staff but have not yet been submitted to the Records Processing Center (RPC) will be carefully re-reviewed and identified corrections will be properly completed prior to submittal.

Block 15. Extent of Condition:

Twenty records, selected at random, will be reviewed to determine the extent of inappropriate corrections. This selection of records will be in addition to those specifically identified in the audit finding. Documented evidence of this review will indicate problems found and the resolution actions taken.

Block 16. Root Cause Determination:

QAIP 17-1, Revision 02 was not properly implemented by Record Sources and the records management staff in relation to proper record corrections.

Block 17. Action to Preclude Recurrence:

The implementation or completion of the following actions will assure that the noted deficiency will not recur.

(a) QAIP 17-1, Revision 02 has been modified (Revision 03) as follows to include acceptability of "Administrative Corrections" and is in the management approval process:

"Administrative Changes - e.g. enhancing legibility, correcting typographical error, making an editorial change, adding or changing a QA designator, labeling privileged records, and adding or correcting page counts or page numbering may be made without obtaining reapproval from the originating organization."

Action Completion Date: (a) the effective date of the revised procedure, expected on or before October 20, 1996.

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YM-96-D084 Amended Response (continued)

(b) The SNL YMP Record/Records Package Deficiency and Justification Form in QAIP 17-1 has been modified to remove the capability to use the form to document corrections. The section on "completeness" has had the following selection option removed "\_\_\_All corrections are reviewed and determined intentional."

Action Completion Date: (b) the effective date of the revised procedure, expected on or before October 20, 1996

(c) The SNL records staff was briefed on July 29th regarding the appropriate correction process and the appropriate use of the deficiency form. As of July 29th, they no longer will allow the use of or accept submitted forms utilizing the selection option "\_\_\_All corrections are reviewed and determined intentional." from the form.

Action Completion Date: (c) completed July 29, 1996

(d) SNL/CRWM Management signed a memorandum to file on July 25, 1996 designating Participant Data Archive (PDA) Staff as approved to make Administrative Changes per verbal direction of the Record Source/Principle Investigator. This is a clarification of the presumed role of Record Source "designee" in the responsibilities section of the procedure. (copy of memorandum attached) This memo serves as retroactive approval to the effective date of QAIP 17-2, Revision 02 "Participant Data Archive (PDA)".

Action Completion Date: (d) completed July 25, 1996

(e) Records Management personnel attended an implementation briefing of the QAIP 17-1, Revision 02 "record correction" process and on the QAIP 17-3, Revision 02 "record review and acceptance" process.

Action Completion Date: (e) completed July 29, 1996

(f) Required training will be assigned for revisions to QAIP 17-1 and 17-3 when the pending revisions are issued. These two procedures are among those that are management required for all YMP personnel. The record correction process has been clarified in both of the revisions of these procedures.

Action Completion Date: (f) the effective date of the revised procedure, expected on or before October 20, 1996

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YM-96-D084 Amended Response (continued)

(g) Review the record numbers which were identified as being deficient during the audit to establish impacts of the corrections which were noted - correct each as required. If corrections are required for records previously submitted to the Records Processing Center a superseded record will be required of the record source.

Action Completion Date: (g) October 10, 1996

Block 18, Corrective Action Completion Due Date:

November 15, 1996

Block 19, Response by:

✓ Amended P. J. Warner 

Date: October 4, 1996 Phone: 505 848-0130

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 17-1

PROTECTING, PREPARING, AND SUBMITTING CRWM QA RECORDS

Revision 03

Effective Date: 11-19-96

Author:

Marlene R. Tucker  
Marlene Tucker

Date:

11/13/96

Concurrence:

F. Joseph Schelling  
Robert Richards F. J. Schelling FJS 11/19/96

Date:

11/19/96

Approval:

Michael C. Brady  
Michael C. Brady, SNL CRWM Lab Lead

Date:

11/19/96

**CONTROLLED DOCUMENT**  
(If Numbered in Red Ink)

Copy Number: \_\_\_\_\_

000001

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## REVISION HISTORY

- | Revision | Summary  |
|----------|--|
| 01       | Total rewrite of the procedure, including the following: record source requirements for protecting, preparing, and submitting QA records have been removed from DOP 17-1 and incorporated into this new procedure. DOP 17-1 has been superseded by QAIP 17-1 and QAIP 17-3. This revision was generated because DOP 17-1 included many implementation requirements that were based on AP 1.7Q which was withdrawn by the Project Office in 7/90.   |
| 02       | This revision included: changes to the definition of "Record Source" to allow for all personnel to process records, added the use of Record Deficiency form, change System 80 to DOE-28, and included missing QARD requirements in Section 4.2. This revision resulted due to the need to identify individuals who may process records, new paragraph deals with records that a) were prepared prior to issuance of the first Project QA records management procedure on 08/15/88, b) have been received from non-project parties thus not meeting requirements, or c) are older project records which have only recently been located and do not meet present requirements, and missing QARD wording. |
| 03       | Total rewrite of the procedure, including the following: Added requirements from YAP 17-1Q, added Appendix B for records submittal, formatted according to QAIP 5-1, rev. 05, and new QARD requirements. This revision was generated in order to incorporate new requirements for YAP-17-1Q and the new QARD, as well as clarify the procedure. Additionally, changes resulting from deficiencies YM-96-D084 and YM-96-D085 have been incorporated.  |

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## 1.0 PURPOSE

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This procedure describes the process by which a record source protects, prepares, and submits Civilian Radioactive Waste Management quality assurance (QA) records for Local Records Receiving Organization (LRRO) processing.

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## 2.0 SCOPE

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This procedure applies to all CRWM QA records generated by or for Sandia National Laboratories (SNL). Non-QA records and records generated prior to November 1988 are excluded from this procedure. The systems used to implement this procedure may, at the discretion of the Lab Lead, be used for non-QA records. A records coordinator may assist the Record Source in proper creation and submittal of records and record packages.

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## 3.0 DEFINITIONS

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**Administrative Changes** - Administrative changes are those used to enhance legibility, correct typographical errors, make editorial changes, add or enhance title content, label privileged records, and add or correct page counts or page numbering.

**Authentication** - The act of attesting that the information contained within a document is accurate, complete, legible, and appropriate to the work accomplished.

**E-Mail Record** - Information transmitted or received by the electronic mail system that meets the definition of a QA record. E-Mail records are authenticated by the fact that the Record Source submits them to the LRRO by selection of the address "YMP Mail Account"; or they may be printed and initialed or signed by the Record Source and submitted per Section 4.2 of this procedure.

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*Continued on next page*

### 3.0 DEFINITIONS, Continued

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**Lifetime QA Record** - A QA record that provides evidence of the following:

- a) Quality of items on the YMP Q-List, YMP/90-55
- b) Quality of activities related to items on the Q-List
- c) Quality of site characterization data and samples
- d) Activities that provide data used to assess the potential dispersion of radioactive materials from the proposed licensed facility
- e) Training and qualification of individuals executing QA program requirements

In addition, implementing documents and documents that specify technical or quality requirements are also lifetime QA records.

**Local Records Receiving Organization (LRRO)** - Persons within the local records organization who are responsible for processing, storing, and protecting CRWM records.

**Non-Permanent QA Record** - A QA record that does not meet the criteria of a Lifetime QA Record but provides objective evidence that the QA program has been properly executed.

**Privileged Record** - A record to which access is controlled due to statutory, legal, or security requirements.

**QA Record** - A completed document that furnishes evidence of (1) the quality and completeness of items and activities affecting quality; or (2) the implementation of quality assurance programs, and which has been generated, completed, and authenticated. A complete QA record is an original, reproduced copy, or e-mail record of a document that will receive no more entries and whose revision would be subject to a change control process.

**Record Package** - A collection of records supporting one topic that is processed as a single record.

**Record Source** - Any individuals (within the constraints that follow) performing SNL CRWM activities who, by means of their position, function, or the nature of the work, generate or receive and submit QA records or QA record packages to the LRRO. Such individuals must be either employees of SNL or SNL contractors for the CRWM Program and must be trained on the provisions of this procedure.

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*Continued on next page*

### 3.0 DEFINITIONS, Continued

**Records** - Those classes of documentary materials which may be disposed of only after archival authority is obtained. The *Federal Records Disposal Act*, 44 USC 3301, defines records as "books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States government under federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations or other activities of the government or because of the informational value of the data in them." This definition applies to all DOE records, including those created, received, and maintained by contractors pursuant to their contracts. Virtually all recorded information in the custody of the government (including information held by contractors which is considered by contract to be government information) regardless of its media (hard copy, machine-readable, microfilm) is considered a "government" record.

**Temporary Storage** - A container or facility which bears an Underwriter's Laboratories label ( or equivalent) with a fire rating of 1-hour or 2-hour fire protection or which has been certified by a person competent in the technical field of fire protection.

**Unique Records** - Records that require unique handling because they cannot be duplicated or microfilmed due to their physical form (one-of-a-kind records) or cannot be filmed on 16 mm roll film (special processed records).

### 4.0 PROCEDURE

#### 4.1 Protecting Records

Responsible Individual(s)	Step	Procedure
Record Source	1	Shall protect materials destined to become QA records against loss or degradation until they have been completed. Once authenticated, the record source shall submit completed records to the LRRO or ensure that records are placed in a certified 1-hour fire rated temporary storage container/facility (see Section 3.0 of this procedure for definition of temporary storage) until submitted to the LRRO.

## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages

Responsible Individual(s)	Step	Procedure
Record Source	1	Contacts the LRRO to establish and open a record package at the beginning of an activity. Provide a title for the record package that concisely identifies and describes the contents of the record package in order to enable future identification, traceability to associated items and/or activities, and timely retrieval.
	2	Reviews each record/record package to ensure that it is legible, accurate, and complete. If legibility is questionable, either <ol style="list-style-type: none"> <li>a. correct by enhancing or transcribing the illegible portions, or if it can't be corrected,</li> <li>b. sign and date a description of the impact on CRWM work, and obtain the signature of the record source's immediate supervisor.</li> <li>c. ensure that printed email records include all addressees which appear on the message. If addressees are incomplete, print the header, mail envelope information sheet, status sheet, distribution list, or other electronic screen that lists the full name(s) of addressee(s) and attach this information to the message.</li> </ol>
	3	Corrects records if necessary, as described in Section 4.4.
	4	<ol style="list-style-type: none"> <li>a. Prepares individual records (those not included in a package) to include the following information on the first page of the record:                             <ol style="list-style-type: none"> <li>1. WBS number (in the upper right corner),</li> <li>2. for a QA record, a designation that the record has a retention period of either Lifetime (QA:L) or Non-Permanent (QA:N) (See note below.),</li> <li>3. for a Non-QA Record, a designation of (QA: N/A),</li> <li>4. total number of pages,</li> <li>5. record date.</li> </ol> </li> </ol>

**Note:** *Until individual procedures are revised to specify the retention period for QA records generated by a procedure, the retention period designation for QA records is defined on-line in the NWMP Applications "List of Lifetime and Non-Permanent QA Records."*

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## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages (continued)

Responsible Individual(s)	Step	Procedure
Record Source (continued)	4 cont.	<p>6. record title (clearly indicate the record content and/or purpose),</p> <p>7. SNL NWM file code,</p> <p>b. Prepares QA record packages to include:</p> <ol style="list-style-type: none"> <li>1. All records that make up the record package (Non-QA records included in a QA record package should be designated "QA:N/A"), and</li> <li>2. cross reference sheets (obtained from the LRRO ) for privileged records if they are not included in the package, and</li> <li>3. Table of Contents (may be prepared by LRRO), which includes                             <ul style="list-style-type: none"> <li>• WBS number,</li> <li>• designation on the Table of Contents that the record package is a QA record package and has a retention period of either Lifetime (QA:L) or Non-Permanent (QA:N) (See note below),</li> <li>• pagination of the Table of Contents (directly below the QA designation),</li> <li>• record date for the Table of Contents,</li> <li>• record package title (clearly indicate the content and/or purpose),</li> <li>• listing of all records in the package with the date and number of pages of each record,</li> <li>• total number of pages,</li> <li>• "PRIVILEGED" designation for training, qualification, certification records and business sensitive records (e.g. vendor designated information, procurement records that cannot be obliterated).</li> </ul> </li> </ol>

*Note: If any lifetime QA records are included in a package, the designation for the package is (QA:L). If all records in a record package are non-QA records, the designation for the package is (QA:N/A) and is processed similarly under Section 4.3.*

Continued on next page

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## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages (continued)

Responsible Individual(s)	Step	Procedure
Record Source (continued)	4 cont.	<ul style="list-style-type: none"> <li>• SNL NWM file code,</li> <li>• List the accession numbers on the Table of Contents for all records previously submitted to the YMP RPC (Do not resubmit such records.)</li> <li>• A listing of reference sheets for privileged or proprietary records that will be submitted under the guidelines for those records</li> </ul>
	5	Machine Readable media records will be submitted and labeled per Appendix A.
	6	Notifies LRRO when an activity is complete and closes the record package.
	7	Authenticates QA records by stamping, signing, or initialing and dating the individual records, or for a QA record package, by authenticating the Table of Contents.
		<p><b>Note:</b> Authentication may also take the form of a statement by the responsible individual or organization. Handwritten signatures are not required if the document is clearly identifiable as a statement by the reporting individual or organization. Records such as magnetic or optical media will reflect authentication on the Table of Contents or on a separate memo with the media.</p>
	8	Verifies that no portions of the printed or graphical content of a page are missing due to tearing or folding of record pages, and that no information is unintentionally obliterated. When parts of a record are intentionally obliterated, (e.g. dollar amounts in procurement records) a statement signed and dated by the appropriate record source shall be included with the record that indicates that the obliterated information does not impact the technical meaning or content of the record.

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages (continued)

Responsible Individual(s)	Step	Procedure
Record Source	9	<p>Submits the individual records or record package to the LRRO no later than 20 working days after authentication. Non-QA records should also be submitted no later than 20 working days after completion. Shall submit the records to the LRRO by completing the Local Records Receiving Organization Submittal Form (Appendix B); receipt of the submitted records by the LRRO shall be verified and acknowledged upon request.</p> <p><b>Note:</b> E-mail records may be transmitted electronically to the "YMP Mail Account" address.</p>

### 4.3 Protecting, Preparing, and Submitting Unique and Non-QA Records

Responsible Individual(s)	Step	Procedure
Record Source	1	<p>Contacts the Local Records Receiving Organization staff for guidance and assistance in protecting, preparing, and submitting unique and non-QA records.</p>

### 4.4 Corrections to/Replacement of Records

Responsible Individual(s)	Step	Procedure
Record Source	1	<p>Chooses one of the following methods to correct a record:</p> <p>a. <u>Correction of Records</u></p> <ol style="list-style-type: none"> <li>1. Shall correct errors on records by scribing a single line through the incorrect information and entering the correct information in close proximity. Date and initial or sign the correction.</li> <li>2. Administrative changes may be made by the LRRO.</li> </ol>

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.4 Corrections to/Replacement of Records

Responsible Individual(s)	Step	Procedure
Record Source (continued)	1 cont.	<p>3. Records rejected by the LRRO that cannot be corrected by scribing a single line through the incorrect information and entering the correct information, shall be regenerated, enhanced, or transcribed. The enhancement or transcription is considered a correction and shall be dated and initialed or signed as stated above.</p> <p>If the LRRO identifies that corrections need to be made to QA records, the QA records shall be returned to the originating record source when feasible. If the record source who was originally responsible for the QA record is no longer available, the record will be returned to the record source organization for correction.</p> <p>If a record is illegible or incomplete and cannot be regenerated, the record shall be processed into the records management system through the completion of the OCRWM corrective action process or the Record Deficiency and Justification Form (Appendix C). The deficiency document shall provide documentation stating the impact of the illegible or incomplete information on future, in-process, or completed work. A copy of the deficiency document, when completed, becomes part of the record package for which it was generated.</p> <p>b. <u>Replacement of Lost QA Records</u></p> <p>Shall regenerate or obtain a new copy of a lost QA record. If a record cannot be regenerated, this deficiency must be documented through the OCRWM deficiency document process utilizing AP-16.1Q and AP-16.2Q. The deficiency document must include a statement of the impact of the lost information on future, in process, or completed work.</p>

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.4 Corrections to/Replacement of Records (continued)

Responsible Individual(s)	Step	Procedure
Record Source	1 cont.	<p><b>c. Correction of Previously Processed Records</b> Should notify the LRRO of any errors in previously processed records or record packages. The record source shall submit the corrected, modified, or supplemental records to the LRRO in accordance with Section 4.2 of this procedure.</p>

## 5.0 RECORDS

No QA records are generated by implementation of this procedure.

## 6.0 REFERENCES

DOE/RW-0333P	Quality Assurance Requirements and Description
AP-16.1Q	Performance/Deficiency Reporting
AP-16.2Q	Corrective Action and Stop Work
YAP-17.1Q	Records Management Requirements and Responsibilities
YMP/90-55	YMP Q-List

## 7.0 APPENDICES

Appendix A: Machine Readable Media Submittal Form  
Appendix B: Records Submittal Form  
Appendix C: Records Deficiency and Justification Form

APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Machine Readable Media</h2>				
Test: _____ Record Identifier: _____ Author: _____ Organization: _____ Date(s): _____ WBS #: _____ Generated: _____					
<b>I. AUDIO/VIDEO RECORDS</b>					
<b>1. Format Type and Specifications</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>A. Audio</b>  <input type="checkbox"/> 3.75-in/sec on 0.25-in open reel  <input type="checkbox"/> 3.75-in/sec on 0.25-in cassette  <input type="checkbox"/> 7.5-in/sec on 0.25-in open reel  <input type="checkbox"/> 7.5-in/sec on 0.25-in cassette  <input type="checkbox"/> Other _____                 </td> <td style="width: 50%; vertical-align: top;"> <b>B. Video-Size:</b>  <input type="checkbox"/> 0.75-in  <input type="checkbox"/> 1-in  <input type="checkbox"/> Other _____                 </td> </tr> <tr> <td colspan="2" style="vertical-align: top;"> <b>Type:</b>  <input type="checkbox"/> Mil tape  <input type="checkbox"/> S-VHS tape  <input type="checkbox"/> BETACAM tape  <input type="checkbox"/> Other _____                 </td> </tr> </table>		<b>A. Audio</b> <input type="checkbox"/> 3.75-in/sec on 0.25-in open reel <input type="checkbox"/> 3.75-in/sec on 0.25-in cassette <input type="checkbox"/> 7.5-in/sec on 0.25-in open reel <input type="checkbox"/> 7.5-in/sec on 0.25-in cassette <input type="checkbox"/> Other _____	<b>B. Video-Size:</b> <input type="checkbox"/> 0.75-in <input type="checkbox"/> 1-in <input type="checkbox"/> Other _____	<b>Type:</b> <input type="checkbox"/> Mil tape <input type="checkbox"/> S-VHS tape <input type="checkbox"/> BETACAM tape <input type="checkbox"/> Other _____	
<b>A. Audio</b> <input type="checkbox"/> 3.75-in/sec on 0.25-in open reel <input type="checkbox"/> 3.75-in/sec on 0.25-in cassette <input type="checkbox"/> 7.5-in/sec on 0.25-in open reel <input type="checkbox"/> 7.5-in/sec on 0.25-in cassette <input type="checkbox"/> Other _____	<b>B. Video-Size:</b> <input type="checkbox"/> 0.75-in <input type="checkbox"/> 1-in <input type="checkbox"/> Other _____				
<b>Type:</b> <input type="checkbox"/> Mil tape <input type="checkbox"/> S-VHS tape <input type="checkbox"/> BETACAM tape <input type="checkbox"/> Other _____					
<b>2. Description of Subject Matter</b> Description may include: major topics; test plans; activity; track number(s) reflecting starting times of major topics					
<b>II. COMPUTER GENERATED RECORDS</b>					
<b>1. Format Type and Specifications</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <b>A. Tape</b>  <input type="checkbox"/> 0.5-in nine track tape reel  <input type="checkbox"/> 0.25-in tape cassette  <input type="checkbox"/> 4-mm tape cassette  <input type="checkbox"/> 8-mm tape cassette  <input type="checkbox"/> Serpoulli  <input type="checkbox"/> Other _____                 </td> <td style="width: 50%; vertical-align: top;"> <b>B. Floppy Disk</b>  <input type="checkbox"/> 3.5-in  <input type="checkbox"/> 5.25-in  <input type="checkbox"/> 8-in   <input type="checkbox"/> Other _____                 </td> </tr> </table>		<b>A. Tape</b> <input type="checkbox"/> 0.5-in nine track tape reel <input type="checkbox"/> 0.25-in tape cassette <input type="checkbox"/> 4-mm tape cassette <input type="checkbox"/> 8-mm tape cassette <input type="checkbox"/> Serpoulli <input type="checkbox"/> Other _____	<b>B. Floppy Disk</b> <input type="checkbox"/> 3.5-in <input type="checkbox"/> 5.25-in <input type="checkbox"/> 8-in  <input type="checkbox"/> Other _____		
<b>A. Tape</b> <input type="checkbox"/> 0.5-in nine track tape reel <input type="checkbox"/> 0.25-in tape cassette <input type="checkbox"/> 4-mm tape cassette <input type="checkbox"/> 8-mm tape cassette <input type="checkbox"/> Serpoulli <input type="checkbox"/> Other _____	<b>B. Floppy Disk</b> <input type="checkbox"/> 3.5-in <input type="checkbox"/> 5.25-in <input type="checkbox"/> 8-in  <input type="checkbox"/> Other _____				

## APPENDIX A (continued)

### Machine Readable Media

#### II. COMPUTER GENERATED RECORDS

##### 2. Hardware/Software Information

###### A. Hardware and Operating System Used to Execute the Software

Include details regarding version, display, print, graphics, etc.  
(e.g.: SUN IPX Solaris 2.1; Gateway 486 DX2 Windows 5.1, DOS 6.2)

###### B. Application Software and/or Compiler Used to Create Software

(e.g. Excel, Microsoft C v6.0)

###### C. Description of Subject Matter of Executable Software

Description may include: file layout, field names, field parameters, form of data-numeric, alphabetic, packed, decimal, float, real, integer, etc.; instructions to identify and interpret codes in file data.

##### 3. Additional Information

###### A. Special Requirements to Playback, Import/Export, Recompile, or Preserve Record

###### B. Main Frame Computer Record Length and Block Size

CRWM 17-1 3/2-3 (5/31/96)

CONTACT THE CENTER STAFF TO OBTAIN THIS DOCUMENT

APPENDIX A (continued)

Machine Readable Media

(To Be Adhered Directly to the Reel/Cassette/Tape/Floppy Disk)

SAMPLE

Records Center Identifier No:	_____
Nuclear Waste Project:	_____
Text/Activity:	_____
Author/Org.	_____
Date(s)	_____
WBS #:	_____
Summary of Machine Readable Record	

- I. **RECORDS CENTER IDENTIFIER NO.**  
To be issued to client by the Records Center prior to record generation and labeling.
- II. **NUCLEAR WASTE MANAGEMENT PROJECT**  
Identify the appropriate Nuclear Waste: YMP, BUC, or other
- III. **TEST PLAN OR ACTIVITY**  
Identify the Test Plan or Activity that this material supports.
- IV. **AUTHOR/ORGANIZATION**  
State the Test Principal Investigator and the Organization which generated the record. (First name initial, middle initial, full last name) (Organization number)
- V. **DATE(S)**  
Indicate the date(s) the record was generated not the date the media was labeled.
- VI. **SUMMARY OF CONTENTS**  
Include any information valuable to the identification of the record

- EXAMPLES:
1. Computer Generated Record, e.g. NCAR's REGCM2 software program disks; include a directory listing stating the file names, file sizes, and dates.
  2. Video or Audio Record, e.g. Track number(s) with brief description of content.

CONTACT THE RECORDS CENTER STAFF TO OBTAIN THIS FORM.



APPENDIX C

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Record Deficiency and Justification Form</h2>	
<input type="checkbox"/> QA Record/Package <input type="checkbox"/> Non-QA Record/Package      WBS: 1.2.12.2.2		
<b>Legibility:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> Illegible portions of this record can be deduced from other information within the record package See: _____ <input type="checkbox"/> Illegible information will have NO impact on future, in-process, or completed work.		
<b>Completeness:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> All blanks on the record(s) are intentional. <input type="checkbox"/> SNL submittal of partially completed form _____; all blanks are appropriate.		
<b>Enclosure/Attachment:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> The enclosure/attachment was not included with the submitted report because: <input type="checkbox"/> It is non-processed material. <input type="checkbox"/> It was previously submitted to the CRF, Accession No. _____ <input type="checkbox"/> Only one enclosure is required with copies of a distributed letter. This enclosure/attachment is the last document in a group of distributed letters. <input type="checkbox"/> Submittals to the RIB (reference AP-530) transmittal letters or forms are only required for the CRF. <input type="checkbox"/> Other: _____		
<b>Regeneration:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> The original record was completed on _____; however, it has subsequently been damaged beyond repair, and a regeneration was required.		
<b>Record Source/Generator Status:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> The original Record Source is no longer on the project. <input type="checkbox"/> The original Record Source is deceased or whereabouts unknown. <input type="checkbox"/> The originator was not on the Project and whereabouts unknown. <input type="checkbox"/> The vendor is no longer available. <input type="checkbox"/> Other: _____		
<b>Approval:</b> I have reviewed this record/package and attest that it is adequate for its intended purpose. Only the appropriate deficiencies are identified above.		
_____ Record Source (printed/typed)	_____ Signature	_____ Date

SAMPLE  
 CONTACT THE CONTROLLED DOCUMENT  
 CENTER STAFF TO OBTAIN THIS FORM.

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 5-1

QUALITY ASSURANCE IMPLEMENTING PROCEDURES

Revision 06

Effective Date: 10-31-96

Author: Thomas F. Ehrhorn  
Thomas F. Ehrhorn

Date: 10/16/96

Concurrence: R.R. Richards  
QA Reviewer R.R. Richards

Date: 10/16/96

Approval: F.J. Schelling  
for M.C. Brady  
SNL CRWM Lab Lead

Date: 10/13/96

M.C. Brady approval signature on faxed copy of this page in Document Control Records.

**CONTROLLED DOCUMENT**  
(If Numbered in Red Ink)

Copy Number: 000001

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## REVISION HISTORY

Revision	Summary
01	Total rewrite of the procedure. Included the following: added use of auxiliary verbs, emphasized use of playscript format, introduced DAIs, formalized forms control, formalized identification of requirements and guidelines, etc. Incorporated ICNs. This total revision was generated as a result of the efforts of the Department 6310 Procedures PMT.
02	Updated organizational titles. Updated references. Streamlined procedures. Incorporated changes to ICNs and generally rewrote to bring the procedure up to date.
03	Added QARD Matrix Requirement Controls. Revised references. General update. Done as a result of new QARD requirements.
04	Incorporated, ICN 01. Clarified review and approval responsibilities. Clarified wording for providing change rationale. Addressed QARD requirements that had not been completely addressed prior.
05	Total rewrite. Incorporated ICNs 01 and 02. Adapted the procedure to comply with QARD Revision 5. Eliminated ICNs. Changed "Rationale for Revision" to "Revision History". Changed YMP to CRWM where appropriate. Incorporated procedure categories. Defined Procedure Coordinator. Redefined use of PAR forms. Redefined QARD requirements matrix. Required personnel to formally process changes resulting from a stopped work condition. Removed WIPP references (e.g. QAPD). Changed name of Records Center to Local Records Receiving Organization.
06	Minor changes. Changed "Request to Provide Training" form to "Request to Provide Training on Controlled Documents" form; changed effective date on the training form to the target completion date; allowed the QA Manager to initiate a new procedure or revision. Includes corrections based on the following Deficiency Reports YM-96-D081 and YM-96-D086.

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## 1.0 PURPOSE

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This procedure prescribes the process for preparation, change, review, and approval, issuance, and implementation of Sandia National Laboratories (SNL) Civilian Radioactive Waste Management (CRWM) Quality Assurance Implementing Procedures (QAIPs).

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## 2.0 SCOPE

---

This procedure applies to the QAIPs that control SNL CRWM activities affecting quality. These QAIPs implement the requirements contained in the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance Requirements and Description (QARD).

This procedure applies to SNL staff and others who prepare Quality Assurance Implementing Procedures.

**Note:** Within the context of this and other QAIPs, the terms "QAIP x-y" and "Procedure x-y" are used interchangeably.

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## 3.0 DEFINITIONS

---

**Effective Date:** The date on the procedure, instruction, or revision by which implementation is mandated

**Lab Lead:** The manager designated as the project leader for CRWM work for SNL; previously designated the "Technical Project Officer".

**Minor Change:** A change which does not affect the implementation of Quality Assurance requirements

**Playscript Format:** A means for prescribing the accomplishment of a task in a logical sequence by identifying the individual(s) performing the action in one column and the step-by-step instructions in another column.

**Procedure Action Request (PAR):** A form that may be used to request the development of a new procedure or to change an existing procedure.

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### 3.0 DEFINITIONS, Continued

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**Procedure Coordinator:** An individual assigned to ensure the correct routing of procedures during the creation/revision process.

**QA Requirements Matrix (Matrix System):** Identifies how and where each requirement of the applicable requirements and controls source is addressed in the SNL CRWM Quality Assurance Program documents including the procedures. Matrix system input is information used to develop or update the system.

**Procedure Package:** A set of documents that are circulated for procedure review and approval. The package may include: the PAR, the procedure (draft or approved), the matrix system input, the Document Review and Comment form or other review and comment documentation, the Request to Provide Training on Controlled Documents form, and the Request for Distribution/Recall of a Controlled Document form.

---

### 4.0 PROCEDURE

---

#### 4.1 Preparation of New Procedure

Responsible Individual(s)	Step	Procedure
Requester	1	Notifies the QA Department Manager, upon identifying the need for a new procedure. A PAR form (Appendix A) may be used for this purpose, if desired. Similarly, a hard copy or electronic memo may be used
QA Department Manager	2	Evaluates the request for a new procedure. a. if approved, selects a Procedure Author and sends original request to the Author with copies to the Requester and the Procedure Coordinator. b. if rejected, returns the original request with an explanation to the Requester

*Continued on next page*

## 4.0 PROCEDURE, Continued

### 4.1 Preparation of New Procedure (continued)

Responsible Individual(s)	Step	Procedure
QA Department Manager (Continued)	2 Cont	<p><b>Note:</b> The QA Department Manager may initiate the creation of a new procedure without a request. In that case, he/she would merely select a Procedure Author and direct the author (orally or in writing) to draft the procedure.</p>
Procedure Author	3          4	<p>Shall identify applicable requirements and controls in the following sources:</p> <ul style="list-style-type: none"> <li>a. Quality Assurance Requirements and Description (QARD)</li> <li>b. Other sources with requirements or controls affecting SNL CRWM scope of work (e.g. Yucca Mountain Administrative Procedures [YAPs], Administrative Procedures [APs], Quality Assurance Procedures [QAPs])</li> <li>c. SNL CRWM commitments (e.g. corrective action for audit findings)</li> </ul> <p>Shall draft the new procedure:</p> <ul style="list-style-type: none"> <li>a. Refers to Appendix B for procedure format and content.</li> <li>b. Develops implementing actions for the applicable requirements and controls identified in Step 3 consistent with the graded approach (See QARD Section 2.2.4) for applying QARD requirements.</li> <li>c. Uses the auxiliary verbs "shall," "should," or "may" as described in Appendix B.</li> </ul> <p>Shall prepare matrix system input that serves as verification that all applicable requirements and controls identified in Step 3 are addressed. (See Section 4.5 for details about the matrix.)</p>

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## 4.0 PROCEDURE, Continued

### 4.1 Preparation of New Procedure (continued)

Responsible Individual(s)	Step	Procedure
Procedure Author (Continued)	6	Informally reviews the draft procedure and matrix system input with the affected managers and users and modifies the draft accordingly.
	7	Prepares: <ol style="list-style-type: none"> <li>a. Document Review and Comment (DRC) forms in accordance with QAIP 6-3 for the use of the QA Reviewer and Lab Lead.</li> <li>b. A Request to Provide Training on Controlled Documents form in accordance with QAIP 2-5.</li> <li>c. A Request for Distribution/Recall of a Controlled Document form in accordance with QAIP 6-1.</li> </ol>
	8	Forwards the procedure package to the Procedure Coordinator for initiation of the review and approval process (Section 4.3).

### 4.2 Changes

Responsible Individual(s)	Step	Procedure
Requester	1	Notifies the QA Department Manager upon identifying the need for a procedure change and/or a form change. A PAR form (Appendix A) may be used for this purpose or the Requester may simply submit a marked up copy of the procedure.
QA Department Manager	2	Evaluates the requested procedure change. This evaluation shall include the procedure's revision history. <ol style="list-style-type: none"> <li>a. if approved, selects a Procedure Author and sends the original request to the Author with copies to the Requester and Procedure Coordinator.</li> <li>b. if rejected, returns the original request with an explanation to the Requester.</li> </ol>

Continued on next page

## 4.0 PROCEDURE, Continued

## 4.2 Changes (continued)

Responsible Individual(s)	Step	Procedure
QA Department Manager (Continued)	2 Cont	Note: The QA Department Manager may initiate a procedure change without a request. In that case, he/she would merely select a Procedure Author and direct the author (orally or in writing) to draft the change.
Procedure Author, Requester	3	Shall draft the procedure change: <ol style="list-style-type: none"> <li>a. Complies with Subsection 4.1, steps 3 through 5, as appropriate.</li> <li>b. Numbers revisions sequentially beginning with 01.</li> <li>c. Identifies all changes by vertical bars in the outside margin, adjacent to the change. If changes are extensive, the change bars should be omitted.</li> <li>d. Provides a rationale for each change from the last issue by appending the change to the Revision History found on the second page of the procedure.</li> <li>e. Performs steps 6 through 8 of Section 4.1 for the procedure change as appropriate.</li> </ol>

## 4.3 Review, Approval, and Effective Date

Responsible Individual(s)	Step	Procedure
Procedure Coordinator	1	Confirms that the package is complete. Evaluates the procedure package. If it is for a procedure change and if the change is minor, enter "NA change is minor" on the Lab Lead signature line on the cover page. Forwards the procedure package to the QA Department.
QA Department Manager	2	Forwards the package to the QA Reviewer.

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## 4.0 PROCEDURE, Continued

## 4.3 Review, Approval, and Effective Date (continued)

Responsible Individual(s)	Step	Procedure
QA Reviewer, Lab Lead	3	<p>Shall perform QA and management reviews of the procedure package and document the review and comment resolution in accordance with QAIP 6-3. The QA Reviewer:</p> <ul style="list-style-type: none"> <li>a. Shall verify inclusion of applicable quality requirements and controls.</li> <li>b. Should verify that referenced documents, including those generated outside of the SNL CRWM, are appropriate, current, and not in conflict with applicable requirements.</li> <li>c. When the review is for a procedure change, the reviewer shall review the Revision History (page 2 of each procedure) to ensure that the change does not compromise or contradict previous commitments.</li> </ul> <p>Note 1: The QA Reviewer serves as the independent reviewer for procedures.</p> <p>Note 2: The QA Reviewer is the only required reviewer of minor changes.</p> <p>Note 3: Editorial corrections (i.e. correcting grammar or spelling, renumbering sections or attachments if the chronological sequence of work is not affected, changing the title or number of the document, or updating organizational titles if there is no change in responsibilities) may be made without review but must be processed as a change or revision to the procedure.</p>
Procedure Author	4	Shall resolve comments and incorporate the applicable comments in the procedure or revision.

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.3 Review, Approval, and Effective Date (continued)

Responsible Individual(s)	Step	Procedure
Procedure Author, QA Reviewer, Lab Lead	5	<p>Shall sign the procedure or revision for authorship (Procedure Author), concurrence (QA Reviewer), and approval (Lab Lead) as appropriate.</p> <p>Note 1: The signature indicates that the procedure or revision was reviewed (if required) and that review comments, if any, have been satisfactorily resolved and incorporated, and that the procedure or revision is approved for use, subject to its effective date.</p> <p>Note 2: The Procedure Author and QA Reviewer are the only required signers for minor changes.</p>
Lab Lead or QA Department Manager	6	<p>Establishes an effective date for the procedure or revision, enters it on the procedure or revision cover page, and forwards the procedure package to the Procedure Coordinator.</p> <p>Note: The effective date may be left blank, in which case it will be assigned by Document Control.</p>

### 4.4 Issuance and Control

Responsible Individual(s)	Step	Procedure
Procedure Coordinator	1	<p>Following receipt of the signed procedure package, enters the target date for completion of training on the Request to Provide Training on Controlled Documents form (the target date may be left blank, in which case it will be determined by Document Control), verifies the distribution marked on the Request for Distribution/Recall of a Controlled Document Form, signs that form, and forwards the package contents as follows:</p> <p>a. The approved procedure or revision and the Request for Distribution/Recall of a Controlled Document form to the Document Control staff for distribution and processing in accordance with QAIP 6-1.</p>

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.4 Issuance and Control (continued)

Responsible Individual(s)	Step	Procedure
Procedure Coordinator (Continued)	1 Cont	b. The Request to Provide Training on Controlled Documents form to the Training Manager for processing in accordance with QAIP 2-5.
		c. The matrix system input to the QA Department for updating the matrix system.
		d. The remaining package contents to the QA Department for possible retention as nonprocessed records.
	2	Revises Orientation Manual Abstracts as necessary for changes and issues new abstracts for new procedures.

### 4.5 Requirements Matrix Preparation and Change

Responsible Individual(s)	Step	Procedure
QA Staff	1	Shall develop a QARD requirements matrix. This matrix shall identify
		a. Where the QARD requirements are directly addressed.
		b. Where QARD requirements are not applicable based on scope of work.
		c. Where exceptions to QARD requirements have been taken including the justification for the exception.
	2	Shall update the matrix as implementing documents are revised.
	3	Shall process updates to the matrix through the document review process in accordance with QAIP 6-3.

## 4.0 PROCEDURE, Continued

### 4.6 Implementation

Responsible Individual(s)	Step	Procedure
SNL CRWM Personnel	1	<p>Shall perform activities in accordance with approved procedures.</p> <p>Note 1: Unless specifically directed otherwise by the Controlled Document Transmittal/Acknowledgment Form, a procedure or revision may be implemented prior to the effective date if the individual using the procedure has been trained on the procedure/revision (if such training is necessary).</p> <p>Note 2: When work cannot be accomplished as described in the procedure or accomplishment of such work would result in an undesirable situation, the work shall be stopped. Work shall not resume until the procedure is changed in accordance with Section 4.2 to reflect correct work practices.</p>

## 5.0 RECORDS

The following QA records, including corrections and changes thereto, generated as a result of implementing this procedure are submitted to the SNL Local Records Receiving Organization by the record source in the applicable procedure.

<u>QA Records</u>	<u>Procedure</u>
Original Copy of the Controlled Document	QAIP 6-1
Request for Distribution/Recall of a Controlled Document Form	QAIP 6-1

## 6.0 REFERENCES

---

QAIP 2-5	Training
QAIP 6-1	Document Control System
QAIP 6-3	Conducting and Documenting Reviews of Documents
QAIP 17-1	Protecting, Preparing, and Submitting CRWM QA Records

---

APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Procedure Action Request (PAR)</h2>
--	--

**Section I: To Be Completed by Requester**

To: QA Manager

From: (Requester's Name)

Org.

Date:

QAIP Title (or subject if new QAIP):

Check Action Requested

Change Procedure Form

Develop New Procedure

Change Existing Procedure

Reason for Request and Suggested Action:

Attachment:  YES  NO - If Yes, Number of Pages \_\_\_\_\_

Other QAIPs/Documents Affected:

**Section II: To be Completed by QA Manager or Designee**

Conflict with QARD:  Yes  No, Comments \_\_\_\_\_

Request Is:  Approved  Rejected  Other Disposition, Comments \_\_\_\_\_

If New  
QAIP

QAIP Number: \_\_\_\_\_ Title: \_\_\_\_\_

Purpose: \_\_\_\_\_

Scope: \_\_\_\_\_

Forward To (Procedure Author) \_\_\_\_\_

Org \_\_\_\_\_

Please Issue New QAIP or Change by Date: (Optional) \_\_\_\_\_

Signature and Date:

QA Department Manager \_\_\_\_\_

Date \_\_\_\_\_

SNL CRWM Lab Lead \_\_\_\_\_

Date \_\_\_\_\_

Copy to Requester  
Procedure Coordinator  
CRWM 5-1.1/1-1(10-15-96)

## APPENDIX B

### PROCEDURE FORMAT AND CONTENT

**A. Cover Page**

Prepares the procedure cover page the same as the cover page of this procedure. The procedure identifier includes the acronym "QAIP" and a number which is "built" by combining the QAIP Series Number from Appendix C with a "-" and a number designating the specific procedure, e.g. QAIP 5-1 is the first procedure in the "5" series.

**B. Revision History**

The revision history is a short narrative description of all revisions of the procedure.

**C. Table of Contents**

A Table of Contents should be developed for procedures with more than five (5) pages or test or numerous appendices, to aid in the use of the procedure.

**D. Body**

The procedure body should consist of the following in listed order:

**1.0 PURPOSE**

The purpose states what the procedure is intended to accomplish.

**2.0 SCOPE**

The scope:

- a. describes the extent to which the procedure applies to specific organizations, activities, tasks or personnel affected by the procedure.
- b. lists interfacing procedures.
- c. describes the activities specifically excluded from the procedure's scope, if appropriate, for clarity.

**3.0 DEFINITIONS**

The definitions section should.

- a. include terms that require specific definition to avoid misinterpretation.
- b. define terms exactly the same as the definitions used in the OCRWM QARD unless there is justification for use of an SNL-unique definition.

## 4.0 PROCEDURE

The procedure section shall prescribe how to perform the procedure activity. The procedure section should use the playscript format that is used in section 4.0 of this procedure.

- a. Identifies individuals responsible for specific actions. This specifically includes identifying the individuals/organizations responsible for submitting the QA records to the records management system.
- b. Numbers the action steps.
- c. Specifies the actions in the active, present tense voice and in a step-by-step logical sequence that will result in the completion of the desired activity. Each action step should be clearly stated and kept as simple as possible but with sufficient detail to be unambiguous to a qualified individual. Includes references to other procedures in the step for which they apply. Uses the action verbs, "may", "shall", and "should" as follows
  - (1) May: Denotes an action which is completed at the discretion of the person implementing the procedure or instruction.
  - (2) Shall: Denotes an action required by a CRWM Department commitment, QA Program requirement, or related requirements document.
  - (3) Should: Denotes a guideline action that is a preferred practice. These actions include good practices that are desirable for achieving uniformity or consistency of administration but do not arise from QA requirements. "Should" is implied when no auxiliary verb (shall or may) is used.
- d. Note that the physical order of the specified actions as they appear in this section of the QAIP does not imply that the actions be mandatorily carried out in that sequence unless specifically stated

Most procedures prescribe processes and should be presented in playscript format. However, for those procedures where the playscript format is not appropriate:

- a. a "Responsible Individuals" section may be prepared as appropriate and
- b. a "Requirements" section may be substituted for the "Procedure" section.



## 7.0 APPENDICES

Appendices should be listed individually in the Table of Contents, if included, or at the end of the body of the procedure if a Table of Contents is not included.

A procedure that produces a document should have the format and content elements of that document summarized in an appendix (as does QAIP 5-1, in this appendix) unless the material is more appropriately located in the body of the procedure.

Descriptive information used to provide background material or explanation that cannot be succinctly given in a note should be summarized in an appendix entitled Description.

APPENDIX C  
PROCEDURE CATEGORIES

- 1 Organization
- 2 Quality Assurance Program
- 3 (not used)
- 4 Procurement Document Control
- 5 Implementing Documents
- 6 Document Control
- 7 Control of Purchased Items or Services
- 8 (not used)
- 9 (not used)
- 10 Surveillances
- 11 (not used)
- 12 Control of Measuring and Test Equipment
- 13 (not used)
- 14 (not used)
- 15 (not used)
- 16 Corrective Action
- 17 Quality Assurance Records
- 18 (not used)
- 19 Software and Electronic Data Management
- 20 Scientific Investigation and Sample Control

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 6-3

CONDUCTING AND DOCUMENTING REVIEWS OF DOCUMENTS

Revision 04

Effective Date: 10-31-96

Author: Thomas F. Ehrhorn  
Thomas F. Ehrhorn

Date: 10/4/96

Concurrence: R.R. Richards  
QA Reviewer R.R. Richards

Date 10/14/96

Approval: F. Schilly for M.C. Brady  
SNL CRWM Lab Lead

Date: ~~10/3/96~~  
10/31/96 F/S 10/31/96

M.C. Brady approval signature on faxed copy of this page in Document Control Records.

CONTROLLED DOCUMENT  
(If Numbered in Red Ink)

Copy Number: 000001

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## REVISION HISTORY

Revision	Summary
00	Replaced DOP 3-13, Rev C. Changed title to new organizational structure. Used QAIP 5-1 format. Clarified the review requirements. Responded to CARs YM 92-070 and YM 92-072.
01	Added QARD requirements from the new QARD and updated references.
02	Updated references and applicable use of DRC form. Added a records submittal step. Responded to SNL YMP CAR 94-46.
03	Added step to section 5.3 to consider the impact on other documents if errors or mandatory changes were noted in the technical review. Modified Document Review and Comment Form to include criteria checklists. Responded to YMP QAD CARs 95-15, 95-16, and 95-17.
04	Modified procedure to comply with the new QARD. Changed format slightly to agree with current QAIP 5-1.

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## 1.0 PURPOSE

---

The purpose of this procedure is to establish requirements for initiating technical, management, and quality assurance (QA) reviews and for documenting comments and resolutions encountered in performing such reviews, as required by Sandia National Laboratories Civilian Radioactive Waste Management (CRWM) procedures.

---

## 2.0 SCOPE

---

This procedure prescribes the method for initiating a technical review (or a management or QA review) and for documenting reviewer comments and resolutions that result from performing documented, traceable, independent reviews, as required by SNL procedures, including changes. This procedure shall be used to conduct and document the reviews of Quality Assurance Implementing Procedures (QAIP 5-1), Work Agreements (QAIP 1-5), Technical Procedures (QAIP 20-1), SAND Documents (QAIP 6-2), SNL Letter Reports (SLTR) (QAIP 6-2), and whenever specified in a controlling Work Agreement or other implementing procedure.

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## 3.0 DEFINITIONS

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**Discretionary Comment:** Any comment that can be resolved by an editorial change or a minor change or any comment that the reviewer defines as discretionary.

**Editorial Change:** The following items are considered editorial changes: correcting grammar or spelling, renumbering sections or attachments which do not affect the chronological sequence of work, changing the title or number of the document, and updating organizational titles with no change in responsibilities.

**Management Review:** A review to confirm acceptance of the documentation being reviewed and to assess any impacts on CRWM projects.

**Mandatory Comment:** Any comment that does not meet the definition of a discretionary comment.

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*Continued on next page*

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### 3.0 DEFINITIONS, Continued

**Minor Change:** A change which does not affect the implementation of Quality Assurance requirements.

**Quality Assurance Review:** A review to provide assurance that the documentation being reviewed is consistent with SNL procedures, that appropriate QA requirements have been met, and that appropriate quality requirements have been incorporated in the documents.

**Technical Review:** A documented, traceable review of technical work performed by qualified personnel who are independent of those who performed the work but who have technical expertise at least equivalent to those who performed the original work.

### 4.0 PROCEDURE

#### 4.1 Preparation

Responsible Individual(s)	Step	Procedure
Review Requester	1	<p>Shall determine the personnel who are to perform the review.</p> <ul style="list-style-type: none"> <li>a. Shall ensure that each organization affected by a document reviews the document and changes to it.</li> <li>b. Shall ensure that each technical discipline affected by a document reviews the document and changes to it.</li> <li>c. Shall ensure that the Quality Assurance organization reviews changes to documents if they reviewed the previous version regardless of whether or not QA is affected by the change.</li> <li>d. Shall ensure that personnel selected to perform the review are qualified in accordance with QAIP 2-6. However, personnel selected to perform technical document reviews because of their expertise do not require SNL CRWM training or orientation. Training to QAIP 6-3 is recommended. The person requesting the review is responsible for documenting the basis for using the individual in a memo and placing it in the QAIP 6-3 review package.</li> </ul>

Continued on next page

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## 4.0 PROCEDURE, Continued

### 4.1 Preparation (continued)

Responsible Individual(s)	Step	Procedure
Review Requester (Continued)	2	Prepares a Document Review and Comment (DRC) form (Appendix A) for each individual selected to perform the review.  Note: The review requester shall specify the criteria to be used to perform the review and shall ensure that each reviewer is provided with those criteria (e.g. procedure checklists or review guidelines). Example criteria are printed on the reverse of the DRC form. While it is not mandatory to use those criteria, the review requester shall ensure that the review criteria consider applicability, correctness, technical adequacy, completeness, accuracy, and compliance with established requirements.
	3	Shall distribute copies of the document and applicable forms to reviewers. Shall also make all pertinent background information or data available to the reviewer if the information is not readily available to the reviewer and the reviewer requests it.

### 4.2 Conduct of Review

Responsible Individual(s)	Step	Procedure
Reviewers	1	Conduct the review in accordance with specified criteria and document mandatory comments on the DRC form.  Note 1: Mandatory comments may also be noted on the document being reviewed in reproducible ink and referenced on the DRC form. In this case, the marked-up pages of the document will be attached to the DRC form.  Note 2: The reviewer may use DRC forms for discretionary comments; however, such use is not required.
	2	If there are no mandatory comments, shall complete the DRC form, note that there were no mandatory comments, and return review materials to the author/requester.

