

#### Department of Energy

Washington, DC 20585

MAY 23 1997

OA: L

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.

OQA:JB-1600

Donald G. Horton, Director Office of Quality Assurance

#### 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

R. A. Morgan, M&O, Las Vegas, NV

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cc w/o encls: W. L. Belke, NRC, Las Vegas, NV

H. T. Greene, OQA/QATSS, Las Vegas, NV

D. G. Sult, OQA/QATSS, Las Vegas, NV

R. W. Clark, DOE/OQA, Las Vegas, NV

9706030057 970523 PDR WASTE PDR : WM-11

Reap: Nmss/Hur



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

<b>D</b> Performanc	a Report
<b>⊠</b> Deficiency F	Report

NO. YM-96-D084

		PAGE 1 OF 2 QA: L
PERFORMANCE/DE	FICIENCY REPORT	
1 Controlling Document:	2 Related Report No.	, , , , , , , , , , , , , , , , , , , ,
QARD, Revision 5	Audit YM-ARC-96-18	
3 Responsible Organization:	4 Discussed With:	<u> </u>
SNL .	Nina Garcia, Eloise James	. ·
5 Requirement/Measurement Criteria:		
Section 17.2.4, A. states, "Corrections to QA records income the initials or signature of the person authorized to make		
		•
	•	
		• •
6 Description of Condition:		
SNL procedure for QA records does not meet the require	ements of the QARD for the correction of	QA records.
QAIP 17-1, Revision 02, Section 4.4 states in part "Record requirements for corrections shall be processed into the YMP Record/Record Package Deficiency and Justification Several QA records have been accepted using this meth showing the signature or initials and date of the person at Examples are: RMS SL #150478, 150533, 150505 (Recons) SNL-96-D2 (Deficiency Document)	records management system through the on Form."  nod. However, several corrections have be authorized to make them.	completion of an SNL
		•
7 Initiator	9 is condition an isolated occurrence?	•
Mario R. Diaz House Sau Date 8/1/96	□ Yes 🖾 No 🖂 Unknown; Ma	ust be Yes if PR
10 Recommended Action: (Not required for PR)		
1. Modify the pertinent SNL procedure in order to compl	y with this requirement.	
2. Review other QA records to evaluate compliance with records. Provide objective evidence of review, evaluate	n this requirement and make appropriate of ation, and corrective actions.	corrections of deficient
^ \		
QAR Mario R. Diazuro Date 8-1-96	12 Response Due Date 20 working days from issuan	
13 Affected Organization QA manager Issuance Approval: (QAR for PR)	20 WOLKING UNIVE LIOU ISSUAN	1
Printed Name 2 t SPENCE Signatu		Date 8.7.96
22 Corrective Action Verified	23 Closure Approved by: (N/A ser-PR)	
QAR	X Com get fitte	Date 5/2/97

# OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

PR/DR NO. Y	M-96-D084
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	PERFORMAN	NCE/DEFICIE	NCY REPO	RT RESPO	NSE	· .
14 Remedial Actions:						•
See Continuation	n Page.	•				
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Based on the fact for corrections of the deficient corrections of the deficient corrections.  Based on the fact for corrections of the deficient correction.	me correction of s to be limited in 14, Remedial A ndition but base	records (e.; n scope. Co ction, will pr d on the an	g. initials, d impletion of ovide furthe parent scor	ates, etc.), the review er evidence	this process of the scope	٠.
16 Root Cause Determination	n: (Not required for	PŘI 1	Required [	Yes X		
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17 Action to Preclude Recur	rence: (Not required	for PR)	Roquired	Yes X N	lo	
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18 Corrective Action Comple	tion Due Date:	9 Response by:	FOR 1-LAN	mi (15	FER	
October 1, 1996		☐ Amended	•	Date 9/4	/96 Phon	575 81-061/
20 Response Accepted	11/0		21 Response	Accepted (N/A	for PR):	
QAR	N/R Date		AOQAM	,	)/A Date	
khibit AP-16.10.2					2010	

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	NO.	YM-96-D084

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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.



Albuquerque, New Mexico 87185-1330

date: July 25, 1996

WBS:1.2.5.3.5.

1.2.11.

QA

b. File

from: M.C. Brady
YMP Project Lead

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 Tile 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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YM-96-D-084

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)
SER 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: 19 Response by:  SEE AIR CONTINUATION PAGE DINITIAL Date Phone
20 Response Accepted (N/A for PR):  OAR Vario for Date 10-15-96 AOOAM Tomas Blogget to Date 10/18/91
QAR Vario tou Date 10-15-96 AOQAM - Composition Date 10/18/90  Rev. 07/

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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:

Namended & J. Warner Phulaud

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 F. Jucker Date: 11/13/96

Concurrence: F. Casal Chillian

Concurrence: F. Joseph Schelling Fos 11/19/96

Robert Richards F. J. Schelling Fos 11/19/96

Approval:

Michaele C. Brady, SNL CRWM Lab Lead

Date: 11/19/91-

CONTROLLED DOCUMENT

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12/2011

## **REVISION HISTORY**

#### Revision

#### Summary

- 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.
- 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.
- 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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6.0	RECORDS	10 12 12

#### 1.0 PURPOSE

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.

## 2.0 SCOPE

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.

#### 3.0 DEFINITIONS, Continued

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.

## 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.

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

Responsible	1.	
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
		a. correct by enhancing or transcribing the illegible portions, or if it can't be corrected,
		<ul> <li>sign and date a description of the impact on CRWM work, and obtain the signature of the record source's immediate supervisor.</li> </ul>
		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.
	3	Corrects records if necessary, as described in Section 4.4.
	4	Prepares individual records (those not included in a package) to include the following information on the first page of the record:
		WBS number (in the upper right corner),
		<ol> <li>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> </ol>
		3. for a Non-QA Record, a designation of (QA: N/A),
		4. total number of pages,
		5. record date.

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."