## 4.0 PROCEDURE, Continued

### 4.3 Comment Resolution

Responsible Individual(s)	Step	Procedure
Author/Requester	<p>1</p> <p>2</p> <p>3</p>	<p>Shall resolve comments with the reviewer's assistance to reach agreement on resolutions.</p> <p><b>Note 1:</b> Differences of opinion on comments and/or resolutions should be decided by higher management levels when necessary to assure the adequacy of the review document.</p> <p><b>Note 2:</b> Differences of opinion on comments and/or resolutions in QA matters should be handled in accordance with QAIP 1-4, "Resolution of Quality Assurance Disputes".</p> <p><b>Note 3:</b> Discretionary comments do not need to be resolved.</p> <p>Document comment resolutions on the DRC form and forward to the reviewer for acceptance.</p> <p>If mandatory comments are noted in the technical review, then the potential impact of these conditions on other documents will be assessed.</p> <p><b>Note:</b> If there is an impact on other documents, the author/requester will initiate a review of the conditions by correspondence, a Procedure Action Request, a Deficiency Document, or other appropriate means.</p>
Reviewer	4	<p>Document acceptance of comment resolution on the DRC form and return to author/requester.</p> <p><b>Note 1:</b> If the document has a cover page which is to be signed, the reviewer may indicate acceptance of the comment resolution by signing the cover page of the document either in place of, or in addition to, signing the DRC form. If the reviewer signs the cover page and not the DRC form, the author/requester will check "Accepted" and enter "N/A - Signed Document" in the "Resolution Review Status" block of the DRC form.</p> <p><b>Note 2:</b> If the resolution is not acceptable, shall document rejection on the DRC form, return form to author/requester, and repeat Step 1 of this section.</p> <p><b>Note 3:</b> Comments resulting from the review shall be documented and mandatory comments shall be resolved before submitting the document for approval.</p>

Continued on Next Page

## 4.0 PROCEDURE, Continued

### 4.3 Comment Resolution (continued)

Responsible Individual(s)	Step	Procedure
Author/Requester	5	Process the DRC form and associated documentation in accordance with applicable document procedures (e.g. QAIP 1-5 for Work Agreements).

## 5.0 RECORDS

There are no records generated by this procedure. The records requirements for the Document Review and Comment Forms for mandatory comments are defined by the procedure or other document that specified the review (e.g. QAIP 1-5 for Work Agreements).

Note: Documentation of discretionary comments is not required to be maintained.

## 6.0 REFERENCE

QAIP 1-4	Resolution of Quality Assurance Disputes
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APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Document Review and Comment (DRC) Form</h2>
<b>REQUESTER:</b> _____	
From Requester/Orgn. _____	Date: _____
To Reviewer/Orgn. _____	Due Date: _____
Document Number _____	Revision: _____
Title (optional): _____	
Review Type: <input type="checkbox"/> Independent Technical <input type="checkbox"/> QA <input type="checkbox"/> Management <input type="checkbox"/> Other	
If Other, specify type: _____	
Section(s) of document to be Reviewed and Review Criteria (sample criteria on back)	
<small>Note: Unless noted otherwise, the entire document is to be reviewed using the criteria on the reverse of this form appropriate to the type of review.</small>	
<b>REVIEWER</b> _____	
Comment number _____ of _____	Location: _____
This comment is: <input type="checkbox"/> Mandatory <input type="checkbox"/> Discretionary	
Reviewer's Signature: _____	
Date: _____	
<b>REQUESTER</b> _____	
Resolution: _____	
Requester's Signature _____	
Date: _____	
<b>REVIEWER</b> _____	
Resolution Review Status: <input type="checkbox"/> Accepted <input type="checkbox"/> Not Accepted	
<input type="checkbox"/> Conditionally Accepted (specify terms) _____	
Reviewer's Signature _____	
Date: _____	

## APPENDIX A (Continued)

### INSTRUCTIONS AND CRITERIA FOR DOCUMENT REVIEW AND COMMENT FORM

#### INSTRUCTIONS

- A. Review Requester will complete top portion of form. Author/Requester will provide the Document Review and Comment (DRC) Form, along with the document to be reviewed, to the Reviewer.
- B. Reviewer will review the subject document, applying criteria as specified. Comments will be recorded in the "Reviewer" portion of the form, one comment per DRC form. Sign the DRCs and return them to the Author/Requester. If no mandatory comments are made, omit items C and D below.
- C. Author/Requester will resolve the mandatory comments and record them in the "Requester" portion of the form, sign the DRCs, and return them to the Reviewer.
- D. Reviewer will indicate disposition of comment resolution in the "Reviewer" portion, sign the DRCs (or document cover page), and return form to the Author/Requester.

#### SNL CRITERIA CHECKLIST FOR TECHNICAL REVIEWS (EXAMPLE)

Technical reviews are in-depth critical reviews, analyses, and/or evaluations of documents, material, or data that require technical verification and/or validation for applicability, correctness, technical adequacy, completeness, and accuracy. Consider such technical problem areas as method, data, results, assumptions, calculations, and software.

- Is the technical problem addressed by this document clearly identified?
- Is the method that will be used to address the technical problem clearly identified?
- Are the data that will be used to address the technical problem clearly identified and has traceability of the data been maintained?
- Is the scope of the work performed and the results obtained sufficient to merit documentation (i.e., are there big gaps in the methods, analysis, results and/or conclusions that require more work be done before publication)?
- Are the assumptions, if assumptions are required, clearly stated?
- Have the calculations or other logical procedures required to implement the method been performed in such a manner that the receiver clearly understands how the solution was obtained?
- Is the solution or result clearly stated?
- Has the problem been correctly identified or has the author solved the wrong problem?
- Is the method used to solve the problem the method that was identified?
- Has the author chosen an appropriate method for the solution of the problem and is this method capable of producing results with the accuracy reported?
- Is there sufficient background information or review of previous work given so that the results presented can be placed in proper context?
- Are the data chosen the correct data to use in the problem solution and are these data capable of producing results with the accuracy reported?
- Are the assumptions stated appropriate for the problem and are the limits placed on the solution to the problem by these assumptions clearly identified?
- Have the calculations or other logical procedures required to implement the method identified been performed correctly?
- Are the symbols, etc., used in the tables and graphs clearly defined in the figure or in the text?
- Is the result reported by the author supported by the method, data, assumptions, and calculations?
- Are there sections of the document that are extraneous to the flow of the technical discussion? If so, should they be removed completely or placed in an appendix?
- Are the substantiating references cited appropriate and complete?
- Does the reviewer agree with the author's approach and solution to the technical problem?
- Is proper credit given to other contributors (either direct contributors who are authors or contributors through reference material cited)?

#### SNL CRITERIA CHECKLIST FOR QUALITY ASSURANCE REVIEWS (EXAMPLE)

A Quality Assurance review assures that documentation is consistent with procedures and that appropriate QA requirements are met and incorporated in the review documents

- Does the document adhere to the format and content requirements of any governing procedure? (e.g., 1. For technical reports, have a WBS number and Work Agreement/revision number been identified? 2. Have data that were used as input to the work or reported as output been appropriately identified as either "qualified data" or "not qualified data"?)
- Are reviews and approvals as required by governing procedure?
- If baseline documents were used as the basis for this document: were the correct versions of those baseline documents used?
- Are applicable QA requirements adequately incorporated/cited?

#### SNL CRITERIA CHECKLIST FOR MANAGEMENT REVIEWS (EXAMPLE)

A Management review confirms acceptance of the documentation being reviewed and assesses impact to YMP

- Does this technical report respond to and adequately meet customer (YMPO) needs, requirements, and expectations?
- Is it consistent with YMP policy?
- Is there evidence that it is consistent with YMP organizing principles (requirements documents, APs, YAPs, etc.)?
- Were the proper reviews done and documented?
- Is there significant impact on Project milestones, budget, or schedule?
- Is the position presented supported by Sandia National Laboratories?

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 17-3

PROCESSING, STORING, AND PROTECTING CRWM QA RECORDS

Revision 03

Effective Date: 11-13-91

Author: *Marlene F. Tucker*  
Marlene Tucker

Date: 11/13/91

Concurrence: *Robert R. Richards*  
Robert R. Richards, QA Reviewer

Date: 11/13/91

Approval: *Michael C. Brady*  
Michael C. Brady, SML CRWM Lab Lead

Date: 11/13/91

CONTROLLED DOCUMENT  
(If Numbered in Red Ink)

Copy Number: 000001

## REVISION HISTORY

Revision	Summary
01	This revision included sections 3.0, 4.1, 4.2, 4.4, and 5.0. The changes included rewording the same as QAIP 17-1, change definition of "record source" to allow all YMP personnel to process records, add the use of the Record Deficiency Form, change System 60 to DOE-26, and missing QARD, Rev. 4 requirements in section 4.2. This revision was generated because there was a need to identify individuals who may process records, new paragraph to deal with records that a) were prepared prior to issuance of the first Project QA records management procedure on August 15, 1955, b) have been received from non-project parties, thus not meeting YMP requirements, or c) are older project records which have only recently been located and do not meet present requirements, and to incorporate missing QARD wording.
02	Total rewrite of procedure, including the following: adding lifetime and non-permanent QA record requirements and adding Appendix A. This revision was generated because of QARD & YAP-17.1Q requirements.
03	This revision was a total rewrite including the following: incorporated ICN 1 Rev 2, coordinating rewording of QAIP 17-1, Rev 3, formatting of QAIP 5-1 rev 5, and new QARD requirements. This revision was a result of new QARD, Rev 5, requirements that need to be incorporated. Additionally, changes resulting from deficiency YM95-D055 has been incorporated.

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4.2 Storing and Protecting CRWM QA Records .....	5
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## 1.0 PURPOSE

---

This procedure describes the system by which the Local Records Receiving Organization (LRRO) staff processes, stores, and protects Civilian Radioactive Waste Management (CRWM) QA Records.

---

## 2.0 SCOPE

---

This procedure applies to all CRWM QA records generated by or for Sandia National Laboratories (SNL). Records generated prior to August 1985 are excluded from this procedure. The systems used to implement this procedure may be used for non-QA records.

---

## 3.0 DEFINITIONS

---

**Accession Number** - A unique identification number assigned to each record to be processed

**Administrative Changes** - Administrative changes are those used to enhance legibility, correct typographical errors, make editorial changes, add or enhance titles, label privileged records, and add or correct page counts or page numbering

**Authentication** - The act of attesting that the information contained within a document is accurate, complete, legible, and appropriate to the work accomplished

**Data** - Information developed as a result of scientific investigation activities, including information extracted from reference sources and performance assessment analyses

**DOE-28** - A records system designator referring to the Department of Energy (DOE) record system 28, General Training Records

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### 3.0 DEFINITIONS, Continued

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**E-Mail Record** - Information transmitted or received by the electronic mail system that meets the definition of a QA record. E-Mail records are authenticated by the fact that the Record Source submits them to the LRRO by selection of the address "YMP Mail Account"; or they may be printed and initialed or signed by the Record Source and submitted per Section 4.2 of QAIP 17-1.

**Lifetime QA Record** - A QA record that provides evidence of the following

- a. Quality of items on the YMP Q List, YMP/90-55.
- b. Quality of activities related to items on the YMP Q List, YMP/90-55
- c. Quality of site characterization data and samples.
- d. Activities that provide data and information used to assess the potential dispersion of radioactive materials from the proposed licensed facility.
- e. Training and qualification of individuals executing QA program requirements

In addition, implementing documents and documents that specify technical or quality requirements are also lifetime QA records

**Local Records Receiving Organization (LRRO) Staff** - Persons within the Local Records Receiving Organization who are responsible for processing, storing, and protecting CRWM records

**Nonpermanent QA Record** - A QA record that does not meet the criteria of a Lifetime QA Record but provides objective evidence that the QA program has been properly executed

**Privileged Record** - A record to which access is controlled due to statutory, legal, or security requirements

**QA Record** - A completed document that furnishes evidence of (1) the quality and completeness of items and activities affecting quality, or (2) the implementation of quality assurance programs, and which has been generated, completed, and authenticated. A complete QA record is an original, reproduced copy, or e-mail record of a document that will receive no more entries and whose revision would be subject to a change control process.

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*Continued on next page*

### 3.0 DEFINITIONS, Continued

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**Record Package** - A collection of records supporting one topic that is processed as a single record.

**Record Source** - Any individual (within the constraints that follow) performing SNL CRWM activities who, by means of their position, function, or the nature of the work, generates or receives and submits QA records or QA record packages to the Local Records Receiving Organization. Such individuals must be either SNL employees or employees of SNL contractors for the CRWM Program and must be trained on the provisions of QAIP 17-1

**Temporary Storage** - A container or facility bearing an Underwriter's Laboratories label (or equivalent) with a fire rating of 1-hour or 2-hour fire protection or which has been certified by a person competent in the technical field of fire protection.

**Unique Records** - Records that require unique handling because they cannot be duplicated or microfilmed due to their physical form (one-of-a-kind records) or cannot be filmed on 16 mm roll film (special processed records)

---

### 4.0 PROCEDURE

---

#### 4.1 Processing CRWM QA Records/Record Packages

Responsible Individual(s)	Step	Procedure
LRRO	1	Shall verify receipt of submitted records and record packages on the records submittal form received from the records source and return a copy of the form as requested by the record source
	2	Shall ensure that record is legible and complete and that any corrections have been made in accordance with QAIP 17-1.

*Continued on next page*

## 4.0 PROCEDURE, Continued

### 4.1 Processing CRWM QA Records/Record Packages (continued)

Responsible Individual(s)	Step	Procedure	
LRRO (Continued)	3	Shall verify that no portions of a page are missing due to tearing or folding of record edges, and that no information is unintentionally obliterated. When part of a record is intentionally obliterated (e.g. dollar amounts in procurement records), shall ensure that a statement signed and dated by the appropriate Record Source is included with the record and indicates that the obliterated information does not impact the technical meaning or content of the record	
	4	Shall inspect records or record packages to verify that they contain the information required by QAIP 17-1, section 4.2 steps 4a and 4b.	
	5	Shall verify that the package includes the records and cross reference sheets listed on the Table of Contents	
	6	Shall verify that machine readable records are labeled and submitted with Machine Readable Media Forms	
	7	Shall check the YMP E-Mailbox weekly for the submission of E-Mail records. These records will be printed and checked for the complete header, mail envelope information sheet, status sheet, distribution list, and attach this information to the message before it is accepted and filed. If the information is incomplete, the LRRO Staff will contact the records source for the missing information	
	8	Shall ensure that QA records or record packages have been authenticated	
	9	Shall add appropriate labeling such as "privileged" and may make administrative changes to records without obtaining reapproval from the originating organization	
	10	Shall resolve other discrepancies in records or record packages either through direct interaction with the record source or by formally rejecting the record.	

Continued on Next Page

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## 4.0 PROCEDURE, Continued

### 4.1 Processing CRWM QA Records/Record Packages (continued)

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	11	<p>Shall complete processing of records/record packages by:</p> <ul style="list-style-type: none"> <li>a. generating a listing of the records being transmitted.</li> <li>b. attaching a special instruction sheet to unique training and procurement records and including one in the transmittal package to identify those being transmitted under separate cover.</li> <li>c. transmitting records to the YMP Records Processing Center (RPC) within 90 days of completion.</li> </ul>
	12	<p>Shall replace, restore, or substitute a lost or damaged record by obtaining another copy of the record or a substitute record, if available, from the record source.</p> <p><b>Note:</b> If replacement or restoration is not practical, the record shall be processed into the records management system through the completion of the OCRWM corrective action process. The deficiency document shall provide documentation stating the impact of the illegible or incomplete information on future, in-process, or completed work. A copy of the deficiency document, when completed, becomes part of the records package for which it was generated.</p>

### 4.2 Storing and Protecting CRWM QA Records

Responsible Individual(s)	Step	Procedure
LRRO	1	Shall provide temporary storage of records submitted to the LRRO in dual storage or a certified 1 hour minimum fire rated safe or container until transmitted to the YMP RPC

Continued on Next Page

## 4.0 PROCEDURE, Continued

## 4.2 Storing and Protecting CRWM QA Records (continued)

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	2	Prevents damage to records from moisture, temperature, and pressure. Makes provisions to protect magnetic media and special processed records from excessive light, stacking, electromagnetic fields, radiation, temperature, humidity, and accidental or deliberate alteration or erasure of information. Stores and maintains records in a manner which minimizes the risk of damage or destruction from natural disasters and adverse environmental conditions
	3	Precludes the entry of unauthorized personnel into the storage area(s) of the LRRO by <ul style="list-style-type: none"> <li>a locking all entrances to the LRRO when LRRO staff are not present and</li> <li>b posting a list that designates those personnel who shall have access to records, including privileged records</li> </ul>
	4	Maintains control and accountability for records within the LRRO by <ul style="list-style-type: none"> <li>a posting a notice advising individuals that all records removed from the LRRO must be logged out and that records should be returned to the LRRO and logged in before the close of business the same day.</li> <li>b restricting access to hard copy and microfilm holdings of all privileged (DOE-28 and procurement) records to those personnel listed on the Records Center Access List.</li> <li>c providing documentation of access to DOE-28 (training, certification, and qualification) records, and</li> <li>d verifying at the close of business each day that all QA records logged out have been logged in and, if not, contacting the individual who logged out the record to ensure that the record is under the individual's control and protection.</li> </ul>

## 5.0 RECORDS

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QA records and record packages, including corrections and changes thereto, generated as a result of implementing this procedure shall be prepared and submitted to the Local Records Receiving Organization in accordance with QAIP 17-1, "Processing, Preparing, and Submitting CRWM QA Records".

The QA record package segments and record packages include:

- Record Center Access List (NONPERMANENT)
  - Documentation of access to DOE-28 records (NONPERMANENT)
- 

## 6.0 REFERENCES

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QAIP 17-1	Protecting, Preparing, and Submitting CRWM QA Records
AP-16 10	Performance Deficiency Reporting
AP-16 20	Corrective Action and Stop Work
YAP-17 10	Records Management Requirements and Responsibilities
DOE/RW-0333P	Quality Assurance Requirements and Description
YMP/90-55	YMP Q-List
	Privacy Act Issuances, 1993 Compilation

---

**From:** Amy V. Martinez  
**To:** 6850, 6851, 6852  
**Date:** 11/25/96 8:44am  
**Subject:** QAIP 17-3

QAIP 17-3 Rev. 3, Processing, Storing, and Protecting CRWM QA Records, has been issued - effective November 13, 1996.

Rev. 3 is a complete rewrite of the procedure and is a result of the new QARD, Rev. 5 requirements. This revision also includes the following: ICN 1, Rev 2 changes, rewording of QAIP 17-1, and formatting of QAIP 5-1, Rev 5.

**From:** Amy V. Martinez  
**To:** 6850, 6851, 6852  
**Date:** 11/26/96 10:05am  
**Subject:** Issuance of QAIP 17-1 Rev 3

QAIP 17-1Rev 3, Protecting, Preparing, and Submitting CRWM QA Records has been issued, effective November 19, 1996.

This is a total rewrite of the procedure and include the following:

- added requirements from YAP 17-1Q,
- added Appendix B for records submittal,
- formatted the procedure according to QAIP 5-1 Rev 5, and
- included the new QARD requirements.

Additionally, changes resulting from deficiencies YM-96-D084 and YM-96-D085 have been incorporated.

**CC:** amarti5

Managers: Please distribute to your SNL YMP staff.

## SNL Civilian Radioactive Waste Management

# Quality Assurance Advisory

November 27, 1996

WBS: 9.1.3.2

QA:N

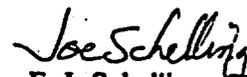
(1 page)

### New Record Source Responsibilities

QAIP 17-1, "Protecting, Preparing, and Submitting OCRWM QA Records," Rev.03 became effective 11/19/96. This revision introduces some new and modified requirements that SNL YMP staff need to be aware of and comply with for records they generate as "records sources." It is highly recommended that you read QAIP 17-1, Rev. 03 and understand the changes summarized below:

- As always, include in the upper right corner the WBS #, QA designator, and date. The big change is now you have to complete the QA designator field (which the LRC used to do for us).
- There are 3 possible QA designators (See the definitions in QAIP 17-1, Sec.3.0.):
  1. QA: N/A for non-QA records
  2. QA:N for "NON-PERMANENT" QA records—A QA record that isn't a "LIFETIME" QA record, but demonstrates that the QA program is being properly executed.
  3. QA:L for "LIFETIME" QA records—These include controlled documents, training records, and most importantly for technical staff, QA records that provide evidence of the quality of site characterization data and samples and of activities subject to the QARD.  
[Note: QA designators for records generated by executing a procedure will be defined in each procedure as they are updated; in the interim, these definitions are available online in NWMP Applications as the "List of Lifetime and Non-Permanent QA Records."]
- State the number of pages of a record on the first page (preferably below the QA designator), and include an SNL NWM filecode preferably in the lower left corner.
- The requirement to include (SCP:B:N/A) or (SCP:B:x.x.x.x) in the title has been removed, but the need to provide a title that clearly indicates the content and/or purpose of the record is emphasized.
- Records are submitted using the LRRO Submittal Form (QAIP 17-1, App.B)—The procedure requires the record source to submit the form, but I think we can still ask our secretaries to do this step for us.
- Finally, QAIP 17-1 has additional requirements for record packages, for which it's noted that:
  - If any record in a package is a "LIFETIME" record, then the entire record package is designated QA:L. (It's recommended that any non-QA information in such a package be identified as such.)
  - At the other extreme, if everything in the package is non-QA, then the entire record package is designated QA:N/A.

Please do not hesitate to contact either myself or Peg Warner if you have any questions on this advisory.



F. J. Schelling, CRWM QA Lead

#### Distribution:

MS-1399 M.C. Brady, 6850  
MS-1399 J. J. Danneels, 6853  
MS-1326 H. A. Dockery, 6851  
MS-1325 L. S. Costin, 6852

MS-1324 P. B. Davies, 6115  
MS-1335 S. Y. Pickering, 6811  
YMP:9.1.3.2:QAP:QA:QA Advisory

P. 680676

QAIP	Record	Designator
3-4	Design Investigation Memo (DIM) and All Revisions	(N)
	Closing Memo	(N)
	DIM Task File	(N)
3-12	Certification of Peer Reviewer Qualifications and Independence	(L)
	Peer Review Initiation Letter	(N)
	Peer Review Plan and Revisions	(N)
	Peer Review Notification Letter and Revisions	(N)
	Document Review and Comment Sheets or Equivalent	(L)
	Peer Review Meeting Report(s) and Revisions	(N)
	Peer Review Report and Revisions	(L)
	Peer Review Checklist (if used)	(N)
	All Dissenting Opinions	(L)
	Any Related Correspondence or Data Required to Complete the Record of the Peer Review and Actions	(L)
4-1	Procurement Planning Checklist (PPC)	(N)
	Purchase Requisition (PR)	(N)
	Request for Quotation/Proposal (RFQ/RFP)	(N)
	Contract	(L)
	Change Requisition(s) (CR)	(N)
	Amendment(s)	(L)
	Support Documentation (e.g. Sole-source/sole-make justification forms, memoranda, acquisition plans, supplier evaluation reports, etc.)	(N)
5-1	No records	
6-1	Original Copy of the Controlled Document	(L)
	Request for Distribution/Recall of a Controlled Document Form	(N)
6-2	Document Review and Comment (DRC) Forms for Independent Technical, QA, and Management Reviews	(L)
	Cross Reference to Peer Review Records Submitted to the LRRO in accordance with QAIP 3-12 (Peer Reviewed Documents Only)	(L)
	Manuscript Review Sheet or Letter Report Review Sheet	(N)
	TPO Transmittal Letter to YMPO without enclosures (SAND Documents Only)	(N)
	Other Transmittal Letters to/from YMPO Regarding Comment Resolution (SAND Documents Only)	(N)
	YMPO Approval Letter with Competed DRSs (SAND Documents Only)	(N)
	Final SAND or SLTR Document as Published or Issued	(L)
6-3	No records	
7-1	Documentation of Acceptance of Services (e.g. Copies of SNL Invoice Action Forms)	(N)
	Certificates of Conformance	(N)
7-3	Contractor's QA Program Document and Transmittal Letter	(L)
	DRC Form or Review Checklist (Final Resolution Copy)	(N)
	QA Program Evaluation Transmittal Letter (Final Resolution Copy)	(N)
	QA Program Acceptance Letter (Final Resolution Copy)	(L)
10-1	Surveillance Report	(N)

QAIP	Record	Designator
12-1	M&TE Calibration Certificates or Reports Supporting Calibration Documents	(N) (N)
17-1	No records	
17-2	See the Procedure	
17-3	Records Center Access List Documentation of Access to DOE-28 Records	(N) (N)
19-1	Baseline Documentation Change Requests Software Use Forms	(L) (N) (L)
20-1	No records (See Note Below)	
20-2	Approved Scientific Notebooks and Supporting Documentation	(L)
20-3	Original Chain of Custody Forms and Photocopies of the Forms After Each Sample Transfer Any Special Shipping Documentation	(L)  (L)

**Note:** All records generated as a result of implementing Technical Procedures shall be designated "Lifetime" unless specifically designated nonpermanent in the Technical Procedure.

**Identification of Lifetime and Nonpermanent  
Quality Assurance Records  
11/19/96**

**NOTE:** Lifetime/Nonpermanent designations in individual procedures take precedence over the ones in this list.

QAIP	Record	Designator
1-2	No records	
1-4	Dispute Identification Documentation	(L)
	Dispute Resolution Documentation	(L)
	Dispute Evaluations	(L)
	Dispute Escalations	(L)
1-5	Original Work Agreement	(L)
	Work Agreement Revisions	(L)
	Completed Document Review and Comment Forms for Mandatory Comments	(N)
	Records Documenting Any Temporary Revisions Memoranda	(L)
		(N)
2-2	Study Plan Draft and Subsequent Revisions (The final is maintained by OCRWM.)	(N)
	Related Review and Comment Forms	(N)
2-4	Analysis and Review Documentation (e.g. the scientific notebook(s) for the analysis)	(L)
2-5	Certification of Personnel Qualification (QAIP 2-6, Appendix A)	(L)
	Training Assignment Form (Appendix A)	(L)
	Training Confirmation Form (Computer Generated)	(L)
	Individual Training Attendance Record (Appendix D)	(L)
	Qualification of Trainer (Appendix B)	(L)
	Lesson Plan Cover Sheet (Appendix C and Attachments)	(N)
	Course Evaluation (Developed by Trainer)	(N)
	Request to Provide Training (Appendix E)	(N)
	Memorandum of Instruction	(N)
2-6	Certification of Personnel Qualifications Form	(L)
	Related Records such as Resumes, Correspondence, Records of Telephone Conversations, and "Employee Placement Reports" if necessary to support the certification	(L)
	Periodic Evaluation of Personnel Proficiency Form	(L)
2-9	Notification to Perform Readiness Review	(N)
	Review Plan	(N)
	Review Report	(L)
	Other Documentation Providing Objective Evidence of Process Completion	(N)



Sandia National Laboratories

Operated for the U.S. Department of Energy by  
Sandia Corporation

Albuquerque, New Mexico 87185-1330

date: July 25, 1996

WBS:1.2.5.3.5.

1.2.11.

to: File

QA

from:   
M.C. Brady  
YMP Project Lead

subject: Delegation of Authority for Participant Data Archive Staff for Procedure Implementation of QAIP 17-2, Rev 02 "Participant Data Archive (PDA)" (SCPB:NA)

This memo serves to clarify and provide Delegation of Authority for Sandia Participant Data Archive (PDA) personnel to act as "designee" for YMP Principal Investigators (PI's) for the following procedure activities within QAIP 17-2, Rev. 02.

Section 4.2 PDA Staff Responsibilities clearly states "Assisting the PI with preparation of data release" and "Assisting the Record Source in compilation of data sets as record packages" however, specific procedure activities were not defined. To provide this clarification and to document approval of the completion of these activities I submit this clarification to the record.

Specific procedure activities which may be completed by the PDA staff per verbal direction of the PI are:

- fill out Appendix A - PDA Data Set Opening Index Form's
- fill out Appendix B - PDA Data Set Segment Submittal Form's
- fill out Appendix C - PDA Data Set Segment Inventory Form's
- fill out Appendix D - PDA Data Set Status Tracking Form's
- fill out, sign as "checked by", Appendix F - Technical Data Information Form (TDIF)
- fill out Appendix H - SNL/PDA Computer Magnetic Tape File Properties

This memo also serves to provide retroactive Delegation of Authority to the effective date of this procedure as the original intent of the term "designee" as part of the PI Responsibilities was to include the Participant Data Archive staff.

YMP: 1.2.5.3.5 and 1.2.11;PM;QA;Participant Data Archive, Delegation of Authority  
YMP-CRF

P. 72 of 76



**Sandia National Laboratories**

Operated for the U.S. Department of Energy by  
Sandia Corporation

Albuquerque, New Mexico 87185-1330

WBS#: 1.2.12.5

QA: N

5 pages

date: 11/4/96

to: Joe Schelling, QA, Org. 6811

from: Peggy Warner, Records Manager, Org. 6811 *PW*

subject: Corrective Action Research Results for YMQAD 96-D084: Record Correction Process  
(SCPB: NA)

#### Item I

I reviewed the attached two listings of records to determine the extent of necessary corrective actions relative to the implementation of the QAIP 17-1, Rev 02, "record correction process". Handwritten notes on the attached lists ( 3 pages) indicate the added or corrected information and the required action to correct. This review covers those records identified by the auditor in Block 6 of the original DR and an additional twenty records to determine the extent of condition.

A review of the records in question revealed that the corrections/additions made by the records management staff were to assure that the records management program required format of indexing information was in the proper location on the first page of the record. The QA designation was copied from the information placed within the file code located in the distribution list by the Record Source. In most cases the WBS number and the page count had been added to the upper right corner of the record. These corrections/additions were provided to assure that the records would be indexed into the Records Information System (RIS) in Las Vegas.

The added information or changes to information did not have any negative impact on the QA status of the records or the work they represent. There is no impact to content change of the document or quality of the content of the records. As such they do not warrant the time and cost of gathering initials and dates of record sources and the resubmittal of the records to the records management system.

#### Item II

The form CRWM 17-1.3/1-1 (08/16/96) "Record Deficiency and Justification Form" Appendix C of QAIP 17-1, Rev. 03 (which is presently in draft) has been revised to remove the selection section regarding correction of records. A sample copy is attached (1 page) for verification purposes.

YMP: 1.2.12.5 and 9.1.3.2; AUD;QA; DOE Audit, YMQAD 96-D084

RECORDS TRANSMITTAL FORM

LOCAL RECORDS CENTER - SNL DEPARTMENT 6310

YUCCA MOUNTAIN PROJECT

03/14/96

Page 1 of 2  
Transmittal # 643

Type	Record	Title / Subject	Pages	RMS Number	Other Info.
REC	09/01/95	LETTER: PREMATURE TERMINATION OF DRILLING AT USW SD-12 (NA to QA = correct)	8	SL*150498	N and pages added QA designations in file code
REC	09/21/95	MEMO, RE: STRAIN GAGE DATA FOR STEEL SETS #005 THROUGH SET #528 (NA to NR = correct)	1	SL*150499	QA designation in file
REC	09/12/95	MEMO, RE: STRAIN GAGE DATA REPORT REQUEST INSPECTION OF QUESTIONABLE GAGES (NA to NR = correct)	2	SL*150501	QA designations in file code
REC	10/16/95	LETTER, W/ENC., RE: QUARTERLY QA STATUS REPORT: PROPOSED FORMAT AND CONTENT GUIDE AND FY95 4TH QUARTER REPORT	9	SL*150504	added WBS#, QA designations, page #'s no initials or date
REC	10/03/95	MEMO, RE: QA PROGRAM TREND REPORT, FEBRUARY 1995 THROUGH JUNE 1995, AND QA PROGRAM REPORT, MAY THROUGH JUNE, 1995	5	SL*150505	QA designations N added, pages corrected
REC	09/19/95	MEMO, RE: PERFORMANCE ASSESSMENT RELATED CODES TOUGH2 AND FEHM ENTERED INTO M&O/SNL CONFIGURATION MANAGEMENT	1	SL*150506	added WBS#, QA designations, pages
REC	10/19/95	LETTER, W/O ENC., RE: TRANSMITTAL OF TSPA-1993 REPORTS	1	SL*150507	added QA in front. NA, pages
REC	10/20/95	LETTER, RE: ASSESSMENT METHODOLOGIES FOR COLLOIDS IN PERFORMANCE ASSESSMENT	1	SL*150508	10/18/96 PJW changed NA to NR NA to NR in QA designations
REC	11/02/95	MEMO, RE: REVIEW OF DRAFT TSPA 1995 REPORT, DATED AUGUST 1995	16	SL*150509	
REC	10/26/95	MEMO, RE: STAIN GAGE DATA RESULTS, PLOTS OF STRESS VERSUS TIME	1	SL*150526	changed NA to NR in file code

need correction =  
initial & date

added name to distribution. (originator no longer on project)

1----- (SNL RC Personnel Signature / Date) -----2  
| x *[Signature]* - 3/14/96 |  
3-----4

1----- CRF Receipt Acknowledgement / Date -----2  
| x |  
3-----4

1-- Comments / Discrepancies / Action Taken -----2  
| |  
3-----4

Type	Record	Title / Subject	Pages	RMS Number	Other Info.
REC	11/28/95	MEMO W/ENC., RE: STRAIN GAGE DATA REPORT <i>RMS SL# corrected appropriately</i>	2	SL*150527	<i>NA changed to NR. RA designation</i>
REC	11/28/95	MEMO, W/O ENC. RE: DATA RESULTS FOR THE NORTH RAMP STARTER TUNNEL (NRST) AND ALCOVE 1 THROUGH 11/17/95	2	SL*150528	<i>NA changed to NR. RA designation</i>
REC	11/28/95	MEMO W/ENC., RE: INTERIM REPORT ESF STRAIN GAGE DATA RESULTS THROUGH 11/17/95, PLOTS OF STRESS VERSUS TIME	1	SL*150529	<i>NA changed to NR. file code</i>
REC	12/06/95	LETTER, W/O ENC., RE: TRANSMITTAL OF SNL DELIVERABLE 611M43, "DATA FROM EVALUATING MINING METHODS IN THE NORTH RAMP", WBS 1.2.3.2.7.3.4 <i>(NA changed to RA = correct)</i>	2	SL*150530	<i>changed NA to N in RA designation, pages added</i>
REC	11/27/95	MEMO, RE: INSTALLATION OF B AND C STATION AT THE TSW1/TSW2 CONTACT AND THERMAL ALCOVE	1	SL*150531	<i>changed 10/18/96 pju</i>
REC	11/27/95	MEMO, RE: FREQUENCY OF CONVERGENCE MONITORING IN THE ESF	1	SL*150532	<i>changed NA to N, added pages, changed NR in file code to RA</i>
REC	11/21/95	MEMO, RE: TSW2 CONTACT IN THE ESF	1	SL*150533	<i>changed NA to N in RA designation, added page</i>
REC	11/21/95	LETTER, W/O ENC. RE: TRANSMITTAL OF MILESTONE 462M31, STUDY PLAN ENTITLED "STUDY PLAN FOR SEAL MATERIAL PROPERITES DEVELOPMENT," BY RAY FINLEY	1	SL*150534	<i>change NR to RA. file code</i>

1	-----2
Total Document Pages in Transmittal :	56
Total Documents in Transmittal :	18
3	-----4

*changed OBS#, added N to RA designation, added pages*

02/01/96

RECORDS TRANSMITTAL FORM  
LOCAL RECORDS CENTER - SNL DEPARTMENT 6310  
YUCCA MOUNTAIN PROJECT

Page 1 of 1  
Transmittal # 632

Type	Record	Title / Subject	Pages	RMS Number	Other Info.
REC	09/13/95	SURVEILLANCE REPORT SR95-13	5	SL*150472	- clean -
REC	09/28/95	CORRECTIVE ACTION REQUEST (CAR) 95-19, RELATED REPORT NO. SR95-02	33	SL*150473	WBS#, RA designat. pages added
		<i>no actual all other corrections</i>			
REC	07/27/95	CORRECTIVE ACTION REQUEST (CAR) 95-23, RELATED REPORT NO. SR95-03	10	SL*150474	same as above
		<i>10/12/96 PJP ok no actual corrections</i>			
REC	07/24/95	CORRECTIVE ACTION REQUEST (CAR) 95-29, RELATED REPORT NO. HOLO -A95-1	17	SL*150475	same as above
		<i>no actual corrections</i>			
REC	11/09/95	CORRECTIVE ACTION REQUEST (CAR) 95-31, RELATED REPORT NO. HOLO -A95-1	8	SL*150476	same as above on Fax page (NRAP?)
		<i>need initials &amp; date of records info. and Fax</i>			
REC	09/19/95	PERFORMANCE REPORT SNL-95-P5, RELATED REPORT NO. SR95-13	1	SL*150477	WBS#, RA designat. pages added
		<i>need initials &amp; date</i>			
REC	09/30/95	DEFICIENCY REPORT SNL-95-D-014, RELATED REPORT NO. SAND92-0450	27	SL*150478	same as above, d. correction on 1st pag
		<i>need initials &amp; date of records info. and date</i>			
REC	11/01/95	DEFICIENCY REPORT SNL-95-018	66	SL*150479	WBS#, pages add
		<i>need initials &amp; date</i>			
PACK	01/30/96	GRP: 1.2.12.2.5, CONTROLLED DOCUMENT SUPPORTING INFORMATION FOR QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP) 16-3, REV 02, "QUALITY ASSURANCE PROGRAM REPORT"	12	SL*150480	Request for Distrib Form (QAIP #)
		<i>no impact - apparent originator make the corrections</i>			
PACK	01/30/96	GRP: 1.2.12.2.5, CONTROLLED DOCUMENT SUPPORTING INFORMATION FOR QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP) 2-5, REV 03, "TRAINING"	22	SL*150481	- no corrections -

1-----2  
 | Total Document Pages in Transmittal : 201 |  
 | Total Documents in Transmittal : 10 |  
 3-----4

1----- SNL RC Personnel Signature / Date -----2  
 | X *[Signature]* 2/1/96 |  
 3-----4

1----- CRF Receipt Acknowledgement / Date -----2  
 | X |  
 3-----4

1-- Comments / Discrepancies / Action Taken -----2  
 | |  
 3-----4

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

**THIS IS A REPAIR STAMP**  
 Performance Report  
 Deficiency Report  
 NO. YM-96-D085  
 PAGE 1 OF 2  
 QA: L

**PERFORMANCE/DEFICIENCY REPORT**

1 Controlling Document: <b>QAIP 17-1, Revision 02</b>	2 Related Report No. <b>Audit YM-ARC-96-18</b>
3 Responsible Organization: <b>SNL</b>	4 Discussed With: <b>Nina Garcia, Eloise James</b>

5 Requirement/Measurement Criteria:  
 QAIP 17-1, Revision 02, Section 4.2.3. states in part, "The record source shall prepare individual records to include the following information on the first page of the record:  
 -SCPB number...  
 -total number of pages...  
 -"YMP CRF" Code...  
 Section 4.4 states in part, "The record source shall correct errors on records by scribing a single line through the incorrect information and entering the correct information in close proximity. Date and initial or sign the correction."

6 Description of Condition:  
 QA records have been processed and accepted without being in compliance with procedural requirements. The following SNL QA records were deficient in accordance with one or more of the requirements mentioned in Block 5 above, and some have been corrected by other than the record source:  
 RMS SL #150498, 150530, 150747 through 150752, 150505, 150531 through 150534, 150750, and 150233.

7 Initiator <b>Mario R. Diaz</b> <i>Mario Diaz</i> Date <b>8/1/96</b>	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
--	---

10 Recommended Action: (Not required for PR)

- Correct the records identified as deficient in accordance with procedural requirements.
- Review and evaluate other QA records to verify compliance with these requirements and make appropriate corrections of deficient records. Provide objective evidence of review, evaluation, and corrective actions.

11 QA Review: QAR <b>Mario R. Diaz</b> <i>Mario Diaz</i> Date <b>8-1-96</b>	12 Response Due Date <b>20 working days from issuance</b>
--	--

13 Affected Organization QA manager Issuance Approval: (QAR for PR) Printed Name <b>R.E. SPENCE</b> Signature <i>Robert B Constable</i> Date <b>8.7.96</b>
---

22 Corrective Action Verified QAR <i>Robert B Constable</i> Date <b>5/19/97</b>	23 Closure Approved by: (N/A for PR) <i>Robert B Constable</i> Date <b>5/21/97</b>
--	---

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

PR/DR NO. YM-96-D085  
PAGE 2 OF 2  
QA: L

**PERFORMANCE/DEFICIENCY REPORT RESPONSE**

**14 Remedial Actions:** Based upon a change to YAP-17.1Q and other procedures, it is no longer necessary to include the SCPB Number or the YMP CRF code on records. Therefore, QAIP 17-1 has been revised to remove those items from the requirements for records. This change is in the coordination cycle now. QAIPs 17-1 and 17-3 have been revised to permit the Records Center staff to make administrative corrections to records. Changes to both these procedures are currently in the coordination cycle. Records noted as deficient by the evaluator have been corrected.

**15 Extent of Condition: (Not required for PR)**

The research effort required to locate and correct all such deficiencies would be neither cost effective nor of value to the program as adding two codes that are no longer required would have minimal effect on quality. Because of the limited significance of this deficiency, there is no reason to conduct root cause determination nor to develop additional actions to preclude recurrence.

**16 Root Cause Determination: (Not required for PR)**

Required  Yes  No

**17 Action to Preclude Recurrence: (Not required for PR)**

Required  Yes  No

**18 Corrective Action Completion Due Date:**

October 1, 1996

**19 Response by:** *M.R.P. LARSON* *J.S.F. ELL*

Initial  
 Amended

Date *9/17/96*

Phone *818-0641*

**20 Response Accepted**

QAR

Date

*N/A*

**21 Response Accepted (N/A for PR):**

AOQAM

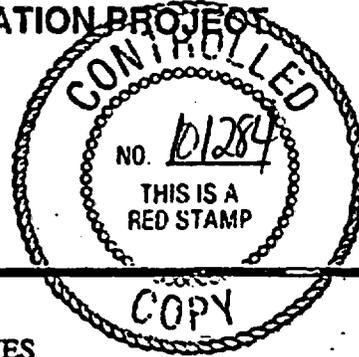
Date

*N/A*

*9/5/96 Brady De Spence*

YMP-175-R1  
06/20/94

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT



PROCEDURE

Title:

RECORDS MANAGEMENT REQUIREMENTS AND RESPONSIBILITIES

Procedure No.:  
YAP-17.1Q

Revision: 0

ICN: 4

Page 1 of 30

Approval: *J. Adams*  
J. Adams

Date: 5/30/95

Approval: N/A

Date:

Approval: N/A

Date:

Concurrence: R.E. Spence

*R.E. Spence*

Date: 6/1/95

CHANGE HISTORY

<u>Rev. No.</u>	<u>ICN No.</u>	<u>Effective Date</u>	<u>Description of Change</u>
0		05/31/94	Initial Issue - Supersedes AP-1.18Q, <i>Records Management: Las Vegas Record Source Responsibilities</i>
0	1	05/17/95	ICN to delete requirement to include microfilm roll number for corrections and supplements to records, to change Local Records Center to Records Processing Center, and to correct procedure approval responsibility. The above deletion enables Affected Organizations to comply with requirements for supplements and corrections to records. Pages affected are 2, 4, 6, 12, 13, 15, 16, 17, 19, 20, and 21.
0	2	05/17/95	ICN to add definition for Yucca Mountain Site Characterization Office Research and Study Center, to include instructions for cited references in the Process Section, and to delete Instructions for the Preparation of Final Scientific and Technical Reports from Attachment 9.5. Pages affected are 4, 8, 13, 19, and 20. Pages added are 4a and 8a.
0	3	05/17/95	ICN to replace Yucca Mountain Site Characterization Program Baseline (SCPB) Reference Numbers with traceability designators, changing the traceability of the procedure. Pages affected are 4, 7, 15, and 19. Page added is 7a.
0	4	06/14/95	ICN to make editorial corrections. Pages affected are 2, 3, 4, 4a, 8, and 13. Page deleted is 2a.

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WASHINGTON, D.C.

8  Performance Report  
 Deficiency Report

NO. YM-96-D-085

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QA: L

PR/DR CONTINUATION PAGE

YM-96-D-085

Your response cannot be accepted based on the following:

Your response ignores the fact that your personnel knowingly and willfully have violated procedural requirements contrary to the QARD requirements. These requirements exist to demonstrate that proper controls are in place and are implemented to demonstrate compliance with the QA Program. Violating them is contrary to the QARD requirements.

This adverse condition does require corrective action to preclude recurrence.

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WASHINGTON, D.C.

PR/DR NO. YM-96-D-085  
PAGE \_\_\_\_\_ OF \_\_\_\_\_  
QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

SEE AMENDED RESPONSE CONTINUATION PAGE.

15 Extent of Condition: (Not required for PR)

SEE AMENDED RESPONSE CONTINUATION PAGE

16 Root Cause Determination: (Not required for PR)

Required  Yes  No

SEE AMENDED RESPONSE CONTINUATION PAGE

17 Action to Preclude Recurrence: (Not required for PR)

Required  Yes  No

SEE AMENDED RESPONSE CONTINUATION PAGE.

18 Corrective Action Completion Due Date:

SEE A/R CONTINUATION PAGE

19 Response by:

Initial  
 Amended

SEE A/R CONTINUATION PAGE  
Date \_\_\_\_\_ Phone \_\_\_\_\_

20 Response Accepted

QAR David Sai

Date 10-15-96

21 Response Accepted (N/A for PR):

AQQAM James Blaylock + CS Date 11/18/96

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WASHINGTON, D.C.

8  Performance Report  
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PAGE \_\_\_\_\_ OF \_\_\_\_\_  
QA: L

PR/DR CONTINUATION PAGE

YM-96-D085 Amended Response

Block 14, Remedial Action:

To ensure that a clear understanding exists regarding the full implementation of procedures, Records Management personnel attended an implementation briefing of the QAIP 17-1, Revision 2 "record correction" process and on the QAIP 17-3, Revision 2 "record review and acceptance" process.

Action Completion Date: completed July 29, 1996

Based upon a change to YAP.17.1Q and other procedures, it is no longer necessary to include the SCPB Number or the YMP CRF code on records. Therefore, QAIP 17-1 has been revised to remove those items from the requirements for records. QAIPs 17-1 and 17-3 have been revised to permit the Records Center staff to make administrative corrections to records. Changes to both these procedures are currently in the approval process.

Records noted as deficient by the evaluator have been corrected.

Research to locate and correct each record would not be cost effective nor of value to the program as there is no quality impact to the content of the document.

No action is required as corrections to the above noted three items are not deemed to impact quality:

- SCPB number: There is no quality impact to the discontinuance of the SCPB number since SNL requires indication of the WBS number which also serves as a specific programmatic identifier. Research to locate and correct each record would not be cost effective nor of value to the program as there is no quality impact to the content of the document.

- total number of pages: Correction of the page count is editorial in nature and is corrected as part of the record verification process for submittal to the records management system. Management issuance of the memorandum designating Technical Data Management Staff as approved to make Administrative Changes per verbal direction of the Record Source/Principal Investigator is retroactive and therefore removes the need to review for programmatic impact based upon the non-quality impact of Administrative Changes the research effort required to locate and correct each record would not be cost effective nor of value to the program as there is no quality impact.

- YMP CRF code: No quality assurance impact as this was an editorially retained mistake that was carried over to the procedure. Removal of the item had been identified for the revision which was not out of management review and approval. "YMP CRF" was previously included in the distribution list of correspondence to assure that a copy of the document was provided for forwarding to the CRF rather than the records staff having to make a copy for dual storage.

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PR/DR CONTINUATION PAGE

YM-96-D085 Amended Response (continued)

Block 15. Extent of Condition

The research effort required to locate and correct all such deficiencies would be neither cost effective nor of value to the program as adding two codes that are no longer required would have minimal effect on quality. Because of the limited significance of this deficiency, there is no reason to conduct root cause determination nor to develop additional actions to preclude recurrence.

Block 16. Root Cause Determination

The Records Management staff implemented changes based upon an issued interum change notice to YAP 17.1Q prior to obtaining a revision to QAIP 17-1.

Block 17. Action to Preclude Recurrence

(a) The SNL records staff was briefed on July 29th regarding the need to fully implement QAIP 17-1 as written until changes are approved as required.

Action Completion Date: (a) completed July 29, 1996

(b) SNL/CRWM Management signed a memorandum to file on July 25, 1996 designating Participant Data Archive (PDA) Staff as approved to make Administrative Changes p designating Technical Data Management Staff as approved to make Administrative Changes per verbal direction of the Record Source "designee" in the responsibilities section of the procedure. (copy of memorandum attached) This memo serves as retroactive approval to the effective date of QAIP 17-2, Revision 2 "Participant Data Archive (PDA)".

Action Completion Date: (b) completed July 25, 1996

(c) Records Management personnel attended an implementation briefing of the QAIP 17-1, Revision 2 "record correction" process and on the QAIP 17-3 "records review and acceptance" process to ensure that a clear understanding exists regarding the full implementation of procedures.

Action Completion Date: (c) completed July 29, 1996

(d) The requirement to utilize the SCPB as a specific identifier was removed as a program requirement 05/17/95 through ICN 4 to YAP-17.1Q "Records Management Requirements and Responsibilities" (copy attached). QAIP 17-1, Revision 2 Section 1.0 Purpose states "Implementation of this procedure assures compliance with the ...YAP-17.1Q, "Records Management Requirements and Responsibilities." QAIP 17-1, Revision 3 will reflect removal of these three items and will be effective in October of 1996.

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                  QA: L

PR/DR CONTINUATION PAGE

YM-96-D085 Amended Response (continued)

Block 18, Corrective Action Completion Due Date:

November 15, 1996

Block 19, Response by:

— Amended <sup>for</sup> P. J. Warner 

Date: October 4, 1996    Phone: 505 848 0130



Sandia National Laboratories

Operated for the U.S. Department of Energy by Sandia Corporation

Albuquerque, New Mexico 87185-1330

date: July 25, 1996

WBS:1.2.5.3.5.

1.2.11.

to: File

QA

from:

*M.C. Brady*  
M.C. Brady  
YMP Project Lead

subject: Delegation of Authority for Participant Data Archive Staff for Procedure Implementation of QAIP 17-2, Rev 02 "Participant Data Archive (PDA)" (SCPB:NA)

This memo serves to clarify and provide Delegation of Authority for Sandia Participant Data Archive (PDA) personnel to act as "designee" for YMP Principal Investigators (PI's) for the following procedure activities within QAIP 17-2, Rev. 02.

Section 4.2 PDA Staff Responsibilities clearly states "Assisting the PI with preparation of data release" and "Assisting the Record Source in compilation of data sets as record packages" however, specific procedure activities were not defined. To provide this clarification and to document approval of the completion of these activities I submit this clarification to the record.

Specific procedure activities which may be completed by the PDA staff per verbal direction of the PI are:

- fill out Appendix A - PDA Data Set Opening Index Form's
- fill out Appendix B - PDA Data Set Segment Submittal Form's
- fill out Appendix C - PDA Data Set Segment Inventory Form's
- fill out Appendix D - PDA Data Set Status Tracking Form's
- fill out, sign as "checked by", Appendix F - Technical Data Information Form (TDIF)
- fill out Appendix H - SNL/PDA Computer Magnetic Tape File Properties

This memo also serves to provide retroactive Delegation of Authority to the effective date of this procedure as the original intent of the term "designee" as part of the PI Responsibilities was to include the Participant Data Archive staff.

YMP: 1.2.5.3.5 and 1.2.11;PM;QA;Participant Data Archive, Delegation of Authority  
YMP-CRF

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SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 17-1

PROTECTING, PREPARING, AND SUBMITTING CRWM QA RECORDS

Revision 03

Effective Date: 11-19-96

Author: Marlene R Tucker Date: 11/13/96  
Marlene Tucker

Concurrence: F. Joseph Schelling Date: 11/19/96  
~~Robert Richards~~ F. J. Schelling FJS 11/19/96

Approval: Michael C. Brady Date: 11/19/96  
Micheale C. Brady, SNL CRWM Lab Lead

**CONTROLLED DOCUMENT**  
(If Numbered in Red Ink)  
Copy Number: 000001

**REVISION HISTORY**

- | Revision | Summary  |
|----------|--|
| 01       | Total rewrite of the procedure, including the following: record source requirements for protecting, preparing, and submitting QA records have been removed from DOP 17-1 and incorporated into this new procedure. DOP 17-1 has been superseded by QAIP 17-1 and QAIP 17-3. This revision was generated because DOP 17-1 included many implementation requirements that were based on AP 1.7Q which was withdrawn by the Project Office in 7/90.   |
| 02       | This revision included: changes to the definition of "Record Source" to allow for all personnel to process records, added the use of Record Deficiency form, change System 80 to DOE-28, and included missing QARD requirements in Section 4.2. This revision resulted due to the need to identify individuals who may process records, new paragraph deals with records that a) were prepared prior to issuance of the first Project QA records management procedure on 08/15/88, b) have been received from non-project parties thus not meeting requirements, or c) are older project records which have only recently been located and do not meet present requirements, and missing QARD wording. |
| 03       | Total rewrite of the procedure, including the following: Added requirements from YAP 17-1Q, added Appendix B for records submittal, formatted according to QAIP 5-1, rev. 05, and new QARD requirements. This revision was generated in order to incorporate new requirements for YAP-17-1Q and the new QARD, as well as clarify the procedure. Additionally, changes resulting from deficiencies YM-96-D084 and YM-96-D085 have been incorporated.  |

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## 1.0 PURPOSE

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This procedure describes the process by which a record source protects, prepares, and submits Civilian Radioactive Waste Management quality assurance (QA) records for Local Records Receiving Organization (LRRO) processing.

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## 2.0 SCOPE

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This procedure applies to all CRWM QA records generated by or for Sandia National Laboratories (SNL). Non-QA records and records generated prior to November 1988 are excluded from this procedure. The systems used to implement this procedure may, at the discretion of the Lab Lead, be used for non-QA records. A records coordinator may assist the Record Source in proper creation and submittal of records and record packages.

---

## 3.0 DEFINITIONS

---

**Administrative Changes** - Administrative changes are those used to enhance legibility, correct typographical errors, make editorial changes, add or enhance title content, label privileged records, and add or correct page counts or page numbering.

**Authentication** - The act of attesting that the information contained within a document is accurate, complete, legible, and appropriate to the work accomplished.

**E-Mail Record** - Information transmitted or received by the electronic mail system that meets the definition of a QA record. E-Mail records are authenticated by the fact that the Record Source submits them to the LRRO by selection of the address "YMP Mail Account"; or they may be printed and initialed or signed by the Record Source and submitted per Section 4.2 of this procedure.

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*Continued on next page*

### 3.0 DEFINITIONS, Continued

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**Lifetime QA Record** - A QA record that provides evidence of the following:

- a) Quality of items on the YMP Q-List, YMP/90-55
- b) Quality of activities related to items on the Q-List
- c) Quality of site characterization data and samples
- d) Activities that provide data used to assess the potential dispersion of radioactive materials from the proposed licensed facility
- e) Training and qualification of individuals executing QA program requirements

In addition, implementing documents and documents that specify technical or quality requirements are also lifetime QA records.

**Local Records Receiving Organization (LRRO)** - Persons within the local records organization who are responsible for processing, storing, and protecting CRWM records.

**Non-Permanent QA Record** - A QA record that does not meet the criteria of a Lifetime QA Record but provides objective evidence that the QA program has been properly executed.

**Privileged Record** - A record to which access is controlled due to statutory, legal, or security requirements.

**QA Record** - A completed document that furnishes evidence of (1) the quality and completeness of items and activities affecting quality; or (2) the implementation of quality assurance programs, and which has been generated, completed, and authenticated. A complete QA record is an original, reproduced copy, or e-mail record of a document that will receive no more entries and whose revision would be subject to a change control process.

**Record Package** - A collection of records supporting one topic that is processed as a single record

**Record Source** - Any individuals (within the constraints that follow) performing SNL CRWM activities who, by means of their position, function, or the nature of the work, generate or receive and submit QA records or QA record packages to the LRRO. Such individuals must be either employees of SNL or SNL contractors for the CRWM Program and must be trained on the provisions of this procedure.

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*Continued on next page*

### 3.0 DEFINITIONS, Continued

**Records** - Those classes of documentary materials which may be disposed of only after archival authority is obtained. The *Federal Records Disposal Act*, 44 USC 3301, defines records as "books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States government under federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations or other activities of the government or because of the informational value of the data in them." This definition applies to all DOE records, including those created, received, and maintained by contractors pursuant to their contracts. Virtually all recorded information in the custody of the government (including information held by contractors which is considered by contract to be government information) regardless of its media (hard copy, machine-readable, microfilm) is considered a "government" record.

**Temporary Storage** - A container or facility which bears an Underwriter's Laboratories label ( or equivalent) with a fire rating of 1-hour or 2-hour fire protection or which has been certified by a person competent in the technical field of fire protection.

**Unique Records** - Records that require unique handling because they cannot be duplicated or microfilmed due to their physical form (one-of-a-kind records) or cannot be filmed on 16 mm roll film (special processed records).

### 4.0 PROCEDURE

#### 4.1 Protecting Records

Responsible Individual(s)	Step	Procedure
Record Source	1	Shall protect materials destined to become QA records against loss or degradation until they have been completed. Once authenticated, the record source shall submit completed records to the LRRO or ensure that records are placed in a certified 1-hour fire rated temporary storage container/facility (see Section 3.0 of this procedure for definition of temporary storage) until submitted to the LRRO.

## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages

Responsible Individual(s)	Step	Procedure
Record Source	1	Contacts the LRR0 to establish and open a record package at the beginning of an activity. Provide a title for the record package that concisely identifies and describes the contents of the record package in order to enable future identification, traceability to associated items and/or activities, and timely retrieval.
	2	Reviews each record/record package to ensure that it is legible, accurate, and complete. If legibility is questionable, either <ul style="list-style-type: none"> <li>a. correct by enhancing or transcribing the illegible portions, or if it can't be corrected,</li> <li>b. sign and date a description of the impact on CRWM work, and obtain the signature of the record source's immediate supervisor.</li> <li>c. ensure that printed email records include all addressees which appear on the message. If addressees are incomplete, print the header, mail envelope information sheet, status sheet, distribution list, or other electronic screen that lists the full name(s) of addressee(s) and attach this information to the message.</li> </ul>
	3	Corrects records if necessary, as described in Section 4.4.
	4	<ul style="list-style-type: none"> <li>a. Prepares individual records (those not included in a package) to include the following information on the first page of the record:                             <ul style="list-style-type: none"> <li>1. WBS number (in the upper right corner),</li> <li>2. for a QA record, a designation that the record has a retention period of either Lifetime (QA:L) or Non-Permanent (QA:N) (See note below.),</li> <li>3. for a Non-QA Record, a designation of (QA: N/A),</li> <li>4. total number of pages,</li> <li>5. record date.</li> </ul> </li> </ul>

**Note:** Until individual procedures are revised to specify the retention period for QA records generated by a procedure, the retention period designation for QA records is defined on-line in the NWMP Applications "List of Lifetime and Non-Permanent QA Records."

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages (continued)

Responsible Individual(s)	Step	Procedure
Record Source (continued)	4 cont.	<p>6. record title (clearly indicate the record content and/or purpose),</p> <p>7. SNL NWM file code,</p> <p>b. Prepares QA record packages to include:</p> <ol style="list-style-type: none"> <li>1. All records that make up the record package (Non-QA records included in a QA record package should be designated "QA:N/A"), and</li> <li>2. cross reference sheets (obtained from the LRRO) for privileged records if they are not included in the package, and</li> <li>3. Table of Contents (may be prepared by LRRO), which includes                             <ul style="list-style-type: none"> <li>• WBS number,</li> <li>• designation on the Table of Contents that the record package is a QA record package and has a retention period of either Lifetime (QA:L) or Non-Permanent (QA:N) (See note below),</li> <li>• pagination of the Table of Contents (directly below the QA designation),</li> <li>• record date for the Table of Contents,</li> <li>• record package title (clearly indicate the content and/or purpose),</li> <li>• listing of all records in the package with the date and number of pages of each record,</li> <li>• total number of pages,</li> <li>• "PRIVILEGED" designation for training, qualification, certification records and business sensitive records (e.g. vendor designated information, procurement records that cannot be obliterated).</li> </ul> </li> </ol>

*Note: If any lifetime QA records are included in a package, the designation for the package is (QA:L). If all records in a record package are non-QA records, the designation for the package is (QA:N/A) and is processed similarly under Section 4.3.*

Continued on next page

P. 170877

## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages (continued)

Responsible Individual(s)	Step	Procedure
Record Source (continued)	4 cont.	<ul style="list-style-type: none"> <li>• SNL NWM file code,</li> <li>• List the accession numbers on the Table of Contents for all records previously submitted to the YMP RPC (Do not resubmit such records.)</li> <li>• A listing of reference sheets for privileged or proprietary records that will be submitted under the guidelines for those records</li> </ul>
	5	Machine Readable media records will be submitted and labeled per Appendix A.
	6	Notifies LRRO when an activity is complete and closes the record package.
	7	Authenticates QA records by stamping, signing, or initialing and dating the individual records, or for a QA record package, by authenticating the Table of Contents.
		<p><b>Note:</b> Authentication may also take the form of a statement by the responsible individual or organization. Handwritten signatures are not required if the document is clearly identifiable as a statement by the reporting individual or organization. Records such as magnetic or optical media will reflect authentication on the Table of Contents or on a separate memo with the media.</p>
	8	Verifies that no portions of the printed or graphical content of a page are missing due to tearing or folding of record pages, and that no information is unintentionally obliterated. When parts of a record are intentionally obliterated, (e.g. dollar amounts in procurement records) a statement signed and dated by the appropriate record source shall be included with the record that indicates that the obliterated information does not impact the technical meaning or content of the record.

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.2 Preparing and Submitting CRWM QA Records/Packages (continued)

Responsible Individual(s)	Step	Procedure
Record Source	9	Submits the individual records or record package to the LRRO no later than 20 working days after authentication. Non-QA records should also be submitted no later than 20 working days after completion. Shall submit the records to the LRRO by completing the Local Records Receiving Organization Submittal Form (Appendix B); receipt of the submitted records by the LRRO shall be verified and acknowledged upon request.  Note: E-mail records may be transmitted electronically to the "YMP Mail Account" address.

### 4.3 Protecting, Preparing, and Submitting Unique and Non-QA Records

Responsible Individual(s)	Step	Procedure
Record Source	1	Contacts the Local Records Receiving Organization staff for guidance and assistance in protecting, preparing, and submitting unique and non-QA records.

### 4.4 Corrections to/Replacement of Records

Responsible Individual(s)	Step	Procedure
Record Source	1	Chooses one of the following methods to correct a record: a. <u>Correction of Records</u> 1. Shall correct errors on records by scribing a single line through the incorrect information and entering the correct information in close proximity. Date and initial or sign the correction.  2. Administrative changes may be made by the LRRO.

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.4 Corrections to/Replacement of Records

Responsible Individual(s)	Step	Procedure
Record Source (continued)	1 cont.	<p>3. Records rejected by the LRRO that cannot be corrected by scribing a single line through the incorrect information and entering the correct information, shall be regenerated, enhanced, or transcribed. The enhancement or transcription is considered a correction and shall be dated and initialed or signed as stated above.</p> <p>If the LRRO identifies that corrections need to be made to QA records, the QA records shall be returned to the originating record source when feasible. If the record source who was originally responsible for the QA record is no longer available, the record will be returned to the record source organization for correction.</p> <p>If a record is illegible or incomplete and cannot be regenerated, the record shall be processed into the records management system through the completion of the OCRWM corrective action process or the Record Deficiency and Justification Form (Appendix C). The deficiency document shall provide documentation stating the impact of the illegible or incomplete information on future, in-process, or completed work. A copy of the deficiency document, when completed, becomes part of the record package for which it was generated.</p> <p>b. <u>Replacement of Lost QA Records</u></p> <p>Shall regenerate or obtain a new copy of a lost QA record. If a record cannot be regenerated, this deficiency must be documented through the OCRWM deficiency document process utilizing AP-16.1Q and AP-16.2Q. The deficiency document must include a statement of the impact of the lost information on future, in process, or completed work.</p>

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.4 Corrections to/Replacement of Records (continued)

Responsible Individual(s)	Step	Procedure
Record Source	1 cont.	<p><b>c. Correction of Previously Processed Records</b> Should notify the LRRO of any errors in previously processed records or record packages. The record source shall submit the corrected, modified, or supplemental records to the LRRO in accordance with Section 4.2 of this procedure.</p>

## 5.0 RECORDS

No QA records are generated by implementation of this procedure.

## 6.0 REFERENCES

DOE/RW-0333P	Quality Assurance Requirements and Description
AP-16.1Q	Performance/Deficiency Reporting
AP-16.2Q	Corrective Action and Stop Work
YAP-17.1Q	Records Management Requirements and Responsibilities
YMP/90-55	YMP Q-List

## 7.0 APPENDICES

Appendix A: Machine Readable Media Submittal Form  
Appendix B: Records Submittal Form  
Appendix C: Records Deficiency and Justification Form

APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Machine Readable Media</h2>				
Test: _____ Record Identifier: _____ Author: _____ Organization: _____ Date(s): _____ WBS #: _____ Generated: _____					
<b>I. AUDIO/VIDEO RECORDS</b>					
<b>1. Format Type and Specifications</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; padding: 5px;"> <b>A. Audio</b>  <input type="checkbox"/> 3.75-in/sec on 0.25-in open reel  <input type="checkbox"/> 3.75-in/sec on 0.25-in cassette  <input type="checkbox"/> 7.5-in/sec on 0.25-in open reel  <input type="checkbox"/> 7.5-in/sec on 0.25-in cassette  <input type="checkbox"/> Other _____                 </td> <td style="width: 50%; padding: 5px;"> <b>B. Video-Size:</b>  <input type="checkbox"/> 0.75-in  <input type="checkbox"/> 1-in  <input type="checkbox"/> Other _____                 </td> </tr> <tr> <td colspan="2" style="padding: 5px;"> <b>Type:</b>  <input type="checkbox"/> Mil tape  <input type="checkbox"/> S-VHS tape  <input type="checkbox"/> BETACAM tape  <input type="checkbox"/> Other _____                 </td> </tr> </table>		<b>A. Audio</b> <input type="checkbox"/> 3.75-in/sec on 0.25-in open reel <input type="checkbox"/> 3.75-in/sec on 0.25-in cassette <input type="checkbox"/> 7.5-in/sec on 0.25-in open reel <input type="checkbox"/> 7.5-in/sec on 0.25-in cassette <input type="checkbox"/> Other _____	<b>B. Video-Size:</b> <input type="checkbox"/> 0.75-in <input type="checkbox"/> 1-in <input type="checkbox"/> Other _____	<b>Type:</b> <input type="checkbox"/> Mil tape <input type="checkbox"/> S-VHS tape <input type="checkbox"/> BETACAM tape <input type="checkbox"/> Other _____	
<b>A. Audio</b> <input type="checkbox"/> 3.75-in/sec on 0.25-in open reel <input type="checkbox"/> 3.75-in/sec on 0.25-in cassette <input type="checkbox"/> 7.5-in/sec on 0.25-in open reel <input type="checkbox"/> 7.5-in/sec on 0.25-in cassette <input type="checkbox"/> Other _____	<b>B. Video-Size:</b> <input type="checkbox"/> 0.75-in <input type="checkbox"/> 1-in <input type="checkbox"/> Other _____				
<b>Type:</b> <input type="checkbox"/> Mil tape <input type="checkbox"/> S-VHS tape <input type="checkbox"/> BETACAM tape <input type="checkbox"/> Other _____					
<b>2. Description of Subject Matter</b> Description may include: major topics; test plans; activity; track number(s) reflecting starting times of major topics.					
<b>II. COMPUTER GENERATED RECORDS</b>					
<b>1. Format Type and Specifications</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; padding: 5px;"> <b>A. Tape</b>  <input type="checkbox"/> 0.5-in nine track tape reel  <input type="checkbox"/> 0.25-in tape cassette  <input type="checkbox"/> 4-mm tape cassette  <input type="checkbox"/> 8-mm tape cassette  <input type="checkbox"/> Betacoulli  <input type="checkbox"/> Other _____                 </td> <td style="width: 50%; padding: 5px;"> <b>B. Floppy Disk</b>  <input type="checkbox"/> 3.5-in  <input type="checkbox"/> 5.25-in  <input type="checkbox"/> 8-in  <input type="checkbox"/> Other _____                 </td> </tr> </table>		<b>A. Tape</b> <input type="checkbox"/> 0.5-in nine track tape reel <input type="checkbox"/> 0.25-in tape cassette <input type="checkbox"/> 4-mm tape cassette <input type="checkbox"/> 8-mm tape cassette <input type="checkbox"/> Betacoulli <input type="checkbox"/> Other _____	<b>B. Floppy Disk</b> <input type="checkbox"/> 3.5-in <input type="checkbox"/> 5.25-in <input type="checkbox"/> 8-in <input type="checkbox"/> Other _____		
<b>A. Tape</b> <input type="checkbox"/> 0.5-in nine track tape reel <input type="checkbox"/> 0.25-in tape cassette <input type="checkbox"/> 4-mm tape cassette <input type="checkbox"/> 8-mm tape cassette <input type="checkbox"/> Betacoulli <input type="checkbox"/> Other _____	<b>B. Floppy Disk</b> <input type="checkbox"/> 3.5-in <input type="checkbox"/> 5.25-in <input type="checkbox"/> 8-in <input type="checkbox"/> Other _____				

## APPENDIX A (continued)

### Machine Readable Media

#### II. COMPUTER GENERATED RECORDS

##### 2. Hardware/Software Information

###### A. Hardware and Operating System Used to Execute the Software

Include details regarding version, display, print, graphics, etc.  
(e.g.: SUN IPX Solaris 2.1; Gateway 486 DX2 Windows 5.1, DOS 6.2)

###### B. Application Software and/or Compiler Used to Create Software

(e.g. Excel, Microsoft C v6.0)

###### C. Description of Subject Matter of Executable Software

Description may include: file layout, field names, field parameters, form of data-numeric, alphabetic, packed, decimal, float, real, integer, etc.; instructions to identify and interpret codes in file data.

##### 3. Additional Information

###### A. Special Requirements to Playback, Import/Export, Recompile, or Preserve Record

###### B. Main Frame Computer Record Length and Block Size

CRWM 17-1 3/2-3 (5/31/96)

APPENDIX A (continued)

Machine Readable Media

(To Be Adhered Directly to the Reel/Cassette/Tape/Floppy Disk)

SAMPLE

Records Center Identifier No:	_____
Nuclear Waste Project:	_____
Text/Activity:	_____
Author/Org.	_____
Date(s)	_____
WBS #:	_____
Summary of Machine Readable Record	

- I. **RECORDS CENTER IDENTIFIER NO.**  
To be issued to client by the Records Center prior to record generation and labeling.
  - II. **NUCLEAR WASTE MANAGEMENT PROJECT**  
Identify the appropriate Nuclear Waste: YMP, BUC, or other
  - III. **TEST PLAN OR ACTIVITY**  
Identify the Test Plan or Activity that this material supports.
  - IV. **AUTHOR/ORGANIZATION**  
State the Test Principal Investigator and the Organization which generated the record. (First name initial, middle initial, full last name) (Organization number)
  - V. **DATE(S)**  
Indicate the date(s) the record was generated not the date the media was labeled.
  - VI. **SUMMARY OF CONTENTS**  
Include any information valuable to the identification of the record
- EXAMPLES:
1. Computer Generated Record, e.g. NCAR's REGCM2 software program disks; include a directory listing stating the file names, file sizes, and dates.
  2. Video or Audio Record, e.g. Track number(s) with brief description of content.

CONTACT THE RECORDS CENTER STAFF TO OBTAIN THIS FORM.



APPENDIX C

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Record Deficiency and Justification Form</h2>	
<input type="checkbox"/> QA Record/Package <input type="checkbox"/> Non-QA Record/Package      WBS: 1.2.12.2.2		
<b>Legibility:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> Illegible portions of this record can be deduced from other information within the record package See: _____ <input type="checkbox"/> Illegible information will have NO impact on future, in-process, or completed work.		
<b>Completeness:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> All blanks on the record(s) are intentional. <input type="checkbox"/> SNL submittal of partially completed form _____; all blanks are appropriate.		
<b>Enclosure/Attachment:</b> <input type="checkbox"/> Non-Applicable for this record/package. <input type="checkbox"/> The enclosure/attachment was not included with the submitted report because: <input type="checkbox"/> It is non-processed material. <input type="checkbox"/> It was previously submitted to the CRF, Accession No. _____ <input type="checkbox"/> Only one enclosure is required with copies of a distributed letter. This enclosure/attachment is the last document in a group of distributed letters. <input type="checkbox"/> Submittals to the RIB (reference AP-530) Transmittal letters or forms are only required for the CRF. <input type="checkbox"/> Other: _____		
<b>Regeneration:</b> <input type="checkbox"/> Non-Applicable for this record/package <input type="checkbox"/> The original record was completed on _____ however, it has subsequently been damaged beyond repair, and a regeneration was required.		
<b>Record Source/Generator Status:</b> <input type="checkbox"/> Non-Applicable for this record/package <input type="checkbox"/> The original Record Source is no longer on the project <input type="checkbox"/> The original Record Source is deceased or whereabouts unknown <input type="checkbox"/> The originator was not on the Project and whereabouts unknown <input type="checkbox"/> The vendor is no longer available <input type="checkbox"/> Other: _____		
<b>Approval:</b> I have reviewed this record/package and attest that it is adequate for its intended purpose. Only the appropriate deficiencies are identified above.		
_____ Record Source (printed/typed)	_____ Signature	_____ Date

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 17-3

PROCESSING, STORING, AND PROTECTING CRWM QA RECORDS

Revision 03

Effective Date: 11-13-96

Author: *Marlene D. Tucker*  
Marlene Tucker

Date: 11/11/96

Concurrence: *Robert R. Richards*  
Robert R. Richards, QA Reviewer

Date: 11/13/96

Approval: *Michael C. Brady*  
Michael C. Brady, SML CRWM Lab Lead

Date: 11/13/96

**CONTROLLED DOCUMENT**  
(If Numbered in Red Ink)

Copy Number: 000001

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## REVISION HISTORY

Revision	Summary
01	This revision included sections 3.0, 4.1, 4.2, 4.4, and 5.0. The changes included rewording the same as QAIP 17-1, change definition of "record source" to allow all YMP personnel to process records, add the use of the Record Deficiency Form, change System 80 to DOE-28, and missing QARD, Rev. 4 requirements in section 4.2. This revision was generated because there was a need to identify individuals who may process records, new paragraph to deal with records that a) were prepared prior to issuance of the first Project QA records management procedure on August 15, 1988, b) have been received from non-project parties, thus not meeting YMP requirements, or c) are older project records which have only recently been located and do not meet present requirements, and to incorporate missing QARD wording.
02	Total rewrite of procedure, including the following: adding lifetime and non-permanent QA record requirements and adding Appendix A. This revision was generated because of QARD & YAP-17.1Q requirements.
03	This revision was a total rewrite including the following: incorporated ICN 1, Rev 2, coordinating rewording of QAIP 17-1, Rev 3, formatting of QAIP 5-1, rev 5, and new QARD requirements. This revision was a result of new QARD, Rev. 5, requirements that need to be incorporated. Additionally, changes resulting from deficiency YM96-D085 has been incorporated.

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## 1.0 PURPOSE

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This procedure describes the system by which the Local Records Receiving Organization (LRRO) staff processes, stores, and protects Civilian Radioactive Waste Management (CRWM) QA Records.

---

## 2.0 SCOPE

---

This procedure applies to all CRWM QA records generated by or for Sandia National Laboratories (SNL). Records generated prior to August 1986 are excluded from this procedure. The systems used to implement this procedure may be used for non-QA records.

---

## 3.0 DEFINITIONS

---

**Accession Number** - A unique identification number assigned to each record to be processed

**Administrative Changes** - Administrative changes are those used to enhance legibility, correct typographical errors, make editorial changes, add or enhance titles, label privileged records, and add or correct page counts or page numbering

**Authentication** - The act of attesting that the information contained within a document is accurate, complete, legible, and appropriate to the work accomplished

**Data** - Information developed as a result of scientific investigation activities, including information extracted from reference sources and performance assessment analyses

**DOE-28** - A records system designator referring to the Department of Energy (DOE) record system 28, General Training Records.

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*Continued on next page*

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### 3.0 DEFINITIONS, Continued

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**E-Mail Record** - Information transmitted or received by the electronic mail system that meets the definition of a QA record. E-Mail records are authenticated by the fact that the Record Source submits them to the LRRO by selection of the address "YMP Mail Account"; or they may be printed and initialed or signed by the Record Source and submitted per Section 4.2 of QAIP 17-1.

**Lifetime QA Record** - A QA record that provides evidence of the following:

- a. Quality of items on the YMP Q List, YMP/90-55.
- b. Quality of activities related to items on the YMP Q List, YMP/90-55
- c. Quality of site characterization data and samples.
- d. Activities that provide data and information used to assess the potential dispersion of radioactive materials from the proposed licensed facility.
- e. Training and qualification of individuals executing QA program requirements

In addition, implementing documents and documents that specify technical or quality requirements are also lifetime QA records.

**Local Records Receiving Organization (LRRO) Staff** - Persons within the Local Records Receiving Organization who are responsible for processing, storing, and protecting CRWM records.

**Nonpermanent QA Record** - A QA record that does not meet the criteria of a Lifetime QA Record but provides objective evidence that the QA program has been properly executed.

**Privileged Record** - A record to which access is controlled due to statutory, legal, or security requirements.

**QA Record** - A completed document that furnishes evidence of (1) the quality and completeness of items and activities affecting quality; or (2) the implementation of quality assurance programs, and which has been generated, completed, and authenticated. A complete QA record is an original, reproduced copy or e-mail record of a document that will receive no more entries and whose revision would be subject to a change control process.

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*Continued on next page*

### 3.0 DEFINITIONS, Continued

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**Record Package** - A collection of records supporting one topic that is processed as a single record.

**Record Source** - Any individual (within the constraints that follow) performing SNL CRWM activities who, by means of their position, function, or the nature of the work, generates or receives and submits QA records or QA record packages to the Local Records Receiving Organization. Such individuals must be either SNL employees or employees of SNL contractors for the CRWM Program and must be trained on the provisions of QAIP 17-1.

**Temporary Storage** - A container or facility bearing an Underwriter's Laboratories label (or equivalent) with a fire rating of 1-hour or 2-hour fire protection or which has been certified by a person competent in the technical field of fire protection.

**Unique Records** - Records that require unique handling because they cannot be duplicated or microfilmed due to their physical form (one-of-a-kind records) or cannot be filmed on 16 mm roll film (special processed records)

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### 4.0 PROCEDURE

---

#### 4.1 Processing CRWM QA Records/Record Packages

Responsible Individual(s)	Step	Procedure
LRRO	1	Shall verify receipt of submitted records and record packages on the records submittal form received from the records source and return a copy of the form as requested by the record source.
	2	Shall ensure that record is legible and complete and that any corrections have been made in accordance with QAIP 17-1.

*Continued on next page*

## 4.0 PROCEDURE, Continued

### 4.1 Processing CRWM QA Records/Record Packages (continued)

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	3	Shall verify that no portions of a page are missing due to tearing or folding of record edges, and that no information is unintentionally obliterated. When part of a record is intentionally obliterated (e.g. dollar amounts in procurement records), shall ensure that a statement signed and dated by the appropriate Record Source is included with the record and indicates that the obliterated information does not impact the technical meaning or content of the record
	4	Shall inspect records or record packages to verify that they contain the information required by QAIP 17-1, section 4.2, steps 4a and 4b.
	5	Shall verify that the package includes the records and cross reference sheets listed on the Table of Contents
	6	Shall verify that machine readable records are labeled and submitted with Machine Readable Media Forms
	7	Shall check the YMP E-Mailbox weekly for the submission of E-Mail records. These records will be printed and checked for the complete header, mail envelope information sheet, status sheet, distribution list, and attach this information to the message before it is accepted and filed. If the information is incomplete, the LRRO Staff will contact the records source for the missing information
	8	Shall ensure that QA records or record packages have been authenticated
	9	Shall add appropriate labeling such as "privileged" and may make administrative changes to records without obtaining reapproval from the originating organization.
	10	Shall resolve other discrepancies in records or record packages either through direct interaction with the record source or by formally rejecting the record.

Continued on Next Page

## 4.0 PROCEDURE, Continued

### 4.1 Processing CRWM QA Records/Record Packages (continued)

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	11	<p>Shall complete processing of records/record packages by:</p> <ul style="list-style-type: none"> <li>a. generating a listing of the records being transmitted;</li> <li>b. attaching a special instruction sheet to unique training and procurement records and including one in the transmittal package to identify those being transmitted under separate cover;</li> <li>c. transmitting records to the YMP Records Processing Center (RPC) within 90 days of completion.</li> </ul>
	12	<p>Shall replace, restore, or substitute a lost or damaged record by obtaining another copy of the record or a substitute record, if available, from the record source.</p> <p><b>Note:</b> If replacement or restoration is not practical, the record shall be processed into the records management system through the completion of the OCRWM corrective action process. The deficiency document shall provide documentation stating the impact of the illegible or incomplete information on future, in-process, or completed work. A copy of the deficiency document, when completed, becomes part of the records package for which it was generated.</p>

### 4.2 Storing and Protecting CRWM QA Records

Responsible Individual(s)	Step	Procedure
LRRO	1	Shall provide temporary storage of records submitted to the LRRO in dual storage or a certified 1 hour minimum fire rated safe or container until transmitted to the YMP RPC.

Continued on Next Page

## 4.0 PROCEDURE, Continued

### 4.2 Storing and Protecting CRWM QA Records (continued)

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	2	Prevents damage to records from moisture, temperature, and pressure. Makes provisions to protect magnetic media and special processed records from excessive light, stacking, electromagnetic fields, radiation, temperature, humidity, and accidental or deliberate alteration or erasure of information. Stores and maintains records in a manner which minimizes the risk of damage or destruction from natural disasters and adverse environmental conditions.
	3	Precludes the entry of unauthorized personnel into the storage area(s) of the LRRO by: <ul style="list-style-type: none"> <li>a. locking all entrances to the LRRO when LRRO staff are not present and</li> <li>b. posting a list that designates those personnel who shall have access to records, including privileged records</li> </ul>
	4	Maintains control and accountability for records within the LRRO by <ul style="list-style-type: none"> <li>a. posting a notice advising individuals that all records removed from the LRRO must be logged out and that records should be returned to the LRRO and logged in before the close of business the same day;</li> <li>b. restricting access to hard copy and microfilm holdings of all privileged (DOE-28 and procurement) records to those personnel listed on the Records Center Access List.</li> <li>c. providing documentation of access to DOE-28 (training, certification, and qualification) records; and</li> <li>d. verifying at the close of business each day that all QA records logged out have been logged in and, if not, contacting the individual who logged out the record to ensure that the record is under the individual's control and protection.</li> </ul>

## 5.0 RECORDS

---

QA records and record packages, including corrections and changes thereto, generated as a result of implementing this procedure shall be prepared and submitted to the Local Records Receiving Organization in accordance with QAIP 17-1, "Processing, Preparing, and Submitting CRWM QA Records".

The QA record package segments and record packages include:

- Record Center Access List (NONPERMANENT)
  - Documentation of access to DOE-28 records (NONPERMANENT)
- 

## 6.0 REFERENCES

---

QAIP 17-1	Protecting, Preparing, and Submitting CRWM QA Records
AP-16.1Q	Performance/Deficiency Reporting
AP-16.2Q	Corrective Action and Stop Work
YAP-17.1Q	Records Management Requirements and Responsibilities
DOE/RW-0333P	Quality Assurance Requirements and Description
YMP/90-55	YMP Q-List
	Privacy Act Issuances, 1993 Compilation

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DATE: 29 July 1996

WBS 1.2.12

QA:L

1 PAGE

TO: Peggy Warner

FROM: Marlene Tucker *MJ*

SUBJECT: QA Records Briefing: QA Record Correction Process

In response to a potential Deficiency Report for Audit YM-ARC-96-18 the following action was taken.

This morning the records staff was briefed on the requirements for "corrections to records" as directed by QAIP 17-1 Rev 02 and QAIP 17-3 Rev. 02. The briefing focused on the requirement that the Record Source must make the corrections. The staff was also instructed that the Corrections Section of the Record Deficiency and Justification Form could no longer be used to cover corrections that were not initialed and dated. Emphasis was placed upon full implementation of effective QA Procedures. Only official changes to QA procedures may be implemented.

Those in attendance have signed below.

*Peggy Warner*  
*Marlene Tucker*  
*L. Laise James*

YMP:1.2.12:AUD:QA:YM-ARC-96-18

P. 37077

RECORDS TRANSMITTAL FORM  
 LOCAL RECORDS CENTER - SNL DEPARTMENT 6310  
 YUCCA MOUNTAIN PROJECT

02/26/97

Type	Record	Title / Subject	Pages	RMS Number	Other Info.
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NMMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR BIENIAWSKI, Z. T.	35	SL*150747	SCBB missing YMP CRF ok at record date
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NMMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR YEAGER, JAMES G	32	SL*150748	SCPBB missing
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NMMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR CHENG, WU-CHING	17	SL*150749	SCPBB missing YMP CRF ok at record date
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NMMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR HANSEN, KATHERINE M	51	SL*150750	- Same -
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NMMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR PANTHAKI, M J	11	SL*150751	- Same -
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NMMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR THOMPSON, T W	10	SL*150752	- Same -

1-----2  
 | Total Document Pages in Transmittal : 156 |  
 | Total Documents in Transmittal : 6 |  
 3-----4

*Regeneration of review conducted 11/4/96*

*2/27/97 Peggy J Warner*

1----- SNL RC Personnel Signature / Date -----2  
 | X |  
 3-----4

1----- CRF Receipt Acknowledgement / Date -----2  
 | X |  
 3-----4

1-- Comments / Discrepancies / Action Taken -----2  
 | |  
 3-----4

RECORDS TRANSMITTAL FORM  
 LOCAL RECORDS CENTER - SNL DEPARTMENT 6310  
 YUCCA MOUNTAIN PROJECT

02/26/97

Type	Record	Title / Subject	Pages	RMS Number	Other Info.
PACK	09/27/95	GRP: 1.2.5.3.5, DTP FOR SEISMIC DATA COLLECTED AT YUCCA MOUNTAIN, NEVADA DURING A SERIES OF UNDERGROUND NUCLEAR EVENTS (UNE'S) CONDUCTED AT THE NEVADA TEST SITE FROM 4/05/77 TO 6/13/90 (DTH: SNF08112294001.001, TDIF #304849)	1449	SL*150233	

*however, two other identifiers* *VAP RPC on ToC*  
*no SCPB*

1-----2
Total Document Pages in Transmittal : 1449
Total Documents in Transmittal : 1
3-----4

*Admin Changes on ToC*  
*July 25 memo*  
*covers*

*no changes to actual record material*

*Regeneration of review conducted 11/4/96*  
*2/27/97 Peggy J Warner*

1----- SNL RC Personnel Signature / Date -----2  
 | X |  
 3-----4

1----- CRF Receipt Acknowledgement / Date -----2  
 | X |  
 3-----4

1-- Comments / Discrepancies / Action Taken -----2  
 | |  
 3-----4

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

8  Performance Report  
 Deficiency Report

NO. YM-96-D-085

PAGE OF  
QA: L

PR/DR CONTINUATION PAGE

VERIFICATION OF CORRECTIVE ACTION

Completion of corrective actions, as documented in the letter to Don Horton from Joe Schelling (SNL) dated 11/27/97, and the training records associated with SNL Procedure QAIP 17-1, Rev. 3, effective 11/19/96, were reviewed and found acceptable during Surveillance SNL-SR-017, performed March 26 through April 3, 1997.

Implementation of corrective actions were verified, and this DR is ready for closure.

QAR

*Hank Greene*

Date

*5/19/97*

QAR Name Printed

*HANK GREENE*

# Sandia National Laboratories

P.O. Box 5800  
Albuquerque, New Mexico 87185-1326

November 27, 1996

WBS: 9.1.3.2

QA: N

(2 pages)

Donald E. Horton  
Office of Quality Assurance  
P.O. Box 98608  
Las Vegas, NV 89193-8608

Attn: M. J. Diaz

**Subject:** Completion of Corrective Actions for Deviation Reports YM-96-D084, YM-96-D085, and YM-96-D086

Remedial and investigation actions defined in the amended responses to the subject Deviation Reports have been completed, and objective evidence to document completion is attached. These attachments include:

1. July 25, 1996 Delegation of Authority Memo, Brady to File (1 page)
2. November 4, 1996, Corrective Action Research Memo, Warner to Schelling (5 pages)
3. November 19, 1996, Listing of online file, "Identification of Lifetime and Nonpermanent Quality Assurance Records" (3 pages)
4. November 25, 1996 email copy, "QAIP 17-3", Martinez to distribution (1 page)
5. November 26, 1996 email copy, "Issuance of QAIP 17-1 Rev 3", Martinez to distribution (1 page)
6. November 27, 1996 QA Advisory, "New Record Source Responsibilities" (1 page)
7. QAIP 5-1, Rev.06, effective 10/31/96 (19 pages)
8. QAIP 6-3, Rev.04, effective 10/31/96 (10 pages)
9. QAIP 17-1, Rev.03, effective 11/19/96 (17 pages)
10. QAIP 17-3, Rev.03, effective 11/13/96 (10 pages)

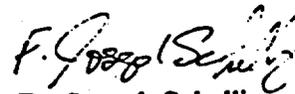
**YM-96-D084:** A review of the cited records and twenty additional randomly selected records, was performed, as documented in the attached. QAIP 17-1, Rev.03 (#9) has been issued and includes a modification to define administrative changes and a modification to the SNL YMP Record/Records Package Deficiency and Justification Form to remove the capability to use the form to document corrections. Briefings on the correction process were held 7/29/96, and a memorandum issued by management on 7/25/96 (#1) approving PDA staff to make administrative changes. Training on QAIPs 17-1 was conducted by means of the usual email notification (#5) and distribution of a QA Advisory (#6) to staff; training on QAIP 17-3 consisted of an email notification to staff (#4) and briefings presented to records management staff (who have responsibility for implementing the procedure).

YM-96-D085: Records management personnel were briefed on 7/29/96 on the record correction, review, and acceptance process. Revisions to QAIPs 17-1 (#9) and 17-3(#10) have been issued which delete requirements to include SCPB numbers and YMP CRF file codes on records, and the 7/25/96 memorandum (#1) mentioned above issued to complete actions for this deficiency. (Note that although QAIPs 17-1 and 17-3 were revised and issued, a November 22, 1996 YMSCO letter from Jerri Adams and Harold Brandt appears to direct a transition from these internal procedures to AP-17.1Q in the near future.)

YM-96-D086: QAIP 17-1, Rev.03 (#9) deleted the Appendix A from Rev.02. An online listing (#3) defining Lifetime and Non-Permanent records has been issued, based on the review of active procedures (#2), which will be used in the interim until individual procedures in the normal course of revision are modified to identify the retention period for records generated by each procedure. QAIP 6-3 (#8) has been revised to clarify that it does not generate any records, and QAIP 5-1 (#7) has been revised to require the designation of record retention period in procedures.

This documentation should suffice to allow you to verify closure of these Deviation Reports. Please contact me at (505) 848-0643 if there are any questions.

Sincerely,



F. Joseph Schelling  
SNL YMP QA Lead

Attachments (68 pages)

Copy (w/o attachments) to:  
6850 M. C. Brady (MS-1399)  
6811 P. J. Warner (MS-1330)

Copy (w/ attachments) to:  
YMP:9.1.3.2:CAR:QA:DR YM-96-D084, -D085, -D086

**Identification of Lifetime and Nonpermanent  
Quality Assurance Records  
11/19/96**

**NOTE: Lifetime/Nonpermanent designations in individual procedures take precedence over the ones in this list.**

QAIP	Record	Designator
1-2	No records	
1-4	Dispute Identification Documentation	(L)
	Dispute Resolution Documentation	(L)
	Dispute Evaluations	(L)
	Dispute Escalations	(L)
1-5	Original Work Agreement	(L)
	Work Agreement Revisions	(L)
	Completed Document Review and Comment Forms for Mandatory Comments	(N)
	Records Documenting Any Temporary Revisions	(L)
	Memoranda	(N)
2-2	Study Plan Draft and Subsequent Revisions (The final is maintained by OCRWM.)	(N)
	Related Review and Comment Forms	(N)
2-4	Analysis and Review Documentation (e.g. the scientific notebook(s) for the analysis)	(L)
2-5	Certification of Personnel Qualification (QAIP 2-6, Appendix A)	(L)
	Training Assignment Form (Appendix A)	(L)
	Training Confirmation Form (Computer Generated)	(L)
	Individual Training Attendance Record (Appendix D)	(L)
	Qualification of Trainer (Appendix B)	(L)
	Lesson Plan Cover Sheet (Appendix C and Attachments)	(N)
	Course Evaluation (Developed by Trainer)	(N)
	Request to Provide Training (Appendix E)	(N)
	Memorandum of Instruction	(N)
2-6	Certification of Personnel Qualifications Form	(L)
	Related Records such as Resumes, Correspondence, Records of Telephone Conversations, and "Employee Placement Reports" if necessary to support the certification	(L)
	Periodic Evaluation of Personnel Proficiency Form	(L)
2-9	Notification to Perform Readiness Review	(N)
	Review Plan	(N)
	Review Report	(L)
	Other Documentation Providing Objective Evidence of Process Completion	(N)

QAIP	Record	Designator
3-4	Design Investigation Memo (DIM) and All Revisions	(N)
	Closing Memo	(N)
	DIM Task File	(N)
3-12	Certification of Peer Reviewer Qualifications and Independence	(L)
	Peer Review Initiation Letter	(N)
	Peer Review Plan and Revisions	(N)
	Peer Review Notification Letter and Revisions	(N)
	Document Review and Comment Sheets or Equivalent	(L)
	Peer Review Meeting Report(s) and Revisions	(N)
	Peer Review Report and Revisions	(L)
	Peer Review Checklist (if used)	(N)
	All Dissenting Opinions	(L)
	Any Related Correspondence or Data Required to Complete the Record of the Peer Review and Actions	(L)
4-1	Procurement Planning Checklist (PPC)	(N)
	Purchase Requisition (PR)	(N)
	Request for Quotation/Proposal (RFQ/RFP)	(N)
	Contract	(L)
	Change Requisition(s) (CR)	(N)
	Amendment(s)	(L)
	Support Documentation (e.g. Sole-source/sole-make justification forms, memoranda, acquisition plans, supplier evaluation reports, etc.)	(N)
5-1	No records	
6-1	Original Copy of the Controlled Document	(L)
	Request for Distribution/Recall of a Controlled Document Form	(N)
6-2	Document Review and Comment (DRC) Forms for Independent Technical, QA, and Management Reviews	(L)
	Cross Reference to Peer Review Records Submitted to the LRRO in accordance with QAIP 3-12 (Peer Reviewed Documents Only)	(L)
	Manuscript Review Sheet or Letter Report Review Sheet	(N)
	TPO Transmittal Letter to YMPO without enclosures (SAND Documents Only)	(N)
	Other Transmittal Letters to/from YMPO Regarding Comment Resolution (SAND Documents Only)	(N)
	YMPO Approval Letter with Completed DRs (SAND Documents Only)	(N)
	Final SAND or SLTR Document as Published or Issued	(L)
6-3	No records	
7-1	Documentation of Acceptance of Services (e.g. Copies of SNL Invoice Action Forms)	(N)
	Certificates of Conformance	(N)
7-3	Contractor's QA Program Document and Transmittal Letter	(L)
	DRC Form or Review Checklist (Final Resolution Copy)	(N)
	QA Program Evaluation Transmittal Letter (Final Resolution Copy)	(N)
	QA Program Acceptance Letter (Final Resolution Copy)	(L)
10-1	Surveillance Report	(N)

QAIP	Record	Designator
12-1	M&TE Calibration Certificates or Reports Supporting Calibration Documents	(N) (N)
17-1	No records	
17-2	See the Procedure	
17-3	Records Center Access List Documentation of Access to DOE-28 Records	(N) (N)
19-1	Baseline Documentation Change Requests Software Use Forms	(L) (N) (L)
20-1	No records (See Note Below)	
20-2	Approved Scientific Notebooks and Supporting Documentation	(L)
20-3	Original Chain of Custody Forms and Photocopies of the Forms After Each Sample Transfer Any Special Shipping Documentation	(L)  (L)

**Note:** All records generated as a result of implementing Technical Procedures shall be designated "Lifetime" unless specifically designated nonpermanent in the Technical Procedure.

From: Amy V. Martinez  
To: 6850, 6851, 6852  
Date: 11/25/96 8:44am  
Subject: QAIP 17-3

QAIP 17-3 Rev. 3, Processing, Storing, and Protecting CRWM QA Records, has been issued - effective November 13, 1996.

Rev. 3 is a complete rewrite of the procedure and is a result of the new QARD, Rev. 5 requirements. This revision also includes the following: ICN 1, Rev 2 changes, rewording of QAIP 17-1, and formatting of QAIP 5-1, Rev 5.

**From:** Amy V. Martinez  
**To:** 6850, 6851, 6852  
**Date:** 11/26/96 10:05am  
**Subject:** Issuance of QAIP 17-1 Rev 3

QAIP 17-1Rev 3, Protecting, Preparing, and Submitting CRWM QA Records has been issued, effective November 19, 1996.

This is a total rewrite of the procedure and include the following:

- added requirements from YAP 17-1Q,
- added Appendix B for records submittal,
- formatted the procedure according to QAIP 5-1 Rev 5, and
- included the new QARD requirements.

Additionally, changes resulting from deficiencies YM-96-D084 and YM-96-D085 have been incorporated.

**CC:** amarti5

Managers: Please distribute to your SNL YMP staff.

## SNL Civilian Radioactive Waste Management

# Quality Assurance Advisory

November 27, 1996

WBS: 9.1.3.2

QA:N

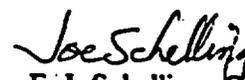
(1 page)

### New Record Source Responsibilities

QAIP 17-1, "Protecting, Preparing, and Submitting OCRWM QA Records," Rev.03 became effective 11/19/96. This revision introduces some new and modified requirements that SNL YMP staff need to be aware of and comply with for records they generate as "records sources." It is highly recommended that you read QAIP 17-1, Rev. 03 and understand the changes summarized below:

- As always, include in the upper right corner the WBS #, QA designator, and date. The big change is now you have to complete the QA designator field (which the LRC used to do for us).
- There are 3 possible QA designators (See the definitions in QAIP 17-1, Sec.3.0.):
  1. QA: N/A for non-QA records
  2. QA:N for "NON-PERMANENT" QA records—A QA record that isn't a "LIFETIME" QA record, but demonstrates that the QA program is being properly executed.
  3. QA:L for "LIFETIME" QA records—These include controlled documents, training records, and most importantly for technical staff, QA records that provide evidence of the quality of site characterization data and samples and of activities subject to the QARD.  
[Note: QA designators for records generated by executing a procedure will be defined in each procedure as they are updated; in the interim, these definitions are available online in NWMP Applications as the "List of Lifetime and Non-Permanent QA Records."]
- State the number of pages of a record on the first page (preferably below the QA designator), and include an SNL NWM filecode preferably in the lower left corner.
- The requirement to include (SCPB:N/A) or (SCPB:x.x.x.x) in the title has been removed, but the need to provide a title that clearly indicates the content and/or purpose of the record is emphasized.
- Records are submitted using the LRRO Submittal Form (QAIP 17-1, App.B)—The procedure requires the record source to submit the form, but I think we can still ask our secretaries to do this step for us.
- Finally, QAIP 17-1 has additional requirements for record packages, for which it's noted that:
  - If any record in a package is a "LIFETIME" record, then the entire record package is designated QA:L. (It's recommended that any non-QA information in such a package be identified as such.)
  - At the other extreme, if everything in the package is non-QA, then the entire record package is designated QA:N/A.

Please do not hesitate to contact either myself or Peg Warner if you have any questions on this advisory.

  
F. J. Schelling, ORWM QA Lead

#### Distribution:

MS-1399 M.C. Brady, 6850  
MS-1399 J. J. Danneels, 6853  
MS-1326 H. A. Dockery, 6851  
MS-1325 L. S. Costin, 6852

MS-1324 P. B. Davies, 6115  
MS-1335 S. Y. Pickering, 6811  
YMP:9.1.3.2:QAP:QA:QA Advisory

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 5-1

QUALITY ASSURANCE IMPLEMENTING PROCEDURES

Revision 06

Effective Date: 10-31-96

Author: Thomas F. Ehrhorn  
Thomas F. Ehrhorn

Date: 10/16/96

Concurrence: R.R. Richards  
QA Reviewer R.R. Richards

Date: 10/16/96

Approval: F.J. Schelling  
for M.C. Brady  
SNL CRWM Lab Lead

Date: 10/13/96

M.C. Brady approval signature on faxed  
copy of this page in Document Control  
Records.