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

	Responsible	C4	
}	Individual(s)	Step	Procedure -
	Record Source (continued)	4 cont.	<ol><li>record title (clearly indicate the record content and/or purpose),</li></ol>
ı			7. SNL NWM file code,
1			b. Prepares QA record packages to include:
			<ol> <li>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> </ol>
			cross reference sheets (obtained from the LRRO )     for privileged records if they are not included in the package, and
			<ol> <li>Table of Contents (may be prepared by LRRO), which includes</li> </ol>
			WBS number,
			<ul> <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> </ul>
			<ul> <li>pagination of the Table of Contents (directly below the QA designation),</li> </ul>
			<ul> <li>record date for the Table of Contents,</li> </ul>
		·	<ul> <li>record package title (clearly indicate the content and/or purpose),</li> </ul>
			listing of all records in the package with the date and number of pages of each record,
			<ul> <li>total number of pages,</li> </ul>
			<ul> <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>

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.

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

Responsible Individual(s)	Step	Procedure -
Record Source (continued)	.4 cont.	SNL NWM file code,
		<ul> <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> </ul>
		<ul> <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.
t in a second	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.
		Note: 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.
	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.

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

Responsible Individual(s)	Step	Procedure
Responsible Individual(s) Step  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. Correction of Records
		<ol> <li>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> </ol>
		2. Administrative changes may be made by the LRRO.

## 4.4 Corrections to/Replacement of Records

Responsibl	Step	Procedure
Record Source (continued)	cont.	<ol> <li>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.</li> </ol>
		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.
		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 accumentation 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.
x 1 2 2 2		b. Replacement of Lost QA Records
		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.

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

Responsible Individual(s)	Step	Procedure
Record Source	1 cont.	c. Correction of Previously Processed Records 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.

#### 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

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### APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT	
Sandia	
National	Machine Readable Media
Laboratories	
Test:	
Record Identifier:	
Author:	Organization:
Date(s)	WBS#:
Generated:	
·	<u> </u>
l.	AUDIONIDEO RECORDS * * *
1. Format Type and Specific	
A. Audio	B. Video-Size: Type:
3.75-in/sec on 0.25-in open reel	0.75-in Mil tape
3.75-in/sec on 0.25-in cassette 7.5-in/sec on 0.25-in open reel	S-VHS tape  BETACAM tape
7.5-in/sec on 0.25-in cassette	
Other	Other Other
2. Description of Subject Ma	
	topics-test plans; activity; track number(s) reflecting
starting times of major topics	
	<u>, , ,                                </u>
	PUTER GENERATED RECORDS
1. Format Type and Specific	L V
A. Tape	B. Floppy Disk
0.5-in nine tracktape reel	□ 3.5-in
0.25-in tape cassette	5.25-in
4-mm tape cassette	- ☐ 8-ın
O community of the control of the co	
Gorgouiii	☐ Other
	Other
~ (i,	
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#### **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 Greate Software

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

C. Description of Subject Matter of Executable Software

Description may include: file ayout, 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
  - B. Main Frame Computer Record Length and Block Size

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### **APPENDIX A (continued)**

#### Machine Readable Media

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

	<b>U.</b>		
Records Center Identifier No:			
Nuclear Waste Project: Text/Activity:			
Author/Org.	•		•
Date(s)			-
WBS#:			-
Summary of Ma	chine 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
- 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.

	AN RADIOACTIV E MANAGEMEN		cal Re		Receivi	•••••	anizatio	on Su	ıbmi	ttal F	orm
Date		Subn	nitter				7	<del>-</del>	Page _	.· 	
		To Be Con	npleted by \$	Submitter	,	10/2	То	Be Comp	leted by	LRRO S	Staff
Dept. No.	Record Source		Record or P	ackage Tille		Regord	RMS#	Page Count	Non RIS	Rej •	Return Date
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LRRO Ted	hnician kilijal	Oale belov	v as comple	eted.				,			
Sandia Received	LRRO Received	Inspect	Query	Input	Extended Report	Verify Report	Corrections	RPC Transm		ull SAIC Copy	Pull SNL Copy
CRW! 1.2/1	·1 (02/21/96)										

### APPENDIX C

	CIVILIAN RADIOACTIVE		December Deficiency			
1	WASTE MANAGEMENT	l	Record Deficience	y and		
Sandia		Justification F	Orm			
National			oustineation F	Ulli		
Lab	oratories			<u> </u>		
	OA Record/Package	•	■ Non-QA Record/Package	WBS: 1.2.12.2.2		
Leg	ibility:					
	Non-Applicable for this reco		•	•		
	Illegible portions of this reco	rd can be deduced fo	rom other information within the record packa	OCHORN.		
	Illegible information will have	NO impact on futur	e, in-process, or completed work.	- M,		
Con	npleteness:		•			
	Non-Applicable for this recor			$\cdot N_{\alpha} \cdot N_{\alpha}$		
	All blanks on the record(s) as		•	1/1/5/1/		
	SNL submittal of partially cor	npleted form	all blanks are appropriate.			
I	losure/Attachment:			$\sim$ $\sim$		
	Non-Applicable for this recon		$\sim$			
	The enclosure/attachment wa	as not included with	the submitted report because:	<b>1</b> 5		
	It is non-processed material.			X		
	It was previously submitted to Only one enclosure is require distributed letters.	of with copies of a		the last document in a group of		
	Submittals to the RIB (referen	00 AP-5 30				
	Other.	CONTRACTOR OF THE PARTY OF THE	smittal letters on orms are only required for the	ne CRF.		
Rege	eneration:	<del></del>	- C			
	Non-Applicable for this record	l/nankann	17,00			
	The original record was comp		$\mathcal{H}$	•		
	regeneration was required.					
_	ord Source/Generator S		<b>4</b> 0			
	Non-Applicable for this record	/packupe				
	The original Record Source is	no est novembe of	yect.	İ		
	The original Record Source The originator was not on the	deseased ocwineres	abouts unknown.			
	The vendor is no longer waita	noject no meteab	OUTS unknown,			
	Other.					
_	TO TO					
Appr	oval:					
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deficie	ricies are ide miled above.	age and allest in	at it is adequate for its intended purpo	se. Only the appropriate		
			•			
	Record Source (printed/ty	ped)	Signature	<del></del> .		
	<b>.</b>	• •	Synature	<b>Date</b>		
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# 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:	This F Ell_		Date:	10/16/20
	Thomas F. Ehrhorn			
Concurrence	Prochaids		Date	10/16/96
	QA Reviewer R. R. Richards			
	600111			6.4
Approval:	F. S. Serelling For M.C. Brady	,	Date:	10/3/96
•	SNL CRWM Lab Lead			
•	M.C. Brady approval signature on faxed			٠
	copy of this page in Document Control Records.			