CONTROLLED DOCUMENT  
(If Numbered in Red Ink)

Copy Number: 000000

**REVISION HISTORY**

<b>Revision</b>	<b>Summary</b>
01	Total rewrite of the procedure. Included the following: added use of auxiliary verbs, emphasized use of playscript format, introduced DAIs, formalized forms control, formalized identification of requirements and guidelines, etc. Incorporated ICNs. This total revision was generated as a result of the efforts of the Department 6310 Procedures PMT.
02	Updated organizational titles. Updated references. Streamlined procedures. Incorporated changes to ICNs and generally rewrote to bring the procedure up to date.
03	Added QARD Matrix Requirement Controls. Revised references. General update. Done as a result of new QARD requirements.
04	Incorporated ICN 01. Clarified review and approval responsibilities. Clarified wording for providing change rationale. Addressed QARD requirements that had not been completely addressed prior.
05	Total rewrite. Incorporated ICNs 01 and 02. Adapted the procedure to comply with QARD Revision 5. Eliminated ICNs. Changed "Rationale for Revision" to "Revision History". Changed YMP to CRWM where appropriate. Incorporated procedure categories. Defined Procedure Coordinator. Redefined use of PAR forms. Redefined QARD requirements matrix. Required personnel to formally process changes resulting from a stopped work condition. Removed WIPP references (e.g. QAPD). Changed name of Records Center to Local Records Receiving Organization.
06	Minor changes. Changed "Request to Provide Training" form to "Request to Provide Training on Controlled Documents" form; changed effective date on the training form to the target completion date; allowed the QA Manager to initiate a new procedure or revision. Includes corrections based on the following Deficiency Reports: YM-96-D081 and YM-96-D086.

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## 1.0 PURPOSE

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This procedure prescribes the process for preparation, change, review, and approval, issuance, and implementation of Sandia National Laboratories (SNL) Civilian Radioactive Waste Management (CRWM) Quality Assurance Implementing Procedures (QAIPs).

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## 2.0 SCOPE

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This procedure applies to the QAIPs that control SNL CRWM activities affecting quality. These QAIPs implement the requirements contained in the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance Requirements and Description (QARD).

This procedure applies to SNL staff and others who prepare Quality Assurance Implementing Procedures.

**Note:** Within the context of this and other QAIPs, the terms "QAIP x-y" and "Procedure x-y" are used interchangeably.

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## 3.0 DEFINITIONS

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**Effective Date:** The date on the procedure, instruction, or revision by which implementation is mandated.

**Lab Lead:** The manager designated as the project leader for CRWM work for SNL; previously designated the "Technical Project Officer".

**Minor Change:** A change which does not affect the implementation of Quality Assurance requirements.

**Playscript Format:** A means for prescribing the accomplishment of a task in a logical sequence by identifying the individual(s) performing the action in one column and the step-by-step instructions in another column.

**Procedure Action Request (PAR):** A form that may be used to request the development of a new procedure or to change an existing procedure.

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### 3.0 DEFINITIONS, Continued

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**Procedure Coordinator:** An individual assigned to ensure the correct routing of procedures during the creation/revision process.

**QA Requirements Matrix (Matrix System):** Identifies how and where each requirement of the applicable requirements and controls source is addressed in the SNL CRWM Quality Assurance Program documents including the procedures. Matrix system input is information used to develop or update the system.

**Procedure Package:** A set of documents that are circulated for procedure review and approval. The package may include: the PAR, the procedure (draft or approved), the matrix system input, the Document Review and Comment form or other review and comment documentation, the Request to Provide Training on Controlled Documents form, and the Request for Distribution/Recall of a Controlled Document form.

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### 4.0 PROCEDURE

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#### 4.1 Preparation of New Procedure

Responsible Individual(s)	Step	Procedure
Requester	1	Notifies the QA Department Manager, upon identifying the need for a new procedure. A PAR form (Appendix A) may be used for this purpose, if desired. Similarly, a hard copy or electronic memo may be used.
QA Department Manager	2	<p>Evaluates the request for a new procedure.</p> <p>a. if approved, selects a Procedure Author and sends original request to the Author with copies to the Requester and the Procedure Coordinator.</p> <p>b. if rejected, returns the original request with an explanation to the Requester</p>

*Continued on next page*

## 4.0 PROCEDURE, Continued

### 4.1 Preparation of New Procedure (continued)

Responsible Individual(s)	Step	Procedure
QA Department Manager (Continued)	2 Cont	<p><b>Note:</b> The QA Department Manager may initiate the creation of a new procedure without a request. In that case, he/she would merely select a Procedure Author and direct the author (orally or in writing) to draft the procedure.</p>
Procedure Author	<p>3</p> <p>4</p>	<p>Shall identify applicable requirements and controls in the following sources:</p> <ul style="list-style-type: none"> <li>a. Quality Assurance Requirements and Description (QARD)</li> <li>b. Other sources with requirements or controls affecting SNL CRWM scope of work (e.g. Yucca Mountain Administrative Procedures [YAPs], Administrative Procedures [APs], Quality Assurance Procedures [QAPs])</li> <li>c. SNL CRWM commitments (e.g. corrective action for audit findings)</li> </ul> <p>Shall draft the new procedure:</p> <ul style="list-style-type: none"> <li>a. Refers to Appendix B for procedure format and content.</li> <li>b. Develops implementing actions for the applicable requirements and controls identified in Step 3 consistent with the graded approach (See QARD Section 2.2.4) for applying QARD requirements.</li> <li>c. Uses the auxiliary verbs "shall," "should," or "may" as described in Appendix B.</li> </ul> <p>Shall prepare matrix system input that serves as verification that all applicable requirements and controls identified in Step 3 are addressed. (See Section 4.5 for details about the matrix.)</p>

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## 4.0 PROCEDURE, Continued

### 4.1 Preparation of New Procedure (continued)

Responsible Individual(s)	Step	Procedure
Procedure Author (Continued)	6	Informally reviews the draft procedure and matrix system input with the affected managers and users and modifies the draft accordingly.
	7	Prepares: <ul style="list-style-type: none"> <li>a. Document Review and Comment (DRC) forms in accordance with QAIP 6-3 for the use of the QA Reviewer and Lab Lead.</li> <li>b. A Request to Provide Training on Controlled Documents form in accordance with QAIP 2-5.</li> <li>c. A Request for Distribution/Recall of a Controlled Document form in accordance with QAIP 6-1.</li> </ul>
	8	Forwards the procedure package to the Procedure Coordinator for initiation of the review and approval process (Section 4.3).

### 4.2 Changes

Responsible Individual(s)	Step	Procedure
Requester	1	Notifies the QA Department Manager upon identifying the need for a procedure change and/or a form change. A PAR form (Appendix A) may be used for this purpose or the Requester may simply submit a marked up copy of the procedure.
QA Department Manager	2	Evaluates the requested procedure change. This evaluation shall include the procedure's revision history. <ul style="list-style-type: none"> <li>a. if approved, selects a Procedure Author and sends the original request to the Author with copies to the Requester and Procedure Coordinator.</li> <li>b. if rejected, returns the original request with an explanation to the Requester.</li> </ul>

Continued on next page

**4.0 PROCEDURE, Continued****4.2 Changes (continued)**

Responsible Individual(s)	Step	Procedure
QA Department Manager (Continued)	2 Cont	<b>Note:</b> The QA Department Manager may initiate a procedure change without a request. In that case, he/she would merely select a Procedure Author and direct the author (orally or in writing) to draft the change.
Procedure Author, Requester	3	<p>Shall draft the procedure change:</p> <ul style="list-style-type: none"> <li>a. Complies with Subsection 4.1, steps 3 through 5, as appropriate.</li> <li>b. Numbers revisions sequentially beginning with 01.</li> <li>c. Identifies all changes by vertical bars in the outside margin, adjacent to the change. If changes are extensive, the change bars should be omitted.</li> <li>d. Provides a rationale for each change from the last issue by appending the change to the Revision History found on the second page of the procedure.</li> <li>e. Performs steps 6 through 8 of Section 4.1 for the procedure change as appropriate.</li> </ul>

**4.3 Review, Approval, and Effective Date**

Responsible Individual(s)	Step	Procedure
Procedure Coordinator	1	Confirms that the package is complete. Evaluates the procedure package. If it is for a procedure change and if the change is minor, enter "NA change is minor" on the Lab Lead signature line on the cover page. Forwards the procedure package to the QA Department.
QA Department Manager	2	Forwards the package to the QA Reviewer.

*Continued on next page*

## 4.0 PROCEDURE, Continued

## 4.3 Review, Approval, and Effective Date (continued)

Responsible Individual(s)	Step	Procedure
QA Reviewer, Lab Lead	3	<p>Shall perform QA and management reviews of the procedure package and document the review and comment resolution in accordance with QAIP 6-3. The QA Reviewer:</p> <ul style="list-style-type: none"> <li>a. Shall verify inclusion of applicable quality requirements and controls.</li> <li>b. Should verify that referenced documents, including those generated outside of the SNL CRWM, are appropriate, current, and not in conflict with applicable requirements.</li> <li>c. When the review is for a procedure change, the reviewer shall review the Revision History (page 2 of each procedure) to ensure that the change does not compromise or contradict previous commitments.</li> </ul> <p>Note 1: The QA Reviewer serves as the independent reviewer for procedures.</p> <p>Note 2: The QA Reviewer is the only required reviewer of minor changes.</p> <p>Note 3: Editorial corrections (i.e. correcting grammar or spelling, renumbering sections or attachments if the chronological sequence of work is not affected, changing the title or number of the document, or updating organizational titles if there is no change in responsibilities) may be made without review but must be processed as a change or revision to the procedure.</p>
Procedure Author	4	Shall resolve comments and incorporate the applicable comments in the procedure or revision.

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.3 Review, Approval, and Effective Date (continued)

Responsible Individual(s)	Step	Procedure
Procedure Author, QA Reviewer, Lab Lead	5	<p>Shall sign the procedure or revision for authorship (Procedure Author), concurrence (QA Reviewer), and approval (Lab Lead) as appropriate.</p> <p>Note 1: The signature indicates that the procedure or revision was reviewed (if required) and that review comments, if any, have been satisfactorily resolved and incorporated, and that the procedure or revision is approved for use, subject to its effective date.</p> <p>Note 2: The Procedure Author and QA Reviewer are the only required signers for minor changes.</p>
Lab Lead or QA Department Manager	6	<p>Establishes an effective date for the procedure or revision, enters it on the procedure or revision cover page, and forwards the procedure package to the Procedure Coordinator.</p> <p>Note: The effective date may be left blank, in which case it will be assigned by Document Control.</p>

### 4.4 Issuance and Control

Responsible Individual(s)	Step	Procedure
Procedure Coordinator	1	<p>Following receipt of the signed procedure package, enters the target date for completion of training on the Request to Provide Training on Controlled Documents form (the target date may be left blank, in which case it will be determined by Document Control), verifies the distribution marked on the Request for Distribution/Recall of a Controlled Document Form, signs that form, and forwards the package contents as follows:</p> <p>a. The approved procedure or revision and the Request for Distribution/Recall of a Controlled Document form to the Document Control staff for distribution and processing in accordance with QAIP 6-1.</p>

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.4 Issuance and Control (continued)

Responsible Individual(s)	Step	Procedure
Procedure Coordinator (Continued)	1 Cont	b. The Request to Provide Training on Controlled Documents form to the Training Manager for processing in accordance with QAIP 2-5.
		c. The matrix system input to the QA Department for updating the matrix system.
		d. The remaining package contents to the QA Department for possible retention as nonprocessed records.
	2	Revises Orientation Manual Abstracts as necessary for changes and issues new abstracts for new procedures.

### 4.5 Requirements Matrix Preparation and Change

Responsible Individual(s)	Step	Procedure
QA Staff	1	Shall develop a QARD requirements matrix. This matrix shall identify
		a. Where the QARD requirements are directly addressed.
		b. Where QARD requirements are not applicable based on scope of work.
		c. Where exceptions to QARD requirements have been taken including the justification for the exception.
	2	Shall update the matrix as implementing documents are revised.
	3	Shall process updates to the matrix through the document review process in accordance with QAIP 6-3.

## 4.0 PROCEDURE, Continued

### 4.6 Implementation

Responsible Individual(s)	Step	Procedure
SNL CRWM Personnel	1	<p>Shall perform activities in accordance with approved procedures.</p> <p><b>Note 1:</b> Unless specifically directed otherwise by the Controlled Document Transmittal/Acknowledgment Form, a procedure or revision may be implemented prior to the effective date if the individual using the procedure has been trained on the procedure/revision (if such training is necessary).</p> <p><b>Note 2:</b> When work cannot be accomplished as described in the procedure or accomplishment of such work would result in an undesirable situation, the work shall be stopped. Work shall not resume until the procedure is changed in accordance with Section 4.2 to reflect correct work practices.</p>

## 5.0 RECORDS

The following QA records, including corrections and changes thereto, generated as a result of implementing this procedure are submitted to the SNL Local Records Receiving Organization by the record source in the applicable procedure.

<u>QA Records</u>	<u>Procedure</u>
Original Copy of the Controlled Document	QAIP 6-1
Request for Distribution/Recall of a Controlled Document Form	QAIP 6-1

## 6.0 REFERENCES

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QAIP 2-5	Training
QAIP 6-1	Document Control System
QAIP 6-3	Conducting and Documenting Reviews of Documents
QAIP 17-1	Protecting, Preparing, and Submitting CRWM QA Records

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APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Procedure Action Request (PAR)</h2>
<b>Section I: To Be Completed by Requester</b>	
To: QA Manager	Date: _____
From: (Requester's Name) _____	Org. _____
QAIP Title (or subject if new QAIP): _____	
Check Action Requested: <input type="checkbox"/> Develop New Procedure	<input type="checkbox"/> Change Procedure Form <input type="checkbox"/> Change Existing Procedure
Reason for Request and Suggested Action: _____	
Attachment: <input type="checkbox"/> YES <input type="checkbox"/> NO	If Yes, Number of Pages: _____
Other QAIPs/Documents Affected: _____	
<b>Section II: To be Completed by QA Manager or Designee</b>	
Conflict with QARD: <input type="checkbox"/> Yes <input type="checkbox"/> No Comments: _____	
Request is: <input type="checkbox"/> Approved <input type="checkbox"/> Rejected <input type="checkbox"/> Other Disposition Comments: _____	
If New QAIP	QAIP Number: _____ Title: _____ Purpose: _____ Scope: _____
Forward To: (Procedure Author) _____ Org. _____	
Please Issue New QAIP or Change by Date: (Optional) _____	
Signature and Date:	
_____	Date: _____
QA Department Manager	
_____	Date: _____
SNL CRWM Lab Lead	

Copy to: Requester  
 Procedure Coordinator  
 CRWM 5-1.1/1-1(10-16-96)

P. 62077

## APPENDIX B

## PROCEDURE FORMAT AND CONTENT

## A. Cover Page

Prepares the procedure cover page the same as the cover page of this procedure. The procedure identifier includes the acronym "QAIP" and a number which is "built" by combining the QAIP Series Number from Appendix C with a "-" and a number designating the specific procedure, e.g. QAIP 5-1 is the first procedure in the "5" series.

## B. Revision History

The revision history is a short narrative description of all revisions of the procedure.

## C. Table of Contents

A Table of Contents should be developed for procedures with more than five (5) pages or test or numerous appendices, to aid in the use of the procedure.

## D. Body

The procedure body should consist of the following in listed order:

## 1.0 PURPOSE

The purpose states what the procedure is intended to accomplish.

## 2.0 SCOPE

The scope:

- a. describes the extent to which the procedure applies to specific organizations, activities, tasks or personnel affected by the procedure.
- b. lists interfacing procedures.
- c. describes the activities specifically excluded from the procedure's scope, if appropriate, for clarity.

## 3.0 DEFINITIONS

The definitions section should.

- a. include terms that require specific definition to avoid misinterpretation.
- b. define terms exactly the same as the definitions used in the OCRWM QARD unless there is justification for use of an SNL-unique definition.

#### 4.0 PROCEDURE

The procedure section shall prescribe how to perform the procedure activity. The procedure section should use the playscript format that is used in section 4.0 of this procedure.

- a. Identifies individuals responsible for specific actions. This specifically includes identifying the individuals/organizations responsible for submitting the QA records to the records management system.
- b. Numbers the action steps.
- c. Specifies the actions in the active, present tense voice and in a step-by-step logical sequence that will result in the completion of the desired activity. Each action step should be clearly stated and kept as simple as possible but with sufficient detail to be unambiguous to a qualified individual. Includes references to other procedures in the step for which they apply. Uses the action verbs, "may", "shall", and "should" as follows
  - (1) **May:** Denotes an action which is completed at the discretion of the person implementing the procedure or instruction.
  - (2) **Shall:** Denotes an action required by a CRWM Department commitment, QA Program requirement, or related requirements document.
  - (3) **Should:** Denotes a guideline action that is a preferred practice. These actions include good practices that are desirable for achieving uniformity or consistency of administration but do not arise from QA requirements. "Should" is implied when no auxiliary verb (shall or may) is used.
- d. Note that the physical order of the specified actions as they appear in this section of the QAIP does not imply that the actions be mandatorily carried out in that sequence unless specifically stated.

Most procedures prescribe processes and should be presented in playscript format. However, for those procedures where the playscript format is not appropriate:

- a. a "Responsible Individuals" section may be prepared as appropriate and
- b. a "Requirements" section may be substituted for the "Procedure" section.



## 7.0 APPENDICES

Appendices should be listed individually in the Table of Contents, if included, or at the end of the body of the procedure if a Table of Contents is not included.

A procedure that produces a document should have the format and content elements of that document summarized in an appendix (as does QAIP 5-1, in this appendix) unless the material is more appropriately located in the body of the procedure.

Descriptive information used to provide background material or explanation that cannot be succinctly given in a note should be summarized in an appendix entitled Description.

APPENDIX C  
PROCEDURE CATEGORIES

- 1 Organization
- 2 Quality Assurance Program
- 3 (not used)
- 4 Procurement Document Control
- 5 Implementing Documents
- 6 Document Control
- 7 Control of Purchased Items or Services
- 8 (not used)
- 9 (not used)
- 10 Surveillances
- 11 (not used)
- 12 Control of Measuring and Test Equipment
- 13 (not used)
- 14 (not used)
- 15 (not used)
- 16 Corrective Action
- 17 Quality Assurance Records
- 18 (not used)
- 19 Software and Electronic Data Management
- 20 Scientific Investigation and Sample Control

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 6-3

CONDUCTING AND DOCUMENTING REVIEWS OF DOCUMENTS

Revision 04

Effective Date: 10-31-96

Author: *Thomas F. Ehrhorn*  
Thomas F. Ehrhorn

Date: 10/4/96

Concurrence: *R.R. Richards*  
QA Reviewer *R.R. Richards*

Date: 10/14/96

Approval: *F. Brady*  
for M.C. Brady  
SNL CRWM Lab Lead

Date: ~~10/3/96~~  
10/31/96 *F45 10/31*

M.C. Brady approval signature on faxed copy  
of this page in Document Control Records.

**CONTROLLED DOCUMENT**  
(If Numbered in Red Ink)

Copy Number: 000001

## REVISION HISTORY

Revision	Summary
00	Replaced DOP 3-13, Rev C. Changed title to new organizational structure. Used QAIP 5-1 format. Clarified the review requirements. Responded to CARs YM 92-070 and YM 92-072.
01	Added QARD requirements from the new QARD and updated references.
02	Updated references and applicable use of DRC form. Added a records submittal step. Responded to SNL YMP CAR 94-46.
03	Added step to section 5.3 to consider the impact on other documents if errors or mandatory changes were noted in the technical review. Modified Document Review and Comment Form to include criteria checklists. Responded to YMP QAD CARs 95-15, 95-16, and 95-17.
04	Modified procedure to comply with the new QARD. Changed format slightly to agree with current QAIP 5-1.

## TABLE OF CONTENTS

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## 1.0 PURPOSE

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The purpose of this procedure is to establish requirements for initiating technical, management, and quality assurance (QA) reviews and for documenting comments and resolutions encountered in performing such reviews, as required by Sandia National Laboratories Civilian Radioactive Waste Management (CRWM) procedures.

---

## 2.0 SCOPE

---

This procedure prescribes the method for initiating a technical review (or a management or QA review) and for documenting reviewer comments and resolutions that result from performing documented, traceable, independent reviews, as required by SNL procedures, including changes. This procedure shall be used to conduct and document the reviews of Quality Assurance Implementing Procedures (QAIP 5-1), Work Agreements (QAIP 1-5), Technical Procedures (QAIP 20-1), SAND Documents (QAIP 6-2), SNL Letter Reports (SLTR) (QAIP 6-2), and whenever specified in a controlling Work Agreement or other implementing procedure.

---

## 3.0 DEFINITIONS

---

**Discretionary Comment:** Any comment that can be resolved by an editorial change or a minor change or any comment that the reviewer defines as discretionary.

**Editorial Change:** The following items are considered editorial changes: correcting grammar or spelling, renumbering sections or attachments which do not affect the chronological sequence of work, changing the title or number of the document, and updating organizational titles with no change in responsibilities.

**Management Review:** A review to confirm acceptance of the documentation being reviewed and to assess any impacts on CRWM projects.

**Mandatory Comment:** Any comment that does not meet the definition of a discretionary comment.

---

*Continued on next page*

### 3.0 DEFINITIONS, Continued

**Minor Change:** A change which does not affect the implementation of Quality Assurance requirements.

**Quality Assurance Review:** A review to provide assurance that the documentation being reviewed is consistent with SNL procedures, that appropriate QA requirements have been met, and that appropriate quality requirements have been incorporated in the documents.

**Technical Review:** A documented, traceable review of technical work performed by qualified personnel who are independent of those who performed the work but who have technical expertise at least equivalent to those who performed the original work.

### 4.0 PROCEDURE

#### 4.1 Preparation

Responsible Individual(s)	Step	Procedure
Review Requester	1	<p>Shall determine the personnel who are to perform the review.</p> <p>a. Shall ensure that each organization affected by a document reviews the document and changes to it.</p> <p>b. Shall ensure that each technical discipline affected by a document reviews the document and changes to it.</p> <p>c. Shall ensure that the Quality Assurance organization reviews changes to documents if they reviewed the previous version regardless of whether or not QA is affected by the change.</p> <p>d. Shall ensure that personnel selected to perform the review are qualified in accordance with QAIP 2-6. However, personnel selected to perform technical document reviews because of their expertise do not require SNL CRWM training or orientation. Training to QAIP 6-3 is recommended. The person requesting the review is responsible for documenting the basis for using the individual in a memo and placing it in the QAIP 6-3 review package.</p>

Continued on next page

## 4.0 PROCEDURE, Continued

### 4.1 Preparation (continued)

Responsible Individual(s)	Step	Procedure
Review Requester (Continued)	2	<p>Prepares a Document Review and Comment (DRC) form (Appendix A) for each individual selected to perform the review.</p> <p><b>Note:</b> The review requester shall specify the criteria to be used to perform the review and shall ensure that each reviewer is provided with those criteria (e.g. procedure checklists or review guidelines). Example criteria are printed on the reverse of the DRC form. While it is not mandatory to use those criteria, the review requester shall ensure that the review criteria consider applicability, correctness, technical adequacy, completeness, accuracy, and compliance with established requirements.</p>
	3	<p>Shall distribute copies of the document and applicable forms to reviewers. Shall also make all pertinent background information or data available to the reviewer if the information is not readily available to the reviewer and the reviewer requests it.</p>

### 4.2 Conduct of Review

Responsible Individual(s)	Step	Procedure
Reviewers	1	<p>Conduct the review in accordance with specified criteria and document mandatory comments on the DRC form.</p> <p><b>Note 1:</b> Mandatory comments may also be noted on the document being reviewed in reproducible ink and referenced on the DRC form. In this case, the marked-up pages of the document will be attached to the DRC form.</p> <p><b>Note 2:</b> The reviewer may use DRC forms for discretionary comments; however, such use is not required.</p>
	2	<p>If there are no mandatory comments, shall complete the DRC form, note that there were no mandatory comments, and return review materials to the author/requester.</p>

## 4.0 PROCEDURE, Continued

### 4.3 Comment Resolution

Responsible Individual(s)	Step	Procedure
Author/Requester	<p>1</p> <p>2</p> <p>3</p>	<p>Shall resolve comments with the reviewer's assistance to reach agreement on resolutions.</p> <p><b>Note 1:</b> Differences of opinion on comments and/or resolutions should be decided by higher management levels when necessary to assure the adequacy of the review document.</p> <p><b>Note 2:</b> Differences of opinion on comments and/or resolutions in QA matters should be handled in accordance with QAIP 1-4, "Resolution of Quality Assurance Disputes".</p> <p><b>Note 3:</b> Discretionary comments do not need to be resolved.</p> <p>Document comment resolutions on the DRC form and forward to the reviewer for acceptance.</p> <p>If mandatory comments are noted in the technical review, then the potential impact of these conditions on other documents will be assessed</p> <p><b>Note:</b> If there is an impact on other documents, the author/requester will initiate a review of the conditions by correspondence, a Procedure Action Request, a Deficiency Document, or other appropriate means.</p>
Reviewer	4	<p>Document acceptance of comment resolution on the DRC form and return to author/requester.</p> <p><b>Note 1:</b> If the document has a cover page which is to be signed, the reviewer may indicate acceptance of the comment resolution by signing the cover page of the document either in place of, or in addition to, signing the DRC form. If the reviewer signs the cover page and not the DRC form, the author/requester will check "Accepted" and enter "N/A - Signed Document" in the "Resolution Review Status" block of the DRC form.</p> <p><b>Note 2:</b> If the resolution is not acceptable, shall document rejection on the DRC form, return form to author/requester, and repeat Step 1 of this section.</p> <p><b>Note 3:</b> Comments resulting from the review shall be documented and mandatory comments shall be resolved before submitting the document for approval.</p>

*Continued on Next Page*

## 4.0 PROCEDURE, Continued

### 4.3 Comment Resolution (continued)

Responsible Individual(s)	Step	Procedure
Author/Requester	5	Process the DRC form and associated documentation in accordance with applicable document procedures (e.g. QAIP 1-5 for Work Agreements).

## 5.0 RECORDS

There are no records generated by this procedure. The records requirements for the Document Review and Comment Forms for mandatory comments are defined by the procedure or other document that specified the review (e.g. QAIP 1-5 for Work Agreements).

**Note:** Documentation of discretionary comments is not required to be maintained.

## 6.0 REFERENCE

QAIP 1-4	Resolution of Quality Assurance Disputes
----------	--

APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT  Sandia National Laboratories	<h2 style="margin: 0;">Document Review and Comment (DRC) Form</h2>
<b>REQUESTER</b>	
From Requester/Orgn. _____	Date: _____
To Reviewer/Orgn. _____	Due Date: _____
Document Number _____	Revision: _____
Title (optional): _____	
Review Type: <input type="checkbox"/> Independent Technical <input type="checkbox"/> QA <input type="checkbox"/> Management <input type="checkbox"/> Other	
If Other, specify type: _____	
Section(s) of document to be Reviewed and Review Criteria (sample criteria on back)	
Note: Unless noted otherwise, the entire document is to be reviewed using the criteria on the reverse of this form appropriate to the type of review.	
<b>REVIEWER</b>	
Comment number _____ of _____	Location: _____
This comment is: <input type="checkbox"/> Mandatory <input type="checkbox"/> Discretionary	
Reviewer's Signature: _____	
Date: _____	
<b>REQUESTER</b>	
Resolution: _____	
Requester's Signature: _____	
Date: _____	
<b>REVIEWER</b>	
Resolution Review Status: <input type="checkbox"/> Accepted <input type="checkbox"/> Not Accepted	
<input type="checkbox"/> Conditionally Accepted (specify terms)	
Reviewer's Signature: _____	
Date: _____	

## APPENDIX A (Continued)

### INSTRUCTIONS AND CRITERIA FOR DOCUMENT REVIEW AND COMMENT FORM

#### INSTRUCTIONS

- A. Review Requester will complete top portion of form. Author/Requester will provide the Document Review and Comment (DRC) Form, along with the document to be reviewed, to the Reviewer.
- B. Reviewer will review the subject document, applying criteria as specified. Comments will be recorded in the "Reviewer" portion of the form, one comment per DRC form. Sign the DRCs and return them to the Author/Requester. If no mandatory comments are made, omit items C and D below.
- C. Author/Requester will resolve the mandatory comments and record them in the "Requester" portion of the form, sign the DRCs, and return them to the Reviewer.
- D. Reviewer will indicate disposition of comment resolution in the "Reviewer" portion, sign the DRCs (or document cover page), and return form to the Author/Requester.

#### SNL CRITERIA CHECKLIST FOR TECHNICAL REVIEWS (EXAMPLE)

Technical reviews are in-depth critical reviews, analyses, and/or evaluations of documents, material, or data that require technical verification and/or validation for applicability, correctness, technical adequacy, completeness, and accuracy. Consider such technical problem areas as method, data, results, assumptions, calculations, and software.

- Is the technical problem addressed by this document clearly identified?
- Is the method that will be used to address the technical problem clearly identified?
- Are the data that will be used to address the technical problem clearly identified and has traceability of the data been maintained?
- Is the scope of the work performed and the results obtained sufficient to merit documentation (i.e., are there big gaps in the methods, analysis, results and/or conclusions that require more work be done before publication)?
- Are the assumptions, if assumptions are required, clearly stated?
- Have the calculations or other logical procedures required to implement the method been performed in such a manner that the receiver clearly understands how the solution was obtained?
- Is the solution or result clearly stated?
- Has the problem been correctly identified or has the author solved the wrong problem?
- Is the method used to solve the problem the method that was identified?
- Has the author chosen an appropriate method for the solution of the problem and is this method capable of producing results with the accuracy reported?
- Is there sufficient background information or review of previous work given so that the results presented can be placed in proper context?
- Are the data chosen the correct data to use in the problem solution and are these data capable of producing results with the accuracy reported?
- Are the assumptions stated appropriate for the problem and are the limits placed on the solution to the problem by these assumptions clearly identified?
- Have the calculations or other logical procedures required to implement the method identified been performed correctly?
- Are the symbols, etc., used in the tables and graphs clearly defined in the figure or in the text?
- Is the result reported by the author supported by the method, data, assumptions, and calculations?
- Are there sections of the document that are extraneous to the flow of the technical discussion? If so, should they be removed completely or placed in an appendix?
- Are the substantiating references cited appropriate and complete?
- Does the reviewer agree with the author's approach and solution to the technical problem?
- Is proper credit given to other contributors (either direct contributors who are authors or contributors through reference material cited)?

#### SNL CRITERIA CHECKLIST FOR QUALITY ASSURANCE REVIEWS (EXAMPLE)

A Quality Assurance review assures that documentation is consistent with procedures and that appropriate QA requirements are met and incorporated in the review documents.

- Does the document adhere to the format and content requirements of any governing procedure? (e.g., 1. For technical reports, have a WBS number and Work Agreement/revision number been identified? 2. Have data that were used as input to the work or reported as output been appropriately identified as either "qualified data" or "not qualified data"?)
- Are reviews and approvals as required by governing procedure?
- If baseline documents were used as the basis for this document, were the correct versions of those baseline documents used?
- Are applicable QA requirements adequately incorporated/cited?

#### SNL CRITERIA CHECKLIST FOR MANAGEMENT REVIEWS (EXAMPLE)

A Management review confirms acceptance of the documentation being reviewed and assesses impact to YMP.

- Does this technical report respond to and adequately meet customer (YMPO) needs, requirements, and expectations?
- Is it consistent with YMP policy?
- Is there evidence that it is consistent with YMP organizing principles (requirements documents, APs, YAPs, etc.)?
- Were the proper reviews done and documented?
- Is there significant impact on Project milestones, budget, or schedule?
- Is the position presented supported by Sandia National Laboratories?

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WASHINGTON, D.C.**

**ORIGINAL**  
THIS IS A RED STAMP  
 Deficiency Report  
NO. YM-96-D088  
PAGE 1 OF 2  
QA: L

**PERFORMANCE/DEFICIENCY REPORT**

1 Controlling Document: <b>QARD, Revision 5</b>	2 Related Report No. <b>Audit YM-ARC-96-18</b>
3 Responsible Organization: <b>SNL</b>	4 Discussed With: <b>R. Richards</b>

5 Requirement/Measurement Criteria:

Section 5.2.2. states "Implementing documents shall include the following information as appropriate to the work to be performed:

H. Identification of the lifetime and nonpermanent quality assurance records generated by the implementing document."

6 Description of Condition:

Technical Procedures are being implemented and generating quality assurance records; however, the technical procedures do not identify records generated as lifetime or nonpermanent as required by the QARD.

Examples are: TP-236, Revision 00; TP-237, Revision 00; TP 244, Revision 00; TP-246, Revision 00; TP-248, Revision 00; TP 250, Revision 00.

7 Initiator <b>Mario R. Diaz</b> <i>Mario Diaz</i> Date <b>8/1/96</b>	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
--	---

10 Recommended Action: (Not required for PR)

1) Correct Technical Procedures that were identified as deficient.

2) Evaluate other technical procedures to determine compliance with this requirement and make appropriate corrections to deficient procedures. Provide objective evidence of evaluation and corrective actions.

11 QA Review: <b>QAR Mario R. Diaz</b> <i>Mario Diaz</i> Date <b>8-1-96</b>	12 Response Due Date <b>20 working days from issuance</b>
13 Affected Organization QA manager Issuance Approval: (QAR for PR) Printed Name <b>R.E. SPENCE</b> Signature <i>Robert B. Constable</i> Date <b>8.7.96</b>	23 Closure Approved by: (N/A for PR) <i>[Signature]</i> Date <b>5/2/97</b>
22 Corrective Action Verified <b>QAR James E. Clark</b> Date <b>5/15/97</b>	

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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

See Continuation Page.

15 Extent of Condition: (Not required for PR)

See Continuation Page.

16 Root Cause Determination: (Not required for PR)

Required  Yes  No

17 Action to Preclude Recurrence: (Not required for PR)

Required  Yes  No

18 Corrective Action Completion Due Date:

N/A

19 Response by: <sup>PR</sup> R. Altimans OS F Ell

Initial

Amended

Date 9/4/96

Phone 655 418-0641

20 Response Accepted

QAR

N/A

Date

21 Response Accepted (N/A for PR):

AOQAM

N/A

Date

7/5/96 Brady to Spencer

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PR/DR CONTINUATION PAGE

**BLOCK 14 - REMEDIAL ACTIONS:**

There is no impact to quality presented by the cited conditions as all technical data are presently submitted forward from Sandia with the records retention designation of "permanent" under the current OCRWM retention schedule. "Permanent" includes the QARD identifier, "LIFETIME". Technical Procedures provide the methods of accomplishing a specific technical activity, but the submittal of generated records is covered by the governing QAIPs (e.g. QAIP 20-1 for scientific notebooks and supporting documentation [LIFETIME], QAIP 20-3 for chain of custody records [LIFETIME], QAIP 2-4 for analysis and review documents [LIFETIME], QAIP 6-2 for SAND reports and review comments [LIFETIME], QAIP 17-2 for technical data information forms [TDIFs] and attached data [LIFETIME], QAIP 19-1 for software documentation and reviews [LIFETIME except for change requests], and QAIP 20-1 for technical procedures and reviews [LIFETIME]). Therefore, no specific actions are required in regards to the LIFETIME/NONPERMANENT status of records produced as a result of performing technical activities. However, to ensure that generated records are properly marked, revised or new technical procedures to be written will indicate whether records created as a result of performing that activity are LIFETIME or NONPERMANENT and the list of LIFETIME/NONPERMANENT records, formally part of QAIP 17-3, has been revised to include, "Note: All records generated as a result of implementing Technical Procedures shall be designated lifetime unless specifically designated nonpermanent in the Technical Procedure." This list has been added to the master list of file codes and will be eliminated from QAIP 17-3 with the next revision.

**BLOCK 15 - EXTENT OF CONDITION:**

Technical Procedures, themselves, did not specifically identify records as LIFETIME or NONPERMANENT. However, further investigation revealed that this designation was being properly applied by the procedure that actually governed the record (rather than the technical activity) and by the Appendix to QAIP 17-3.

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YM-96-D-088

Your response is not acceptable based on the following:

Your response is inaccurate. Several TP procedures do contain forms originated and required by use of them (i.e., TP 61, 64, 65, 90, etc.). Also, many of the TPs have not been revised to update the identification of the current procedure required to process QA records, which is contrary to QARD requirements. Furthermore, the Appendix to QAIP 17-3 is one element useful to determine the proper identification of the QA Record(s). However, the Record Source using the TP should be made aware in this procedure of how to cross reference this information.

Corrective action is required.

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PR/DR NO. YM-96-2088  
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QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

SEE AMENDED RESPONSE CONTINUATION PAGE.

15 Extent of Condition: (Not required for PR)

SEE AMENDED RESPONSE CONTINUATION PAGE.

16 Root Cause Determination: (Not required for PR)

Required  Yes  No

SEE AMENDED RESPONSE CONTINUATION PAGE.

17 Action to Preclude Recurrence: (Not required for PR)

Required  Yes  No

SEE AMENDED RESPONSE CONTINUATION PAGE.

18 Corrective Action Completion Due Date:

SEE A/R CONTINUATION PAGE

19 Response by:

Initial  
 Amended

SEE A/R CONTINUATION PAGE  
Date \_\_\_\_\_ Phone \_\_\_\_\_

20 Response Accepted

OAR Walter Lee

Date 10-15-96

21 Response Accepted (N/A for PR):

AOQAM James B. Layford Date 10/18/96

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**YM-96-D088 Amended Response**

Block 14, Remedial Actions:

The Technical Procedures cited in block 6 will be revised as necessary to specifically identify records to be submitted and to cite QAIP 17-1 as the governing document for records submittal.

Block 15, Extent of Condition:

Each Technical Procedure which is being utilized on current work will be reviewed to establish whether records to be generated are clearly identified and whether these records are being submitted per upper tier procedures.

Block 16, Root Cause Determination:

The Appendix to QAIP 20-1 "Technical Procedures," did not provide instructions with sufficient detail to direct record sources as to proper identification and submittal of generated records. Additionally, the Lifetime/Nonpermanent Record List (App. A of QAIP 17-3, Rev.2) did not clearly categorize the records generated by TP usage.

Block 17, Action to Preclude Recurrence:

The Appendix to QAIP 20-1, "Technical Procedures," will be revised to require submittal of records per appropriate governing procedures.

The Lifetime/Nonpermanent Record List (Appendix A for QAIP 17-3, Revision 2) will be reviewed and revised as necessary to assure proper categorization of records created through the use of Technical Procedures.

The Records Management and Participant Data Archive staff members will be briefed on the application of the Lifetime/Nonpermanent Records List to technical data and forms which are generated through implementation of Technical Procedures.

Block 18, Corrective Action Completion Date:

December 1, 1996

Block 19, Response by:

Amended for P. J. Warner



Date: October 4, 1996 Phone: 505 848-0130

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PR/DR CONTINUATION PAGE

VERIFICATION OF CORRECTIVE ACTION

Completion of corrective actions, as documented in the letter to Don Horton from Joe Schelling (SNL) dated 2/3/97, and the training records associated with SNL Procedure QAIP 17-1, Rev. 3, effective 11/19/96, were reviewed and found acceptable on February 28, 1997, while performing procedure revision assistance to SNL.

Revision and new effective dates of the six affected technical procedures were verified (all were effective 1/31/97) and an online system was verified in place to advise procedure users regarding lifetime vs. nonpermanent records for all SNL procedures.

Implementation of corrective actions has been verified, and this DR is ready for closure.

QAR James E. Clark Date 5/15/97

QAR Name Printed JAMES E. CLARK



**Sandia National Laboratories**

Operated for the U.S. Department of Energy by

**Sandia Corporation**

Albuquerque, New Mexico 87185-1326

February 3, 1997

WBS: 9.1.3.2

QA: L

(1 page)

Donald E. Horton  
Office of Quality Assurance  
P.O. Box 98608  
Las Vegas, NV 89193-8608

Attn: M. R. Diaz

Subject: Completion of Corrective Actions for Deviation Report YM-96-D088

Corrective actions defined in the amended response for Deviation Report YM-96-D088 (Brady to Spence, "Submittal of Amended Response for Deficiency Reports YM-96-D080, -D083, -D084, -D085, and D-088," dated October 7, 1996) have been completed. As described in the extension request letter (Brady to Sult, "Extension Request for Completion of Corrective Actions from Audit YM-ARC-96-18," dated November 27, 1996), remaining actions included those defined in Blocks 14 and 15 of the response.

For Block 14, the six cited Technical Procedures were revised to indicate that records generated by the procedures are designated lifetime records. Objective evidence provided for verification includes the signed cover pages for the six procedures and a copy of one of the procedures (TP-236) showing the changed text; controlled distribution for these procedures has been initiated.

For Block 15, active FY96 Work Agreements were reviewed to identify which Technical Procedures were being used. This review identified 29 of the total of 55 Technical Procedures as active. A subcontract was placed to have all of these Technical Procedures reviewed and changes marked as appropriate. Changes identified included revisions to the records sections to indicate the lifetime records designation, add or clarify the generation of a record of proficiency training in each procedure, and incorporate other minor changes. A second subcontract was simultaneously used to convert all active Technical Procedures to electronic format to simplify revision of the remainder as resources permit.

This documentation should suffice to allow you to verify closure of this Deviation Report. Please contact me at (505) 848-0643 if there are any questions.

Sincerely,

F. Joseph Schelling  
SNL YMP QA Lead

Attachment (10 pages)

Copy (w/o attachments) to:  
6850 M. C. Brady (MS-1399)  
Copy (w/ attachment) to:  
YMP:9.1.3.2:CAR:QA:DR YM-96-D088

*Exceptional Service in the National Interest*

**SANDIA NATIONAL LABORATORIES**  
**YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT**  
**TECHNICAL PROCEDURE**

**TP-236**

**Tape Extensometer Measurements**

**Revision 02**

Author: *Ron Taylor*  
Ron Taylor, Principal Investigator

Date: 1/30/97

Approved: *Clara Hu*  
Independent Technical Review

Date: 1/30/97

Approved: *John F. Pelletier*  
SNL YMP Quality Assurance Review

Date: 1/31/97

Approved: *J. J. Daniels*  
J. J. Daniels, 6853  
SNL YMP Manager

Date: 1/31/97

Effective Date: 1/31/97

Attachment p 2 of 10 2/3/97 F95

### REVISION HISTORY

<u>Revision</u>	<u>Effective Date</u>	<u>Summary</u>
00	8/7/95	Initial issue under title "Operation, Calibration, and Control of Tape Extensometers"
01	1/17/96	Complete rewrite to better represent process, focus on necessary steps, and improve documentation flow. Replaces former use of scientific notebook with records generated by this procedure, narrows scope to the measurement process, and clarifies baseline determination
02		Modified Section 4.2.3 to reflect current post-processing steps, updated Section 5.0 (Records) to identify records as lifetime records per YM-96-D-088.

Attachment 2/13/97  
P3 of 10 F95

TP-236  
Revision 02  
Page 3 of 5

## 1.0 SCOPE

This Technical Procedure applies to all SNL YMP personnel and contractors performing tape extensometer measurements in the Exploratory Studies Facility (ESF).

## 2.0 OBJECTIVES AND PRIMARY TASKS

The objective of this technical procedure is to describe the process for performing and documenting tape extensometer measurements in the ESF. The measurement process is based on ASTM D4403-84, "Standard Practice for Extensometers Used in Rock," and the Geokon Tape Extensometer Instruction Manual provided with the instrumentation. The process includes two primary tasks: (1) Setting Tape Extensometer Performance Criteria; and (2) Performing Tape Extensometer Measurements

## 3.0 PREREQUISITES

The Principal Investigator is responsible for assuring that individuals assigned to conduct tape extensometer measurements under this procedure are trained before these individuals initiate work. This training includes documenting that these individuals have read the procedure and have demonstrated proficiency in its use.

Other prerequisites to the execution of this procedure, which are the responsibility of the individual making measurements, are ensuring that:

- a controlled copy of the procedure is available for use; and
- only controlled, calibrated instrumentation is used.

## 4.0 PROCESS

### 4.1 Setting Tape Extensometer Performance Criteria

#### 4.1.1 Baseline Average Uncertainty:

Perform and record a series of at least ten measurements of a calibrated static frame with each tape extensometer to establish an average uncertainty range for the instrument. (It is preferable, however, to have three or more individuals each perform a series of at least ten measurements each to minimize potential operator bias.) The Baseline Average Uncertainty range is set to the average plus or minus two standard deviations for all readings in this series. The baseline range is used to check instrument performance both before and after a series of readings in the ESF. New baseline values are established at least annually, whenever the instrument configuration changes, or whenever the performance check measurements are found to exceed the existing baseline values. Documentation of this step includes identification of the static frame, extensometer gage, and digital thermometer, extensometer tape and gage readings, temperature, dated signature of the individual making the measurements, and calculation results.

#### 4.1.2 Relative Instrument Baseline

Because different tape extensometers will not produce identical absolute measurements, a baseline value of the relative measurement difference between instruments is needed. This permits the use of alternate instruments in case of failure of an original. The baseline relative measurement value is determined by averaging a series of similar measurements

2/3/97 Attachment #4-10 FGS

made with both instruments at several measurement stations in the ESF. The Relative Instrument Baseline value is set to the average of the temperature-corrected length differences between measurements made with two different extensometer gages. This process is repeated whenever new instruments are acquired or whenever the instrument configuration changes. Documentation of this step includes the usual measurement documentation (See Section 4.2) and calculation results.

#### 4.2 Performing Tape Extensometer Measurements

##### 4.2.1 Performance Checking

Both before and after taking ESF extensometer readings:

Examine the extensometer for any visible damage since its last use.

Conduct performance checks by using the calibrated extensometer to measure a standard, calibration frame.

Compare the measurements against the Baseline Average Uncertainty range.

- If the measurements are within the baseline range, the instrument is assumed usable.
- If the measurements fall outside the baseline range,
  - repeat the measurement and comparison after the extensometer and calibration frame reach thermal equilibrium (at least fifteen minutes).
  - If the measurement remains outside the baseline range, do not use the extensometer, notify the Principal Investigator, who determines if the baseline range should be updated (See Section 4.1.1) or other equipment calibration and control steps taken per QAIP 12-1.

##### 4.2.2 Conducting a Tape Extensometer Measurement

1. For safety reasons, tape extensometer measurements to the left rib of the ESF require that the conveyor belt be locked out and tagged by the ESF Test Coordination Office during the measurement. Contact the ESF Test Coordination Office to arrange the lockout period. It is recommended that a two-person team perform tape extensometer measurements in the ESF.
2. Connect the two ends of the extensometer to the convergence pins.
3. Take up the slack in the tape and engage the tape locking pin in the nearest punched tape hole.
4. Align the extensometer along the chord between the two convergence pins, minimizing the effect of instrument weight on tape tension.
5. Align the scribed lines on the instrument, repeating the previous step if necessary to adjust the tape locking point.
6. Check the tape alignment.
7. Record the date, time, temperature (to 0.1"), measurement location (station and chord), instrument readings (foot, inch, and vernier {to the nearest 0.001"}), and instrument identification (dial gage and digital thermometer), and comments (if any). Initial and date this documentation.

8. If the measurement appears to deviate significantly from earlier readings, the measurement should be repeated to determine if it is reproducible. If not, the measurement should be repeated with another extensometer.

#### 4.2.3 Post-processing and archival of extensometer data.

Submit original records of extensometer measurement data in a timely manner for retention in the records package associated with the Work Agreement under which this procedure is conducted.

[Note: Post-processing of the data, either by hand calculation or database functions includes the following:

- Conversion of readings into a common unit system
- Correction of lengths for thermal expansion of the extensometer tape
- Calculation of displacement (as the difference between measurements taken between the same convergence pins) and displacement rate, corrected for relative instrument differences if appropriate.]

### 5.0 RECORDS

Records and record packages, including corrections and changes thereto, generated as a result of implementing this procedure shall be prepared and submitted as lifetime QA records (QA:L) to the SNL Local Records Receiving Organization by the record source in accordance with the requirements of QAIP 17-1.

QA records generated by this procedure include:

- Documentation of proficiency in the use of this procedure;
- Records of measurements and calculations used to establish tape extensometer performance criteria;
- Records of ESF data collection, including pre- and post-measurement performance checks; and
- Records of any data processing and conversion.