# CONTROLLED DOCUMENT

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## REVISION HISTORY

Revision	Summary
	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

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).

#### 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.

#### 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.

#### 3.0 DEFINITIONS, Continued

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  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		
Requester	1			
QA Department Manager	2	Evaluates the request for a new procedure.		
Managei		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		

#### 4.1 Preparation of New Procedure (continued)

Responsible		
Individual(s)	Step	Procedure
QA Department Manager (Continued)	2 Cont	Note: 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.
Procedure Author	3	Shall identify applicable requirements and controls in the following sources:
		a. Quality Assurance Requirements and Description (QARD)
		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])
		c. SNL CRWM commitments (e.g. corrective action for audit findings)
	4	Shall draft the new procedure:
		a. Refers to Appendix B for procedure format and content.
		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.
		c. Uses the auxiliary verbs "shall," "should," or "may" as described in Appendix B.
		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.)

### 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:
	٠.	a. Document Review and Comment (DRC) forms in accordance with QAIP 6-3 for the use of the QA Reviewer and Lab Lead.
		b. A Request to Provide Training on Controlled Documents form in accordance with QAIP 2-5.
		c. A Request for Distribution/Recall of a Controlled Document form in accordance with QAIP 6-1.
	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		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.
		a if approved, selects a Procedure Author and sends the original request to the Author with copies to the Requester and Procedure Coordinator.
		b if rejected, returns the original request with an explanation to the Requester.

#### 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,	3	Shall draft the procedure change:	
Requester		a.	Complies with Subsection 4.1, steps 3 through 5, as appropriate.
		b.	Numbers revisions sequentially beginning with 01
	•	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.
		ď.	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.
		e.	Performs steps 6 through 8 of Section 4.1 for the procedure change as appropriate.

#### 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.

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

Responsible Individual(s)	Step	Procedure -
QA Reviewer, Lab Lead	3	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:
		Shall verify inclusion of applicable quality requirements and controls.
	•	b. Should verify that referenced documents, including those generated outside of the SNL CRWM, are appropriate, current, and not in conflict with applicable requirements.
		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.
		Note 1: The QA Reviewer serves as the independent reviewer for procedures.
;*		Note 2: The QA Reviewer is the only required reviewer of minor changes.
		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 Author	4	procedure.  Shall resolve comments and incorporate the applicable comments in the procedure or revision.

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

Responsible Individual(s)	Step	Procedure
Procedure Author, QA Reviewer, Lab Lead	5	Shall sign the procedure or revision for authorship (Procedure Author), concurrence (QA Reviewer), and approval (Lab Lead) as appropriate.
		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.
		Note 2: The Procedure Author and QA Reviewer are the only required signers for minor changes.
Lab Lead or QA Department Manager	1 1	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.
		Note: The effective date may be left blank, in which case it will be assigned by Document Control.

#### 4.4 Issuance and Control

Responsible Individual(s)	Step	Procedure				
Procedure Coordinator	1	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:				
		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.				

### 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.
	,	<ul> <li>b. Where QARD requirements are not applicable based on scope of work.</li> </ul>
	• :	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.

#### 4.6 Implementation

Responsible Individual(s)	Step	Procedure -
SNL CRWM Personnel	. 1	Shall perform activities in accordance with approved procedures.  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).
		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.

### 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.

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

## 6.0 REFERENCES

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

#### **APPENDIX A**

CIVILIAN RADIOACTIVE WASTE MANAGEMENT Sandia	Procedure Action Request (PAR)
National Laboratories	
Section I: To Be Completed by I	Requester
To: QA Manager	
From: (Requester's Name)	Org. Date:
QAIP Title (or subject if new QAIP):	all a
Check Action Requested	Change Procedure: Form
[ ] Develop New Procedu	
Reason for Request and Suggested Action	
Attachment: [] YES []	NO —If Yes, Number of Pages
Other QAIPs/Documents Affected:	Die Contract
Section II: To be Completed by Q	A Manager or Designee
Conflict with QARD: [ ] Yes	[ ] No Comments
Request Is: [ ] Approved [ ] Rejected	[S]Otner Disposition Comments
GAIP Number:	Title:
QAIP Purpose:	
Scope:	
13.4%	
Forward To (Procedure Author)	Org
Please Issue New OAIP or Change by Date:	(Optional)
Signature and Date:	
-	
QA Department Manager	Date
	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:

- 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.

#### 5.0 RECORDS

If records are generated as a result of implementing the procedure, this section shall include the instructions given below as appropriate for processing the records

	<u></u>
If the record is a	then use the statement, modified as appropriate
QA (or non-QA) record that is generated and processed by the procedure	"QA (or "non-QA") records and record packages, including corrections and changes thereto, generated as a result of implementing this procedure shall (should) be prepared and submitted to the Local Records Receiving Organization ("in a separate non-processed records package") in accordance with QAIP 17-1, "Protecting, Preparing, and Submitting CRWM QA Records", and, if applicable, add QAIP 17-2, "Processing of Technical Data on the Yucca Mountain Site Characterization Project".
	"The QA (or "non-QA") records, record package segments and record packages include: (List the individual records, record package segments, or record packages contents that are generated by the procedure and include the appropriate retention designator [LIFETIME or NONPERMANENT].) "
QA (or non-QA) record that is generated by the procedure but processed by another procedure (as does QAIP 5-1, see Section 5.0)	"The following QA (or "non-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:  OA Records Procedure  (list QA (or non-QA) records) (list applicable procedure)"
No records are generated	"No records are generated as a result of implementing this procedure"

If none of the standard statements above fit the specific situation for the procedure, the author may use different wording as long as it clearly indicates what records are generated as a result of implementing the procedure and how those records are to be processed. The procedure author should seek assistance from Local Records Receiving Organization personnel in developing this statement.

#### 6.0 REFERENCES

This section should include a list of all documents referenced in this procedure. Referenced documents, including those generated outside of SNL CRWM Projects, should be applicable and current, and should not be in conflict with applicable requirements.

#### 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: 10-31-910

Author:

Date: 16/4/76

Thomas F. Ehrhorn

Concurrence: Date: 16/4/76

QA Reviewer K.R. Richards

Approval:

SNL CRWM Lab Lead

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

10131148 Ed. 1012

Date: 70/5

CONTROLLED DOCUMENT

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P. 46 976

## **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.

#### 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.

## 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	Shall determine the personnel who are to perform the review.		
		a. Shall ensure that each organization affected by a document reviews the document and changes to it.		
		b. Shall ensure that each technical discipline affected by a document reviews the document and changes to it.		
		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.		
		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.		

#### 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.
		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.

#### 4.3 Comment Resolution

Responsible Individual(s)	Step	Procedure -
Author/Requester	1	Shall resolve comments with the reviewer's assistance to reach agreement on resolutions.
		Note 1: 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.
		Note 2: 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".
·	•	Note 3: Discretionary comments do not need to be resolved.
	2	Document comment resolutions on the DRC form and forward to the reviewer for acceptance.
	3.	If mandatory comments are noted in the technical review, then the potential impact of these conditions on other documents will be assessed
		Note: 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.
Reviewer	. 4	Document acceptance of comment resolution on the DRC form and return to author/requester.
		Note 1: 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.
		Note 2: 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.
•		Note 3: Comments resulting from the review shall be documented and mandatory comments shall be resolved before submitting the document for approval.

Continued on Next Page

## 4.0 PROCEDURE, Continued

#### 4.3 Comment Resolution (continued)

Responsible Individual(s)	Step	Procedure
Author/Requester	ľ	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**

WASTE MANAGEMENT Sandia National Laboratories	Document Review and Comment (DRC) Form
REQUESTER-	-
From Requester/Orgn.	Date:
To Reviewer/Orgn.	Due Date:
Document Number	Revision:
Title (optional):	
Review Type: Independent If Other, specify type:	
	iewed and Review Criteria (sample criteria on back)
Note: Unless noted otherwise, the entire do type of review.	ocument is to be reviewed using the criteria on the reverse of this form appropriate to the
REVIEWER	
Comment number of	Location:
This comment is:  Manda	
<u> </u>	
	W. Ch.
Reviewer's Signature:	Date OCC
REQUESTER	
Resolution:	
	- 20, 20, 11,
	SMIP CULLY
•	24, C.
•	-070
Requester's Signature	Date:
REVIEWER	
Resolution Review Status:	☐ Accepted ☐ Not Accepted
Conditionally Accepted	√specify terms)
41,48	
Conditionally Accepted	
Reviewer's Signature	Date:

CRWM 6-3 1/1-2 (10/1/96)

#### **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 ventication 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?
- THE LIFE WALL HIGH WILL DE LISED ID RIGHTESS THE SECRETARIST AND ADMINISTRATION OF THE SECRETARIST AND ADM
Is the scope of the work performed and the results obtained sufficient to merit documentation (i.e., are there big gaps in the methods, analyst and/or conclusions that require more work be done before publications?
results and/or conclusions that require more work be done before publication)?
Are the assumptions, if assumptions are required clearly stead of
Have the calculations or other logical procedures required to implement the
understands how the solution was obtained?
Is the solution or result clearly stated?
Fias the problem been correctly identified or has the author solved the wrong expellent
is the inclined used to solve the problem the method that the independent and
has the author chosen an appropriate method for the solution of the problem and a true many
has the author chosen an appropriate method for the solution of the problem and is this method capable of producing results with the accurate reported?
Is there sufficient background information or reversed program and a sufficient background information or reversed program and a sufficient background information or reverse and a sufficient background informat
Are the data chosen the correct data to use in the problem solution and are these data 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 in dentified?
identified?
Have the calculations or other logical procedures required to implement the materials and the calculations or other logical procedures required to implement the materials and the calculations or other logical procedures required to implement the materials and the calculations or other logical procedures required to implement the materials and the calculations or other logical procedures required to implement the materials and the calculations of the calculations
Are there sections of the document that are extraneous to the flow of the technique 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?
is proper credit given to other contributors (either direct contributors received and problem?
is proper credit given to other contributors (either direct contributors who are authors or contributors through reference material cited)?
SNE CATTERIA CHECKLIST FOR QUALITY ASSURANCE REVIEWS (EXAMPLE)
A Quality Assurance review assures that documentation is consistent and
incorporated in the review documents
Does the document adhere to the format and content requirements of a
Does the document adhere to the format and content requirements of any governing procedure? (e.g., 1. For technical reports, have a WBS appropriately identified as either "qualified data" or "not qualified data".)
appropriately identified as either "qualified data" or "not qualified data" or
Are reviews and approvals as required by governing executive?
reduce the documents were used as the basis for this occurrent was the annual to the second sec
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.
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?
CRWM 6-3 1/C-2(10/1/96)

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# 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: Mulling Wither

Date: //

Concurrence:

Robert R. Richards, OA Reviewe:

Date 1// 13

Approval:

Michaele C. Brady, SML CRWN Vab Lead

Date: 11/13/96

## CONTROLLED DOCUMENT

(if Numbered in Red Init)

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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, 1983, 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 working.
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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#### 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 1988 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

## 3.0 DEFINITIONS, Continued

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.
- D Quality of activities related to items on the YMP Q List, YMP:90-55
- 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 cocuments and cocuments 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.

#### 3.0 DEFINITIONS, Continued

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.

## 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
	5	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 and 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.

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

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	11	Shall complete processing of records/record packages by:
<u> </u>		a. generating a listing of the records being transmitted.
	-	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;
	·	transmitting records to the YMP Records Processing Center (RPC) within 90 days of completion
	12	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
		Note: 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

#### 4.2 Storing and Protecting CRWM QA Records

Responsible Individual(s)	Step	Procedure
LRRO		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

## 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
		a locking all entrances to the LRRO when LRRO staff are not present and
•		b posting a list that designates those personnel who shall have access to records, including privileged records
:	4	Maintains control and accountability for records within the LRRO by
		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.
		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.
		c providing documentation of access to DOE-28 (training, certification, and qualification) records, and
		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.