### 6.0 REFERENCES

1. ASTM D4403-84, "Standard Practice for Extensometers Used in Rock," American Society for Testing and Materials, November, 1984.
2. Geokon Tape Extensometer Instruction Manual, Geokon, Inc., Lebanon, NH, 1990.
3. QAIP 12-1, "Measuring and Test Equipment Control"
4. QAIP 17-1, "Protecting, Preparing, and Submitting YMP QA Records"
5. QAIP 17-2, "Participant Data Archive"

SNL  
YMP

TP-237  
Revision 01  
Page 1 of 8

Sandia National Laboratories  
Yucca Mountain Site Characterization Project

TECHNICAL PROCEDURE (TP)

TP-237  
Revision 01

Installation and Verification of Instrumentation Wiring

Author: *Ron S. Taylor* Date: 1/30/97  
Ron S. Taylor

Approved: *Clute* Date: 1/30/97  
Independent Technical Review

Approved: *John F. Pelletier* Date: 1/31/97  
SNL YMP QA Review

Approved: *John J. Danneels* Date: 1/31/97  
Danneels, 6853  
SNL YMP Manager

Effective Date: 1/31/97

SNL  
YMP

Sandia National Laboratories  
Yucca Mountain Site Characterization Project

Revised  
Date:

TECHNICAL PROCEDURE (TP)

TP-244  
Revision 01

Downloading, Verifying, and Backing Up  
Electronic Data Taken by Data Logger

Author: Ron S. Taylor Date: 1/30/97  
Ron S. Taylor

Approved: Clara Turner Date: 1/30/97  
Independent Technical Review

Approved: John F. Pelletier Date: 1/31/97  
SNL YMP QA Review

Approved: William J. Daniels Date: 1/31/97  
11/11/97, 6853  
SNL YMP Manager

Effective Date: 1/31/97

Sandia National Laboratories  
Yucca Mountain Site Characterization Project

TECHNICAL PROCEDURE (TP)

TP-246  
Revision 01

Control of Measuring and Test Equipment Used in the Exploratory Studies Facility

Author: *Ron S. Taylor* Date: 1/30/97  
Ron S. Taylor

Approved: *Clute* Date: 1/30/97  
Independent Technical Review

Approved: *John F. Pelletier* Date: 1/31/97  
SNL YMP QA Review

Approved: *John J. Daniels* Date: 1/31/97  
J. J. Daniels, 6853  
SNL YMP Manager

Effective Date: 1/31/97

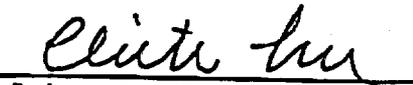
Sandia National Laboratories  
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TECHNICAL PROCEDURE (TP)

TP-248  
Revision 01

Reading, Verifying, and Backing Up  
Instruments Using Portable Data Logger

Author:  Date: 1/30/97  
Ron S. Taylor

Approved:  Date: 1/30/97  
Independent Technical Review

Approved:  Date: 1/31/97  
SNL YMP QA Review

Approved:  Date: 1/31/97  
J. J. Dannels  
SNL YMP Manager

Effective Date: 1/31/97

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Yucca Mountain Site Characterization Project

TECHNICAL PROCEDURE (TP)

TP-250  
Revision 01

Calibration, Preparation, Installation, and Operation  
of Instrumented Rock Bolts

Author: R S Taylor Date: 1/30/97  
Ron S. Taylor

Approved: Curtis Hu Date: 1/30/97  
Independent Technical Review

Approved: John F Pelletier Date: 1/31/97  
SNL YMP QA Review

Approved: J. Danheef Date: 1/31/97  
J. Danheef,  
SNL YMP Manager

Effective Date: 1/31/97

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

**ORIGINAL**  
 Performance Report  
 Deficiency Report  
 NO. YM-96-D090  
 PAGE 1 OF 7573 / AKW  
 QA: L

**PERFORMANCE/DEFICIENCY REPORT**

1 Controlling Document: AP-16.1Q, Revision 0; AP 16.2Q, Revision 0; QAIP 17-1, Revision 02	2 Related Report No. Audit YM-ARC-96-18
---	--

3 Responsible Organization: SNL	4 Discussed With: R. Richards
------------------------------------	----------------------------------

5 Requirement/Measurement Criteria:

AP-16.1Q, Revision 0, Section 5.3.b states, "The responsible individual (RI) documents remedial actions in Block 12 of the DR, with signature and date in Block 13 and a proposed due date in Block 14."

Section 5.3.e states in part, "The RI, based on a review of the recommended actions in Block 17 of the DR, indicates the root cause determination and action to preclude recurrence."

Section 5.7.a states, "The QAR performs verification and documents the verification on a DR Continuation Page, identifying the objective evidence reviewed."

Section 7.1 states, "Completed DRs, Continuation Pages and all relevant correspondence are lifetime QA records."

AP-16.2Q, Revision 0, Section 5.4.5 states, "The affected organization QA Manager concurs with the extension request evaluation by signing the appropriate justification correspondence."  
 (Continued on page 3)

6 Description of Condition:

Documentation for deficiencies do not comply with procedural requirements.

Examples are:

- SNL-96-D5 proposed due date for remedial actions is missing.
- SNL-96-D2 remedial actions and proposed due dates are missing.
- SNL-96-D5 root cause determination and action to preclude recurrence are missing.
- SNL-96-D2 was verified and closed; however, the objective evidence reviewed is missing.
- SNL-96-D2 and D5 are missing some relevant correspondence.
- SNL-96-C-01 an extension request letter signed by M. Brady and dated 2/27/95 was issued and made part of the QA records package. However, documentation signed by the QA Manager to approve this request does not exist.

(Continued on page 3)

7 Initiator Mario R. Diaz <i>Mario Diaz</i> Date 8/1/96	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
--	---

10 Recommended Action: (Not required for PR)

- Correct documentation identified as deficient.
- Review other deficiency documentation to verify compliance to procedural requirements and make corrections as appropriate. Provide objective evidence of review and corrective actions taken.

11 QA Review: QAR Mario R. Diaz <i>Mario Diaz</i> Date 8-1-96	12 Response Due Date 20 working days from issuance
--	---

13 Affected Organization QA manager Issuance Approval: (QAR for PR) Printed Name <b>RESPEENCE</b> Signature <i>Robert B. Respeence</i> Date <i>8.7.96</i>
--

22 Corrective Action Verified QAR <i>[Signature]</i> Date <i>5/1/97</i>	23 Closure Approved by: (N/A for PR) <i>[Signature]</i> Date <i>5/2/97</i>
--	---

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 QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:  
 See Continuation Sheet.

15 Extent of Condition: (Not required for PR)  
 See Continuation Sheet.

16 Root Cause Determination: (Not required for PR) Required  Yes  No

17 Action to Preclude Recurrence: (Not required for PR) Required  Yes  No

18 Corrective Action Completion Date:  
 October 31, 1996

19 Response by: *[Signature]*  
 Initial  
 Amended  
 Date 8/28/96 Phone 505 848 0786

20 Response Accepted  
 QAR N/A Date

21 Response Accepted (N/A for PR):  
 AOQAM N/A Date

*9/5/96 Brady & Spencer*

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QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

See Amended Response Continuation Page.

15 Extent of Condition: (Not required for PR)

SEE AMENDED RESPONSE CONTINUATION PAGE.

16 Root Cause Determination: (Not required for PR)

Required

Yes

No

SEE AMENDED RESPONSE CONTINUATION PAGE.

17 Action to Preclude Recurrence: (Not required for PR)

Required

Yes

No

SEE AMENDED RESPONSE CONTINUATION PAGE.

18 Corrective Action Completion Due Date:

SEE A/R CONTINUATION PAGE

19 Response by:

Initial

Amended

SEE A/R CONTINUATION PAGE

Date

Phone

20 Response Accepted

OAR

*Waino Lau*

Date 10-16-96

21 Response Accepted (N/A for PR):

AODAM

*[Signature]*

Date 10/21/96

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5. Requirement/Measurement Criteria (Continuation):

QAIP 17-1, Revision 02, Section 4.2 states in part "The record source shall review each record package to ensure that it is accurate and complete."

Section 4.4 states, "The record source shall correct errors on records by scribing a single line through the incorrect information and entering the correct information in close proximity with his initials and date."

6. Description of Condition (Continuation):

Documentation of SNL-96-D4 was found to be part of SNL-96-C-01 without being relevant to that package. Corrections have been made to SNL-96-D2 by other than the record source and initials and dates are missing. Additionally, some memos are dated prior to the deficiency being issued.

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**BLOCK 14 - REMEDIAL ACTIONS:**

The deficiency report was actually written against the "informal" PR/DR/CAR files maintained by the PR/DR/CAR coordinator for ease in performing that task. Most of the discrepancies noted were of the type that were corrected during the normal records acceptance and closing process, a fact that was borne out by the inspection of the records package to evaluate the remedial actions required to correct this deficiency.

**SNL-96-D5 proposed due date for remedial actions is missing:** The actual record was inspected and the proposed due date was marked "N/A" since no remedial actions were required. No further action is required.

**SNL-96-D2 remedial actions and proposed due dates are missing:** The actual record was inspected and the proposed due date was marked "Completed with response" to show that the remedial action had already been completed and there was no proposed due date. Also, the actual record contained a remedial action in block 12. No further action is required.

**SNL-96-D5 root cause determination and action to preclude recurrence are missing:** The actual record was inspected and both these items were on a continuation sheet in the records package. No further action is required.

**SNL-96-D2 was verified and closed; however, the objective evidence reviewed is missing:** The remedial action was for the customer to submit a memo to the file to show acceptance of the deliverable. The actual records package was inspected and found to contain an E-mail from the customer which stated, "As the customer for this deliverable, I have agreed that it is not required." This E-mail was also reviewed and verified by the QAR. No further action is required.

**SNL-96-D2 and D5 are missing some relevant correspondence:**

**D2:** There was no letter of issuance completed for SNL-96-D2 because the DR was delivered to the responsible individual and responded to and completed in a timely manner. There was no impact on quality because of this omission. Nor is there any appropriate remedial action to correct the deficiency since preparing a letter of issuance after the remedial action has been completed would have no value whatsoever.

**D5:** The "missing document" was an attachment mentioned by F.J. Schelling in his letter. The actual records package was inspected and Mr. Schelling had crossed out (and initialed and dated the correction) the line mentioning the attachment as the attachment was the DR itself. No further action is required.

**SNL-96-C-01 an extension request letter signed by M. Brady and dated 2/27/95 was issued and made part of the QA records package. However, documentation signed by the QA Manager to approve this request does not exist:** It is correct; the QA Manager did not document is approval of the request for extension although, based on the correspondence in the records package, it is obvious that he was aware of the request and at least did not oppose it. A memo for file will be prepared by the QA Manager stating that he was aware of the extension request and approved it orally.

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Documentation of SNL-96-D4 was found to be part of SNL-96-C01 without being relevant to that package: This deficiency was corrected in the presence of the auditor. No further action is required.

Corrections have been made to SNL-96-D2 by other than the record source and initials and dates are missing: The actual records package was inspected and all corrections were made by the originator of the document or by the PR/DR/CAR Coordinator who is the record source for DR packages. All corrections in the actual records package had initials. One correction did not have the date entered; that deficiency has been corrected. No further action is required.

Some memos are dated prior to the deficiency being issued: In SNL-96-C-01, an extension request letter signed by M. Brady was incorrectly dated 2/27/95 rather than 2/27/96. The record source has corrected this error. No further action is required.

To ensure that the deficiencies noted above are not present in other packages, the SNL QA Staff will inspect all authenticated FY96 deficiency report record packages for errors such as corrections not dated or initialed, blank remedial action due blocks, blank portions of forms, or missing attachments or other correspondence. The conduct of this review will be documented and any deficiencies noted will be documented in accordance with AP-16.1Q and tracked as deficiencies.

**BLOCK 15 - EXTENT OF CONDITION:**

Authenticated records packages were reviewed to determine the remedial actions necessary to correct this deficiency. Although there are occasional administrative errors in the deficiency records packages, discrepancies of this nature are normally caught and corrected during records processing. The deficient condition is not widespread nor is it sufficiently serious to warrant root cause analysis. Therefore, a root cause determination will not be performed.

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YM-96-D-090

Your response is rejected based on the following:

Your statement about the deficiency report being written against the "informal" PR/DR/CAR files maintained by the PR/DR/CAR coordinator is incorrect. The adverse conditions were documented based on the records found in the SNL Records Processing Center and later discussed with the QA Manager.

Individuals creating QA records shall ensure that the QA records are legible, accurate, complete, appropriate to the work accomplished, and identifiable to the item(s) or activity(s) to which they apply. Otherwise, they will become an adverse condition affecting QARD requirements.

These adverse conditions demonstrate that discrepancies of this nature are not usually caught and corrected during records processing. Therefore, corrective action to preclude recurrence is mandatory.

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**YM-96-D090 Amended Response**

**Block 14, Remedial Actions:**

Deficiency document records in the SNL Local Records Center, related to the deficiencies cited in block 6, were inspected, with the following conditions found and needed corrections made, shown with the individual deficiency statements:

- a) SNL-96-D5 proposed due date for remedial actions is missing: The record was inspected and the remedial action due date was found to be marked "N/A", which is appropriate since no remedial actions were required.
- b) SNL-96-D2 remedial actions and proposed due dates are missing: Upon inspection, the record was found to contain a remedial action in block 12. The remedial action due date was found to be marked, "Completed with response," to show that the remedial action had already been completed and, correspondingly, there was no proposed due date.
- c) SNL-96-D5 root cause determination and action to preclude recurrence are missing: The statement, "See attachment," appears in blocks 19 and 20 of the DR, and both these items were on a PR/DR Continuation Sheet (page 3 of the DR) in the records package.
- d) SNL-96-D2 was verified and closed; however, the objective evidence reviewed is missing: The remedial action was for the customer to submit a memo stating acceptance of the deliverable. The records package was inspected and found to contain an e-mail memo from the customer which stated, "As the customer for this deliverable, I have agreed that it is not required," which is documented evidence meeting the intent of the remedial action statement.
- e) SNL-96-D2 and D5 are missing some relevant correspondence:  
D2: The records package for this DR does not contain a no "letter of issuance" because none was prepared for SNL-96-D2. However, at this time there is no appropriate remedial action to address that omission, since preparing a letter of issuance after the remedial action has been completed would have no value.  
D5: The document missing from this records package was an attachment to the DR response memo from F.J. Schelling; the attachment was the DR itself with the response portions completed. A copy of the DR as originally provided with the memo was located and included in the records package with the DR response memo.

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f) SNL-96-C-01 an extension request letter signed by M. Brady and dated 2/27/95 was issued and made part of the QA records package. However, documentation signed by the QA Manager to approve this request does not exist. As the above statement indicates, approval of the request for extension was not documented. A memo has been prepared by the QA Manager stating that he was aware of the extension request and approved it; the memo has been placed in the records package.

g) Documentation of SNL-96-D4 was found to be part of SNL-96-C01 without being relevant to that package: This situation was corrected on the spot.

h) Corrections have been made to SNL-96-D2 by other than the record source and initials and dates are missing: The actual records package was inspected and all corrections were found to have been made by the originator of the document or by the PR/DR/CAR Coordinator, who is the record source for DR records packages. All corrections in the actual records package had initials. One correction did not have the date entered; that deficiency has been corrected.

i) Some memos are dated prior to the deficiency being issued: In SNL-96-C-01, an extension request letter signed by M. Brady was incorrectly dated 2/27/95 rather than 2/27/96. The record source has corrected this error in the records package.

Block 15. Extent of Condition:

To ensure that the deficiencies noted above are not present in other packages, the SNL QA Staff will inspect all completed FY96 deficiency report record packages for errors or omissions (such as corrections not dated or initialed, blank portions of forms, or missing attachments or other correspondence). The conduct of this review will be documented; records corrections will be made in accordance with QAIP 17-1.

The occasional administrative errors that existed in the deficiency document records packages (only cases e) through i) in block 14) are dissimilar in their nature and in the individuals associated with them. Additionally, discrepancies of this nature are normally caught and corrected during records processing (the records evaluated had not, at the time of the audit, had their final Records Management staff inspection prior to being sent to the project Records Processing Center). Consequently, the deficient condition does not warrant root cause analysis.

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Block 16. Root Cause Determination:

None.

Block 17. Action to Preclude Recurrence:

The individual who performed the function of PR/DR/CAR Coordinator and who served as "Records source" for the deficiency document packages during the period that the cited deficiency documents were processed has since left SNL. In order that deficiency document records packages be accumulated and processed in a more error-free manner in the future, a memo-of-instruction will be provided to the new PR/DR/CAR Coordinator. The memorandum-of-instruction will provide a checklist to be used in preparing accurate, complete, correct deficiency report records packages; the memo will be supplemented with a one-on-one training session, to be documented by a memo describing the training, for the new PR/DR/CAR Coordinator. This training will emphasize use of the previously-mentioned checklist; records accuracy, identifiability, and completeness criteria; and the importance of either preventing, or detecting and correcting, records problems early.

Block 18. Corrective Action Completion Due Date:

November 15, 1996

Block 19. Response by:

Amended R. R. Richards



Date: Oct. 4, 1996 Phone: 505 848 0786

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PR/DR CONTINUATION PAGE

VERIFICATION OF CORRECTIVE ACTION

Completion of corrective actions, as documented in the letter to Don Horton from Joe Schelling (SNL) dated 1/10/97, and the training records associated with SNL Procedure QAIP 17-1, Rev. 3, effective 11/19/96, were reviewed and found acceptable during Surveillance SNL-SR-017, performed March 26 through April 3, 1997.

Implementation of corrective actions were verified, and this DR is ready for closure.

QAR  Date 5/19/97

QAR Name Printed HANK GREENE



Sandia National Laboratories

Operated for the U.S. Department of Energy by

Sandia Corporation

Albuquerque, New Mexico 87185-1326

January 10, 1997

WBS: 9.1.3.2

QA: L

(1 page)

Donald E. Horton  
Office of Quality Assurance  
P.O. Box 98608  
Las Vegas, NV 89193-8608

Attn: M. R. Diaz

Subject: Completion of Corrective Actions for Deviation Report YM-96-D090

Corrective actions defined in the amended response (dated October 8, 1996) for Deviation Report YM-96-D090 have been completed, and objective evidence to verify completion is attached.

These attachments include:

1. Deficiency Document Review:

- Memorandum, Ehrhorn to Schelling, dated 12/10/96, "Review of Deficiency Documents (DR-YM-96-D090), and
- Memorandum, Schelling to Ehrhorn, dated 12/16/96, "Response to Deficiency Document Review Memorandum per (DR YM-96-D090)

2. Document Package Preparation Instructions and Checklist

- Memorandum, Schelling to Deficiency Document Package Record Sources, "Memo of Instruction - Preparation of Deficiency Document Packages"

As described in Block 15 of the amended response, completed FY96 deficiency report record packages were inspected, corrections made as needed, and the review documented per item #1 above. Item #2 was prepared as described in Block 17 of the amended response and will be used in processing future deficiency document record packages. Because I have assumed PR/DR/CAR Coordinator responsibilities, no additional one-on-one training as indicated in the amended response is necessary. This documentation should suffice to allow you to verify closure of this Deviation Report. Please contact me at (505) 848-0643 if there are any questions.

Sincerely,

F. Joseph Schelling  
SNL YMP QA Lead

Attachment (6 pages)

Copy (w/o attachments) to:  
6850 M. C. Brady (MS-1399)

Copy (w/ attachment) to:  
YMP:9.1.3.2:CAR:QA:DR YM-96-D090

**SNL-SR-97-017**

**APPENDIX 3**

**DR# YM-96-D-090**

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PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: AP-16.1Q, Revision 0; AP 16.2Q, Revision 0; QAIP 17-1, Revision 02		2 Related Report No. Audit YM-ARC-96-18	
3 Responsible Organization: SNL		4 Discussed With: R. Richards	
5 Requirement/Measurement Criteria: <p>AP-16.1Q, Revision 0, Section 5.3.b states, "The responsible individual (RI) documents remedial actions in Block 12 of the DR, with signature and date in Block 13 and a proposed due date in Block 14."</p> <p>Section 5.3.e states in part, "The RI, based on a review of the recommended actions in Block 17 of the DR, indicates the root cause determination and action to preclude recurrence."</p> <p>Section 5.7.a states, "The QAR performs verification and documents the verification on a DR Continuation Page, identifying the objective evidence reviewed."</p> <p>Section 7.1 states, "Completed DRs, Continuation Pages and all relevant correspondence are lifetime QA records."</p> <p>AP-16.2Q, Revision 0, Section 5.4.5 states, "The affected organization QA Manager concurs with the extension request evaluation by signing the appropriate justification correspondence." (Continued on page 3)</p>			
6 Description of Condition: <p>Documentation for deficiencies do not comply with procedural requirements.</p> <p>Examples are:</p> <ul style="list-style-type: none"> <li>SNL-96-D5 proposed due date for remedial actions is missing.</li> <li>SNL-96-D2 remedial actions and proposed due dates are missing.</li> <li>SNL-96-D5 root cause determination and action to preclude recurrence are missing.</li> <li>SNL-96-D2 was verified and closed; however, the objective evidence reviewed is missing.</li> <li>SNL-96-D2 and D5 are missing some relevant correspondence.</li> <li>SNL-96-C-01 an extension request letter signed by M. Brady and dated 2/27/95 was issued and made part of the QA records package. However, documentation signed by the QA Manager to approve this request does not exist.</li> </ul> <p>(Continued on page 3)</p>			
7 Initiator Mario R. Diaz <i>Mario Diaz</i> Date 8/1/96		9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR	
10 Recommended Action: (Not required for PR) <p>1. Correct documentation identified as deficient.</p> <p>2. Review other deficiency documentation to verify compliance to procedural requirements and make corrections as appropriate. Provide objective evidence of review and corrective actions taken.</p>			
11 QA Review. QAR Mario R. Diaz <i>Mario Diaz</i> Date 8-1-96		12 Response Due Date 20 working days from issuance	
13 Affected Organization QA manager Issuance Approval: (QAR for PR) <p>Printed Name <b>R. SPENCE</b> Signature <i>Robert B. Spence</i> Date <i>8.7.96</i></p>			
22 Corrective Action Verified QAR _____ Date _____		23 Closure Approved by: (N/A for PR) AOQAM _____ Date _____	

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WASHINGTON, D.C.

PRDR NO. YM-96-D090

PAGE 2 OF 2 <sup>5</sup> 07/1/96

QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

See Continuation Sheet.

15 Extent of Condition: (Not required for PR)

See Continuation Sheet.

16 Root Cause Determination: (Not required for PR)

Required  Yes  No

17 Action to Preclude Recurrence: (Not required for PR)

Required  Yes  No

18 Corrective Action Completion Date:

October 31, 1996

19 Response by:

Initial

Amended

Date 8/28/96 Phone 605 648 0786

20 Response Accepted

OAR

N/A

Date

21 Response Accepted (N/A for PR)

AOOAM

N/A

Date

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PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

See Amended Response Continuation Page.

15 Extent of Condition: (Not required for PR)

SEE AMENDED RESPONSE CONTINUATION PAGE.

16 Root Cause Determination: (Not required for PR)

Required

Yes

No

SEE AMENDED RESPONSE CONTINUATION PAGE.

17 Action to Preclude Recurrence: (Not required for PR)

Required

Yes

No

SEE AMENDED RESPONSE CONTINUATION PAGE.

18 Corrective Action Completion Due Date:

SEE A/R CONTINUATION PAGE

19 Response by:

Initial

Amended

SEE A/R CONTINUATION PAGE

Date

Phone

20 Response Accepted

OAR *Vaino Lau*

Date 10-16-96

21 Response Accepted (N/A for PR):

AODAM *[Signature]*

Date 10/21/96

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 Performance Report Deficiency ReportNO. YM-86-D080PAGE 3 OF 62  
QA: L**PR/DR CONTINUATION PAGE****5. Requirement/Measurement Criteria (Continuation):**

QAIP 17-1, Revision 02, Section 4.2 states in part "The record source shall review each record package to ensure that it is accurate and complete."

Section 4.4 states, "The record source shall correct errors on records by scribing a single line through the incorrect information and entering the correct information in close proximity with his initials and date."

**6. Description of Condition (Continuation):**

Documentation of SNL-86-D4 was found to be part of SNL-86-C-01 without being relevant to that package. Corrections have been made to SNL-86-D2 by other than the record source and initials and dates are missing. Additionally, some memos are dated prior to the deficiency being issued.

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**PR/DR CONTINUATION PAGE**

**BLOCK 14 - REMEDIAL ACTIONS:**

The deficiency report was actually written against the "informal" PR/DR/CAR files maintained by the PR/DR/CAR coordinator for ease in performing that task. Most of the discrepancies noted were of the type that were corrected during the normal records acceptance and closing process, a fact that was borne out by the inspection of the records package to evaluate the remedial actions required to correct this deficiency.

**SNL-96-D5 proposed due date for remedial actions is missing:** The actual record was inspected and the proposed due date was marked "N/A" since no remedial actions were required. No further action is required.

**SNL-96-D2 remedial actions and proposed due dates are missing:** The actual record was inspected and the proposed due date was marked "Completed with response" to show that the remedial action had already been completed and there was no proposed due date. Also, the actual record contained a remedial action in block 12. No further action is required.

**SNL-96-D5 root cause determination and action to preclude recurrence are missing:** The actual record was inspected and both these items were on a continuation sheet in the records package. No further action is required.

**SNL-96-D2 was verified and closed; however, the objective evidence reviewed is missing:** The remedial action was for the customer to submit a memo to the file to show acceptance of the deliverable. The actual records package was inspected and found to contain an E-mail from the customer which stated, "As the customer for this deliverable, I have agreed that it is not required." This E-mail was also reviewed and verified by the QAR. No further action is required.

**SNL-96-D2 and D5 are missing some relevant correspondence:**

**D2:** There was no letter of issuance completed for SNL-96-D2 because the DR was delivered to the responsible individual and responded to and completed in a timely manner. There was no impact on quality because of this omission. Nor is there any appropriate remedial action to correct the deficiency since preparing a letter of issuance after the remedial action has been completed would have no value whatsoever.

**D5:** The "missing document" was an attachment mentioned by F.J. Schelling in his letter. The actual records package was inspected and Mr. Schelling had crossed out (and initialed and dated the correction) the line mentioning the attachment as the attachment was the DR itself. No further action is required.

**SNL-96-C-01 an extension request letter signed by M. Brady and dated 2/27/95 was issued and made part of the QA records package. However, documentation signed by the QA Manager to approve this request does not exist.:** It is correct; the QA Manager did not document approval of the request for extension although, based on the correspondence in the records package, it is obvious that he was aware of the request and at least did not oppose it. A memo for file will be prepared by the QA Manager stating that he was aware of the extension request and approved it orally.

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PR/DR CONTINUATION PAGE

Documentation of SNL-96-D4 was found to be part of SNL-96-C01 without being relevant to that package: This deficiency was corrected in the presence of the auditor. No further action is required.

Corrections have been made to SNL-96-D2 by other than the record source and initials and dates are missing: The actual records package was inspected and all corrections were made by the originator of the document or by the PR/DR/CAR Coordinator who is the record source for DR packages. All corrections in the actual records package had initials. One correction did not have the date entered; that deficiency has been corrected. No further action is required.

Some memos are dated prior to the deficiency being issued: In SNL-96-C-01, an extension request letter signed by M. Brady was incorrectly dated 2/27/95 rather than 2/27/96. The record source has corrected this error. No further action is required.

To ensure that the deficiencies noted above are not present in other packages, the SNL QA Staff will inspect all authenticated FY96 deficiency report record packages for errors such as corrections not dated or initialed, blank remedial action due blocks, blank portions of forms, or missing attachments or other correspondence. The conduct of this review will be documented and any deficiencies noted will be documented in accordance with AP-16.1Q and tracked as deficiencies.

**BLOCK 15 - EXTENT OF CONDITION:**

Authenticated records packages were reviewed to determine the remedial actions necessary to correct this deficiency. Although there are occasional administrative errors in the deficiency records packages, discrepancies of this nature are normally caught and corrected during records processing. The deficient condition is not widespread nor is it sufficiently serious to warrant root cause analysis. Therefore, a root cause determination will not be performed.

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**PR/DR CONTINUATION PAGE**

YM-96-D-090

Your response is rejected based on the following:

Your statement about the deficiency report being written against the "informal" PR/DR/CAR files maintained by the PR/DR/CAR coordinator is incorrect. The adverse conditions were documented based on the records found in the SNL Records Processing Center and later discussed with the QA Manager.

Individuals creating QA records shall ensure that the QA records are legible, accurate, complete, appropriate to the work accomplished, and identifiable to the item(s) or activity(s) to which they apply. Otherwise, they will become an adverse condition affecting QARD requirements.

These adverse conditions demonstrate that discrepancies of this nature are not usually caught and corrected during records processing. Therefore, corrective action to preclude recurrence is mandatory.

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## PR/DR CONTINUATION PAGE

## YM-96-D090 Amended Response

Block 14, Remedial Actions:

Deficiency document records in the SNL Local Records Center, related to the deficiencies cited in block 6, were inspected, with the following conditions found and needed corrections made, shown with the individual deficiency statements:

- a) SNL-96-D5 proposed due date for remedial actions is missing: The record was inspected and the remedial action due date was found to be marked "N/A", which is appropriate since no remedial actions were required.
- b) SNL-96-D2 remedial actions and proposed due dates are missing: Upon inspection, the record was found to contain a remedial action in block 12. The remedial action due date was found to be marked, "Completed with response," to show that the remedial action had already been completed and, correspondingly, there was no proposed due date.
- c) SNL-96-D5 root cause determination and action to preclude recurrence are missing: The statement, "See attachment," appears in blocks 19 and 20 of the DR, and both these items were on a PR/DR Continuation Sheet (page 3 of the DR) in the records package.
- d) SNL-96-D2 was verified and closed; however, the objective evidence reviewed is missing: The remedial action was for the customer to submit a memo stating acceptance of the deliverable. The records package was inspected and found to contain an e-mail memo from the customer which stated, "As the customer for this deliverable, I have agreed that it is not required," which is documented evidence meeting the intent of the remedial action statement.
- e) SNL-96-D2 and D5 are missing some relevant correspondence:  
D2: The records package for this DR does not contain a no "letter of issuance" because none was prepared for SNL-96-D2. However, at this time there is no appropriate remedial action to address that omission, since preparing a letter of issuance after the remedial action has been completed would have no value.  
D5: The document missing from this records package was an attachment to the DR response memo from F.J. Schelling; the attachment was the DR itself with the response portions completed. A copy of the DR as originally provided with the memo was located and included in the records package with the DR response memo.

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PR/DR CONTINUATION PAGE

f) SNL-96-C-01 an extension request letter signed by M. Brady and dated 2/27/95 was issued and made part of the QA records package. However, documentation signed by the QA Manager to approve this request does not exist. As the above statement indicates, approval of the request for extension was not documented. A memo has been prepared by the QA Manager stating that he was aware of the extension request and approved it; the memo has been placed in the records package.

g) Documentation of SNL-96-D4 was found to be part of SNL-96-C01 without being relevant to that package. This situation was corrected on the spot.

h) Corrections have been made to SNL-96-D2 by other than the record source and initials and dates are missing. The actual records package was inspected and all corrections were found to have been made by the originator of the document or by the PR/DR/CAR Coordinator, who is the record source for DR records packages. All corrections in the actual records package had initials. One correction did not have the date entered; that deficiency has been corrected.

i) Some memos are dated prior to the deficiency being issued. In SNL-96-C-01, an extension request letter signed by M. Brady was incorrectly dated 2/27/95 rather than 2/27/96. The record source has corrected this error in the records package.

Block 15. Extent of Condition:

To ensure that the deficiencies noted above are not present in other packages, the SNL QA Staff will inspect all completed FY96 deficiency report record packages for errors or omissions (such as corrections not dated or initialed, blank portions of forms, or missing attachments or other correspondence). The conduct of this review will be documented; records corrections will be made in accordance with QAIP 17-1.

The occasional administrative errors that existed in the deficiency document records packages (only cases e) through i) in block 14) are dissimilar in their nature and in the individuals associated with them. Additionally, discrepancies of this nature are normally caught and corrected during records processing (the records evaluated had not, at the time of the audit, had their final Records Management staff inspection prior to being sent to the project Records Processing Center). Consequently, the deficient condition does not warrant root cause analysis.

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PR/DR CONTINUATION PAGE

Block 16. Root Cause Determination:

None.

Block 17. Action to Preclude Recurrence:

The individual who performed the function of PR/DR/CAR Coordinator and who served as "Records source" for the deficiency document packages during the period that the cited deficiency documents were processed has since left SNL. In order that deficiency document records packages be accumulated and processed in a more error-free manner in the future, a memo-of-instruction will be provided to the new PR/DR/CAR Coordinator. The memorandum-of-instruction will provide a checklist to be used in preparing accurate, complete, correct deficiency report records packages; the memo will be supplemented with a one-on-one training session, to be documented by a memo describing the training, for the new PR/DR/CAR Coordinator. This training will emphasize use of the previously-mentioned checklist; records accuracy, identifiability, and completeness criteria; and the importance of either preventing, or detecting and correcting, records problems early.

Block 18. Corrective Action Completion Due Date:

November 15, 1996

Block 19. Response by:

Amended R. R. Richards



Date: Oct. 4, 1996 Phone: 505 848 0786

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**date:** December 20, 1996

**to:** Deficiency Document Package Record Sources

**from:** <sup>FJS</sup> F. J. Schelling, 6850

WBS: 9.1.3.2

QA: L

(2 pages)

**subject:** Memo of Instruction -- Preparation of Deficiency Document Packages

Deficiency Report YM-96-D090, issued during the August 1996 audit of SNL, identified inconsistencies between procedural requirements and a number of deficiency document records, for which SNL serves as the Records Source. The purpose of this memorandum is to provide instructions and a checklist to help ensure that deficiency documentation submitted to Project records are complete and in compliance with procedural requirements. Note, however, that this responsibility will be transferred shortly to the OQA representative as one of the first steps of the OQA Transition.

AP-16.1Q, "Performance/Deficiency Reporting," and AP-16.2Q, "Corrective Action and Stop Work," identify very similar sets of records associated with the processing of deficiency documents, which include: Performance Reports (PRs), Deficiency Reports (DRs), Corrective Action Requests (CARs), and Stop Work Orders (SWOs). The following are defined as Lifetime QA records:

- Completed PRs, DRs, and CARs (including those voided, superseded, or changed),
- PR, DR, and CAR Continuation Pages,
- All relevant correspondence (including documentation of dispute resolution), and
- SWOs and related correspondence.

Defined as a Nonpermanent QA Record is the:

- Deficiency Document Encoding Form.

(Note that instructions for preparation of the Deficiency Document Encoding Form is given in AP-16.3Q, "Trend Reporting," and that documentation prepared per AP-16.4Q, "Root Cause Determination," becomes part of the AP-16.1Q or AP-16.2Q documentation package.)

Basically, in compiling and reviewing deficiency documentation for submittal as project records, it is important to ensure that: (1) the associated forms are properly completed; (2) the package is accurate and complete; and (3) corrections to potential records are made in compliance with records requirements. It is useful to review the records against the procedure(s) by which they were generated and to examine the content to establish that the process followed is clear and traceable. And certainly, identifying potential problems early as documentation is generated for incorporation into a records package is important to the prevention and minimization of final corrections. The attached checklist has been developed as an aid to the performance of this task.

YMP:9.1.3.2:CAR:QA:DR YM-96-D090

**CHECKLIST FOR DEFICIENCY RECORDS PACKAGE PREPARATION**

1. Check that all blocks of forms are filled in, including the use of "N/A" for blocks intentionally left blank; initial and date any changes needed to complete the forms.
2. Verify that the deficiency identifier and page count are correct.
3. Verify that a Deficiency Document Encoding Form is present, accurate, and complete.
4. Check that correspondence issuing the deficiency is present.
5. Check that documentation of requests for, and concurrence or rejection of, extensions is present.
6. Check that verification results are documented on a PR/DR Continuation page.
7. Check that notification correspondence regarding closure is present.
8. Check that other pertinent documentation (if any) is present, including records of dispute resolution, and deficiency cancellation, voidance, or, supersession.
9. Check that the deficiency log has been updated to reflect completion.
10. Document any actions taken in association with record package preparation, including a descriptive account and justification of any corrective measures taken with respect to the package.
11. For SWOs, check that written documentation regarding compliance with the SWO is present.
12. Verify that any standalone records are identified in accordance with QAIP 17-1.
13. Check that Records Submittal form is complete and consistent with the records being submitted.
14. Check that records packages are prepared in accordance with QAIP 17-1.



date: December 16, 1996  
to: T. E. Ehrhorn, 6811, MS-1335

Albuquerque, New Mexico 87185-1326  
WBS 9.1.3.2  
QA: L  
(1 page)

from:   
F. J. Schelling, 6850, MS-1326

subject: Response to Deficiency Document Review Memorandum per (DR YM-96-D090)

Thank you for your review and correction of SNL's FY96 deficiency documents as part of the corrective actions associated with Deficiency Report (DR) YM-96-D090, which you provided in your 12/10/96 memorandum, "Review of Deficiency Documents (DR YM-96-D090)." In response to those areas in which you had questions, I have also reviewed the subject packages and reached the conclusions below. This memorandum and your 12/10/96 memorandum document completion of the review and corrective actions taken for DR YM-96-D090.

SNL-96-D004:

The 3/5/96 memorandum from R. R. Richards to the Deficiency File describes only the completion of the five remedial actions from Block 12 of the DR, but does not discuss the actions to preclude recurrence from Block 20, which concerned the QAIP 1-5 revision. On page 5 of the DR, Richards added a note that the anticipated completion date for the QAIP revision was 4/1/96. On 4/1/96, Jaramillo requested and received an extension to 5/30/96, because of review process delays. And finally, on page 2 of the DR, Jaramillo verified completion (Block 27) on 6/17/96, which was the effective date for the revised procedure, and apparently also entered the 6/17/96 date in Block 22 as the due date for completion. No additional changes to the deficiency documentation are therefore needed.

SNL-96-D005:

While there is no direct verification information provided, as Acting Manager of 6853 at the time and the responding individual, my response to the DR adequately describes the investigative actions performed. With respect to the corrective actions: (1) I interviewed the Training Manager on 12/13/96 regarding the training process now used and was informed that individuals receiving training assignments are notified in writing which procedures they are assigned abstract training on and which they are required to read and understand, which satisfies the intent of this action; (2) The current version of the Training Assignment Form (CRWM 2-5.1/1-2 (6/17/96)) became effective on the corrective action verification date and has been revised per the corrective action. No further changes to the deficiency documentation are therefore needed.

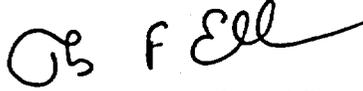
Copy to:  
MS 1335 Deficiency Documentation File 6811

# Sandia National Laboratories

Albuquerque, New Mexico 87185-1335

date: December 10, 1996

to: F.J. Schelling, 6850, MS-1335



from: Thomas F. Ehrhorn, 6811, MS-1335

subject: Review of Deficiency Documents (DR YM-96-D090)

Per your request (Your email dated 11/20/96, 7:31 am), I have reviewed those FY 96 deficiency documents created by SNL and available in the records center, viz. SNL-96-C01, SNL-96-D01, SNL-96-D02, SNL-96-D03, SNL-96-D04, and SNL-96-D05. This review was conducted strictly to assess the administrative process in completing and processing deficiency documents, not the quality of the documents themselves as this is what the auditor found and commented on in the subject DR.

Specific discrepancies are noted below. If I believe the governing reference is not common, I mentioned it the first time I noted the deficiency (e.g. DR numbers on the DDEFs). Also at your request, I have corrected any of the errors that I was able to. Corrections are noted in *italic* type.

## SNL-96-C001

- CAR Fixed?
1. On the continuation page, block 8 is not checked. *Checked block 8.*
  2. The corrective action due date on the CAR form is noted as March 1, 1996, yet the amended response from M. Brady (2/27/95 which should be 2/27/96) shows corrective action due March 15, 1996. *Corrected the date on the M. Brady memo and the CAR.*
  3. Continuation pages provided with the amended response are not numbered. *Numbered the continuation pages.*
  4. The QAR review pages are not numbered. *Numbered the QAR review pages.*

## SNL-96-D001

1. Block 10: The correction is not made according to procedure. *Made the correction according to QAIP 17-1.*
2. The continuation page, block 8, no "pages of". *Added the "pages of". (Pg 3+4)*
3. On the DDEF, the deficiency sequence number is not constructed correctly (see instructions for DDEF block 1 [AP-16.3Q] and AP-16.1Q, section 6.3d). *Prepared a superseding DDEF with the number constructed correctly.*
4. On the DDEF, the text descriptions of the deficiency cause codes and deficiency codes are not included (see instructions for the DDEF). *Prepared a superseding DDEF with the text descriptions included.*

~~1~~ The DDEF is not completed by the QAR (AP-16.1Q, para. 5.1.2m). Bob Richards (the QAR) signed the superseding DDEF.

## SNL-96-D002

1. There are no "pages of" on either the first or second page of the deficiency form. This was corrected by Bob Richards on a supplemental record dated 10/17/96.
2. There is no corrective action due date yet there was a corrective action. Put N/A in the corrective action due date block, initialed and dated it.
3. On the DDEF, the date correction was improperly done. Replaced the DDEF with a superseding DDEF negating the correction.
4. On the DDEF, the sequence number is not correctly built. On the superseding DDEF the sequence number is built correctly.
5. On the DDEF, the text descriptions of the deficiency codes is not included. Included the text descriptions on the superseding DDEF.
6. The QAR did not complete the DDEF. Bob Richards (the QAR) signed the superseding DDEF.
7. On the DDEF, the correction in block 8 was not correctly accomplished. Replaced the DDEF with a superseding DDEF negating the correction.

## SNL-96-D003

- OK*
- Need to be submit*
1. The "Pages of" numbers are not complete. Corrected in a supplemental record done by Bob Richards 10/17/96. ~~(to be done)~~
  2. The DDEF sequence number is not correctly built. Prepared a superseding DDEF with the sequence number built correctly.
  3. The DDEF does not have the text descriptions of the codes. Put the text descriptions of the codes on the superseding DDEF.
  4. The QAR did not complete the DDEF. Bob Richards (the QAR) signed the superseding DDEF.

## SNL-96-D004

- OK From VIGAS*
1. On the DR form, block 2 is not marked NA. Entered N/A in block 2.
  2. On the DR form block 8, "Pages of" is crossed out but not corrected nor initialed. Completed the correction according to QAIP 17-1.
  3. On page 2 of the DR form, block 8, "Pages of" is not complete. Completed the "pages of" entry.
  4. On the continuation pages, block 8, "Pages of" is not complete. Completed the "pages of" entry.

5. On the DDEF, the sequence number is not correctly built. *Corrected the DDEF with a properly built sequence number.*
6. On the DDEF, the text version of the codes is not included. *Added the text version of the codes to the DDEF.*
7. On the DDEF, the date correction is not dated. *Dated the correction using the same date as the other corrections on the form that were completed by the same individual.*
8. On the request for extension, the corrective action due date makes no sense. The DR form says that the corrective action is due 6/17/96, yet the request for extension is for an extension to 5/30/96. *Am unable to correct this as I have no idea what the correct information is.*
9. QAIP 1-5 is mentioned on the request for extension yet is not included in either the remedial action nor the verification. *Am unable to correct this as I have no idea what the correct information is.*
10. The verification letter is dated 3/5/96 yet on 4/1/96 an extension of the due date is requested. *Am unable to correct this as I have no idea what the correct information is.*
11. Even though the DR verification is complete 3/5/96, the DR is not closed until 6/17/96. *Am unable to correct this as I have no idea what the correct information is.*

**SNL-96-D005**

1. The sequence number on the DDEF is not correctly built. *Corrected the sequence number on the DDEF.*
2. There is no text for the deficiency codes on the DDEF. *Added the text for the deficiency codes on the DDEF.*
3. There is no verification information (e.g. objective evidence reviewed) for closing this deficiency document. *Am unable to correct this as I have no idea what Ms. Jaramillo reviewed to close the deficiency.*

I would certainly concur that most of the items noted above are fairly insignificant. However, this is the type of error noted by the auditor on the original DR and, therefore, I did my review looking for the same type of problem.

RECORD ACCEPTED

AT LRC 2/24/97  
K

RMS SL\* 151732

QRP: 1.2.11  
QA:L  
Page 1

**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
FOR DEFICIENCY REPORT SNL-96-D-04**

DATE	TITLE/DESCRIPTIVE DATA	PAGE COUNT	LRC NOTE
	Table of Contents	1	
06/17/96	Deficiency Report SNL-96-D-04	5	
02/01/96	Deficiency Document Encoding Form	1	
03/05/96	Memo, from R. R. Richards, to File, re: Verification of Completion of Remedial Actions	14	
04/01/96	Memo, from C. Jaramillo, to R. R. Richards. re: Request for Extension for DR SNL-96-D-4	3	
<b>TOTAL PAGES</b>		<b>24</b>	

**INFORMATION ONLY**

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1. All blanks are intentional.

Thomas F. Ehrhorn  
Signature of Record Source

12/10/96  
Date

THOMAS F. EHRHORN  
Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-04  
YMP CRF

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

8  Performance Report  
 Deficiency Report  
 NO. SNL-96-D4  
 PAGE 1 OF 35  
 QA: L. [unclear]

**PERFORMANCE/DEFICIENCY REPORT**

1 Controlling Document: QAIP 2-5, "TRAINING" AND WORK AGREEMENTS WA-01B2/01B5/0205  
 2 Related Report No. N/A

3 Responsible Organization: SNL 6852  
 4 Discussed With: L. COSTIN, E. RYDER, M. MAUROY.

5 Requirement/Measurement Criteria:  
 • QAIP 2-5, Section 4.1, STEP 2 states "Department Manager determines the extent of required orientation and QA training... based on scope, complexity and nature of the individual(s) activity."  
 • Within WA-01B2/WA-01B5/WA-0205 applicable training is specified for all suppliers in SNL Implementing Procedures (QAIPs/APs) that are participants in Section 3.0  
 • WA-0205, Revision -1 "Request to Provide Training on Controlled Documents" was marked in Section II for -Read Procedure"

6 Description of Condition:  
 Various training omissions, oversights, or lack of documented completion exists within SNL YMP Personnel Files of participants (suppliers) assigned to WBS: 1.2.3.2.7.5.2 work activities of WA-01B2/01B5/0205 as follows:  
 • Personnel involved in Study Plan 8.3.1.15.1.6 did not have evidence of training to Study Plan preparation, review, approval and issuance per QAIP 2-2 and YMP-2.02Q as follows:  
 - L. Costin / J. Pott / E. Ryder  
 • Training Files for L. Costin / B. Arnold did not contain evidence of QAIP 2-4 training specified in WA-01B5. (SEE PAGE 3)

7 Initiator: David R. Ashburn Date 1/25/96  
 9 QA Review: [Signature] Date 1/25/96

10 Response Due Date: FEB 2, 1996  
 11 QA Issuance Approval: [Signature] Date 1/25/96

12 Remedial Actions: See attached

13 Remedial Action Response By: N/A Date  
 14 Remedial Action Due Date: N/A Date

15 Remedial Action Response Acceptance: N/A Date  
 16 PR Verification/Closure: N/A Date

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WASHINGTON, D.C.

8  
DR NO. SNL-96-D4  
PAGE 2 OF 5  
QA: L

DEFICIENCY REPORT

17 Recommended Actions:

18 Investigative Actions:

*see attachment*

19 Root Cause Determination:

*see attachment*

20 Action to Preclude Recurrence:

*See Attachment*

21 Response by:

*See response from D. Costen*  
Date *2/2/96*

22 Corrective Action Completion Due Date:

*by C. Daviam* Date *4/17/96*

23 Response Accepted

OAR *Claudette Juvale* Date *2/2/96*

24 Response Accepted

AQQAM *Paul* Date *2/2/96*

25 Amended Response Accepted

OAR *N/A* Date

26 Amended Response Accepted

AQQAM *N/A* Date

27 Corrective Actions Verified

OAR *Claudette Juvale* Date *6/17/96*

28 Closure Approved by:

AQQAM *Paul* Date *6/17/96*

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QA: L 0111

PR/DR CONTINUATION PAGE

BLOCK 6 CONTINUED :

- Training Files and Database show no training in WA-205, Rev-1 for list of involved participants (suppliers) :  
- E. Ryder / N. Francis / M. Riggins / E. Dunn / S. Sobolik / T. George / J. Pott / M. Lee
- Training Files and Database show no evidence to support WA-0102 training requirement for QAIPs 2-5 and 2-6 for ALL participants :  
- B. Arnold / R. Finley / T. George / J. Pott / E. Ryder

NOTE :

1.) The SNL Training Database continues to be inconsistent with LRC YMP Personnel Training Files (hardcopy) evidence and lacks credit for training completions, as follows:

- L. Costin / B. Arnold / E. Dunn / R. Finley / T. George / J. Pott / E. Ryder / S. Sobolik / N. Francis have completed QAIP 1-5 training. The database does not show this completed training.
- B. Arnold / T. George / J. Pott / E. Ryder have completed WA-0102 training. The database does not show this completed training.

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QA: L

**PR/DR CONTINUATION PAGE**

**Block 12. Remedial Actions**

1. Training on QAIP 2-2 and YAP 2.02Q will be assigned by L. Costin and completed by Costin, Pott, and Ryder. Training will be assigned by 2/2/96 and completed within 15 days.
2. Training on QAIP 2-4 will be assigned for Arnold and Costin will be assigned by 2/2/96 and completed in within 15 days.
3. The training assignment for training on WA-0205 will be retracted (done already during recent audit).
4. WA-0182 will be revised to make training requirements appropriate to individuals roles. L. Costin will complete by 2/28/96.
5. Training database "snapshots" will be corrected to reflect actual training as per note in block 6. J. Bickley will complete by 2/28/96.

**Block 18 Investigative Actions**

An investigation to determine the impact of the deficiency was conducted. The following are conclusions of the investigation.

There is substantial evidence that QAIP 2-4 was followed in the execution of work under WA-0185. Thus, lack of evidence of training on the procedure by two persons does not impact the quality of the product.

There is substantial evidence that QAIP 2-2 and YAP 2.02Q were followed in the preparation of Study Plan 8.3.1.15.1.6. Thus, lack of evidence of training on the procedures does not impact the quality of the product.

The principals involved in the work described in a WA (customer and suppliers) negotiate, review, and concur on the contents of a WA. Unless there are specific reasons to do additional training (such as for safety) it seems that training on a WA is not needed. QAIP 1-5 does not suggest or require training on WAs.

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PR/DR CONTINUATION PAGE

Block 19: Root Cause

There are inconsistencies in the general training assignments given to staff when they first start on YMP and additional training that may be required for a specific WAs are not added to their assignment list.

QAIP 1-5 requires that training and application of procedures be identified by individuals assigned in the WA. This was done correctly in WA 205, but in WA 185 and 182 blanket assignments were made, i.e. all personnel were assigned all procedures regardless of applicability.

The results of the investigation suggest that the root cause of this deficiency is that there is no permanent link between assignment of work (through a WA) and assignment of training that may be needed to perform that work (through QAIP 2-5). Actions needed to address the root cause are provided in block 20.

Block 20 Action to preclude recurrence

QAIP 1-5 should be modified to include an additional step, either as part of the QA review or as part of the issuance as a controlled document, that a check be made to assure that the personnel identified in the WA have been trained on the applicable procedures specified in the WA. If individuals are not trained, a training assignment on the procedures needed will be generated concurrent with the issuance of the WA.

*Anticipate completion date -  
 Apr. 1, 1996 .*

*PK  
 2/1/96*



date: March 5, 1996

to: ~~File for Deficiency Report: SNL-96-D04~~



from: R. R. Richards, 6812, M/S 1333

subject: Verification of Completion of Remedial Actions

I have observed objective, documentary evidence that shows that all remedial actions specified in Deficiency report SNL-96-D04 are complete as of this date.