#### 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

Amy V. Martinez 6850, 6851, 6852 To: 11/25/96 8:44am Date:

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

New Record Source Responsibilities

(1 page)

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 pacakge is designated QA:N/A.

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

Joe 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

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)	
<b>U</b>	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  Any Related Correspondence or Data Required to Complete the Record	(L) (L)	
	of the Peer Review and Actions	•	
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) Support Documentation (e.g. Sole-source/sole-make justification forms, memoranda, acquisition plans, supplier evaluation reports, etc.)	(L) (N)	
5-1	No records	•	
6-1	Original Copy of the Controlled Document Request for Distribution/Recall of a Controlled Document Form	(L) (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)	
		4.69 976	

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	
20-3	Original Chain of Custody Forms and Photocopies of the Forms After Each Sample Transfer  Any Special Shipping Documentation	(L)
	Any operations pocumentation	(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 Dispute Resolution Documentation Dispute Evaluations Dispute Escalations	(L) (L) (L)
1-5	Original Work Agreement Work Agreement Revisions Completed Document Review and Comment Forms for Mandatory Comments Records Documenting Any Temporary Revisions	(L) (N) (L)
	Memoranda	(N)
2-2	Study Plan Draft and Subsequent Revisions (The final is maintained by OCRWM.) Related Review and Comment Forms	(N) · · (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) Training Assignment Form (Appendix A) Training Confirmation Form (Computer Generated) Individual Training Attendance Record (Appendix D) Qualification of Trainer (Appendix B) Lesson Plan Cover Sheet (Appendix C and Attachments) Course Evaluation (Developed by Trainer) Request to Provide Training (Appendix E) Memorandum of Instruction	(1) (1) (1) (1) (1)
2-6	Certification of Personnel Qualifications Form Related Records such as Resumes, Correspondence, Records of Telephone Conversations, and "Employee Placement Reports" if necessary to support the certification Periodic Evaluation of Personnel Proficiency Form	(L) (L)
2-9	Notification to Perform Readiness Review Review Plan Review Report Other Documentation Providing Objective Evidence of Process Completion	(N) (N) (L) (N)

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.

QA

File

VMP Project I ead

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 Tile 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;Participent Data Archive, Delegation of Authority YMP-CRF

P. 72976

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

b: Joe Schelling, QA, Org. 6811

trom: Peggy Warner, Records Manager, Org. 6811

Eutopoor 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

#### 03/14/96

	·····		
Iype	Record	Title / Subject	Pages. RNS Number Other Info.
REC	09/01/95	LETTER: PREHATURE TERMINATION OF DRILLING AT USW  SD-12 (NA to QA = concet)	8 SL+150498 Nand pages about QA designations in Fi cole
REC	09/21/95	MEND, RE: STRAIN GAGE DATA FOR STEEL SETS #005 THROUGH SET #528 (NA to NR = concet)	1 SL*150499 RA designation is fil
REC	09/12/95	MEND, RE: STRAIN GAGE DATA REPORT REQUEST INSPECTION OF QUESTIONABLE GAGES (NA to NR = correct)	2 SL*150501 QA designation in x
REC Cone al 4 c	10/16/95 Elion = Late	LETTER, W/ENC., RE: QUARTERLY QA STATUS REPORT: PROPOSED FORMAT AND CONTENT GUIDE AND FY95 4TH QUARTER REPORT	9 SL*150504 added wB5#, DA designation, page #5 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 St*150505 QA designation N adled, pages corrected
	09/19/95 rection: late	MEMO, RE: PERFORMANCE ASSESSMENT RELATED CODES TOUGHS AND FEMMN ENTERED INTO M&D/SNL CONFIGURATION MANAGEMENT	1 St=150506 added w85#, BA designation, pages
	10/19/95 rection = Late	LETTER, W/O ENC., RE: TRANSHITTAL OF TSPA-1993 REPORTS	1 SL=150507 added RA in front. NA, pages
REC	10/20/95	LETTER, RE: ASSESSMENT METHODOLOGIES FOR COLLOIDS IN PERFORMANCE ASSESSMENT	1 SL=150508 Changel Nato H NAto NR in RA designation
REC	11/02/95	MENO, RE: REVIEW OF DRAFT TSPA 1995 REPORT, DATED	16 SL=150509

1 × Paria - 3/14/96	1 CRF Receipt Acknowledgement / Date	2    4
1 Comments / Discrepancies / Action Taken		
3		

MEHO, RE: STAIN GAGE DATA RESULTS, PLOTS OF STRESS

AUGUST 1995

neel correction = VERSUS TIME

initial & late

SL=150526 Changel NA to NQ in file code

Type	Record	Title / Subject	Pages	RMS Number Other Info.
REC	11/28/95	MEHO W/ENC., RE:STRAIN GAGE DATA REPORT  RMS SL# corrected appropriately	2	SL*150527 NA cleanged to NR. RAdesignation
REC	11/28/95	MEHO, M/O ENC. RE: DATA RESULTS FOR THE NORTH RAMP STARTER TUNNEL (MRST) AND ALCOVE 1 THROUGH 11/17/95	19/5/	SL=15052B NA changed to NR.
REC	11/28/95	MEHO W/ENC., RE: INTERIM REPORT ESF STRAIN GAGE DATA RESULTS THROUGH 11/17/95, PLOTS OF STRESS VERSUS TIME	1	SL=150529 NA changel to NR 2 Sile cole
REC	12/06/95	LETTER, W/O ENC., RE: TRANSHITTAL OF SNL DELIVERABLE 611H43, "DATA FROM EVALUATING MINING METHODS IN THE NORTH RAMP", WBS 1.2.3.2.7.3.4  (NA changel to RA = correct)	2	SL=150530 Eleanged NA to Nin RA designation pages alled
REC	11/27/95	MEND, RE: INSTALLATION OF B AND C STATION AT THE TSWI/TSW2 CONTACT AND THERMAL ALCOVE	1	SL*150531 than 10/18/96 PJW
REC	11/27/95	MEMO, RE: FREQUENCY OF CONVERGENCE MONITORING IN THE ESF	1	SL=150532
REC	11/21/95	MEHO, RE: TSW2 CONTACT IN THE ESF	1	shed pages changed st 150533 for cade to RA changed NA to Nin RA
REC .	11/21/95	LETTER, W/O ENC.RE: TRANSHITTAL OF MILESTONE 462M31, STUDY PLAN ENTITLED "STUDY PLAN FOR SEAL MATERIAL PROPERITES DEVELOPMENT," BY RAY FINLEY	. 1	SL=150534 change NQ to RA-
	•	en la <del>de la composition de la composition de la composition della composition della composition della composition della composition della composition della</del>		of a first to the second
· ·		Total Document Pages in Transmittal : Total Documents in Transmittal :	56   18	N to RA designation, alle Pages
		3	•	0

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

02/01/96

Comments / Discrepancies / Action Taken

	<u>Type</u>	Record	Title / Subject	Pages	BMC Number - Behan Indo
	-				RMS Number Other Info.
	REC	09/13/95	SURVEILLANCE REPORT SR95-13	5	st=150472 - clean -
6	REC	09/28/95 Fr: 0	CORRECTIVE ACTION REQUEST (CAR) 95-19, RELATED	.a. ∙ 33	SL=150473 WB9#, Ot designed
			E REPORT NO. SR95-02 wantual ellettier consections of the consections	tion	pages alded
	REC		CORRECTIVE ACTION REQUEST (CAR) 95-23, RELATED	10	SL+150474 Same as also
ند	ntial	lo + late	REPORT NO. 5895-03 no actual corrections		<del>-</del>
		07/24/95		17	SL*150475 same as above
نه	ntia	bolate	REPORT NO. HOLO -A95-1 no actual correction	n	The later of the same of the s
		11/09/95	CORRECTIVE ACTION REQUEST (CAR) 95-31, RELATED	8	SL*150476 same as also
نه	milia	els q-date	REPORT NO. HOLD -A95-1	·	
reç	ord.	5 info . a	nd Fax		on Fax page (NRAF
		09/19/95	PERFORMANCE REPORT SNL-95-P5, RELATED REPORT NO.	1	SL * 150477 WB 5#, RA Lesign
Ŀ.	int	ials & late	*2882-12		pages aldel
		09/30/95	DEFICIENCY REPORT SNL-95-D-014, RELATED REPORT NO.	27	SL=150478 same as above,
		elsodete	SAND92-0450	-	correction on lot p
co Ri	er Er	info. and 11/01/95	DEFICIENCY REPORT SNL-95-018		•
•	•	11/01/	DELICIENCI KELOKI PNT-A3-010	66	SL=150479 WB = #, pages a
PA	ACK (	01/30/96	AND. 4 2 45 3 E ANUTON I EN RAMBERT MEMBARTINA		
• -	-	/1/ <i>0</i> 0/ /-	GRP: 1.2.12.2.5, CONTROLLED DOCUMENT SUPPORTING INFORMATION FOR GUALITY ASSURANCE IMPLEMENTING	12	SL=150480 Request for Dis
	•		PROCEDURE (QAIP) 16-3, REV 02, "QUALITY ASSURANCE	•	form (RAIP #)
		•	PROGRAM REPORT" no impact-apparent origin	tar	
~.			GRP: 1.2.12.2.5, CONTROLLED DOCUMENT SUPPORTING		
PA	CK D	01/30/96	GRP: 1.2.12.2.5, CONTROLLED DOCUMENT SUPPORTING	22	SL=150481_ no conection
•			INFORMATION FOR GUALITY ASSURANCE IMPLEMENTING		- no concessor
	t.	. •	PROCEDURE (QAIP) 2-5, REV 03, "TRAINING"		•
		•			
			1	2	
			Total Document Pages in Transmittal :	201	
			Total Documents in Transmittal :	10	•
			J	4	
		· · · · · · · · · · · · · · · · · · ·	·		
	•				
	1	SUL RC F	Personnel \$/gnature / Date2		•
			ersonnet Signature / Date CRF Ke	ceipt Acknr	owledgement / Date2

THIS IS A DE RESTAN	Þ
<b>⊠</b> Deficiency Report	

NO. YM-96-D085

PAGE 1 OF 2 QA: L

	PERFORMAN	NCE/DEFICIENCY REPORT
1 Controlling Document:		2 Related Report No.
QAIP 17-1, Revision 02		Audit YM-ARC-96-18
3 Responsible Organization:		4 Discussed With:
SNL		Nina Garcia, Eloise James
5 Requirement/Measurement Criter	ia:	
QAIP 17-1, Revision 02,	Section 4.2.3. states in p	part, "The record source shall prepare individual records to include the
following information on the	ne first page of the reco	ord:
-SCPB number		
-total number of pages	<b>5</b>	
-"YMP CRF" Code		
Continue 4 4 states in part	"The record source sh	hall correct errors on records by scribing a single line through the
incorrect information and	entering the correct info	formation in close proximity. Date and initial or sign the correction."
	• '	
6 Description of Condition:		•
OA reporte hove been n	necessal and accented	d without being in compliance with procedural requirements. The
following SNI OA record	s were deficient in accor	ordance with one or more of the requirements mentioned in Block 5
above, and some have b	een corrected by other f	r than the record source:
· · · · · · · · · · · · · · · · · · ·		once 450505 450504 Normal 450504 450750 and 450023
RMS SL #150498, 15053	10, 150747 through 150	0752, 150505, 150531 through 150534, 150750, and 150233.
		9 is condition an isolated occurrence?
7 Initiator	Ou Date 8/1/96	□ Yes ☑ No □ Unknown; Must be Yes if PR
Mario R. Diaz WWW 12 10 Recommended Action: (Not rec	·	D 165 E 10 D DIMINITI, MUST BE 105 II 1
10 Recommended Action. (Not let	Junea 401 PK)	
1 Correct the records id	lentified as deficient in a	accordance with procedural requirements.
		•
2. Review and evaluate	other QA records to ver	erify compliance with these requirements and make appropriate
corrections of deficier	it records. Provide obje	jective evidence of review, evaluation, and corrective actions.
	•	
11 QA Review:	$\mathbb{A} \cdot \mathbb{A}$	12 Response Due Date
	Haus bay Date 8-	
13 Affected Organization QA man		
Printed Name	E.SPENCE	Signature Constable Date S.7.
22 Corrective Action Verified	-//	23 Closure Approved by: (NHA for PR)
QAR funk	Leene_Date 5	5/19/9/Date 5/2/9
Exhibit AP-16.1Q.1		, , , Rev. 0/15

## OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT.

PR/DR NO.	YM-96-D085
	2 of 2
	00.1

	× .							
	PERI	FORMAN	CE/DEFIC	IENCY REP	ORT RES	SPONSE	<u>:</u>	
4 Remedial Actions:	necessary Therefore requireme	to include, QAIP 17 ents for re	le the SCF 7-1 has be cords. Th	PB Number en revised is change i	or the YI to remov s in the c	rocedures, it MP CRF cod te those item coordination	e on rec s from the cycle no	cords. he w.
	make adm are curren	ninistrativ otly in the	e correction coordinati	ns to recor	ds. Chai	it the Record nges to both been correc	these p	
5 Extent of Condition	: (Not require	d for PR)		<del></del> -			<del></del>	
The research eneither cost efficiency required significance of determination in	ective nor or o	of value t have min ency, ther	to the prog nimal effect e is no rea	ram as add t on quality son to con	ling two o Becaus duct root	codes that ar se of the limit cause	е	
6 Root Cause Determ	nination: (Not	required fo	r PR)	Required	Yes	X No		
	'							
				·				• • •
							• •	
				•				
7 Action to Preclude	Recurrence:	(Not require	d for PR)	Required	Yes	X No		
					•			
						• ,		•
			•.	•				
	•		•	•	• •			
	•.						•	
October 1,		ue Date:	19 Response	:	VARIAN. Dato	9/1/16	Phone	846 H1-064
						ted (N/A (or PR):		

Exhibit AP. 16.10.2 9/5/94 Budy de Spence

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJ YMP-175-R1 06/20/94 THIS IS A RED STAME **PROCEDURE** Title: cosRECORDS MANAGEMENT REQUIREMENTS AND RESPONSIBILITIES ICN: Procedure No.: Revision: Page YAP-17.1Q 0 .4 30 of Date: Approval: Date: Approval: N/A Approval: Concurrence: N/A R.E. Spence **CHANGE HISTORY** ICN No. **Description of Change** Rev. No. **Effective Date** O 05/31/94 Initial Issue - Supersedes AP-1.18Q, Records Management: Las Vegas Record Source Responsibilities 0 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. 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. 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 ICN to make editorial corrections. Pages affected are 2, 3, 4, 4a, 8, 06/14/95 and 13. Page deleted is 2a.

Perform Deficien	nance Report ncy Report
NO. <u>YM-96</u>	-D-085
PAGE	OF
	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.

# OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

PRIOR NO. YM-	96-D-085
PAGE	
	OF

U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.
PERFORMANCE/DEFICIENCY REPORT RESPONSE
14 Remedial Actions:
SEE AMENDED RESPONSE CONTINUATION PAGE.
15 Extent of Condition: (Not required for PR)
SEE AMENDED RESPONSE CONTINUATION FAGE
16 Reat Saura Determination: (Not required for PR) Required Yes No
16 Root Cause Determination: (Not required for PR) Required L Yes L No
SEE AMENDED RESPONSE CONTINUATION PAGE
17 Action to Preclude Recurrence: (Not required for PR) Required Yes No
SER AMENDED RESPONSE CONTINUATION PAGE.
JES HIMEY CES VILL
18 Corrective Action Completion Due Date: 19 Response by:  See AR CONTINUATION PAGE   Initial   SEE AR CONTINUATION PAGE   Managed   Date   Phone
21 Response Accepted (N/A for PR):
20 Response Accepted  OAR Lavo Jai Date 10-15-96 ADDAM Sims Blands LES Date P/18/96  Rev. 07/15/9
ENHALLM TALLES

Perform Deficient	ance Report cy Report D <b>¢&amp;</b> S
NO.	
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.

Exhibit AP-16.10.3
10/7/96 Brady to Spence

Rev. 07/03/95

P. 6977

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YM-96-1	DØ85
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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.

Exhibit AP-16.1Q.3

Rev. 07/03/95

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YM-96	-D085
NO.	
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#### 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 P. J. Warner Thulands

Date: October 4, 1996 Phone: 505 848 0130

Albuquerque, New Mexico 67165-1330

date: July 25, 1996

WBS:1.2.5.3.5. 1.2.11.

OA

File

1

YMP Project Lead

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 Tile 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

11/27/16 - Schelling 409 Despicional Service in the National Interest

P. 9 477

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

## PROTECTING, PREPARING, AND SUBMITTING CRWM QA RECORDS

Author:

Revision 03	
Effective Date: 11-19-96	
ne B Tuckee	Date: 11/13/96
oh Schelling Hards F. J. Schelling F95 1119196	Date: _///9/96

CONTROLLED DOCUMENT
(H Numbered in Red trick)

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## **REVISION HISTORY**

#### Revision

#### Summary

- 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.
- 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.
- 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

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.

### 2.0 SCOPE

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.

## 3.0 DEFINITIONS, Continued

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.

## 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.

## 4.2 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
		a. correct by enhancing or transcribing the illegible portions, or if it can't be corrected,
		b. sign and date a description of the impact on CRWM work, and obtain the signature of the record source's immediate supervisor.
		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.
	3	Corrects records if necessary, as described in Section 4.4.
	4	Prepares individual records (those not included in a package) to include the following information on the first page of the record:
		1 WBS number (in the upper right corner),
		<ol> <li>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> </ol>
		3 for a Non-QA Record, a designation of (QA: N/A),
		4 total number of pages,
		5 record date.

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."