The attached documentation comprises objective evidence of the individual actions, as follows:

Remedial Action 1: The attached Training Snapshots for Costin, Pott, and Ryder show that training was assigned and completed for QAIP 2-2 and YAP 2.02Q.

Remedial Action 2: The attached Training Snapshots for Costin and Arnold show that training was assigned and completed for QAIP 2-4.

Remedial Action 3: The SNL YMP training database shows, as I personally observed, that there now exists no training assignment for WA-205.

Remedial Action 4: Revision 01 of Work Agreement 182 was prepared, reviewed, and approved; this revision incorporates changes in the "Training Assignment" section that tailors the required training to the roles of the personnel involved in the work.

Remedial Action 5: Programming of the training database has been changed to produce only one type of report called a "Training Snapshot," which shows all training assigned to any individual and the completion status of that training. The attached printouts are examples of that more comprehensive report format.

copy to:

M/S 1325 L. S. Costin 6852  
M/S 1333 R. R. Richards 6812

Sandia National Laboratories  
SNL NMP TRAINING  
Dept. 6752, MS 1330  
Albuquerque, NM 87185-1330

TRAINING SNAPSHOT

\*\*\* COSTIN, LAURENCE S. \*\*\* SNL 6852 M/S 1325

YMP

WBS Assigned:

Last Certified: YMP 01/20/92

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	ROLL OVEF
CLASS				GET: EMPLOYEE RADIOLOGICAL TRAINING	03/09/93	03/09/93		YMP	A	
CLASS				GET 1.3: ENVIRONMENTAL REQUIREMENTS	03/09/93	03/09/93		YMP	A	
CLASS				DOE PCS OVERVIEW	04/22/93	04/22/93		YMP	A	
CLASS				GET 1.2: SITE ORIENTATION	03/09/93	03/09/93		YMP	A	
CLASS				NEW UNDERGROUND WORKER YMP TRAINING	06/21/93	06/21/93		YMP	A	
CLASS				GET 1.4: SAFETY & HEALTH INDOCTRINATION	03/09/93	03/09/93		YMP	A	
CLASS				SCIENTIFIC NOTEBOOKS, QAIP 20-02	05/25/95	05/25/95		YMP	A	
CLASS				HOW DO WE ENSURE PROFICIENCY QAIP 2-5 AND 2-6	05/22/95	05/22/95		YMP	A	
CLASS				LICENSING PROCESS WORKSHOP	03/13/95	03/13/95		YMP	A	
MANUAL				YMP ORIENTATION				YMP	A	
MANUAL				YMP Orientation		12/09/86		YMP	A	
VAL				GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	05/31/94	05/05/94		YMP	I	
0				PACS AND 10,000 YEAR TEST		12/09/86		YMP	A	
APQ	01.06	0		Release of Unpublished Information to Nonparticipants		08/23/89		YMP	I	
APQ	01.06	01		Release of Unpublished Information to Nonparticipants		08/23/89		YMP	I	
APQ	03.06	0		Configuration Management	10/19/90	09/30/90		YMP	I	
APQ	03.06	0	1	Configuration Management	07/30/93	09/09/93		YMP	I	
APQ	03.06	0	2	Configuration Management	07/30/93	09/09/93		YMP	I	
APQ	03.06	0	3	Configuration Management	07/30/93	09/09/93		YMP	I	
APQ	05.02	03		Technical Information Flow To and From the Yucca Mountain Si	06/15/92	06/02/92		YMP	I	
APQ	05.02	04		Technical Information Flow To and From the Yucca Mountain Si	07/30/93	09/09/93		YMP	I	
APQ	05.04	0				08/23/89		YMP	I	
APQ	05.09	02		Qualification of Existing Data	07/30/93	09/09/93		YMP	I	
APQ	05.09	1		Qualification of Existing Data	10/19/90	09/30/90		YMP	I	
APQ	05.17	0				08/23/89		YMP	I	
APQ	05.19	02		Interface Control	07/30/93	09/09/93		YMP	A	
APQ	05.19	02	1	Interface Control	07/30/93	09/09/93		YMP	A	
APQ	05.19	02	2	Interface Control	07/30/93	09/09/93		YMP	A	
APQ	05.19	1		Interface Control	07/19/91	08/05/91		YMP	I	
APQ	05.20	0		Document Hold Control		08/23/89		YMP	I	
APQ	05.20	01		Document Hold Control	07/30/93	09/09/93		YMP	A	
APQ	06.01	04		Project Office Document Development, Review, Approval, and R	07/30/93	09/09/93		YMP	I	
APQ	06.01	3		Project Office Document Development, Review, Approval, and R	07/19/91	08/04/91		YMP	I	
APQ	16.01	00		Performance/Deficiency Reporting	10/25/95	12/15/95		YMP	A	
APQ	16.02	00		Corrective Action And Stop Work	10/25/95	12/15/95		YMP	A	
DOP	02-03	A		Work Plans		11/27/89		YMP	I	
	02-03	A	1	Work Plans	04/19/90	04/18/90		YMP	I	
	02-04	A		Analysis Control and Verification		08/22/89		YMP	I	
DOP	02-04	A	1	Analysis Control and Verification	05/01/90	04/09/90		YMP	I	
DOP	03-10	B		Routine Calculations	05/04/90	05/01/90		YMP	I	
DOP	03-10	B	1	Routine Calculations	02/26/91	02/06/91		YMP	I	

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TRAINING SNAPSHOT

\*\*\* COSTIN, LAURENCE S. \*\*\* SNL 6852 M/S 1325

YMP

WBS Assigned:

Last Certified: YMP 01/20/92

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RC OV
DOP	03-12	A		Peer Reviews		08/23/89		YMP	I	
DOP	03-12	A	1	Peer Reviews		02/16/90		YMP	I	
DOP	03-17	0		Preparing Technical Information Documents		08/22/89		YMP	I	
DOP	03-17	0	1	Preparing Technical Information Documents		10/25/89		YMP	I	
DOP	03-17	0	3	Preparing Technical Information Documents	10/28/92	11/01/92		YMP	I	
EP	-0019	0		Rock Mass Response Experiment		02/02/90		YMP	A	
QAIP	01-03	04		Stop Work Orders	08/26/94	08/25/94		YMP	I	
QAIP	01-04	00		Resolution of Quality Assurance Disputes	09/23/92	09/03/92		YMP	A	
QAIP	01-05	03		Establishing Work Agreements (WA)	04/19/93	04/05/93		YMP	I	
QAIP	01-05	04		Establishing Work Agreements	10/03/93	10/08/93		YMP	I	
QAIP	01-05	05		Establishing Work Agreements	12/31/93	12/04/93		YMP	I	
QAIP	01-05	06		Establishing Work Agreements	06/10/94	06/13/94		YMP	I	
P	01-05	07		Establishing Work Agreements	09/25/94	08/26/94		YMP	I	
P	01-05	08		Establishing Work Agreements	04/20/95	03/24/95		YMP	I	
QAIP	01-05	09		Establishing Work Agreements	03/01/96	02/06/96		YMP	A	NT
QAIP	02-02	02		Study Plan Requirements	03/01/96	02/06/96		YMP	A	
QAIP	02-04	02		Conducting and Documenting Analyses and Calculations	03/04/96	02/01/96		YMP	A	
QAIP	02-05	00		Training	05/01/92	04/17/92		YMP	I	
QAIP	02-05	00	1	Training	01/04/93	01/18/93		YMP	I	
QAIP	02-05	01		Training	10/01/93	09/03/93		YMP	I	
QAIP	02-05	02		Training	06/10/94	05/12/94		YMP	I	
QAIP	02-05	03		Training	06/30/95			YMP	I	
QAIP	02-06	01		Qualification and Certification of Personnel	03/31/93	03/19/93		YMP	I	
QAIP	02-06	02		Qualification and Certification of Personnel	03/03/95	01/27/95		YMP	I	
QAIP	02-06	03		Qualification and Certification of Personnel	06/30/95			YMP	I	
QAIP	02-10	01		Determination of Applicable QA Controls	03/26/93	02/28/93		YMP	I	
QAIP	03-02	02		Software Quality Assurance Requirements	09/04/92	09/03/92		YMP	I	
QAIP	03-02	02	1	Software Quality Assurance Requirements	02/12/93	02/02/93		YMP	I	
QAIP	03-04	01		Design Investigation Control	02/26/93	02/04/93		YMP	A	
QAIP	03-04	01	1	Design Investigation Control	03/26/93	02/28/93		YMP	A	
QAIP	03-10	00		Routine Calculations	06/30/93	06/17/93		YMP	I	
QAIP	03-12	00		Peer Reviews	06/30/93	06/17/93		YMP	I	
QAIP	03-12	01		Peer Reviews	06/03/94	05/05/94		YMP	A	
QAIP	04-01	03		Procurement	04/22/93	04/12/93		YMP	I	
QAIP	04-01	03	1	Procurement	05/17/93	07/01/93		YMP	I	
QAIP	04-01	04		Procurement	01/09/94	12/14/93		YMP	I	
QAIP	04-01	05		Procurement	06/10/94	06/14/94		YMP	I	
QAIP	04-01	06		Procurement	10/23/94	10/31/94		YMP	I	
P	05-01	02		Quality Assurance Implementing Procedures	02/26/93	02/04/93		YMP	I	
P	06-01	00		Document Control System	04/22/93	04/12/93		YMP	I	
QAIP	06-01	01		Document Control System	06/03/94	05/05/94		YMP	I	
QAIP	06-01	02		Document Control System	10/28/94	09/29/94		YMP	A	
QAIP	06-02	02		Reviewing, Approving, and Issuing Technical Information Docu	05/17/93	07/02/93		YMP	I	

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TRAINING SNAPSHOT

\*\*\* COSTIN, LAURENCE S. \*\*\* SNL 6852 M/S 1325  
WBS Assigned:  
Last Certified: YMP 01/20/92

YMP

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RC. OVE
QAIP	06-02	03		Preparing, Reviewing, Approving, & Issuing Technical Informa	10/16/94	09/21/94		YMP	I	
QAIP	06-02	03	1	Preparing, Reviewing, Approving, & Issuing Technical Informa	03/31/95			YMP	I	
QAIP	06-02	04		Preparing, Reviewing, Approving, & Issuing Technical Informa	09/01/95	08/28/95		YMP	A	
QAIP	06-03	00		Conducting and Documenting Reviews of Documents	02/12/93	02/02/93		YMP	I	
QAIP	06-03	01		Conducting and Documenting Reviews of Documents	08/13/93	09/09/93		YMP	I	
QAIP	06-03	02		Conducting and Documenting Reviews of Documents	10/26/94	09/26/94		YMP	I	
QAIP	06-03	03		Conducting and Documenting Reviews of Documents	09/13/95	08/28/95		YMP	A	
QAIP	07-01	00		Procurement Acceptance Verification	11/30/92	11/08/92		YMP	I	
QAIP	07-03	00		Evaluation of Contractor QA Program Documents	09/15/90	09/26/90		YMP	I	
QAIP	07-03	01		Evaluation of Contractor QA Program Documents	06/30/93	06/17/93		YMP	A	
QAIP	10-01	01		Surveillances	06/19/92	08/21/92		YMP	I	
QAIP	15-01	00		Nonconformance Control and Reporting	06/08/92	08/21/92		YMP	I	
QAIP	16-01	00		Corrective Action	05/25/92	05/05/92		YMP	I	
QAIP	16-01	01		Corrective Action	06/30/93	06/17/93		YMP	I	
QAIP	16-01	02		Corrective Action	01/02/94			YMP	I	
QAIP	16-01	02		Corrective Action	01/21/94	12/03/93		YMP	I	
QAIP	16-01	03		Corrective Action	06/15/94	07/28/94		YMP	I	
QAIP	16-01	04		Corrective Action	10/28/94	09/28/94		YMP	I	
QAIP	16-01	05		Corrective Action	02/08/95	04/02/95		YMP	I	
QAIP	16-01	06		Corrective Action	08/06/95	07/07/95		YMP	I	
QAIP	17-01	00		Protecting, Preparing, and Submitting YMP QA Records	06/10/92	06/02/92		YMP	I	
QAIP	17-01	01		Protecting, Preparing, and Submitting YMP QA Records	06/16/94	07/26/94		YMP	I	
QAIP	17-01	02		Protecting, Preparing, and Submitting YMP QA Records	10/26/94	10/31/94		YMP	A	
QAIP	19-01	00		Software Quality Assurance Requirements	01/09/94	03/03/94		YMP	I	
QAIP	19-01	01		Software Quality Assurance Requirements	06/17/94	06/14/94		YMP	I	
QAIP	20-02	00		Scientific Notebooks	11/16/94	10/31/94		YMP	I	
QAIP	20-02	01		Scientific Notebooks	04/27/95	04/02/95		YMP	A	
QAPD	-	00		Quality Assurance Program Description	09/02/91	08/17/91		YMP	I	
WA	-0162	00		Review of Rock-Mass Properties Models	03/24/95	04/02/95		YMP	A	
WA	-0163	00		Develop Triaxial Rock Testing Capability	03/08/95	02/12/95		YMP	A	
WA	-0164	00		Scientific Basis for Design	01/20/95	12/29/94		YMP	A	
WA	-0165	00		Analysis Code Validation	03/08/95	02/12/95		YMP	A	
WA	-0183	00		Evaluate Sealing Requirements and Assumptions for ACD.	03/15/95	03/19/95		YMP	A	
WA	-0190	00		INEL Laboratory Scale Experiments	03/22/95	02/24/95		YMP	A	
WA	-0209	00		YMP SITE GEOTECHNICAL REPORT	02/28/96	02/01/96		YMP	A	
YAP	02.020	00		Preparation, Review, Approval, and Revision of Site Characte	03/01/96	02/06/96		YMP	A	
YAP	03.020	00		Configuration Management	03/25/94	02/28/94		YMP	A	
YAP	05.010	00		Document Development, Change, Review, and Approval Control	01/05/94	12/04/93		YMP	A	
	S111.10	00		Qualification of Existing Data	04/15/94	04/27/94		YMP	A	
	S111.20	00		Technical Information Flow To and From the Yucca Mountain Si	09/16/94	08/22/94		YMP	A	

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TRAINING SNAPSHOT

\*\*\* POTT, JOHN . \*\*\* SNL 6852 M/S 1399  
WBS Assigned:  
Last Certified: YMP 03/03/92

YMP

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RCL CVE
CLASS				GEOLOGY FOR NON-GEOLOGISTS	01/27/93	01/27/93		YMP	A	
CLASS				GET 1.2: SITE ORIENTATION	03/09/93	03/09/93		YMP	A	
CLASS				GET 1.4: SAFETY & HEALTH INDOCTRINATION	03/09/93	03/09/93		YMP	A	
CLASS				NEW UNDERGROUND WORKER YMP TRAINING	05/17/93	05/17/93		YMP	A	
CLASS				GET: EMPLOYEE RADIOLOGICAL TRAINING	03/09/93	03/09/93		YMP	A	
CLASS				GET 1.3: ENVIRONMENTAL REQUIREMENTS	03/09/93	03/09/93		YMP	A	
CLASS				SCIENTIFIC NOTEBOOKS, QAIP 20-02	05/25/95	05/25/95		YMP	A	
CLASS				HOW DO WE ENSURE PROFICIENCY QAIP 2-5 AND 2-6	05/31/95	05/31/95		YMP	A	
CLASS				LICENSING PROCESS WORKSHOP	03/13/95	03/13/95		YMP	A	
CLASS				AP16.10 & AP16.20	09/25/95	09/25/95		YMP	A	
MANUAL				YMP ORIENTATION		11/04/94		YMP	A	
QUAL				YMP Orientation	04/01/91	02/05/91		YMP	A	
QUAL				GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	05/31/94	05/27/94		YMP	I	
VIDEO				PACS AND 10,000 YEAR TEST	04/01/91	02/05/91		YMP	A	
APQ	01.06	0		Release of Unpublished Information to Nonparticipants	04/01/91	03/18/91		YMP	I	
APQ	01.06	01		Release of Unpublished Information to Nonparticipants	04/01/91	03/18/91		YMP	I	
APQ	05.19	02		Interface Control	07/30/93	10/01/93		YMP	A	
APQ	05.19	02	1	Interface Control	07/30/93	10/01/93		YMP	A	
APQ	05.19	02	2	Interface Control	07/30/93	10/01/93		YMP	A	
APQ	05.19	1		Interface Control	07/19/91	08/14/91		YMP	I	
APQ	05.20	0		Document Hold Control	04/01/91	03/18/91		YMP	I	
APQ	05.20	01		Document Hold Control	07/30/93	10/01/93		YMP	A	
APQ	06.01	04		Project Office Document Development, Review, Approval, and R	07/30/93	10/01/93		YMP	I	
APQ	06.01	3		Project Office Document Development, Review, Approval, and R	07/19/91	07/18/91		YMP	I	
APQ	16.01	00		Performance/Deficiency Reporting	10/25/95	09/25/95		YMP	A	
APQ	16.02	00		Corrective Action And Stop Work	10/25/95	09/25/95		YMP	A	
DOP	02-03	A		Work Plans	04/01/91	03/12/91		YMP	I	
DOP	02-03	A	1	Work Plans	04/01/91	03/12/91		YMP	I	
DOP	02-04	A		Analysis Control and Verification	04/01/91	03/12/91		YMP	I	
DOP	02-04	A	1	Analysis Control and Verification	04/01/91	03/12/91		YMP	I	
DOP	03-10	B		Routine Calculations	04/01/91	03/14/91		YMP	I	
DOP	03-10	B	1	Routine Calculations	04/01/91	03/14/91		YMP	I	
DOP	03-12	A		Peer Reviews	04/01/91	03/14/91		YMP	I	
DOP	03-12	A	1	Peer Reviews	04/01/91	03/14/91		YMP	I	
DOP	03-17	0		Preparing Technical Information Documents	04/01/91	03/15/91		YMP	I	
DOP	03-17	0	3	Preparing Technical Information Documents	10/28/92	10/22/92		YMP	I	
	01-03	01		Stop Work Orders	10/14/93	09/14/93		YMP	I	
	01-03	02		Stop Work Orders	11/26/93	11/19/93		YMP	I	
QAIP	01-03	03		Stop Work Orders	06/03/94	05/05/94		YMP	I	
QAIP	01-03	04		Stop Work Orders	08/05/94	08/05/94		YMP	I	
QAIP	01-04	00		Resolution of Quality Assurance Disputes	09/23/92	08/24/92		YMP	A	

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TRAINING SNAPSHOT

\*\*\* POTT, JOHN . \*\*\* SNL 6852 M/S 1399

YMP

WBS Assigned:

Last Certified: YMP 03/03/92

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RC ON
QAIP	01-05	03		Establishing Work Agreements (WA)	04/19/93	03/26/93		YMP	I	
QAIP	01-05	04		Establishing Work Agreements	10/03/93	10/01/93		YMP	I	
QAIP	01-05	05		Establishing Work Agreements	12/31/93	12/22/93		YMP	I	
QAIP	01-05	06		Establishing Work Agreements	06/10/94	06/29/94		YMP	I	
QAIP	01-05	07		Establishing Work Agreements	09/25/94	09/12/94		YMP	I	
QAIP	01-05	08		Establishing Work Agreements	04/20/95	03/23/95		YMP	I	
QAIP	01-05	09		Establishing Work Agreements	03/01/96	02/05/96		YMP	A	N
QAIP	02-02	02		Study Plan Requirements	03/01/96	02/05/96		YMP	A	
QAIP	02-04	00		Conducting and Documenting Analyses	07/16/93	07/09/93		YMP	I	
QAIP	02-04	01		Conducting and Documenting Analyses	06/03/94	05/05/94		YMP	I	
QAIP	02-04	02		Conducting and Documenting Analyses and Calculations	11/16/94	11/23/94		YMP	A	
QAIP	02-05	00		Training	05/01/92	04/20/92		YMP	I	
QAIP	02-05	00	1	Training	01/04/93	12/15/92		YMP	I	
QAIP	02-05	01		Training	10/01/93	09/07/93		YMP	I	
QAIP	02-05	02		Training	06/10/94	05/12/94		YMP	I	
QAIP	02-05	03		Training	06/30/95			YMP	I	
QAIP	02-06	01		Qualification and Certification of Personnel	03/31/93	03/22/93		YMP	I	
QAIP	02-06	02		Qualification and Certification of Personnel	03/03/95	01/27/95		YMP	I	
QAIP	02-06	03		Qualification and Certification of Personnel	06/30/95			YMP	I	
QAIP	02-09	00		Readiness Review	05/10/95	05/18/95		YMP	A	
QAIP	02-10	01		Determination of Applicable QA Controls	10/14/93	09/14/93		YMP	I	
QAIP	02-10	01	1	Determination of Applicable QA Controls	10/14/93	09/14/93		YMP	I	
QAIP	03-02	02		Software Quality Assurance Requirements	09/04/92	09/03/92		YMP	I	
QAIP	03-02	02	1	Software Quality Assurance Requirements	02/12/93	01/28/93		YMP	I	
QAIP	03-04	01		Design Investigation Control	02/26/93	02/16/93		YMP	A	
QAIP	03-04	01	1	Design Investigation Control	03/26/93	03/22/93		YMP	A	
QAIP	03-10	00		Routine Calculations	06/30/93	07/09/93		YMP	I	
QAIP	03-12	00		Peer Reviews	06/30/93	07/09/93		YMP	I	
QAIP	03-12	01		Peer Reviews	06/03/94	05/05/94		YMP	A	
QAIP	04-01	03		Procurement	04/22/93	04/23/93		YMP	I	
QAIP	04-01	03	1	Procurement	05/17/93	05/26/93		YMP	I	
QAIP	04-01	04		Procurement	01/09/94	12/22/93		YMP	I	
QAIP	04-01	05		Procurement	06/10/94	06/29/94		YMP	I	
QAIP	04-01	06		Procurement	10/23/94	10/24/94		YMP	I	
QAIP	06-01	00		Document Control System	04/22/93	04/23/93		YMP	I	
QAIP	06-01	01		Document Control System	06/03/94	05/05/94		YMP	I	
QAIP	06-01	02		Document Control System	10/28/94	09/28/94		YMP	A	
QAIP	06-02	02		Reviewing, Approving, and Issuing Technical Information Docu	05/17/93	05/26/93		YMP	I	
QAIP	06-02	03		Preparing, Reviewing, Approving, & Issuing Technical Informa	10/16/94	10/17/94		YMP	I	
QAIP	06-02	03	1	Preparing, Reviewing, Approving, & Issuing Technical Informa	03/31/95			YMP	I	
QAIP	06-02	04		Preparing, Reviewing, Approving, & Issuing Technical Informa	09/01/95	10/01/95		YMP	A	
QAIP	06-03	00		Conducting and Documenting Reviews of Documents	02/12/93	02/16/93		YMP	I	
QAIP	06-03	01		Conducting and Documenting Reviews of Documents	08/13/93	07/28/93		YMP	I	

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\*\*\* POTT, JOHN . \*\*\* SNL 6852 M/S 1399  
WBS Assigned:  
Last Certified: YMP 03/03/92

YMP

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	ROL OVE
QAIP	06-03	02		Conducting and Documenting Reviews of Documents	10/26/94	09/26/94		YMP	I	
QAIP	06-03	03		Conducting and Documenting Reviews of Documents	09/13/95	10/01/95		YMP	A	
QAIP	07-01	00		Procurement Acceptance Verification	11/30/92	12/15/92		YMP	I	
QAIP	10-01	01		Surveillances	06/19/92	06/18/92		YMP	I	
QAIP	12-01	01		Measuring and Test Equipment Control	10/14/93	09/14/93		YMP	I	
QAIP	12-01	02		Measuring and Test Equipment Control	01/02/94	12/22/93		YMP	I	
QAIP	12-01	03		Measuring and Test Equipment Control	06/03/94	05/05/94		YMP	I	
QAIP	12-01	04		Measuring and Test Equipment Control	09/07/94	08/08/94		YMP	I	
QAIP	12-01	05		Measuring and Test Equipment Control	08/17/95	07/18/95		YMP	A	
QAIP	16-01	00		Corrective Action	05/25/92	05/11/92		YMP	I	
QAIP	16-01	01		Corrective Action	06/30/93	07/09/93		YMP	I	
QAIP	16-01	02		Corrective Action	01/21/94	12/03/93		YMP	I	
IP	16-01	02		Corrective Action	01/02/94			YMP	I	
.P	16-01	03		Corrective Action	06/15/94	05/27/94		YMP	I	
QAIP	16-01	04		Corrective Action	10/28/94	09/28/94		YMP	I	
QAIP	16-01	05		Corrective Action	02/08/95	01/13/95		YMP	I	
QAIP	16-01	06		Corrective Action	08/06/95	07/07/95		YMP	I	
QAIP	17-01	00		Protecting, Preparing, and Submitting YMP QA Records	06/10/92	06/10/92		YMP	I	
QAIP	17-01	01		Protecting, Preparing, and Submitting YMP QA Records	06/16/94	05/27/94		YMP	I	
QAIP	17-01	02		Protecting, Preparing, and Submitting YMP QA Records	10/26/94	10/24/94		YMP	A	
QAIP	17-02	02		Participant Data Archive.(PDA)	08/11/94	07/12/94		YMP	A	
QAIP	18-01	01		Quality Assurance Audits	03/26/93	03/22/93		YMP	I	
QAIP	18-01	02		Quality Assurance Audits	01/02/94	12/22/93		YMP	I	
QAIP	19-01	00		Software Quality Assurance Requirements	01/09/94	12/22/93		YMP	I	
QAIP	19-01	01		Software Quality Assurance Requirements	06/17/94	05/27/94		YMP	I	
QAIP	20-01	00		Technical Procedures	10/14/93	09/14/93		YMP	I	
QAIP	20-02	00		Scientific Notebooks	10/14/93	09/14/93		YMP	I	
QAIP	20-02	01		Scientific Notebooks	04/27/95	04/14/95		YMP	A	
QAPD	-	00		Quality Assurance Program Description	09/02/91	09/10/91		YMP	I	
TP	-235	00		Spot Welding Vibrating Wire Strain Gages To Steel Sets	06/08/95	05/25/95		YMP	A	
WA	-0065	00		Construction Monitoring Activities in the North Ramp Starter	04/02/93	03/22/93		YMP	I	
WA	-0065	01		Construction Monitoring Activities in the North Ramp Starter	09/12/93	08/13/93		YMP	I	
WA	-0065	02		Construction Monitoring Activities in the North Ramp Starter	12/12/93	11/16/93		YMP	I	
WA	-0065	03		Construction Monitoring Activities in the North Ramp Starter	09/15/94	08/18/94		YMP	A	
WA	-0115	01		Measuring Rock Mass Modulus and Compliance using TBM Gripper	12/09/94	11/23/94		YMP	A	
WA	-0164	00		Scientific Basis for Design	01/20/95	01/06/94		YMP	A	
WA	-0182	00		Development of the YMP Thermal Testing Strategy	03/01/96	02/05/96		YMP	A	NT
WA	-0185	00		Supporting Analyses for an In Situ Thermal Testing Program	03/10/95	02/15/95		YMP	A	
WA	-0189	00		X-Ray Powder Diffraction Analysis	03/22/95	02/25/95		YMP	A	
	02.02Q	00		Preparation, Review, Approval, and Revision of Site Characterization	03/01/96	02/05/96		YMP	A	
YAP	05.01Q	00		Document Development, Change, Review, and Approval Control	01/05/94	12/22/93		YMP	A	

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TRAINING SNAPSHOT

YMP

\*\*\* RYDER, ERIC E. \*\*\* SNL 6852 M/S 1325

WBS Assigned:

Last Certified: WIPP 06/02/92

Last Certified: 11/28/95

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	ROLL OVER
CLASS				HOW DO WE ENSURE PROFICIENCY QAIP 2-5 AND 2-6	05/22/95	05/22/95		YMP	A	
MANUAL				YMP Orientation		01/09/89		YMP	A	
MANUAL				YMP ORIENTATION		11/08/94		YMP	A	
MANUAL				GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	05/31/94	05/05/94		YMP	I	
VIDEO				PACS AND 10,000 YEAR TEST		11/18/89		YMP	A	
QAP	17-1	01		WIPP Quality Assurance Records Source Requirements.	12/07/95	11/13/95		WIP	A	
QAP	19-1	01		WIPP Computer Software Quality Assurance Requirements.	12/07/95	11/13/95		WIP	I	
QAP	19-1	01	1	WIPP Computer Software Quality Assurance Requirements.	12/07/95	11/13/95		WIP	I	
QAP	19-1	02		WIPP Computer Software Quality Assurance Requirements.	12/27/95	11/27/95		WIP	A	
QAP	2-1	01		Qualification and Certification of Personnel.	12/07/95	11/13/95		WIP	A	
	2-2	01		Orientation and Training Program	12/07/95	11/13/95		WIP	A	
	2-5	01		Issuing and Lifting Stop Work Orders.	12/07/95	11/13/95		WIP	A	
QAP	2-6	01		Conducting and Documenting Readiness Reviews.	12/07/95	11/13/95		WIP	A	
QAP	3-1	01		Managing Design and Analysis Contracts.	12/07/95	11/13/95		WIP	A	
QAP	6-1	01		Document Control System	12/07/95	11/13/95		WIP	A	
QAP	6-2	01		Preparing, Reviewing, and Approving Technical Information Do	12/07/95	11/13/95		WIP	A	
QAP	6-3	01		Conducting and Documenting Reviews of Documents.	12/07/95	11/13/95		WIP	A	
QAP	9-1	01		Quality Assurance Requirements For Conducting Analyses	12/13/95	11/13/95		WIP	A	
APQ	01.06	0		Release of Unpublished Information to Nonparticipants		08/17/89		YMP	I	
APQ	01.06	01		Release of Unpublished Information to Nonparticipants		08/17/89		YMP	I	
APQ	03.06	0		Configuration Management	10/19/90	10/01/90		YMP	I	
APQ	03.06	0	1	Configuration Management	07/30/93			YMP	I	
APQ	03.06	0	2	Configuration Management	07/30/93			YMP	I	
APQ	03.06	0	3	Configuration Management	07/30/93			YMP	I	
APQ	05.02	03		Technical Information Flow To and From the Yucca Mountain Si	06/15/92	06/05/92		YMP	I	
APQ	05.02	04		Technical Information Flow To and From the Yucca Mountain Si	07/30/93	09/08/93		YMP	I	
APQ	05.04	0				08/17/89		YMP	I	
APQ	05.09	02		Qualification of Existing Data	07/30/93			YMP	I	
APQ	05.09	1		Qualification of Existing Data	10/19/90	10/01/90		YMP	I	
APQ	05.17	0				08/17/89		YMP	I	
APQ	05.20	0		Document Hold Control		08/17/89		YMP	I	
APQ	05.20	01		Document Hold Control	07/30/93			YMP	I	
APQ	06.01	04		Project Office Document Development, Review, Approval, and R	07/30/93	09/08/93		YMP	I	
APQ	06.01	3		Project Office Document Development, Review, Approval, and R	07/19/91	07/08/91		YMP	I	
APQ	16.01	00		Performance/Deficiency Reporting	10/25/95	10/09/95		YMP	A	
	16.02	00		Corrective Action And Stop Work	10/25/95	10/09/95		YMP	A	
	02-03	A		Work Plans		11/30/89		YMP	I	
DOP	02-03	A	1	Work Plans	04/19/90	04/18/90		YMP	I	
DOP	02-04	A		Analysis Control and Verification		08/18/89		YMP	I	
DOP	02-04	A	1	Analysis Control and Verification	05/01/90	04/06/90		YMP	I	

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\*\*\* RYDER, ERIC E. \*\*\* SNL 6852 M/S 1325  
WBS Assigned:  
Last Certified: WIPP 06/02/92  
Last Certified: 11/28/95

YMP

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RC C.
DOP	03-10	B		Routine Calculations	05/04/90	04/30/90		YMP	I	
DOP	03-10	B	1	Routine Calculations	02/26/91	02/08/91		YMP	I	
DOP	03-12	A		Peer Reviews		08/17/89		YMP	I	
DOP	03-12	A	1	Peer Reviews		02/16/90		YMP	I	
DOP	03-17	0		Preparing Technical Information Documents		08/17/89		YMP	I	
DOP	03-17	0	1	Preparing Technical Information Documents		10/30/89		YMP	I	
DOP	03-17	0	3	Preparing Technical Information Documents	10/28/92	10/15/92		YMP	I	
QAIP	01-03	04		Stop Work Orders	09/23/94	09/06/94		YMP	I	
QAIP	01-04	00		Resolution of Quality Assurance Disputes	09/23/92	08/21/92		YMP	A	
QAIP	01-05	03		Establishing Work Agreements (WA)	04/19/93	03/26/93		YMP	I	
QAIP	01-05	04		Establishing Work Agreements	10/03/93	09/09/93		YMP	I	
QAIP	01-05	05		Establishing Work Agreements	12/31/93	12/07/93		YMP	I	
QAIP	01-05	06		Establishing Work Agreements	06/10/94	05/20/94		YMP	I	
QAIP	01-05	07		Establishing Work Agreements	09/25/94	09/06/94		YMP	I	
QAIP	01-05	08		Establishing Work Agreements	04/20/95	03/27/95		YMP	I	
QAIP	01-05	09		Establishing Work Agreements	03/01/96	02/09/96		YMP	A	
QAIP	02-02	02		Study Plan Requirements	03/01/96	02/09/96		YMP	A	
QAIP	02-04	00		Conducting and Documenting Analyses	07/16/93	06/21/93		YMP	I	
QAIP	02-04	01		Conducting and Documenting Analyses	06/03/94	05/05/94		YMP	I	
QAIP	02-04	02		Conducting and Documenting Analyses and Calculations	11/16/94	11/08/94		YMP	A	
QAIP	02-05	01		Training	10/01/93	09/07/93		YMP	I	
QAIP	02-05	02		Training	06/10/94	05/12/94		YMP	I	
QAIP	02-05	03		Training	06/30/95			YMP	I	
QAIP	02-06	01		Qualification and Certification of Personnel	03/31/93	03/11/93		YMP	I	
QAIP	02-06	02		Qualification and Certification of Personnel	03/03/95	01/27/95		YMP	I	
QAIP	02-06	03		Qualification and Certification of Personnel	06/30/95			YMP	I	
QAIP	02-09	00		Readiness Review	05/10/93	04/12/93		YMP	A	
QAIP	02-10	01		Determination of Applicable QA Controls	03/26/93	03/01/93		YMP	I	
QAIP	03-02	02		Software Quality Assurance Requirements	09/04/92	09/21/92		YMP	I	
QAIP	03-02	02	1	Software Quality Assurance Requirements	02/12/93	01/28/93		YMP	I	
QAIP	03-04	01		Design Investigation Control	02/26/93	02/05/93		YMP	A	
QAIP	03-04	01	1	Design Investigation Control	03/26/93	03/01/93		YMP	A	
QAIP	03-05	02		Design Analysis and Verification	09/23/94	08/26/94		YMP	A	
QAIP	03-10	00		Routine Calculations	06/30/93	06/10/93		YMP	I	
QAIP	03-12	00		Peer Reviews	06/30/93	06/10/93		YMP	I	
QAIP	03-12	01		Peer Reviews	06/03/94	05/05/94		YMP	A	
QAIP	04-01	03		Procurement	04/22/93	04/12/93		YMP	I	
QAIP	04-01	03	1	Procurement	05/17/93	04/22/93		YMP	I	
QAIP	04-01	04		Procurement	01/09/94	12/17/93		YMP	I	
QAIP	04-01	05		Procurement	06/10/94	05/20/94		YMP	I	
QAIP	04-01	06		Procurement	10/23/94	10/03/94		YMP	I	
QAIP	06-01	00		Document Control System	04/22/93	04/12/93		YMP	I	
QAIP	06-01	01		Document Control System	06/03/94	05/05/94		YMP	I	

Sandia National Laboratories  
SNL NWMP TRAINING  
Dept. 6752, MS 1330  
Albuquerque, NM 87185-1330

TRAINING SNAPSHOT

\*\*\* RYDER, ERIC E. \*\*\* SNL 6852 M/S 1325

YMP

WBS Assigned:

Last Certified: WIPP 06/02/92

Last Certified: 11/28/95

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RC
QAIP	06-01	02		Document Control System	10/28/94	09/28/94		YMP	A	
QAIP	06-02	02		Reviewing, Approving, and Issuing Technical Information Docu	05/17/93	04/22/93		YMP	I	
QAIP	06-02	03		Preparing, Reviewing, Approving, & Issuing Technical Informa	10/16/94	09/23/94		YMP	I	
QAIP	06-02	03	1	Preparing, Reviewing, Approving, & Issuing Technical Informa	03/31/95			YMP	I	
QAIP	06-02	04		Preparing, Reviewing, Approving, & Issuing Technical Informa	09/01/95	09/26/95		YMP	A	
QAIP	06-03	00		Conducting and Documenting Reviews of Documents	02/12/93	01/28/93		YMP	I	
QAIP	06-03	01		Conducting and Documenting Reviews of Documents	08/13/93	07/16/93		YMP	I	
QAIP	06-03	02		Conducting and Documenting Reviews of Documents	10/26/94	09/26/94		YMP	I	
QAIP	06-03	03		Conducting and Documenting Reviews of Documents	09/13/95	09/26/95		YMP	A	
QAIP	07-01	00		Procurement Acceptance Verification	11/30/92	11/04/92		YMP	I	
QAIP	07-03	00		Evaluation of Contractor QA Program Documents	09/15/90	08/23/90		YMP	I	
QAIP	07-03	01		Evaluation of Contractor QA Program Documents	06/30/93	06/10/93		YMP	A	
IP	10-01	01		Surveillances	06/19/92	06/16/92		YMP	I	
IP	12-01	04		Measuring and Test Equipment Control	09/23/94	08/26/94		YMP	I	
QAIP	12-01	05		Measuring and Test Equipment Control	08/17/95	07/18/95		YMP	A	
QAIP	15-01	00		Nonconformance Control and Reporting	06/08/92	05/27/92		YMP	I	
QAIP	16-01	00		Corrective Action	05/25/92	04/29/92		YMP	I	
QAIP	16-01	01		Corrective Action	06/30/93	06/10/93		YMP	I	
QAIP	16-01	02		Corrective Action	01/02/94			YMP	I	
QAIP	16-01	02		Corrective Action	01/21/94	12/03/93		YMP	I	
QAIP	16-01	03		Corrective Action	06/15/94	05/20/94		YMP	I	
QAIP	16-01	04		Corrective Action	10/28/94	09/28/94		YMP	I	
QAIP	16-01	05		Corrective Action	02/08/95	01/18/95		YMP	I	
QAIP	16-01	06		Corrective Action	08/06/95	07/07/95		YMP	I	
QAIP	17-01	00		Protecting, Preparing, and Submitting YMP QA Records	06/10/92	06/05/92		YMP	I	
QAIP	17-01	01		Protecting, Preparing, and Submitting YMP QA Records	06/16/94	05/20/94		YMP	I	
QAIP	17-01	02		Protecting, Preparing, and Submitting YMP QA Records	10/26/94	10/04/94		YMP	A	
QAIP	17-02	02		Participant Data Archive (PDA)	09/23/94	08/26/94		YMP	A	
QAIP	19-01	00		Software Quality Assurance Requirements	01/09/94	12/17/93		YMP	I	
QAIP	19-01	01		Software Quality Assurance Requirements	06/17/94	05/20/94		YMP	I	
QAIP	20-02	00		Scientific Notebooks	09/23/94	08/26/94		YMP	I	
QAIP	20-02	01		Scientific Notebooks	04/27/95	04/17/95		YMP	A	
QAPD	-	00		Quality Assurance Program Description	09/02/91	08/16/91		YMP	I	
WA	-0137	00		Non-Isothermal-PA/ Process Level Task	09/14/94	08/26/94		YMP	I	
WA	-0161	00		Data Assumptions Updating	01/15/95	01/18/95		YMP	A	
WA	-0164	00		Scientific Basis for Design	01/20/95	01/18/95		YMP	A	
WA	-0182	00		Development of the YMP Thermal Testing Strategy	03/01/96	02/09/96		YMP	A	
YAP	02.02a	00		Preparation, Review, Approval, and Revision of Site Characte	03/01/96	02/09/96		YMP	A	
	03.02a	00		Configuration Management	03/25/94	03/05/94		YMP	A	
	05.01a	00		Document Development, Change, Review, and Approval Control	01/05/94	12/07/93		YMP	A	
YAP	S111.2a	00		Technical Information Flow To and From the Yucca Mountain Si	09/16/94	08/26/94		YMP	A	

Sandia National Laboratories  
SNL NEMP TRAINING  
Dept. 6752, MS 1330  
Albuquerque, NM 87185-1330

TRAINING SNAPSHOT

\*\*\* ARNOLD, BILL W. \*\*\* SNL 6851 M/S 1326  
WBS Assigned:  
Last Certified: YMP 09/06/94

YMP

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	ROL OVE:
CLASS				AP-16.1Q AND AP-16.2Q	06/08/95	06/08/95		YMP	A	
CLASS				PROBLEM IDENTIFICATION, CONTROL, & FEEDBACK	06/08/95	06/08/95		YMP	A	
CLASS				LICENSING PROCESS WORKSHOP	03/13/95	03/13/95		YMP	A	
CLASS				SCIENTIFIC NOTEBOOKS, QAP 20-2	06/08/95	06/08/95		YMP	A	
MANUAL				GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	10/07/94	09/20/94		YMP	I	
MANUAL				YMP Orientation	10/07/94	10/07/94		YMP	A	
MANUAL				YMP ORIENTATION		11/30/94		YMP	A	
VIDEO				PACS AND 10,000 YEAR TEST	10/07/94	09/20/94		YMP	A	
APQ	01.06	01		Release of Unpublished Information to Nonparticipants	10/07/94	10/05/94		YMP	A	
APQ	16.01	00		Performance/Deficiency Reporting	10/25/95	06/08/95		YMP	A	
	16.02	00		Corrective Action And Stop Work	10/25/95	06/08/95		YMP	A	
	03-17	0		Preparing Technical Information Documents	10/07/94	09/21/94		YMP	I	
DOP	03-17	0	1	Preparing Technical Information Documents	10/07/94	09/21/94		YMP	I	
DOP	03-17	0	2	Preparing Technical Information Documents	10/07/94	09/21/94		YMP	I	
DOP	03-17	0	3	Preparing Technical Information Documents	10/07/94	09/21/94		YMP	I	
QAIP	01-02	06		Organization	10/07/94	09/21/94		YMP	I	
QAIP	01-03	04		Stop Work Orders	10/07/94	09/21/94		YMP	A	
QAIP	01-04	00		Resolution of Quality Assurance Disputes	10/07/94	09/21/94		YMP	I	
QAIP	01-05	07		Establishing Work Agreements	10/07/94	09/21/94		YMP	I	
QAIP	01-05	08		Establishing Work Agreements	04/20/95	03/29/95		YMP	A	NT
QAIP	01-05	09		Establishing Work Agreements	03/01/96	02/05/96		YMP	A	
QAIP	02-02	02		Study Plan Requirements	03/01/96	02/05/96		YMP	A	
QAIP	02-04	02		Conducting and Documenting Analyses and Calculations	03/25/96	02/26/96		YMP	A	
QAIP	03-10	00		Routine Calculations	10/07/94	09/21/94		YMP	I	
QAIP	06-01	01		Document Control System	10/07/94	10/05/94		YMP	I	
QAIP	06-01	02		Document Control System	10/28/94	09/28/94		YMP	A	
QAIP	06-02	02		Reviewing, Approving, and Issuing Technical Information Docu	10/07/94	10/05/94		YMP	I	
QAIP	06-02	03		Preparing, Reviewing, Approving, & Issuing Technical Informa	10/16/94	10/05/94		YMP	I	
QAIP	06-02	03	1	Preparing, Reviewing, Approving, & Issuing Technical Informa	03/31/95			YMP	I	
QAIP	06-02	04		Preparing, Reviewing, Approving, & Issuing Technical Informa	09/01/95	09/07/95		YMP	A	
QAIP	06-03	02		Conducting and Documenting Reviews of Documents	08/11/95	07/17/95		YMP	I	
QAIP	06-03	03		Conducting and Documenting Reviews of Documents	09/13/95	09/07/95		YMP	A	
QAIP	16-01	03		Corrective Action	10/07/94	10/05/94		YMP	I	
QAIP	16-01	04		Corrective Action	10/28/94	09/28/94		YMP	I	
QAIP	16-01	05		Corrective Action	02/08/95	01/23/95		YMP	I	
QAIP	16-01	06		Corrective Action	08/06/95	07/07/95		YMP	I	
	17-01	01		Protecting, Preparing, and Submitting YMP QA Records	10/07/94	10/05/94		YMP	I	
	17-01	02		Protecting, Preparing, and Submitting YMP QA Records	10/26/94	10/05/94		YMP	A	
QAIP	19-01	01		Software Quality Assurance Requirements	08/11/95	07/17/95		YMP	I	
QAIP	19-01	01	1	Software Quality Assurance Requirements	08/11/95	07/17/95		YMP	I	
QAIP	20-02	01		Scientific Notebooks	06/13/95	06/13/95		YMP	A	

P. 47 of 126

Sandia National Laboratories  
SNL NWMP TRAINING  
Dept. 6752, MS 1330  
Albuquerque, NM 87185-1330

TRAINING SNAPSHOT

YMP

\*\*\* ARNOLD, BILL W. \*\*\* SNL 6851 M/S 1326  
WBS Assigned:  
Last Certified: YMP 09/06/94

TYPE	NUM	REV	ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	ROL OVE
WA	-0182	00		Development of the YMP Thermal Testing Strategy	03/01/96	02/05/96		YMP	A	NT
WA	-0185	00		Supporting Analyses for an In Situ Thermal Testing Program	03/10/95	03/02/95		YMP	A	
WA	-0192	00		Develop Bounding Representations Of Unsaturated Fracture Flo	04/14/95	05/12/95		YMP	A	

SANDIA NATIONAL LABORATORIES  
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT  
WORK AGREEMENT (WA)

WA-0182

Revision 01

Development of the YMP Thermal Testing Strategy

Customer: Original Signed By Date: 03/05/96  
(L. S. Costin, 6852)

Supplier: Original Signed By Date: 03/05/96  
(E. E. Ryder, 6852)

Technical  
Review: Original Signed By Date: 02/20/96

QA  
Review: Original Signed By Date: 02/23/96

(Reviewer signatures above serve to document the review and resolution of comments; Customer and Supplier signatures include comment resolution and approval of the Work Agreement.)

Effective Date: 03/05/96

## 6.0 TRAINING REQUIREMENTS

PROCEDURE		Personnel
QAIP 1-3	Stop Work Orders	All SNL supplier personnel listed in WA Requirements Table
QAIP 1-4	Resolution of Quality Assurance Disputes	All SNL supplier personnel listed in WA Requirements Table
QAIP 1-5	Establishing Work Agreements	All SNL supplier personnel listed in WA Requirements Table
QAIP 2-5	Training	Larry Costin
QAIP 2-6	Qualification and Certification of Personnel	Larry Costin
QAIP 6-1	Document Control System	All SNL supplier personnel listed in WA Requirements Table
QAIP 6-2	Preparing, Reviewing, Approving, and Issuing Technical Information Documents	All SNL supplier personnel listed in WA Requirements Table
QAIP 6-3	Conducting Documenting Reviews of Documents	All SNL supplier personnel listed in WA Requirements Table
QAIP 16-1	Corrective Actions	All SNL supplier personnel listed in WA Requirements Table
QAIP 17-1	Protecting, Preparing, and Submitting YMP QA Records	All SNL supplier personnel listed in WA Requirements Table

## 7.0 WORK ACCEPTANCE CRITERIA

The work acceptance criteria for the tasks defined in this WA are as follows:

- Successful completion and submittal of the SLTR to the USDOE and submittal of task records to the SNL records center.

Date: 4-1-96

To: R.R. Richards, 6812

From: Claudette Jerome

Request for Extension for DR SNL-96-D-4:

This extension is for a Response \_\_\_\_\_ or Corrective Action .

Requested Due Date: 05/30/96.

The justification is:

QAIP 1-5, is being revised for QARD, Rev 5,  
and is delayed in the review process.

Extension Request Approval:

Signed: [Signature] Date: 4/1/96

Reason for Rejection:

\_\_\_\_\_  
\_\_\_\_\_

Extension Rejection:

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

## 4.0 PROCEDURE, Continued

### 4.1 Preparing, Reviewing, and Approving a Work Agreement (continued)

Responsible Individual(s)	Step	Procedure
QA/ Technical Reviewer(s)	7	Signs and dates the WA to document the review and resolution of comments.
Supplier(s) / Customer	8	Signs and dates the WA to indicate concurrence with and commitment to the content.  Note: Supplier should review that draft WA to ensure that the stated requirements can be met considering resources available.
Customer	9	Submits copies of completed Document and Review Comment forms (QAIP 6-3 Appendix A) for <u>mandatory comments</u> to the Local Records Receiving Organization.

### 4.2 Issuing a Work Agreement

Responsible Individual(s)	Step	Procedure
Customer	1	If the customer is not the Task Manager, reviews the WA and recommends training to the Task Manager. This may be done by completing a draft Training Assignment form(s) Appendix A, QAIP 2-5.
Task Manager	2	Reviews the WA and the training history of personnel affected by this WA including QAIPs, Technical Procedures, or Yucca Mountain Administrative Procedures (YAPs) in order to determine if personnel have been trained on the applicable procedures specified in the WA.
	3	Assigns training to all responsible individuals working to the Work Agreement according to QAIP 2-5.
	4	Forwards Training Assignment form(s) to the customer for submittal.
Customer	5	Submits the WA to the Document Control staff for distribution as a controlled document per QAIP 6-1 and training assignment documentation per QAIP 2-5 to the Training Manager.

Continued on next page

SANDIA NATIONAL LABORATORIES  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)  
QAIP 1-5

ESTABLISHING WORK AGREEMENTS

Revision 10

Effective Date: \_\_\_\_\_

Author: Claudette Jaramillo 5/28/96  
Claudette Jaramillo Date

Concurrence: Robert Richards 5/28/96  
Robert Richards Date

Approval: Michael C. Brady 5/29/96  
Michael C. Brady, SNL CRWM Lab Lead Date

**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
ON DEFICIENCY REPORT (DR) SNL-96-D003  
RELATED REPORT NO. YMQAD-95-D-10  
THIS SUPERSEDES SNL-96-D-3 CONTAINED IN MOL.19960429.0456**

<u>DATE</u>	<u>TITLE/DESCRIPTIVE DATA</u>	<u>PAGE COUNT</u>	<u>LRC NOTE</u>
	Table of Contents	1	
03/18/96	Revised Deficiency Report SNL-96-D-003		
<b>TOTAL PAGES</b>		3	

**INFORMATION ONLY**

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1.

*F. J. Schelling*  
Signature of Record Source

3/5/97  
Date

**F. J. Schelling**  
Record Source (Printed)

**YMP:1.2.11:AUD:QA:CAR SNL-96-D003  
YMP RPC**

<b>OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.</b>	8 <input type="checkbox"/> Performance Report <input checked="" type="checkbox"/> Deficiency Report  NO. SNL-96-D-3  PAGE 1 OF 2 QA: L
RECORD ACCEPTED AT LRC <u>4/15/96</u> <i>UH</i>	<i>10/1</i>

**PERFORMANCE/DEFICIENCY REPORT**

<b>1 Controlling Document:</b> SNL YMP QAIP 1-5	<b>2 Related Report No.</b> YMQAD-95-D-010
--	---

<b>3 Responsible Organization:</b> 6852	<b>4 Discussed With:</b> Eric E. Ryder
--	---

**5 Requirement/Measurement Criteria:**  
 QAIP-1-5, Section 4.4, step 1  
 Upon completion check to assure all deliverables have been recieved and negotiate any additional termination actions and document the actions through a final revision to the WA.

**6 Description of Condition:**  
 For WA-0074, and WA-0130 the final revision of the WA did not reflect the negotiated deliverable.

<b>7 Initiator</b> <i>Donald P. Wrobel</i> Donald P. Wrobel      Date 12/12/95	<b>9 QA Review</b> QAR <i>[Signature]</i> Date 12/10/95
<b>10 Response Due Date</b> <i>Jan. 10, 1996</i>	<b>11 QA Issuance Approval</b> QAR (PRI/AOQAN) <i>[Signature]</i> Date 12/15/95

**12 Remedial Actions:**

Memos to the WA-074 and WA-130 file will be prepared and appended to the submitted records packages to document that the deliverables generated under these WAs were acceptable.

<b>13 Remedial Action Response By:</b> <i>[Signature]</i> Date 2-12-96	<b>14 Remedial Action Due Date</b> Date 3-12-96
<b>15 Remedial Action Response Acceptance</b> QAR <i>N/A</i> Date	<b>16 PR Verification/Closure</b> QAR <i>N/A</i> Date

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

8  
 DR NO. 5AL-96-D-02  
 PAGE 2 OF 2  
 QA: L  
 3/18/96  
 12/17/96

DEFICIENCY REPORT

17 Recommended Actions:

Memorandums or letters of agreement from the customer for the acceptance of deliverables that differ from the deliverable stated in the WA, or omission of deliverables needs to be sent to the Local Record Center (LRC) to be added to the WA record for both WAs.

18 Investigative Actions:

Completed as part of YMQAD-95-D-10.

19 Root Cause Determination:

Completed as part of YMQAD-95-D-10.

20 Action to Preclude Recurrence:

Completed as part of YMQAD-95-D-10.

21 Response by:

See #13 Date —

22 Corrective Action Completion Due Date:

See #14

23 Response Accepted

OAR *Claudette Jerome* Date 2/13/96

24 Response Accepted

AOQAM *[Signature]* Date 2/13/96

25 Amended Response Accepted

R N/A Date

26 Amended Response Accepted

AOQAM N/A Date

27 Corrective Actions Verified

OAR *[Signature]* Date 3/18/96

28 Closure Approved by:

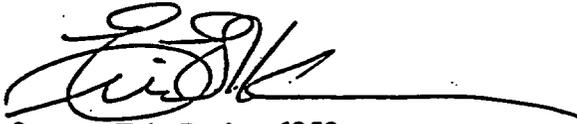
AOQAM *[Signature]* Date 3/18/96

# Sandia National Laboratories

Albuquerque, New Mexico 87185-1325

date: March 12, 1996

to: WA-130 File



from: Eric Ryder, 6852

subject: Acceptance of Deliverables

Work Agreement (WA) 130, Revision 01 states that the deliverables for the activities defined under the WA would be as follows:

- A letter report covering the 100 kW/acre loading case
- A letter report covering the 80 kW/acre loading case
- Copies of inputs to analysis programs
- task file documenting the analysis results

The actual deliverable from this WA was a Technical Data Information Form (TDIF 303124) that received two Sandia technical, one Sandia management, and one Sandia quality assurance review. This deliverable exceeds the review requirements of the originally defined letter reports, contains the information requested in the first two bullets, and is considered an acceptable substitute for the originally defined deliverable reports. The last two deliverables (copies of inputs and task file) were delivered as requested and have been filed in the records center.

YMP:1.2.4.2.3.2:WA-130:Design:QA:Deliverable Acceptance

*Note: This memo completes remedial action for DR SNL-9C-D03, with regard to WA-130. I observed that this memo has been received by the Local Records Receiving Organization as a QA record to be added to the records package identified directly above.*  
*R. Richards 3/10/96*

Sandia National Laboratories

Albuquerque, New Mexico 87185-1325

date: March 12, 1996

to: WA-074 File



from: Eric Ryder, 6852

subject: Acceptance of Deliverables

Work Agreement (WA) 074, Revision 01 states that the deliverables for the activities defined under the WA would be a memo report documenting the results of the analyses.

The actual deliverable from this WA was a Technical Data Information Form (TDIF 302273) that received two Sandia technical, one Sandia management, and one Sandia quality assurance review. This deliverable exceeds the review requirements of the originally defined memo report, contains the requested documentation, and is considered an acceptable substitute for the originally defined deliverable memo report.

YMP:1.2.4.2.3.2/1.2.4.2.1.2:WA-074:Design:QA:Deliverable Acceptance

*Note: This memo completes the remedial action for  
DR SNL-96-003, with regard to WA-074. I  
observed that this memo has been received by the  
Local Records Receiving Org. as a QA record to be  
added to the records package identified directly above  
P. Phulwade 5/18/96*



**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
ON DEFICIENCY REPORT (DR) SNL-96-D-002  
RELATED REPORT NO. YMQAD-95-D-10  
This supersedes SNL-96-D-2 Contained in MOL.19960429.0457**

<u>DATE</u>	<u>TITLE/DESCRIPTIVE DATA</u>	<u>PAGE COUNT</u>	<u>LRC NOTE</u>
	Table of Contents	1	<b>INFORMATION ONLY</b>
10/17/96	Revised Deficiency Report SNL-96-D-002	4	
<b>TOTAL PAGES</b>			

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1.

*F. J. Schelling*  
Signature of Record Source

3/5/97  
Date

**F. J. Schelling**  
Record Source (Printed)

**YMP:1.2.11:AUD:QA:CAR SNL-96-D-002  
YMP RPC**



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

8 DR NO. SNL-96-D002  
 PAGE 2 OF 3  
 QA: L

10/17/96

DEFICIENCY REPORT

17 Recommended Actions:

Memorandums or letters of agreement from the customer for the acceptance of deliverables that differ from the deliverable stated in the WA, or omission of deliverables needs to be sent to the Local Record Center (LRC) to be added to the WA record for both WAs.

18 Investigative Actions:

Completed as part of YMQAD-95-D-10

19 Root Cause Determination:

Completed as part of YMQAD-95-D-10

20 Action to Preclude Recurrence:

Completed as part of YMQAD-95-D-10

21 Response by: *of 2/13/96*  
*Ken Nelson w/D. Keasler* Date *2/5/96*

22 Corrective Action Completion Due Date:  
*N/A* *of 2/13/96*

23 Response Accepted  
 QAR *Chudite Jaramila* Date *2/13/96*

24 Response Accepted  
 AOQAM *Richard* Date *2/13/96*

25 Amended Response Accepted  
 IR *N/A* Date

26 Amended Response Accepted  
 AOQAM *N/A* Date

27 Corrective Actions Verified  
 QAR *John* Date *2/28/96*

28 Closure Approved by:  
 AOQAM *Richard* Date *2/28/96*

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

8  Performance Report  
 Deficiency Report

NO. SNL-96-DDPZ

PAGE 3 OF 3

QA: L

PR/DR CONTINUATION PAGE

Corrections made to this document, and their explanations, include:

Page 1, block 8 - the page total for this form (3) was added; it had been omitted previously.

Page 1, block 10 - the corrected entry for the Response Due Date was added ("2/13/96"). Originally, a correction to the Response Due Date of Jan. 10, 1996, was made by C. P. Jaramillo. The correction was made to change the date to 2/13/96; this correction was also actually made on 2/13/96. Since the corrected entry and the date of the correction were the same, Ms. Jaramillo inadvertently failed to write the corrected entry. That has now been corrected.

Page 2, block 8 - The DR number and the page total (3) for this form were added; they had been omitted previously.

Page 3 - This page was added in order to provide documentation of these corrections. All corrections made at this time were initialed and dated near the new entries, or, in the case of this page, below

PKR  
10/17/96



**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
FOR CORRECTIVE ACTION REQUEST (CAR) SNL-96-C-01**

<u>DATE</u>	<u>TITLE/DESCRIPTIVE DATA</u>	<u>PAGE COUNT</u>	<u>LRC NOTE</u>
	Table of Contents	1	
04/11/96	Corrective Action Request CAR SNL-96-C-01	5	
12/01/95	Memo, from R. R Richards, to C. A. Rautman, re: Corrective Action Request	2	
12/01/95	Deficiency Document Encoding Form	1	
12/11/95	Memo, from R. R. Richards, to C. P. Jaramillo, re: CAR SNL-96-C-01 - Extension of Due Date for Responses and Change of Responsibility for Response Development	1	
01/02/96	Memo, from R. R. Richards, to Distribution, re: Evaluation of Response to Corrective Action Request SNL-96 C-01	6	
01/30/96	Memo, from D. R. Hawkinson, to File, re: Investigative Action for Corrective Action Request SNL-96-C-01	5	
01/30/96	Memo, from L. S. Costin, to R. R. Richards, re: Request for Extension on Due Date for CAR SNL-96-C-01	1	
02/09/96	Memo, from M. C. Brady, to R. R. Richards, re: Completion of Action to Preclude Recurrence, Corrective Action Request SNL-96-C-01	6	
02/27/96	Memo, from M. C. Brady, to R. R. Richards, re: Submittal of Amended Response and Extension for SNL-96-C-01	3	
03/21/96	Memo, from R. R. Richards, to File, re: Investigative Action 3a of Corrective Action Request (CAR) SNL-96-C-01	2	
03/22/96	Worksheet signed by J. C. Friend, re: CAR SNL-96-C-01; Investigative Action 3.b	1	
04/11/96	CAR/SWO Continuation Page, signed by T. F. Ehrhorn, re: Review	1	
04/11/96	Memo, from R. R. Richards, to M. C. Brady, re: Closure of CAR SNL-96-C-01	1	
09/30/96	Memo, from R. R. Richards, to File, re: Approval of Action Due Date Extension Request	1	

**TOTAL PAGES**

**37**

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1. All blanks are intentional.

*Thomas F Ehrhorn*  
Signature of Record Source

12/10/96  
Date

THOMAS F EHRHORN  
Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-C-01  
YMP CRF

RECORD ACCEPTED

CAR NO. SNL-96-C-01  
PAGE 1 OF 36  
QA: L

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

RWS SL \*

CORRECTIVE ACTION REQUEST

1 Controlling Document: OCRWM "QA Requirements and Description," Rev. 5 (cont.)  
2 Related Report No.: N/A

3 Responsible Organization: SNL  
4 Discussed With: C. A. Rautman

5 Requirement:  
SNL QAIP 1-5, para. 3.2 and 3.3: "Lower tier WAs will be issued to provide a detailed work prescription. Because of their lack of detail, upper tier WAs cannot be used to prescribe technical activities... (lower tier WAs) are prepared by TLs or PIs to define and allocate specific work scope, identify graded QA and technical requirements controls and deliverables, and communicate this information to support staff and contractors."  
OCRWM QARD, para. 2.2.1.1, and .3: "Each Affected Organization shall establish a structured system of implementing documents... The system shall provide positive control over... internal interfaces within an organization." (cont.)

6 Description of Condition:  
The quality of the work performed under Work Agreements 14 (WBS 1.2.3.2.2.2.1) and 15 (WBS 1.2.3.2.2.2.2) has not been assured, and is therefore questionable at this time, due to insufficient control of internal interfaces and lack of detailed implementing instructions for the performance of work subject to the QA Program.  
Specifically:  
• concerning Work Agreement (WA) 14, there are no lower-tier WAs to provide the necessary and required interface control and detailed implementing instructions for execution of the work (e.g., identification of responsibilities, actions to be performed, deadlines, desired products, etc.) The one detailed implementing procedure related to this work—that exists, Technical Procedure 162, applies to only one aspect of the activities within WBS 1.2.3.2.2.2.1.  
• concerning WA 15, the two related lower-tier WAs, WA 177 and WA 178, apply only to work at Colorado State University; all other work governed by this upper-tier WA (i.e., work performed at SNL by the Task Leader and others) (cont.)

7 Initiator: R. R. Richards  
Date 11/30/95

10: Does a stop work condition exist?  
9. Yes \_\_\_ No  ; If Yes, Attach copy of SWO  
If Yes, Check One:  A  B  C  D

12 Recommended Actions:  
10a. Revise WA 14 and WA 15 to reflect current content of the WBS element and to include all appropriate QA controls.  
b. Develop, and issue for implementation, lower-tier work agreements for all work governed by the upper-tier WAs.  
c. Investigate all work done to date in WBS 1.2.3.2.2.2.1 and 1.2.3.2.2.2.2 to determine how the quality of the work can be represented or initiate actions (correspondence, information to the Technical Data Base, revisions to SAND Reports, etc.) to identify the products of the work to be "unqualified" for use in the Civilian Radioactive Waste Management Program.

11 QA Review: J. F. Ell  
Date 12/1/95

12 Response Due Date: Dec. 11, 1995  
Extension letter dated 12/11/95  
New Due Date 01/03/96

13 Affected Organization QA Manager Issuance Approval:  
Printed Name R.R. Richards  
Signature [Signature]  
Date 12-01-95

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 U.S. DEPARTMENT OF ENERGY  
 WASHINGTON, D.C.

B  
 CAR NO. SNL-96-C-01  
 PAGE 2 OF 6  
 QA: L

CORRECTIVE ACTION REQUEST

14 Remedial Actions:

See page 4

15 Investigative Actions:

See page 4

16 Root Cause Determination:

See page 5

17 Action to Preclude Recurrence:

See page 5

MARCH 15, 1996 OR 12/1/96

18 Response by: F. J. Schell; Fore MCB Date 12/22/95	18 Corrective Action Due Date: March 1, 1996 (latest date)
20 Response Accepted CAR O. F. Ell Date 12/22/95	21 Response Accepted AOCAM F. Richards Date 12/22/95
22 Amended Response Accepted CAR O. F. Ell <del>1/1/96</del> Date 2/27/96	23 Amended Response Accepted AOCAM <del>1/1/96</del> F. Richards Date 2/28/96
24 Corrective Actions Verified CAR O. F. Ell Date 4/11/96	25 Closure Approved By: AOCAM F. Richards Date 4/11/96

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RADIOACTIVE WASTE MANAGEMENT  
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8  Corrective Action  
 Request

NO. SNL-96-C-01  
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QA: L C\*

CAR/SWO CONTINUATION PAGE

Block 1, "Controlling Document," continued

- SNL Yucca Mountain Site Characterization Project QA Implementing Procedure 1-5, Rev. 09
- SNL Yucca Mountain Work Agreement 14, "Systematic Acquisition of Site-Specific Subsurface Information" Rev. 01
- SNL Yucca Mountain Work Agreement 15, "Three-Dimensional Rock Characteristics Models," Rev. 01

Block 5, "Requirement," continued

OCRWM QARD, para. 5.2: "work shall be performed in accordance with controlled implementing procedures."

- SNL YMP Work Agreements 14 and 15, sec. 17: "The supplier is responsible for identifying, developing, and implementing all lower-tier work agreements necessary to support the conduct of the work identified under this upper-tier work agreement."

Block 6, "Description of Condition," continued

lacks sufficient interface control and detailed implementing instructions. Also, a portion of the work within WA 15 is to prepared a study plan; the appropriate procedure for study plan preparation, YAP 2.2Q, is not cited in the WA, however.

Additionally, both WA 14 and 15 include out-of-date identifiers for the tasks within their WBS elements, making it unclear what work is actually governed by the WAs and whether all current work subject to the QA Program in these WBS's is addressed.

Corrective Action Response, CAR No. SNL-96-C-01

Remedial Action (CAR Block 14):

1. New Work Agreements (WAs) will be developed to replace WA-14 and WA 15; the new WAs will incorporate current information and will address the portions of the FY96 workscope of the subject WBS Elements that are not covered by existing lower-tier WAs or Technical Procedures. Responsible party - L. S. Costin. Anticipated completion date(completion = submittal of approved revisions for issuance by Document Control) -Feb 29, 1996.

Investigative Action (CAR Block 15):

1. Upper-Tier Work Agreements: An evaluation of the upper-tier Work Agreements indicates that needed revisions primarily involve updating P&S Account Numbers and other minor editorial corrections. These changes would not impact the quality of the work, and the extent of deficiency in this area is limited to these editorial corrections to the Work Agreement. No additional investigative action is needed regarding upper-tier WAs.
2. Lower-Tier Work Agreements: All of the work that is covered by upper-tier WAs 14 and 15 will be evaluated with respect to whether or not the detailed work is specified in an existing lower-tier WA or Technical Procedure; this evaluation will serve as input to both the Remedial Action, above, and Investigative Action 3, below. The product of this action will be a list or description of the work activities or interface relationships not adequately covered by a lower-tier WA or TP. Responsible Party - Dave Hawkinson. Anticipated completion date - Jan 15, 1996.
3. Evaluation of the effect on the quality of past and current work:
  - a. Systematic Drilling Program - An evaluation of the effect of the lack of written work instructions and detailed interface documents for those work areas, activities, or topics identified in Investigative Action 2, above. The investigation should consider the effect of contract specifications, standard geotechnical discipline practices, and oral instructions or interface coordination. Other considerations that can be addressed are the extent to which all personnel involved in this work are trained and have access to pertinent controlled documents (TPs and QAIPs), as well as the availability, for reference, of non-controlled documents such as the Study Plan, PACS, and relevant contracts. The product of this action will be documentation of the results of this evaluation, including a conclusion concerning the effect on quality of the past and current work. Responsible party - R. R. Richards. Anticipated date of completion - Mar. 15, 1996.

b. **Three-Dimensional Model Development** - Investigation indicates that, of necessity because of lack of availability of enough qualified data, some of the data used for model development activities to date is not known to be qualified. Therefore, for that work, it is currently correct that it be considered not fully qualified with regard to fulfilling all aspects of the QA Program. (For information, once enough qualified data is available to meaningfully utilize with the models under development, final model development and validation can be carried out fulfilling all applicable QA Program requirements.) All existing products of this activity will be identified and checked for whether they appropriately indicate their "not fully qualified" status. Responsible party - John Friend. Anticipated date of completion - March 15, 1996.

Root Cause Determination (CAR Block 16):

The apparent cause of this deficiency was a lack of effective use of the governing QAIP for the preparation and use of Work Agreements. Underlying, root cause factors that contributed to creating this condition adverse to quality are:

- Reliance, on the part of the Task Leader for this work, on directing and coordinating the work by oral, rather than written, instructions.
- Instructions to the Task Leader by his supervisor that, based on the nature of the work, lower-tier Work Agreements were not required. While those instructions are inconsistent with QA Program implementation, rather than being deliberate misinformation, they simply represent insufficient depth of familiarity with specific QA Program requirements, combined with not referring to the relevant QA Implementing Procedure.

Corrective Action to Preclude Recurrence (CAR Block 17):

The purpose and rationale for the use of written work instructions and interface documents in Civilian Radioactive Waste Management Program work that is subject to the QA Program, and the role of such written materials (e.g., lower-tier Work Agreements) in achieving and assuring quality, will be directly explained to the subject Task leader and his supervisor. Responsible party - M. C Brady. Anticipated completion date - January 20, 1996.

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

8  Corrective Action  
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SNL-96-C-1  
NO. OF 12/1/96  
PAGE 6 OF 6  
QA: L

CAR/SWO CONTINUATION PAGE

I reviewed the *Request for Distribution/Recall of a Controlled Document* for Work Agreements 300 and 301. These forms clearly show that WA-0300 supersedes WA-0015 and WA-0301 supersedes WA-0014.

I reviewed Work Agreements 300 and 301 and they do contain current information and they do address the FY96 workscope specified in the corrective action response. The subject work agreements have been processed through Document Control and are both on-line and in the official controlled documents file.

I reviewed the Memo to File (CAR SNL-96-C-01) dated January 30, 1996, by David R. Hawksinson submitted to respond to investigative action no. 2. This memo appears to thoroughly describe the work activities or interface relationships not adequately covered by a lower-tier WA or TP.

I reviewed the memo, "Investigative Action 3a of Correction Action Request (CAR) SNL-96-C01", dated March 21, 1996 from R.R. Richards. This memo was to provide information regarding the effect of the lack of written instructions on the quality of the systematic drilling program. The memo thoroughly covers the subject and provides the conclusions regarding the quality of past and current work as specified in the investigative action.

Regarding investigative action 3b, I reviewed the report provided by John C. Friend 3/22/95 (sic). Although "All existing products. . ." were not checked (five abstracts), it is obvious that the "not fully qualified" status has not been applied to the appropriate documents.



Thomas F. Ehrhorn  
April 11, 1996

# Sandia National Laboratories

Albuquerque, New Mexico 87185-1333

date: April 11, 1996

to: M.C. Brady



from: R.R. Richards, MS-1333

subject: Closure of CAR SNL-96-C-01

All remedial and investigative actions required for CAR SNL-96-C-01 have been completed and the CAR is closed effective this date.

copy to: L.S. Costin, MS 1325  
C.A. Rautman, MS 1325  
C.P. Jaramillo, MS 1333

**Sandia National Laboratories**

Albuquerque, New Mexico 87185

date: September 30, 1996

to: Records Management File - Corrective Action Request SNL-96-C001



from: Robert R. Richards, M/S 1333, 6812

subject: Approval of Action Due Date Extension Request

In a memo dated February 27, 1995 (error - should have read 1996), subject: "Submittal of Amended Response and Extension for SNL-96-C1", M. C. Brady requested that the due dates for actions to be carried out for this CAR be extended from those stated in the original CAR response. Since the rationale for the amended actions and the corresponding due date changes was reasonable and realistic, I approved of both the amended actions and the extension of due dates; I conveyed that orally to Ms. Brady and other affected individuals at the time. This memo serves to document that approval.

# Sandia National Laboratories

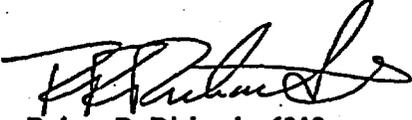
Abuquerque, New Mexico 87185-1333

date: December 1, 1995

WBS 1.2.11.5

to: Christopher A. Rautman, MS-1324 (6115)

QA



from: Robert R. Richards, 6812

subject: Corrective Action Request

Chris,

I initiated the accompanying Corrective Action Request (CAR) in order to preclude possible future problems (from regulators, intervenors, auditors, or even technical peers) concerning the work being done in WBS elements 1.2.3.2.2.2.1 and 1.2.3.2.2.2.2. We need to act now to be able to demonstrate later that the work was adequately planned, controlled, and carried out. Since your work should be central to successful site characterization, it will be very important that we be able to show that the work was done in a manner that met quality requirements as the way to achieve technical excellence. Developing a response to this CAR and carrying out the appropriate actions will eliminate the risk that this work now faces.

Please provide a response to a Corrective Action Request (CAR) by the due date identified in Block 12 of the CAR. If the due date cannot be met, provide a written request for extension to the CAR Coordinator (Claudette P. Jaramillo, MS-1333, 848-0797). Your request must include justification for the delay and must be provided to the CAR Coordinator prior to the due date.

Please use page 2 of the CAR, plus any needed continuation pages, for your response. For reference, the procedure that guides this process is AP 16.2Q; there are copies available in my office and in the NWM Information Center.

In order to develop the CAR response, perform investigative action to determine the extent of deficiency and to identify root cause. Next, determine the actions required to correct the adverse condition. These actions include remedial action, and, as required, corrective action to preclude recurrence. A review of the recommended actions provided in Block 10 of the CAR will assist in developing the response; you may also call on Dave Hawkinson for assistance in developing the appropriate actions for this situation. The response must include the following information:

## 1. Corrective Action Response

A. Remedial Action - Describe actions required to correct the specific conditions noted. (CAR form, block 14)

**B. Investigative Action - Describe the investigative actions performed to determine the extent of the condition and the results of the determination. (CAR form, block 15)**

**C. Root Cause Determination - Identify the root cause of the condition as determined through investigative actions. Include or reference detailed analyses supporting the root cause determination. (CAR form, block 16) Reference to Attachment 9.7, "Guidelines for Root Cause Determination," may assist you in this effort.**

**D. Corrective Action to Preclude Recurrence - Identify the actions required to address the root cause of the condition in order to preclude recurrence. (CAR form, block 17)**

**2. For each action above, identify the name of the individual assigned responsibility for completion of the action and the anticipated completion date.**

**If it becomes apparent that any of the corrective action due dates cannot be met, a written request for extension must be provided to the CAR Coordinator. This request must include justification for the delay and must be provided to the CAR Coordinator prior to the due date.**

**3. The response must include the dated signature of the Responsible Individual.**

**Again, for assistance or advice, please contact me, Dave Hawkinson, or Claudette Jaramillo.**

**Enclosure: CAR SNL-96-C-01**

**Copy to:**

**CRWMS M&O QA Ron Ruth  
OCRWM Dr. Daniel Dreyfus  
OCRWM Don Horton  
YMQAD R. E. Spence  
MS 1399 M. C. Brady  
MS 1325 L. S. Costin  
MS 1324 P. B. Davies  
MS 1333 R. R. Richards  
MS 1333 C. P. Jaramillo  
MS 1333 D. R. Hawkinson**



**Sandia National Laboratories**

Albuquerque, New Mexico 87185

date: December 11, 1995  
to: C. P. Jaramillo, MS 1333 (6812)  
from:   
R. R. Richards, MS 1333 (6812)

subject: CAR SNL-96-C-01 - Extension of Due Date for Response and Change of  
Responsibility for Response Development

On December 7, 1995, Mikey Brady, Chris Rautman, Peter Davies, and myself discussed development of the response to the subject Corrective Action Request. It became clear as a result of that discussion that additional time would be needed for response development, beyond the assigned due date of December 11, 1995. I was requested to extend the due date to a point in time that would allow adequate root cause determination and the conduct of evaluation actions necessary to develop comprehensive investigative actions. The effect on schedules of the current holiday season was also taken into consideration. I was also asked to change the responsible party for response development to be M. C. Brady.

Consequently, please change the information in the CAR Log database to indicate that the responsible party for development of the response for this CAR is M. C. Brady and the due date for response is January 3, 1996.

# Sandia National Laboratories

Albuquerque, New Mexico 87185-

date: January 2, 1996

to: Distribution

  
from: Robert R. Richards, MS-1333 (6812)

subject: Evaluation of Response to Corrective Action Request SNL-96-C-01

The attached response to CAR SNL-96-C-01 has been evaluated and has been determined to be satisfactory. The following individuals are responsible to complete corrective actions according to the following table.

#### Remedial Actions:

1. C. Rautman 01/31/96
2. C. Rautman 02/15/96

#### Investigative Action

2. D. Hawkinson 01/15/96
- 3a. R. Richards 02/15/96
- 3b. D. Hawkinson 03/01/96

#### Corrective Action to Preclude Recurrence

1. M. Brady 01/20/96

Verification of completion of the actions will be scheduled as each action is completed. Each individual listed should provide notice and, where feasible, documented evidence of completion of the specified actions to the QA Coordinator, Claudette Jaramillo, MS-1333, 505-848-0797. Any extension to the dates listed in the response must be requested by the responsible person in writing, with appropriate justification, prior to the date listed. Please send any request for extension to R. Richards, MS-1333.

If you have any questions, please contact either R. Richards at 505-848-0786 or Claudette Jaramillo at 505-848-0797.

Attachment: CAR SNL-96-C-01

Distribution:

MS-1324, C. Rautman  
MS-1333, D. Hawkinson  
MS-1333, R. Richards  
MS-1399, M. Brady

Copy to:

OCRWM Dr. Daniel Dreyfus  
OCRWM Don Horton  
YMQAD R. E. Spence  
CRWMS M&O QA R. Ruth  
MS-1333, C. P. Jaramillo  
MS-1325, L. S. Costin  
MS-1324, P. B. Davies

OFFICE OF CIVILIAN.  
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CAR NO. SNL-96-C-01  
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QA: L

CORRECTIVE ACTION REQUEST

14 Remedial Actions:

See page 4

15 Investigative Actions:

See page 4

16 Root Cause Determination:

See page 5

17 Action to Preclude Recurrence:

See page 5

18 Response by:

F. J. Schell for MCB Date 12/22/95

19 Corrective Action Due Date:

March 1, 1996 (latest date)

20 Response Accepted

OAR OL F/ELL Date 12/22/95

21 Response Accepted

AQAM F. Richards Date 12/22/95

22 Amended Response Accepted

OAR N/A Date

23 Amended Response Accepted

AQAM N/A Date

24 Corrective Actions Verified

OAR Date

25 Closure Approved by:

AQAM Date

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

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QA: L

CAR/SWO CONTINUATION PAGE

Block 1, "Controlling Document," continued

- SNL Yucca Mountain Site Characterization Project QA Implementing Procedure 1-5, Rev. 09
- SNL Yucca Mountain Work Agreement 14, "Systematic Acquisition of Site-Specific Subsurface Information" Rev. 01
- SNL Yucca Mountain Work Agreement 15, "Three-Dimensional Rock Characteristics Models," Rev. 01

Block 5, "Requirement," continued

OCRWM QARD, para. 5.2: "work shall be performed in accordance with controlled implementing procedures."

SNL YMP Work Agreements 14 and 15, sec. 17: "The supplier is responsible for identifying, developing, and implementing all lower-tier work agreements necessary to support the conduct of the work identified under this upper-tier work agreement."

Block 6, "Description of Condition," continued

lacks sufficient interface control and detailed implementing instructions. Also, a portion of the work within WA 15 is to prepared a study plan; the appropriate procedure for study plan preparation, YAP 2.2Q, is not cited in the WA, however.

Additionally, both WA 14 and 15 include out-of-date identifiers for the tasks within their WBS elements, making it unclear what work is actually governed by the WAs and whether all current work subject to the QA Program in these WBS's is addressed.

Corrective Action Response, CAR No. SNL-96-C-01

Remedial Action (CAR Block 14):

1. Editorial revisions will be made to Work Agreements 14 and 15 to make them applicable to currently-defined work in their respective WBSs. Responsible Party - C. A. Rautman. Anticipated completion date (completion = submittal of approved revisions for issuance by Document Control) - Jan. 31, 1996.
2. Lower-tier Work Agreements will be prepared for the portions of the FY96 workscope of the subject WBS Elements that are not covered by existing lower-tier WAs or Technical Procedures. Responsible party - Chris Rautman. Anticipated completion date (completion = submittal of approved WAs for issuance by Document Control) - Feb. 15, 1996.

Investigative Action (CAR Block 15):

1. Upper-Tier Work Agreements: An evaluation of the upper-tier Work Agreements indicates that needed revisions primarily involve updating P&S Account Numbers and other minor editorial corrections. These changes would not impact the quality of the work, and the extent of deficiency in this area is limited to these editorial corrections to the Work Agreement. No additional investigative action is needed regarding upper-tier WAs.
2. Lower-Tier Work Agreements: All of the work that is covered by upper-tier WAs 14 and 15 will be evaluated with respect to whether or not the detailed work is specified in an existing lower-tier WA or Technical Procedure; this evaluation will serve as input to both Remedial Action 2, above, and Investigative Action 3, below. The product of this action will be a list or description of the work activities or interface relationships not adequately covered by a lower-tier WA or TP. Responsible Party - Dave Hawkinson. Anticipated completion date - Jan 15, 1996.
3. Evaluation of the effect on the quality of past and current work:
  - a. Systematic Drilling Program - An evaluation of the effect of the lack of written work instructions and detailed interface documents for those work areas, activities, or topics identified in Investigative Action 2, above. The investigation should consider the effect of contract specifications, standard geotechnical discipline practices, and oral instructions or interface coordination. Other considerations that can be addressed are the extent to which all personnel involved in this work are trained and have access to pertinent controlled documents (TPs and QAIPs), as well as the availability, for reference, of non-controlled documents such as the Study Plan, PACS, and relevant contracts. The product of this action will be documentation of the results of this evaluation, including a conclusion concerning the effect on quality of the past and

rec'd 12/22/96 C. Jaramila

current work. Responsible party - R. R. Richards. Anticipated date of completion - Feb. 15, 1996.

b. Three-Dimensional Model Development - Investigation indicates that, of necessity because of lack of availability of enough qualified data, some of the data used for model development activities to date is not known to be qualified. Therefore, for that work, it is currently correct that it be considered not fully qualified with regard to fulfilling all aspects of the QA Program. (For information, once enough qualified data is available to meaningfully utilize with the models under development, final model development and validation can be carried out fulfilling all applicable QA Program requirements.) All existing products of this activity will be identified and checked for whether they appropriately indicate their "not fully qualified" status. Responsible party - Dave Hawkinson. Anticipated date of completion - March 1, 1996.

Root Cause Determination (CAR Block 16):

The apparent cause of this deficiency was a lack of effective use of the governing QAIP for the preparation and use of Work Agreements. Underlying, root cause factors that contributed to creating this condition adverse to quality are:

- Reliance, on the part of the Task Leader for this work, on directing and coordinating the work by oral, rather than written, instructions.
- Instructions to the Task Leader by his supervisor that, based on the nature of the work, lower-tier Work Agreements were not required. While those instructions are inconsistent with QA Program implementation, rather than being deliberate misinformation, they simply represent insufficient depth of familiarity with specific QA Program requirements, combined with not referring to the relevant QA Implementing Procedure.

Corrective Action to Preclude Recurrence (CAR Block 17):

The purpose and rationale for the use of written work instructions and interface documents in Civilian Radioactive Waste Management Program work that is subject to the QA Program, and the role of such written materials (e.g., lower-tier Work Agreements) in achieving and assuring quality, will be directly explained to the subject Task leader and his supervisor. Responsible party - M. C Brady. Anticipated completion date - January 20, 1996.

# Sandia National Laboratories

Albuquerque, New Mexico 87185-1333

date: January 30, 1996

to: Memo to File (CAR SNL-96-C-01)

  
from: D. R. Hawkinson, MS-1333

subject: Investigative Action for Corrective Action Request SNL-96-C-01

The attached Work Profile outlines the statement of work and description of tasks and activities covered by Upper-Tier work Agreements WA-0014 and WA-0015. Execution of the work was compared to criteria imposed by CAR (Block 15) for Investigative Action (2). Results of this evaluation are as follows:

1.) WA-0014. "Systematic Acquisition of Site Specific Subsurface Information"

- Geologic description and logging of drill core samples from Boreholes SD-7, SD-9 and SD-12 was controlled by issuance of SNL YMP Technical Procedure TP-0162.
  - Core recovery data was submitted to the PDA System under TDIF Data Set numbers per QAIP 17-2.
- Other activities conducted under WBS 1.2.3.2.2.2.1 and the PACS Account that are not defined, clarified or covered by detailed instruction were found to consist of:
  - Records that reflect suppliers for this work actually consists of a collaborative group (D. Engstrom, C. Lum, M. Spsychala). Consequently there is no evidence to identify interface relationships and responsibilities between WA-0014 Supplier C. Rautman and other contributors supporting this work per Task Assignments.
  - Some Training differences exists, i.e., Chris Rautman is the only one of the group trained to YAP 2.02Q (Preparation, Review, Approval and Revision of Site Characterization); Mike Spsychala is trained to numerous TPs but not TP-0162. Without a lower-tier WA and breakdown of supplier training applicability, adequacy of training is indeterminate.
  - Without a Lower-Tier WA, there is no evidence that PACS Milestones and Delivery Dates were "passed-along" to other personnel involved in this activity.

- PACS work Item Lists measurement of rock properties of Samples SD-7, SD-9 and SD-12. This work was done to USGS Procedure HP-229 by Mike Spychala. Details and direction for planning and conduct have not been provided for in SNL instructions, nor is this procedure shown on the SNL Training Database. How this activity documents support of SCP Investigation 8.3.1.4.3 and related Performance Assessment activities is indeterminate.
- WA-0014 style and content is out-of-date and does not reflect current QAIP 1-5 information; i.e., still references deleted QAGR, etc.

## 2.) WA-0015, "Three Dimensional Rock Characteristics Models"

- There is no lower-tier WA in place to delineate, control, define and pass-along appropriate Graded QA commensurate with PACS identified tasks and deliverables. Problems resulting from a lack of QA Program compliance have been found and are as follows:
  - Records show participating input from a collaborative group (S. McKenna, M. Crower, W. Zelinski). There is no evidence to identify interface relationships, responsibilities and task assignments between WA-0015 Supplier C. Rautman and personnel supporting this work.
  - Software QA control/compliance is indeterminate. The old QAGR 1.2.3.2.2.2 lists QAIP 3-2. WA-0015 under obsolete QA Control Section references QAGR 1.2.3.3.3.3 but QAIP 19-1 is not applied. PACS identifies several milestones referring to "Software Modification to GSLIB Algorithms" (32222A71) and (32222M22) transmittal of computer files to YMP TDB. Also WA-0178, "continued Development of GSLIB Geostatistical Subroutines and UNCERT Computer Software" was assigned to Colorado School of Mines under Contract AJ-8931, which has since been canceled. Completion of this milestone was reported to have been done by W. Zelinski for Milestone M22. No one associated with this work has evidence of SNL Training to QAIP 19-1 nor does W. Zelinski show training to WA-0178.
  - Without a Lower-tier WA it is indeterminate as to what portion of the deliverable was who's responsibility or that PACS due dates were communicated to the group of suppliers associated with WA-0015.

### Summary

The purpose of this investigative effort was to over-view the work products of WA-0014 and WA-0015 and list work activities not adequately covered by a lower-tier WA or TP.

- This information will be used in meeting other response commitments for CAR Remedial Action (2) and CAR Investigative Action (3) for overall impact on quality for this work.
- Both WA-0014 and WA-0015 are obsolete and need revision.

DRH:6812

Attachment - Work Profile

Copy to:

R. R. Richards, MS-1333

C. J. Jaramillo, MS-1333

C. A. Rautman, MS-1324

L. S. Costin, MS-1325

# WORK PROFILE - CAR SNL-96-C-01

P. 87 of 126

WBS: 1.2.3.2.2.2.1 WA-0014

## Systematic Acquisition of Site Specific Sub Surface Information

- 1) Statement of Work - Conduct Activities to Support YMP Drilling Program
  - Perform core logging for boreholes SD-7, SD-9 and SD-12
  - Submit TDIF data transfers
  - Submit summary reports
  - Prepare Sand Reports
  
- 2) Work Controlled by TP-0162 "Geologic Description and Core Logging" provides for core recovery data, geologic log sheets, photos and data sets for PDA system
  - TDIF #204400 - SD - 7 Borehole
  - TDIF #304282 - SD - 9 Borehole
  - #204742 - SD - 9 Borehole
  - TDIF #303744 - SD - 12 Borehole
  
- 3) Some laboratory Rock prep/measurement was done by USGS to USGS procedure HP-229
  - Work done by SNL - M. Sypchala (Trained to USGS) HP0229

WBS: 1.2.3.2.2.2.2 WA-0015

## Develop 3 Dimensional Rock Characterization Models

- 1) Statement of Work - Develop Computer Based 3D Models That:
  - Integrate Quantitative Data on Rock Character
  - Include compilation/evaluation of Rock Properties Data
  - Include borehole geophysics data
  - Include statistical and spatial continuity
  - Support report writing of rock properties summary reports/geotechnical and geophysical data synthesis reports
  
- 2) Work control
  - No Lower-Tier Work Agreement or Technical Procedure was used.
  - Work was a collaborative effort by:
    - Chris Rautman - Team Leader
    - Sean Mc Kenna - Computer - SAND 95-2338
    - Marc Cromer - Computer - SAND 95-20808
    - Bill Zelinski - Software (Lynx) and milestones M-11, M12 M-41, M-42

# WORK PROFILE - CAR SNL-96-C-01

P. 88 of 121

WBS: 1.2.3.2.2.2.1 WA-0014

4) Personnel Involved:

- Chris Rautman - Team Leader SNL
- Dale Engstrom - Contractor/SPECTRA
- Clinton Lum - SNL
- Mike Sychala - SNL  
(Some training problems exist)

5) Deliverables

- SAND Report for SD-9 In production
- SAND Report for SD-12 in "Rough"
- SAND Report for SD-7 TBD

6) Evaluation

- Primary work/tasks controlled and defined by TP-0162
- No Lower-Tier WA exists
  - Task responsibilities of personnel not defined or interface clarified
  - Use of USGS procedure HP-229 not covered in TP or documentation
  - WA-0014 is obsolete

WBS: 1.2.3.2.2.2.2 WA-0015

3) Training

- SNL training database for involved personnel is current  
(No training to QAIP 19-1)

4) Deliverables

- SLTR 94-0002 (Zelinski)
- LYNX GMS data files memo complete (Zelinski)
- SAND Report - Saturated Zone - canceled
- SAND Report 95-2338 (Mc Kenna)
- SAND Report 95-2080 (Cromer)
- SLTR 95-0007 (Rautman)
- SLTR 95-0012 (Rautman)

6) Evaluation

- Work not controlled by Lower-tier WA
- No evidence of interface relationships or responsibilities defined
- This work is on-going in FY96 and will require Lower-tier WA
  - M&O support FY96 is just Rautman
- Software QA compliance is indeterminate
  - Discontinuance contract AJ-8931 to Colorado School of Mines/no one trained to QAIP 19-1

DATE: Jan 30, 1996

TO: R. R. Richards, 6319, MS 1333

FROM: L.S. Costin, 6852, MS 1325

RE: Request for Extension on Due Date for:

Audit No. N/A, CAR No. SNL-96-C-01

Is this a significant condition adverse to quality (i.e., Part 10. on the Corrective Action Request form has been checked 'Yes') Yes  / No

Is this a request for an extension on a response date? Yes  / No

The reason for this extension request is: Regarding Remedial Actions -  
Concurrently with <sup>(but independently of)</sup> actions to develop the changes to WA-14 & WA-15 called for  
in Remed. Act. #1, the overall WA process is being adjusted by SNL CPWM  
management. As a consequence (resulting from management review of the WA  
rev's.), these two WA revisions need additional work to be appropriately <sup>incorporated</sup> into  
the new WA scheme.

Please extend the due date to: Feb 29, 1996

Upon completion of the necessary action(s), I will submit any pertinent objective evidence to QA to verify and close out this deficiency.

EXTENSION REQUEST APPROVED / REJECTED (circle one)

Signed: [Signature]

DATE: 01/31/96

REASON FOR REJECTION: N/A

QAR: Request for Extension has been evaluated and Accepted  
QAR R.R. Richardson 2/6/96

copy to: L.S. Costin, MS 1325      M.C. Brady MS 1399  
C.A. Reinman, MS 1314      R.R. Richards, MS 1333  
C.P. Jaramillo, MS 1393

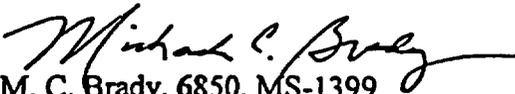
RRR:6319:bl

**Sandia National Laboratories**

Albuquerque, New Mexico 87185-1399

date: February 9, 1996

to: R. R. Richards, 6812, MS-1333

from:   
M. C. Brady, 6850, MS-1399

subject: Completion of Action to Preclude Recurrence, Corrective Action Request  
SNL-96-C-01

On January 12, 1996, I met with Peter Davies and Chris Rautman, both of Department 6115, to discuss my expectations for the use of Work Agreements for work on the Civilian Radioactive Waste Management Program. Among other aspects of the discussion, I emphasized the purpose and rationale for written work instructions and interface documents, roles which lower-tier Work Agreements fulfill, in achieving and assuring quality in that work. Attached are talking papers which I referred to during the discussion and which I provided to Peter and Chris, they further illustrate the content of our discussion.

This memo documents completion of the action prescribed in Corrective Action Request SNL-96-C-01 to preclude recurrence of the cited deficiency.

Attachment

Copy to:  
C. P. Jaramillo, MS-1333

Mike

1-12-96

Larry

1232221

1232222

- w/path Pacis / <sup>son</sup> deliver + criteria
- list who does what (generalized level)

Chris  
Date

CAR

- (1) New Format / Mike + Kenneth Devel
- (2) Assessment (R. Richards lead) / Larry - Chris new version 1232221/2

Mike  
Chris  
Peter

*Identify any deliverables products, the individual(s) responsible for completing them, and due dates. Be very specific about what should be included in the deliverable package (e.g., The deliverable for this activity is written input to Section XYZ of ABC report; or TDIF submittal on data collected up to -a date, time, or place-). All contract deliverables (not limited to Level 3 milestones only) should be called out in the sum total of work agreements developed for FY96.*

#### Other Customer Requirements

*This might be the section you include any specific support or input you require to fulfill the requirements of the upper-tier work agreement (e.g., customer request for weekly status, fiscal year planning, etc.), identify any unique ES&H considerations, etc.*

#### Schedule

*Another table or matrix may be appropriate here showing at least the expected completion dates for each activity. Assembling and submitting records packages at the closure of an activity should be reflected here, as well as under the responsibilities matrix and/or listed in other customer requirements, or point to the budget baselined in Project and Control System depending on the level of detail needed to demonstrate conclusion of an activity as assigned in the responsibility matrix.*

#### Budget

*The estimated budget you have assigned to an activity may be here or even included in the matrix under "Tasks," or, point to the budget baselined in the Project and Control, System depending on the level of detail needed to demonstrate cost control.*

#### Training

*Training will be assigned by the Task Manager in accordance with QAP 2-5, commensurate with the responsibilities assigned to personnel conducting the assigned workscope. Another matrix included here would succinctly identify the individual training assignments based on responsibility.*

#### Acceptance Criteria

*Some objective evidence that the activity has been completed or the product has been delivered. Generally, a good deliverable product delivered on time is sufficient. However, in the case of taking measurements at the site (or sets of experiments) the acceptance criteria might be defined by the total number of measurements taken or experiments conducted. Qualifiable or quantifiable criteria are needed and generally a point of contention with DOE/QA. Be specific and make the criteria measurable.*

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Activity/Deliverable	Supplier	Duration (or end date)	# Days (or \$)	QAIPs	Acceptance Criteria
Conduct the technical review of.....and participate in comment resolution	E. E. Ryder	1/2/96-1/20/96	3 days	QAIP 6-3	Complete review implementing QAIP 6-3 and return review package by 1/9/96
Submit records to the record center	E. E. Ryder	Once a month		QAIP 17-1	Either demonstrated by the file code on individual records or a summary letter identifying what has been submitted.

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Work agreements implement the QA requirements to use controlled documents to prescribe and perform work, and to document interfaces. Sufficient detail is needed to demonstrate the adequacy of the planning and definition of interfaces.

The complete set of lower-level work agreements must cover the full SNL contract workscope. The work agreement defines customer/supplier expectations, interfaces, and responsibilities. Examples of supplier roles are listed below:

- A staff member who is assigned (as principal investigator) responsibility for several summary accounts in which the nature of the work is similar;
- A subcontractor who supports several summary accounts in which the nature of the support is similar;
- If the effort is a major one, (e.g., Thermal Testing), a work agreement between department managers (org. 6852 (customer) and org. 6853 (supplier)) for providing the required staff to support the effort, with possibly additional lower-level work agreements developed within the supplier organization;
- In another instance, there may be several suppliers conducting different but related activities in support of a summary account, all of whom are accountable to the same customer.

If there are several "suppliers" included in the work agreement, the inclusion of a responsibility matrix is appropriate. The matrix would clearly map out what activities will be conducted by whom among the suppliers.

Using these examples (and there are other interfaces not defined here) please consolidate the work agreements required for each summary account to as few in number as possible.

Scope:

This Work Agreement establishes responsibilities and interfaces between the SNL/YMP Task Manager (Customer) and the Supplier (assigned responsibility for...) OR (as Principal Investigator for...) OR (as applicable). This should be a very general description, with details to follow in other sections.

Specifically, the scope of this Work Agreement includes (support, oversight, conduct of activities, etc.) within following summary account(s):

WBS #	Upper-Tier WA #	PACS Account #	PACS Account Title	Case #

P. 948126

Objective:

The objective of the work prescribed by this Work Agreement is to assure the effective and efficient implementation of SNL/YMP activities. *(or something equally appropriate, from the BOE scope of work, perhaps).*

Tasks:

Tasks included in this work agreement are described below. *(Be very specific and prescriptive about what is expected of your supplier(s); do not merely cite or repeat the scope of work in the BOE (PACS). Several general items that should be required of suppliers (when applicable) are: (1) regularly submitting all records on a set schedule to the PI (or whomever at SNL) and all remaining records before the end of the fiscal year (especially in the case of subcontractors); (2) providing input to weekly/monthly statusing, FY planning, QA CARs, and any other activities for which you, as Task Manager, are held accountable for under the upper tier work agreement.)*

*If there is more than one "supplier", a responsibility matrix should be included at the end of the narrative for this section, as well as a duration for the activity, and the amount of time the individual(s) are allocated for the specific activity or set of activities.*

Quality Assurance Controls

*Identify QA program verification, quality verification points and hold points. From a list of potentially applicable procedures, indicate those directly applicable to the work, which procedures apply to the Customer and which apply to the Supplier, and perhaps note how specific procedures will be applied to portions of the work. These should be included in the matrix or list of training requisites, as well. Keep in mind that SNL/YMP is embracing certain Project APs and YAPs in its implementation. Remember, the training assignment form for quality assurance controls is not replaced by the list of procedures you define as requisite to conduct of the work*

Readiness Review Prerequisite: *Include, if applicable.*

Records

*Records will be prepared and submitted in accordance with QAIP 17-1 using filing codes specified in the NWMP File Code document. QAIP 1-5 also requires the recording of objective evidence of the results of the work performed, i.e., in addition to records defined by individual QAIPs, define other specific records generated by the work, and indicate where they will be filed, and be sure the file code cites the WBS element and Work Agreement number. Reiterate, if applicable, the frequency with which records (NOT NECESSARILY RECORDS PACKAGES!!) will be submitted.*

Deliverables

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# Sandia National Laboratories

Albuquerque, New Mexico 87185-

1996 <sup>02</sup> 12/16  
date: February 27, 1995

to: Robert Richards, 6812, ms 1333

  
from: Mikey Brady, 6850, ms 1399

subject: Submittal of Amended response and Extension for SNL-96-C1

Attached please find an amended response for SNL-96-C-01, which includes changes in the due dates for some of the actions to provide. The rationale for the primary aspect of the revision to the response is that the overall Work Agreement "structure" is being changed, making the terminology and details of the original response obsolete. The due dates are being extended to accommodate the effect of implementing the revised remedial action as well as to account for Quality Engineer personnel changes in your staff.

copy to: L.S. Costin, ms 1325  
C.A. Rautman, ms 1325  
C. P. Jaramillo, ms 1333  
M.C. Brady, ms 1399  
R.R. Richards, ms 1333

**Corrective Action Response, CAR No. SNL-96-C-01**

**Remedial Action (CAR Block 14):**

1. New Work Agreements (WAs) will be developed to replace WA-14 and WA 15; the new WAs will incorporate current information and will address the portions of the FY96 workscope of the subject WBS Elements that are not covered by existing lower-tier WAs or Technical Procedures. Responsible party - L. S. Costin. Anticipated completion date(completion = submittal of approved revisions for issuance by Document Control) -Feb 29, 1996.

**Investigative Action (CAR Block 15):**

1. Upper-Tier Work Agreements: An evaluation of the upper-tier Work Agreements indicates that needed revisions primarily involve updating P&S Account Numbers and other minor editorial corrections. These changes would not impact the quality of the work, and the extent of deficiency in this area is limited to these editorial corrections to the Work Agreement. No additional investigative action is needed regarding upper-tier WAs.
2. Lower-Tier Work Agreements: All of the work that is covered by upper-tier WAs 14 and 15 will be evaluated with respect to whether or not the detailed work is specified in an existing lower-tier WA or Technical Procedure; this evaluation will serve as input to both the Remedial Action, above, and Investigative Action 3, below. The product of this action will be a list or description of the work activities or interface relationships not adequately covered by a lower-tier WA or TP. Responsible Party - Dave Hawkinson. Anticipated completion date - Jan 15, 1996.
3. Evaluation of the effect on the quality of past and current work:
  - a. Systematic Drilling Program - An evaluation of the effect of the lack of written work instructions and detailed interface documents for those work areas, activities, or topics identified in Investigative Action 2, above. The investigation should consider the effect of contract specifications, standard geotechnical discipline practices, and oral instructions or interface coordination. Other considerations that can be addressed are the extent to which all personnel involved in this work are trained and have access to pertinent controlled documents (TPs and QAIPs), as well as the availability, for reference, of non-controlled documents such as the Study Plan, PACS, and relevant contracts. The product of this action will be documentation of the results of this evaluation, including a conclusion concerning the effect on quality of the past and current work. Responsible party - R. R. Richards. Anticipated date of completion - Mar. 15, 1996.

*M. Brady's memo to  
attachment to, R. Richards memo dated 2/27/93.  
C. Jaramila 4/9/96.*

b. Three-Dimensional Model Development - Investigation indicates that, of necessity because of lack of availability of enough qualified data, some of the data used for model development activities to date is not known to be qualified. Therefore, for that work, it is currently correct that it be considered not fully qualified with regard to fulfilling all aspects of the QA Program. (For information, once enough qualified data is available to meaningfully utilize with the models under development, final model development and validation can be carried out fulfilling all applicable QA Program requirements.) All existing products of this activity will be identified and checked for whether they appropriately indicate their "not fully qualified" status. Responsible party - John Friend. Anticipated date of completion - March 15, 1996.

Root Cause Determination (CAR Block 16):

The apparent cause of this deficiency was a lack of effective use of the governing QAIP for the preparation and use of Work Agreements. Underlying, root cause factors that contributed to creating this condition adverse to quality are:

- Reliance, on the part of the Task Leader for this work, on directing and coordinating the work by oral, rather than written, instructions.
- Instructions to the Task Leader by his supervisor that, based on the nature of the work, lower-tier Work Agreements were not required. While those instructions are inconsistent with QA Program implementation, rather than being deliberate misinformation, they simply represent insufficient depth of familiarity with specific QA Program requirements, combined with not referring to the relevant QA Implementing Procedure.

Corrective Action to Preclude Recurrence (CAR Block 17):

The purpose and rationale for the use of written work instructions and interface documents in Civilian Radioactive Waste Management Program work that is subject to the QA Program, and the role of such written materials (e.g., lower-tier Work Agreements) in achieving and assuring quality, will be directly explained to the subject Task leader and his supervisor. Responsible party - M. C Brady. Anticipated completion date - January 20, 1996.

**Sandia National Laboratories**

Abuquerque, New Mexico 87185

WBS: 9.1.3.2

date: March 21, 1996

QA:

to: Record File for CAR SNL-96-C01



from: R. R. Richards, 6812, M/S 1333

subject: Investigative Action 3a of Corrective Action Request (CAR) SNL-96-C01

This memorandum documents the results of the evaluation specified in the subject investigative action. That investigative action called for an evaluation of the effect of the lack of written work instructions and detailed interface documents for the work covered by upper-tier Work agreements 14 and 15 (i.e., WBS element 1.2.3.2.2.1, Systematic Acquisition of Site-specific Sub-surface Information, and WBS element 1.2.3.2.2.2, 3D Geologic Modeling).

In conducting this evaluation, I considered the experience, education, and YMP-specific training of the personnel involved; their working relationships and ability to directly coordinate during work; the content of existing contract specifications; the number of personnel involved in the work; and their access to controlled QA implementing documents.

Evaluation of work in Systematic Acquisition of Site-specific Sub-surface Information indicates the following:

- The products of the work are fairly straight-forward - reports providing the geologic characterization of core strings from holes SD-7, -9, and -12 at the Yucca Mountain Site. The majority of the data for these reports was generated by Dale Engstrom, utilizing SNL Technical Procedure 162, recording his determinations in scientific notebooks, utilizing standard geotechnical discipline practices. Mr. Engstrom holds an M.S. in Geology, has over 20 years experience in geotechnical work of a directly related nature, and has been trained in all appropriate procedures.
- Other individuals found to have worked in these activities are Clinton Lum and Michael Spsychala. Both were found to have held a secondary and limited role; Dr. Lum, a Ph.D Geologist, provided technical review of Mr. Engstrom's geologic notebooks, and Mr. Spsychala served as a technician assisting Lori Flint, of the USGS, in collecting laboratory geologic characteristics of the core samples, using a USGS technical procedure. (The interface with USGS, though not clearly documented earlier, is now specifically addressed in SNL Work Agreement 301.) In both cases, Dr.

Lum and Mr. Spsychala were performing functions for which they are qualified and appropriately trained.

Although the organization of the work (e.g., the functions of and relationships among Mr. Engstrom, Dr. Lum, Mr. Spsychala, and Ms. Flint of the USGS) would have been more clearly portrayed had it been documented better, I conclude that the quality of the work performed in WBS element 1.2.3.2.2.2.1 prior to the remedial and corrective actions taken as a result of the subject CAR was not detrimentally affected by lack of written work instructions or interface documents for some aspects of the work.

Evaluation of work in 3D Geologic Modeling indicates the following:

- This work has been conducted in Albuquerque, primarily by Mr. William Zelinski, with some assistance by Dr. Sean McKenna. Mr. Zelinski's and Dr. McKenna's offices are in close proximity to that of the Task Leader for the work, Dr. C. A. Rautman, providing for easy, frequent consultation and coordination of the work effort as it proceeded.
- A recent performance-based Quality Assurance audit of this specific work activity, conducted by representatives of the OCRWM Office of Quality Assurance, found that the technical work is (and has been) carried out effectively. The one QA deficiency cited is that the current Work Agreement for the work does not specify criteria for the validation of the model being developed. Since the work has not proceeded to the point of validation of the 3D model, that deficiency does not affect past or current work.

Again, although the organization of the work (e.g., the functions of and relationships among Dr. Rautman, Mr. Zelinski and Dr. McKenna) would have been more clearly portrayed had it been documented better, the close physical proximity of those performing the work contributed to effective interfacing. Therefore, I conclude that the quality of the work performed in WBS element 1.2.3.2.2.2.2 prior to the remedial and corrective actions taken as a result of the subject CAR was not detrimentally affected by lack of written work instructions or interface documents for detailed aspects of the work.

Copy to:

M/S 1324	C. A. Rautman	6115
M/S 1399	M. C. Brady	6850
M/S 1325	L. S. Costin	6852
M/S 1333	R. R. Richards	6812
M/S 1333	C. P. Jaramillo	6812

CAR SNL-96-C-01; Investigative Action 3.b

A review was performed of existing products that were directly associated with Three-Dimensioned Model Development or were otherwise indirectly part of that work.

The review was performed of SAND reports, SLTRs, abstracts, journal, and conference papers to determine if they indicated whether the data were fully qualified or not. The following is the status of each document:

SAND Reports

SAND 91-0758, issued 1992; no qualification statement.  
SAND 95-2338, "draft"; states "Some data used was unqualified."  
SAND 95-2080, "draft"; no qualification statement, references WA-0015.

ABSTRACTS

SAND 91-2728A, issued 1992; no qualification statement, references Quality Level III  
SAND 94-2688A, issued 1995; no qualification statement, references WA-0015  
SAND 94-2766A, issued 1995; no qualification statement, references WA-0015 & 0040  
SAND 94-2736A, issued 1995; no qualification statement, references WA-0015  
SAND 94-2654A, issued 1995; no qualification statement, references WA-0015  
SAND 94-2119A, issued 1995; no qualification statement,  
SAND 95-1447A, issued 1995; no qualification statement, references WA-0015  
SAND 95-2734A, issued 1995; no qualification statement, references WA-0015

Note: There were five other abstracts available, however, from the results above these were not reviewed.

SLTR's

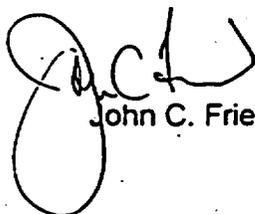
SLTR 94-0003, issued 1994; states "Do Not Reference"  
SLTR 94-0006, n.d.; states "Do Not Reference"  
SLTR 95-0012; n.d.; states "Do Not Reference"  
SLTR 94-0004; issued 1994; states "Do Not Reference"  
SLTR 95-0007; issued 1995; states "Do Not Reference"  
SLTR 94-0002; n.d.; states "Do Not Reference" and "Only qualified existing data was used in this study."

Conference Papers

SAND 90-2146C; issued 1990; no qualification statement  
SAND 92-2671C; issued 1993; no qualification statement  
SAND 94-0155C; issued 1994; no qualification statement

Journal

SAND 91-0008J; issued 1991; no qualification statement, References Quality Level II

  
John C. Friend

3/22/95-  
3/22/96  
or  
12/10/96

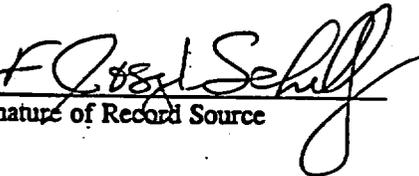
RMS SL\* 151761

QRP: 1.2.11  
QA:L  
Page 1 of 1

**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
ON DEFICIENCY REPORT (DR) SNL-96-D-001  
RELATED REPORT NO. SR 95-19  
THIS SUPERSEDES SNL-96-D-1 CONTAINED IN MOL.199600313.0471**

<u>DATE</u>	<u>TITLE/DESCRIPTIVE DATA</u>	<u>PAGE COUNT</u>	<u>ONLY</u>	<u>LRC NOTE</u>
	Table of Contents	1	<b>INFORMATION</b>	
02/13/96	Revised Deficiency Report SNL-96-D-001	2		
<b>TOTAL PAGES</b>		<b>3</b>		

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1.

  
Signature of Record Source

3/5/97  
Date

F. J. Schelling  
Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-001  
YMP RPC

RMS SL \* ISO 518

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

RECORD ACCEPTED

AT LRC 2/23/96

8  Performance Report  
 Deficiency Report

NO.  
SNL-96-D-1  
PAGE 1 OF 4 *OK*  
12/10/95  
QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:

QAIP 12-1, Rev 05, Section 4.2, Step 7

2 Related Report No.

YMP QA Surveillance 95-19

3 Responsible Organization:

Sandia National Laboratory, Dept., 6314

4 Discussed With:

Moo Lee and Joe Grant

5 Requirement/Measurement Criteria:

SNL YMP QAIP 12-1, Revision 05, Section 4.2, step 7 states, "Out-of-calibration and past-due devices shall be tagged or segregated and not used until they have been recalibrated."

6 Description of Condition:

The following instrumentation was found with calibration stickers indicating a past-due recalibration date. These devices were not tagged, segregated, or otherwise controlled to prevent their use:

- A Dial Indicator manufactured by Mitutoyo, model 2424, SNL #012, located in the equipment storage trailer on the ESF pad, due date 09/15/95.
- A Vibrating Wire Readout Box manufactured by Geokon, model GR-401, SNL #017, located in the equipment storage trailer on the ESF pad, due date 09/07/95.
- The Tape Extensometer Static Frame Assembly manufactured by Geokon, SNL #010, located in the equipment storage trailer on the ESF pad, due date 08/01/95.

7. Initiator

*Shirley S. Motta*

Date 10/2/95

9 QA Review

QAR *P. Richards*

Date 10/10/95

10 Response Due Date

*NEW*  
~~10/10/95~~ DATE: 10/27/95 *of*

11 QA Issuance Approval

QAR (PRI/AOQAM) *P. Richards* Date 10/16/95

12 Remedial Actions:

*See attached response dated 11/16/96*

13 Remedial Action Response By:

*N/A*

Date

14 Remedial Action Due Date

*N/A*

Date

15 Remedial Action Response Acceptance

QAR

*N/A*

Date

16 PR Verification/Closure

QAR

*N/A*

Date

OFFICE OF CIVILIAN  
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 WASHINGTON, D.C.

DR NO. SNL-96-D-1  
 PAGE 2 OF 4  
 QA: L

DEFICIENCY REPORT

17 Recommended Actions:

- For each device:
  - have it calibrated.
  - determine what measurements or calibration checks were performed with the device.
  - based on the recalibration result, determine whether any of those measurements are now suspect and, if so, what other actions to take.
- Establish an effective recall system for calibrated measuring devices/standards.
- Determine whether any other devices are presently past-due for calibration.

18 Investigative Actions:

*See attached Response dated 11/16/96.*

19 Root Cause Determination:

*See attached response dated 11/16/96.*

20 Action to Preclude Recurrence:

*See attached response dated 11/16/96*

21 Response by:

*See attached response*  
 11/16/96 Date

22 Corrective Action Completion Due Date:

*See attached response*  
 11/16/96

23 Response Accepted

QAR *David R. Hawthorn* Date *11/30/95*

24 Response Accepted

AOQAM *F. J. Schelly* Date *11/30/95*

25 Amended Response Accepted

QAR *N/A* Date

26 Amended Response Accepted

AOQAM *N/A* Date

27 Corrective Actions Verified

QAR *F. J. Schelly* Date *2/5/96*

28 Closure Approved by:

AOQAM *F. J. Schelly* Date *2/13/96*

Response on 11/16/96

SNL-96-D-1 Response

Block 12. Remedial Actions:

SNL012, Dial Indicator, Mitutoyo model #2424 was returned to ReeCo Calibration Lab on 10/24/95 for recalibration.

SNL017, Vibrating Wire Readout Box, Geokon Model #401, is in the process of being returned to Geokon for recalibration.

SNL010 Tape Extensometer Static Frame (Geokon) has been recalibrated by the ReeCo Calibration Lab and returned to on 10/25/95.

RJR 10/25/95

Block 18. Investigative Actions:

A review of scientific notebooks and records indicate that no measurements or calibration checks were performed with SNL012, Dial Indicator, after the past due recall date of 9/15/95.

A review of scientific notebooks and records indicate that no measurements or calibration checks were performed with SNL017, Vibrating Wire Readout Box, after the past due recall date of 9/7/95.

A review of scientific notebooks and records indicated that 67 calibration checks were performed with SNL010, Tape Extensometer Static Frame, after the past due recall date of 8/1/95. A review of the results of these calibration checks shows that all of the results were within the baseline minimum/maximum range established before the calibration expiration date; this deficiency therefore had no impact on the measurements.

Block 19. Root Cause Determination:

For two of the instruments, SNL012 and SNL017, the requirement to tag or segregate out-of-calibration equipment had not been fully implemented, although controls were in place and followed to ensure that they were not used. For SNL010, a communication problem caused the deficiency; a decision to require recalibration of the static frame had been made, but not communicated to the individual maintaining the calibration schedule.

Block 20. Action to Preclude Recurrence:

All equipment in expired calibration status will be labeled: "DO NOT USE Until Tested & Calibrated."

A recall bench has been established in the PK-5 equipment trailer at the ESF Pad, which will be used to segregate out-of-calibration equipment.

The YMP SNL Equipment Calibration Schedule has been posted in the PK-5 equipment trailer. This schedule will be updated whenever there is equipment activity, and the PI (or PI designee) will monitor the calibration schedule and coordinate and control the recall and control of measuring and testing equipment.

Faxed response from *or Ron Taylor*  
*Thao Lee* 11/16/96

# Sandia National Laboratories

Albuquerque, New Mexico 87185-1399

date: February 5, 1996

WBS: 9.1.3.2.5

QA

to: Bob Richards, 6812 (MS-1330)

from: Joe Schelling, 6853 (MS 1399)

subject: Verification of Closeout for SNL-96-P-1 and SNL-96-D-1

On February 2, 1996, I performed a verification evaluation of the completion of corrective actions taken at the Exploratory Studies Facility and Field Operations Center with respect to Performance Report SNL-96-P-1 and Deficiency Report SNL-96-D-1. The results of my evaluation are provided below and indicate that both of these actions may be closed out.

### SNL-96-P-1 (Scientific Notebook Entry)

My examination included Volumes 1, 2, and 3 of in-process Scientific Notebook #24, "Vibrating Wire Strain Gage Data," which was cited in the Performance/Deficiency Report. Additionally, I chose to examine Volume 6 as a spot check on the process. Although it was clear that the notebooks had been reviewed and dated initials added to correct a number of errors, and that the responsible personnel are more conscientiously addressing this requirement for recent entries, a few instances of unattributable earlier entries remained, which were corrected at that time by the Principal Investigator, Joe Grant.

### SNL-96-D-1 (Calibration Status)

My examination of the equipment calibration process at the pad offices included a review of calibration files and an interview and inspection of the equipment trailer. Records appeared well-maintained for tracking the status of instruments out for recalibration. In the equipment trailer, Roy Johnston was interviewed and had a good understanding of the process controls. He pointed out the clearly-marked locker used to segregate out-of-calibration equipment, the YMP SNL Equipment Calibration Schedule posting (which had been updated on 2/1/96), and sticker tags which are available for tagging equipment whose calibration has expired. No equipment is presently out-of-calibration, and a spot check of calibration labels on several pieces of equipment indicated that all were usable.

Please contact me at 702.794.7575 if you have any questions about the results of this verification.

### Distribution:

6812 C. P. Jaramillo (MS 1333)

YMP:WBS 9.1.3.2.5:VER:QA:SNL-96-P1, SNL-96-D-1

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
DEFICIENCY DOCUMENT ENCODING FORM

151742

1. Document No. 151211 - 116 - 01911 -    

Issuing Org. Code    

Fiscal Yr. (last 2 digits)    

Document Type    

Seq. Number    

Extension number (for multiple deficiencies)    

RECORD ACCEPTED  
LRC 2/24/97 KH

Doc. Type Codes:

- C - Corrective Action Request
- D - Deficiency Report
- P - Performance Report
- N - Nonconformance Report
- O - Other: NRC commitments, Vendor documents
- A - Deficiency closed during audit
- S - Deficiency closed during surveillance
- T - STIR

2. Initiation Date 11 - 02 - 1995 (MM/DD/YY)

3. Deficiency Code: 11211\* INADEQUATE CONTROL OF M&TE

Deficiency Code:    \*

Deficiency Code:    \*

4. Deficiency Cause Code: 014A\* PREPARATION AND PLANNING PERFORMED BY SUPERVISOR INADEQUATE

Deficiency Cause Code:    \*

Deficiency Cause Code:    \*

5. Hardware Code: (if applicable)    \*

6. Supplier: (if applicable)    

7. Miscellaneous: (if applicable)    

8. Data File Review:

Open deficiency found:  No  Yes - DD# N/A

Three or more recurring deficiencies in the same organization noted in last 4 quarters?  No  Yes

If Yes, STIR initiated?  Yes - STIR No.    

No - If No, provide justification:

N/A

QAR [Signature] Date 10/11/95

\* See latest revision of Trending Codes List

RMS SL \* 150518

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WASHINGTON, D.C.

RECORD ACCEPTED  
AT LRC 2/23/86

8  Performance Report  
 Deficiency Report  
NO.  
SNL-96-D-1  
PAGE 1 OF

QA: 1

PERFORMANCE/DEFICIENCY REPORT

INFORMATION ONLY

1 Controlling Document: QAIP 12-1, Rev 05, Section 4.2, Step 7  
2 Related Report No. YMP QA Surveillance 95-19

3 Responsible Organization: Sandia National Laboratory, Dept., 6314  
4 Discussed With: Moo Lee and Joe Grant

5 Requirement/Measurement Criteria:  
SNL YMP QAIP 12-1, Revision 05, Section 4.2, step 7 states, "Out-of-calibration and past-due devices shall be tagged or segregated and not used until they have been recalibrated."

6 Description of Condition:  
The following instrumentation was found with calibration stickers indicating a past-due recalibration date. These devices were not tagged, segregated, or otherwise controlled to prevent their use:  
• A Dial Indicator manufactured by Mitutoyo, model 2424, SNL #012, located in the equipment storage trailer on the ESF pad, due date 09/15/95.  
• A Vibrating Wire Readout Box manufactured by Geokon, model GK-401, SNL #017, Located in the equipment storage trailer on the ESF pad, due date 09/07/95.  
• The Tape Extensometer Static Frame Assembly manufactured by Geokon, SNL #010, located in the equipment storage trailer on the ESF pad, due date 08/01/95.

7 Initiator: Shirley S. Miller Date 10/2/95  
9 QA Review: PR Richards Date 10/10/95

10 Response Due Date: NEW 10/10/95 DATE: 10/27/95 of  
11 QA Issuance Approval: PR Richards Date 10/14/95

12 Remedial Actions:  
See attached response dated 11/16/96

13 Remedial Action Response By: N/A Date  
14 Remedial Action Due Date: N/A Date

15 Remedial Action Response Acceptance: N/A Date  
16 PR Verification/Closure: N/A Date P.108 of 26

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U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

8  
OR NO. SNL-96-D-1  
PAGE 2 OF  
QA: L

**DEFICIENCY REPORT**

**17 Recommended Actions:**

- For each device:
  - have it calibrated.
  - determine what measurements or calibration checks were performed with the device.
  - based on the recalibration result, determine whether any of those measurements are now suspect and, if so, what other actions to take.
- Establish an effective recall system for calibrated measuring devices/standards.
- Determine whether any other devices are presently past-due for calibration.

**18 Investigative Actions:**

*See attached Response dated 11/16/96.*

**19 Root Cause Determination:**

*See attached response dated 11/16/96.*

**20 Action to Preclude Recurrence:**

*See attached response dated 11/16/96*

**21 Response by:**

*See attached response*  
Date 11/16/96

**22 Corrective Action Completion Due Date:**

*See attached response*  
Date 11/16/96

**23 Response Accepted**

QAR *David R. Hawthorn* Date 11/30/95

**24 Response Accepted**

AQOAM *F. Richards* Date 11/30/95

**25 Amended Response Accepted**

QAR *N/A* Date

**26 Amended Response Accepted**

AQOAM *N/A* Date

**27 Corrective Actions Verified**

QAR *F. J. Schelly* Date 2/5/96

**28 Closure Approved by:**

AQOAM *F. Richards* Date 2/13/96

RMS SL\* 151761

RECORD ACCEPTED  
AT LRC 3/5/97  
74

QRP: 1.2.11  
QA:L  
Page 1 of 1

**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
ON DEFICIENCY REPORT (DR) SNL-96-D-001  
RELATED REPORT NO. SR 95-19  
THIS SUPERSEDES SNL-96-D-1 CONTAINED IN MOL.199600313.0471**

<u>DATE</u>	<u>TITLE/DESCRIPTIVE DATA</u>	<u>PAGE COUNT</u>	<u>LRC NOTE</u>
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<b>TOTAL PAGES</b>		<b>3</b>	

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1.

F. J. Schelling  
Signature of Record Source

3/5/97  
Date

**E. J. Schelling**  
Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-001  
YMP RPC

RMS SL * <u>150518</u>  RECORD ACCEPTED AT LRC <u>2/23/96</u>	<b>OFFICE OF CIVILIAN          RADIOACTIVE WASTE MANAGEMENT          U.S. DEPARTMENT OF ENERGY          WASHINGTON, D.C.</b>	8 <input type="checkbox"/> Performance Report <input checked="" type="checkbox"/> Deficiency Report  NO. SNL-96-D-1 <i>or</i> PAGE 1 OF 4 <i>11/15</i>  QA: L
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**PERFORMANCE/DEFICIENCY REPORT**

1 Controlling Document: QAIP 12-1, Rev 05, Section 4.2, Step 7	2 Related Report No. YMP QA Surveillance 95-19
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3 Responsible Organization: Sandia National Laboratory, Dept., 6314	4 Discussed With: Moo Lee and Joe Grant
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5 Requirement/Measurement Criteria:  
 SNL YMP QAIP 12-1, Revision 05, Section 4.2, step 7 states, "Out-of-calibration and past-due devices shall be tagged or segregated and not used until they have been recalibrated."

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- The Tape Extensometer Static Frame Assembly manufactured by Geokon, SNL #010, located in the equipment storage trailer on the ESF pad, due date 08/01/95.

7 Initiator <i>Matthew S. Motta</i> Date 10/2/95	9 QA Review OAR <i>Richard</i> Date 10/10/95
---	---

10 Response Due Date <i>NEW</i> <del>10/10/95</del> DATE: 10/27/95 <i>of</i>	11 QA Issuance Approval OAR (PRI)/AOQAM <i>Richard</i> Date 10/1/95
--	--

12 Remedial Actions:  
*10/27/95*  
*See attached response dated 11/16/96*

13 Remedial Action Response By: <i>N/A</i> Date	14 Remedial Action Due Date <i>N/A</i> Date
15 Remedial Action Response Acceptance OAR <i>N/A</i> Date	16 PR Verification/Closure OAR <i>N/A</i> Date

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U.S. DEPARTMENT OF ENERGY  
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8.  
DR NO. SNL-96-D-1  
PAGE 2 OF 4 <sup>02</sup>  
QA: L <sup>11</sup>

DEFICIENCY REPORT

17 Recommended Actions:

- For each device:
  - have it calibrated.
  - determine what measurements or calibration checks were performed with the device.
  - based on the recalibration result, determine whether any of those measurements are now suspect and, if so, what other actions to take.
- Establish an effective recall system for calibrated measuring devices/standards.
- Determine whether any other devices are presently past-due for calibration.

18 Investigative Actions:

*See attached Response dated 11/16/96.*

19 Root Cause Determination:

*See attached response dated 11/16/96.*

20 Action to Preclude Recurrence:

*See attached response dated 11/16/96*

21 Response by: <i>See attached response</i> Date <i>11/16/96</i>	22 Corrective Action Completion Due Date: <i>See attached response</i> Date <i>11/16/96</i>
23 Response Accepted QAR <i>David R. Hawthorn</i> Date <i>11/30/95</i>	24 Response Accepted AOQAM <i>P. Richards</i> Date <i>11/30/95</i>
25 Amended Response Accepted QAR <i>N/A</i> Date	26 Amended Response Accepted AOQAM <i>N/A</i> Date
27 Corrective Actions Verified QAR <i>F. J. Schilly</i> Date <i>2/5/96</i>	28 Closure Approved by: AOQAM <i>P. Richards</i> Date <i>2/13/96</i>

...D ACCEPTED  
2/24/97  
/k

RMS SL\* 151731

QRP: 1.2.11  
QA:L  
Page 1

**SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE  
FOR DEFICIENCY REPORT SNL-96-D-05**

<u>DATE</u>	<u>TITLE/DESCRIPTIVE DATA</u>	<u>PAGE COUNT</u>	<u>LRC NOTE</u>
	Table of Contents	1	
06/17/96	Deficiency Report SNL-96-D-05	3	
03/22/96	Memo, from R. R Richards, to F. J. Schelling, re: Deficiency Report SNL-96-D-05	2	
04/02/96	Deficiency Document Encoding Form	1	
04/17/96	Memo, from F. J. Schelling, to R. R. Richards, re: Deficiency Report SNL-96-D-05 - Response	4	
04/25/96	Memo, from R. R. Richards, to J. Blickey, re: Clarification of Training Assignments	3	
<b>TOTAL PAGES</b>		<b>14</b>	

I have reviewed this records package and it is adequate for its intended purpose. This record package has been reviewed in accordance with SNL QAIP 17-1. All blanks are intentional.

OS F Ell  
Signature of Record Source

12/10/96  
Date

THOMAS F BIRKORN  
Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-05  
YMP CRF

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WASHINGTON, D.C.

8  Performance Report  
 Deficiency Report  
NO. SNL-96-D05  
PAGE 1 OF 3  
QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:

QAIP 2-5, Rev. 04, Para. 4.1

2 Related Report No.

N/A

3 Responsible Organization:

SNL Departments 6752 and 6853

4 Discussed With:

Jud Blickley

5 Requirement/Measurement Criteria:

The paragraph of QAIP 2-5 cited above calls for:

- The Department Manager to determine the extent of required ... QA training and proficiency training for (a newly-assigned) individual, and to complete and submit a Training Assignment form to the Training Manager.
- The Training Manager to notify the trainee of the training assignment; and
- The trainee to complete the assigned training activities...

6 Description of Condition:

For Michael E. Sychala, the Department Manager assigned one-on-one training for all QAIP training in his initial orientation. The training assignment notifications (and confirmation form) provided by the Training Manager to Mr. Sychala do not specify that one-on-one training on each QAIP was required; their wording implies that the training to be accomplished was to read. Consequently, Mr. Sychala did not apparently perform the type of training that his manager assigned.

7 Initiator

R. R. Richards

*R.R. Richards* Date Mar 22, '96

9 QA Review

QAR *Claudia DeJavault*

Date 3/22/96

10 Response Due Date

April 18, 1996

11 QA Issuance Approval

QAR (PRI/AOQAM) *R.R. Richards*

Date 3/22/96

12 Remedial Actions:

See attachment (ps. 3)

13 Remedial Action Response By:

N/A

Date

14 Remedial Action Due Date

N/A

Date

15 Remedial Action Response Acceptance

QAR N/A

1

Date

16 PR Verification/Closure

QAR N/A

Date

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

B  
 DR NO. SNL-96-DOE  
 PAGE 2 OF 3  
 QA: L

DEFICIENCY REPORT

17 Recommended Actions:

- Investigate to determine if the condition exists for other personnel in Dept. 6853
- Revise the text of the training assignment notification document to clearly specify what is to be done to complete the training assignment
- Evaluate the effect of the apparent difference in the intended training for Mr. Spychala (and any others in similar situation) and the actual training activity that was performed.

18 Investigative Actions:

See attachment (pg. 3)

19 Root Cause Determination:

See attachment (pg. 3)

20 Action to Preclude Recurrence:

See attachment (pg. 3)

21 Response by:

be Schelling - See Memo dated 4/17/96

22 Corrective Action Completion Due Date:

05/30/96

23 Response Accepted

QAR *Claudette Juana* Date 4/23/96

24 Response Accepted

AQAM *Richard* Date 4/23/96

25 Amended Response Accepted

QAR *N/A* Date

26 Amended Response Accepted

AQAM *N/A* Date

27 Corrective Actions Verified

QAR *Claudette Juana* Date 6/17/96

28 Closure Approved by:

AQAM *Richard* Date 6/17/96

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

B  Performance Report  
 Deficiency Report  
SNL-96-D-5  
NO.  
PAGE 3 OF 3  
QA: L

PR/DR CONTINUATION PAGE.

**12. Remedial Actions :** Mr. Spychala has read and understood the assigned procedures. At this time, there is no indication that additional orientation/training is required for him. No remedial actions are required.

**18. Investigative Actions:** The manager who assigned Mr. Spychala's training was interviewed to ascertain that the type of training indicated was intentional and, if so, to determine what that intention was. The discussion indicated that the selection of one-on-one training was indeed intentional and had the expectation that a discussion of the procedures with an experienced user would be a beneficial addition to the more typical "read and understand" training.

Mr. Spychala was contacted and the interview indicated that he had an adequate understanding of the assigned procedures and understood who he could contact if questions arose. Because the training notification did not clearly explain what was to be done, Mr. Spychala assumed he should "read and understand," which was the most commonly used method of training by other individuals in the group.

Copies of Training Assignment Forms for Dept. 6853 staff were also obtained from the Training Manager. An examination of the other training assignment forms showed that one was signed by L. S. Costin, one was unsigned by a manager, and three were signed by M. C. Brady. The forms reviewed indicated at least some one-on-one training; two of them also indicated a need for on-the-job training (OJT), and one for classroom training (via videotape). With the exception of Mr. Spychala's form referenced in this deficiency, all indicated completion of assigned training by the dated initials of the trainees.

Training personnel were contacted to determine how they satisfied Steps 4.1.5 and 4.1.6 of QAIP 2-5. Their response was that the Training Manager or his designee notifies and provides training materials to the trainee, by transmitting a standard, computer-generated notification/confirmation form, which provides instructions to complete the assigned training, along with (typically) a copy of the Training Assignment Form. It was noted that if the Training Assignment Form was not provided, the trainee could not determine from the notification/confirmation form which training methods were to be completed.

**19. Root Cause Determination:** The root cause for this deficiency has three elements: (1) Although the version of the Training Assignment Form used for these individuals by the Manager has options for "Abstract Training" and three types of "Performance-Based Training," the training staff is not able to supply some of the Performance-Based Training options; (2) there is no guidance on the Training Assignment form about how to accomplish "Abstract Training" or any of the "Performance-Based Training"; and (3) the training notification/confirmation form supplied by the Training Manager per QAIP 2-5, Step 4.1.6 has inadequate instruction to the trainee for the training assignment selections.

**20. Corrective Action to Preclude Recurrence**

1. Notify the Training Manager that to adequately complete QAIP 2-5, Step 4.1.6, the trainee must be provided with a copy of the completed Training Assignment Form. Action: Bob Richards, to be completed by April 30, 1996.
2. Revise the Training Assignment Form and/or the instructions for the Training Assignment Form, so that a manager may have sufficient information to complete the form and so that the trainee, when given a copy of the Training Assignment form, will understand and be able to complete the training actions assigned. Action: Sarah Sharpton, to be completed by May 30, 1996.

# Sandia National Laboratories

Albuquerque, New Mexico 87185-1333

WBS 9.1.3.2

date: March 22, 1996

to: F. J. Schelling, MS-1399 (6853)

QA



from: Robert R. Richards, 6812

subject: Deficiency Report SNL-96-D-05 - Issuance

Joe,

I initiated the subject Deficiency Report (DR) in order to address and correct inconsistencies in Mike Spychala's orientation training.

Please provide a response to the attached DR by the due date identified in Block 10 of the DR. If the due date cannot be met, provide a written request for extension to the DR Coordinator (Claudette P. Jaramillo, MS-1333, 848-0797). Your request must include justification for the delay and must be provided to the DR Coordinator prior to the due date.

Please use page 2 of the DR, plus any needed continuation pages, for your response. For reference, the procedure that guides this process is AP 16.1Q; there are copies available in my office, in the NWM Information Center, and accessible on Lotus Notes.

In order to develop the DR response, perform investigative action to determine the extent of deficiency and to identify root cause. Next, determine the actions required to correct the adverse condition. These actions include remedial action, and, as required, corrective action to preclude recurrence. A review of the recommended actions provided in Block 17 of the DR will assist in developing the response; you may also call on John Friend for assistance in developing the appropriate actions for this situation. The response must include the following information:

## 1. Corrective Action Response

A. Remedial Action - Describe actions required to correct the specific conditions noted. (DR form, block 12)

B. Investigative Action - Describe the investigative actions performed to determine the extent of the condition and the results of the determination. (DR form, block 18)

C. Root Cause Determination - Identify the root cause of the condition as determined through investigative actions. Include or reference detailed analyses supporting the root cause determination. (DR form, block 19) Reference to Attachment 9.6, "Guidelines for Root Cause Determination," in AP 16.1Q may assist you in this effort.

D. **Corrective Action to Preclude Recurrence** - Identify the actions required to address the root cause of the condition in order to preclude recurrence. (DR form, block 20)

2. For each action above, identify the name of the individual assigned responsibility for completion of the action and the anticipated completion date.

If it then becomes apparent that any of the corrective action due dates cannot be met, a written request for extension must be provided to the DR Coordinator. This request must include justification for the delay and must be provided to the DR Coordinator prior to the due date.

3. The response must include the dated signature of the Responsible Individual in block 21.

Again, for assistance or advice, please contact me, John Friend, or Claudette Jaramillo.

Enclosure: DR SNL-96-D-04<sup>5</sup>

Copy to:

MS 1399 M. C. Brady  
MS 1333 R. R. Richards  
MS 1333 C. P. Jaramillo  
MS 1333 J. C. Friend

RR2  
3/22/96

**OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
DEFICIENCY DOCUMENT ENCODING FORM**

1. Document No. SM4 | | - 916 | - 015 | | | | | |

Issuing Org. Code |  
 Fiscal Yr. (last 2 digits) |  
 Document Type |  
 Seq. Number |  
 Extension number (for multiple deficiencies) |

0005  
GR  
12/3/94

**Doc. Type Codes:**

- |                               |  |
|-------------------------------|--|
| C - Corrective Action Request | O - Other: NRC commitments, Vendor documents |
| D - Deficiency Report         | A - Deficiency closed during audit           |
| P - Performance Report        | S - Deficiency closed during surveillance    |
| N - Nonconformance Report     | T - STIR                                     |

2. Initiation Date 10/31 - 12/21 - 1916 (MM/DD/YY)

3. Deficiency Code: 10211\* INADEQUATE TRAINING GR 12/3/94

Deficiency Code: | | | | \*

Deficiency Code: | | | | \*

4. Deficiency Cause Code: 10214\* LACK OF ATTENTION GIVEN TO TASK GR 12/3/94

Deficiency Cause Code: | | | | \*

Deficiency Cause Code: | | | | \*

5. Hardware Code: (if applicable) | | | | \*

6. Supplier: (if applicable) | | | | | | | | | | | | | | | |

7. Miscellaneous: (if applicable) | | | | | | | | | | | | | | | |

8. Data File Review:

Open deficiency found:  No  Yes - DD# none

Three or more recurring deficiencies in the same organization noted in last 4 quarters?  No  Yes  
*This deals with one on one training.*

If Yes, STIR initiated?  Yes - STIR No. \_\_\_\_\_  
 No - If No, provide justification:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

QAR Charlette Jaramila Date 04/02/94

\* See latest revision of Trending Codes List



**Sandia National Laboratories**

Operated for the U.S. Department of Energy by  
Sandia Corporation

Albuquerque, New Mexico 87185-1399

**date:** April 17, 1996

**to:** R. R. Richards, MS-1333 (6812)

**from:**

*F. J. Schelling*  
F. J. Schelling, 6855

**subject:** Deficiency Report SNL-96-D-05 - Response

In response to your March 22, 1996 memorandum, which issued the referenced Deficiency Report, attached is the completed Performance/Deficiency Report Form. The form was prepared in accordance with AP 16.1Q as requested. Please note that corrective actions are assigned to yourself and the training staff with anticipated completion dates of April 30 and May 15, 1996, respectively. Please contact me at 702.295.5234 if you have any questions.

Attachment: DR SNL-96-D-05

Copy to:

MS 1399 M. C. Brady  
MS 1333 C. P. Jaramillo  
MS 1333 J. C. Friend

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

8  Performance Report  
 Deficiency Report  
NO. SNL-96-D05  
PAGE 1 OF 3  
QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: QAIP 2-5, Rev. 04, Para. 4.1	2 Related Report No. N/A
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3 Responsible Organization: SNL Departments 6752 and 6853	4 Discussed With: Jud Blickley
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5 Requirement/Measurement Criteria:

The paragraph of QAIP 2-5 cited above calls for:

- The Department Manager to determine the extent of required ... QA training and proficiency training for (a newly-assigned) individual, and to complete and submit a Training Assignment form to the Training Manager.
- The Training Manager to notify the trainee of the training assignment; and
- The trainee to complete the assigned training activities...

6 Description of Condition:

For Michael E. Sychala, the Department Manager assigned one-on-one training for all QAIP training in his initial orientation. The training assignment notifications (and confirmation form) provided by the Training Manager to Mr. Sychala do not specify that one-on-one training on each QAIP was required; their wording implies that the training to be accomplished was to read. Consequently, Mr. Sychala did not apparently perform the type of training that his manager assigned.

7 Initiator R. R. Richards <i>R. Richards</i> Date <i>Mar 22, '96</i>	9 QA Review QAR <i>Claudia Jarant</i> Date <i>3/22/96</i>
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10 Response Due Date April 18, 1996	11 QA Issuance Approval QAR (PRI)/AQQAM <i>R. Richards</i> Date <i>3/22/96</i>
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12 Remedial Actions:

See attachment (pg. 3)

13 Remedial Action Response By: N/A Date	14 Remedial Action Due Date N/A Date
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15 Remedial Action Response Acceptance QAR N/A 1 Date	16 PR Verification/Closure QAR N/A Date
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*Faxed Copy of signature*  
OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.

DR NO. SNL-96-DC  
PAGE 22 OF 23  
4/17/96 QA: L

DEFICIENCY REPORT

17 Recommended Actions:

- Investigate to determine if the condition exists for other personnel in Dept. 6853
- Revise the text of the training assignment notification document to clearly specify what is to be done to complete the training assignment
- Evaluate the effect of the apparent difference in the intended training for Mr. Sychala (and any others in similar situation) and the actual training activity that was performed.

18 Investigative Actions:

*See p. 3*

19 Root Cause Determination:

*See p. 3*

20 Action to Preclude Recurrence:

*See p. 3*

21 Response by: <i>E. J. Schelling</i> Date <i>4/17/96</i>	22 Corrective Action Completion Due Date: <i>5/15/96 5/30/96</i> <i>4/17/96</i>
23 Response Accepted QAR Date	24 Response Accepted AOQAM Date
25 Amended Response Accepted JAR Date	26 Amended Response Accepted AOQAM Date
27 Corrective Actions Verified QAR Date	28 Closure Approved by: AOQAM Date

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

B  Performance Report  
 Deficiency Report  
*SNL-96-D-5*  
NO.  
PAGE *3* OF  
QA: L

PR/DR CONTINUATION PAGE

**12. Remedial Actions:** Mr. Spychala has read and understood the assigned procedures. At this time, there is no indication that additional orientation/training is required for him. No remedial actions are required.

**18. Investigative Actions:** The manager who assigned Mr. Spychala's training was interviewed to ascertain that the type of training indicated was intentional and, if so, to determine what that intention was. The discussion indicated that the selection of one-on-one training was indeed intentional and had the expectation that a discussion of the procedures with an experienced user would be a beneficial addition to the more typical "read and understand" training.

Mr. Spychala was contacted and the interview indicated that he had an adequate understanding of the assigned procedures and understood who he could contact if questions arose. Because the training notification did not clearly explain what was to be done, Mr. Spychala assumed he should "read and understand," which was the most commonly used method of training by other individuals in the group.

Copies of Training Assignment Forms for Dept. 6853 staff were also obtained from the Training Manager. An examination of the other training assignment forms showed that one was signed by L. S. Costin, one was unsigned by a manager, and three were signed by M. C. Brady. The forms reviewed indicated at least some one-on-one training; two of them also indicated a need for on-the-job training (OJT), and one for classroom training (via videotape). With the exception of Mr. Spychala's form referenced in this deficiency, all indicated completion of assigned training by the dated initials of the trainees.

Training personnel were contacted to determine how they satisfied Steps 4.1.5 and 4.1.6 of QAIP 2-5. Their response was that the Training Manager or his designee notifies and provides training materials to the trainee, by transmitting a standard, computer-generated notification/confirmation form, which provides instructions to complete the assigned training, along with (typically) a copy of the Training Assignment Form. It was noted that if the Training Assignment Form was not provided, the trainee could not determine from the notification/confirmation form which training methods were to be completed.

**19. Root Cause Determination:** The root cause for this deficiency has three elements: (1) Although the version of the Training Assignment Form used for these individuals by the Manager has options for "Abstract Training" and three types of "Performance-Based Training," the training staff is not able to supply some of the Performance-Based Training options; (2) there is no guidance on the Training Assignment form about how to accomplish "Abstract Training" or any of the "Performance-Based Training"; and (3) the training notification/confirmation form supplied by the Training Manager per QAIP 2-5, Step 4.1.6 has inadequate instruction to the trainee for the training assignment selections.

**20. Corrective Action to Preclude Recurrence**

1. Notify the Training Manager that to adequately complete QAIP 2-5, Step 4.1.6, the trainee must be provided with a copy of the completed Training Assignment Form. Action: Bob Richards, to be completed by April 30, 1996.
2. Revise the Training Assignment Form and/or the instructions for the Training Assignment Form, so that a manager may have sufficient information to complete the form and so that the trainee, when given a copy of the Training Assignment form, will understand and be able to complete the training actions assigned. Action: Sarah Sharpton, to be completed by May 30, 1996.

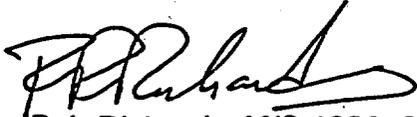
*1. Hence of 20.1*

**Sandia National Laboratories**

Albuquerque, New Mexico 87185

date: April 25, 1996

to: Jud Blickley, M/S 1330, 6752



from: Bob Richards, M/S 1333, 6812

subject: Clarification of Training Assignments

We have recently discussed the difficulty that exists with the current version of the computer-generated Training Notification and Confirmation form, that is that the wording on the form itself does not specify what to the "trainee" is to actually do in the way of a training event in order to complete the required training. I understand the concern about investing very limited training budget dollars in programming changes necessary to make the form "tailorable" to each specific training assignment, particularly in light of possibly moving the training database to another programming environment.

As an alternative, I request the following: That a copy of the Training Assignment form, which identifies in "shorthand" terminology (abstract training, one-on-one, etc.) the specific training to be done, along with an additional page that explains what the shorthand terminology means in terms of what the trainee is to do, be attached to the Training Notification and Confirmation form that is sent to the "trainee." By doing so, the individuals who are to accomplish training will be fully informed of what they are expected to do, while no programming effort is required at this time to significantly change the Training Notification and Confirmation form.

This memo fulfills an action on Deficiency Report SNL-96-D005.

copy to:

M/S 1333 C. P. Jaramillo  
M/S 1330 S. E. Sharpton

<b>CIVILIAN RADIOACTIVE WASTE MANAGEMENT</b>  Sandia National Laboratories	<h2 style="margin: 0;">Training Assignment</h2>
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Trainee Name	SNL Org. #	Mail Stop	Position
Company Name (if contractor)		Company Mailing Address	

**SECTION I ORIENTATION**

Employee's Orientation Manual (assigned to all new (CRWM) staff and is provided by Training Dept.)	<input checked="" type="checkbox"/>
"10,000 Year Test" – Video (assigned to new employees and provided by Training Dept.)	<input checked="" type="checkbox"/>

SECTION II TRAINING (One block for each procedure must be checked)	READ PROCEDURE PLUS TRAINING			Read Abstract	Read Only	Un-assign Training
	One on One	For One on One Training Indicate Trainer	CBT			
1-2 Organization	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-4 Resolution of QA Disputes	<input type="checkbox"/>			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1-5 Establishing Work Agreements	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-2 Study Plan Requirements	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-4 Conducting and Documenting Analyses/ Calculations	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-5 Training	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-6 Qualification and Certification of Personnel	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-9 Readiness Reviews	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2-10 Determination of Applicable QA Controls	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3-4 Design Investigation Control	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3-12 Peer Reviews	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4-1 Procurement	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5-1 Quality Assurance Implementing Procedures (QAIPs)	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Return completed form to Training Manager, Dept. 6352, M/S 1330.

# Training Assignment

SECTION II (continued) TRAINING	READ PROCEDURE PLUS TRAINING			Read Abstract	Read Only	Un-assign Training
	One on One	For One on One Training Indicate Trainer	CBT			
6-1 Document Control System	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-2 Preparing, Reviewing, Approving and Issuing Technical Information Documents	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6-3 Conducting and Documenting Reviews of Documents	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-1 Procurement Acceptance Verification	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7-3 Evaluation of Contractor QA Program Documents	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10-1 Surveillances	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12-1 Measuring and Test Equipment Control	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17-1 Protecting, Preparing, and Submitting CRWM QA Records	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17-2 Participant Data Archive (PDA)	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17-3 Processing, Storing, and Protecting CRWM QA Records	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19-1 Software Quality Assurance (QA) Requirements	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20-1 Technical Procedures	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20-2 Scientific Notebooks	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20-3 Sample Control	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AP-16.1Q Performance/Deficiency Reporting * Training Available by Video	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AP-16.2Q Corrective Action and Stop Work * Training Available by Video	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YAP-15.1Q Control of Nonconformances	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION III ADDITIONAL TRAINING

Enter additional training assignments below as applicable, such as: Technical Procedures, Work Agreements, DOE Orders, Seminars, Workshops, University Courses or other activities.

\_\_\_\_\_  
Department Manager Signature

\_\_\_\_\_  
Date