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

Responsible Individual(s)	Step	Procedure -
Record Source (continued)	4 cont.	<ol> <li>record title (clearly indicate the record content and/or purpose).</li> </ol>
		7. SNL NWM file code,
		b. Prepares QA record packages to include:
		<ol> <li>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> </ol>
		<ol><li>cross reference sheets (obtained from the LRRO) for privileged records if they are not included in the package, and</li></ol>
		<ol><li>Table of Contents (may be prepared by LRRO), which includes</li></ol>
	+	WBS number,
		<ul> <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> </ul>
	-	<ul> <li>pagination of the Table of Contents (directly below the QA designation),</li> </ul>
		record date for the Table of Contents,
		<ul> <li>record package title (clearly indicate the content and/or purpose),</li> </ul>
		<ul> <li>listing of all records in the package with the date and number of pages of each record,</li> </ul>
		total number of pages,
		<ul> <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>

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.

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

Responsible Individual(s)	Step	Procedure -
Record Source (continued)	4 cont.	SNL NWM file code,
		<ul> <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> </ul>
		<ul> <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.
		Note: 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.
	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.

## 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. Correction of Records
	. :	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.

## 4.4 Corrections to/Replacement of Records

Responsible		·
Individual(s)	Step	Procedure
Record Source (continued)	1 cont.	<ol> <li>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.</li> </ol>
		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.
		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.
		b. Replacement of Lost QA Records  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.

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

Responsible Individual(s)	Step	Procedure -
Record Source	1 cont.	c. Correction of Previously Processed Records 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.

## 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	Machine Readable Media
Test:	11/2/21
Record Identifier:	
Author:	Organization:
Date(s)	WBS#:
Generated:	V.162
	V, A
1	AUDIONIDEO RECORDS * * * * *
starting times of major topics	B. Video-Size: Type:  O.75-in
	IPUTER GENERATED RECORDS
1. Format Type and Specific  A. Tape  0.5-in nine track tape reel  0.25-in tape cassette  4-mm tape cassette  Refreculii	B. Floppy Disk  3.5-in  5.25-in  8-in
D Other	Other

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

## **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 Greate Software
  - (e.g. Excel, Microsoft C v6.Ø)→
- 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
  - 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/Cas	sette/1	ape/Floppy	Disk)
			'CA	MDI E	,		

Records Center Identifier No:	:					
Nuclear Waste Project:	· .	•				
Text/Activity: Author/Org.	_			<u> </u>		
Date(s) WBS #:				·		
Summary of Mac	hine f	Readat	ie Re	cord	·	

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 AND 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.

## **APPENDIX B**

	AITENDIAD
CIVILIAN RADIOACTIVE WASTE MANAGEMENT	Local December Description Occurred to the Law Law
Sandia National Laboratories	Local Records Receiving Organization Submittal Form

Date		Sub	mitter .			<i>\</i>	<u>Z</u> ,	<b>-</b>	Page		of
		To Be Co	mpleted by	Submitter		· M	То	Be Comp	oleted by	LRRO	Staff
Dept. No.	Record Source		Record or	Package Tille		Regota	RMS#	Page Count	Non RIS	Rej *	Return Date
				X.	704	100					
,			11		1/2			· · · · · · · · · · · · · · · · · · ·	•		
•			5/2	X 0	3						
				$Z_{L}$					•		
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			XX								
		COR	<u>~</u>						<u>-</u> -		
	-0	N. V.									
LRRO Tec	hnician Initial	Oate belo	w as compl	eted.		· · · · · · · · · · · · · · · · · · ·					<u>.</u>
Sandia Received	LRRO Received	Inspect	Query	Input	Extended . Report	Verify Report	Corrections	RPC Transmi		ill SAIC Copy	Pull SNL Copy
<u> </u>						•					

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## **APPENDIX C**

CIVILIAN RADIOACTIVE	Record Deficiency and	
WASTE MANAGEMENT		•
Sandia	Justification Form	
National Laboratories	<u>_</u>	
	□ Nes OA Bessel/Besless NABO: 4.6	. 40.00
QA Record/Package	Non-QA Record/Package WBS: 1.2	2.12.2.2
Legibility:		
Non-Applicable for this reco		
See:	ord can be deduced from other information within the record package	
	e NO impact on future, in-process, or completed work.	EN.
Completeness:		
☐ Non-Applicable for this reci	ord/package.	1.011.
☐ All blanks on the record(s)	are intentional.	21
SNL submittal of partially of	ompleted form; all blanks are appropriate.	<i>つ</i> /
Enclosure/Attachment:	$\sim$ $\sim$ $\sim$	
Non-Applicable for this reco	ord/package.	
	The first monday with the basis of the first postages.	
tt is non-processed materia		1
It was previously submitted  Only one enclosure is requi		
distributed letters.	red with copies of a definitive letter. This enclosure attackment is the last docume	nt in a group of
☐ Submittals to the RIB (refer	ence AP-5.300 reansmittal letters on orms are only required for the CRF.	
☐ Other	SI OUXIN	· .
Regeneration:	3 KG	
☐ Non-Applicable for this reco	ord/package	
☐ The original record was cor	npleted onhow it has subsequently been damaged beyon	ond repair, and a
regeneration was required.	$\sim \mathcal{O}_{\lambda}()$	
Record Source/Generator		was a far
☐ Non-Applicable for this reco		
	deceased or whereabouts unknown	
The originator was not en the	te Project and thereabouts unknown	
☐ The vendor is no londer va		
□ Other.		
	2	
Approval;		
	ckage and attest that it is adequate for its intended purpose. Only the	annronriate
deficiencies are identified abou		sppropriate
Record Source (printe	d/typed) Signature	Date
· · · · · · · · · · · · · · · · · · ·		••.
		•
•		
		•
•		·
	•	

CRWM 17-1.3/1-1 (08/16/96)

## 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

Approval:

Date: 11/13/96

CONTROLLED DOCUMENT (ii Numbered in Red Init)

> 100000 Occay Manshart

> > P. 21 477

## **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

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 1988 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.

## 3.0 DEFINITIONS, Continued

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 cocuments 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.

### 3.0 DEFINITIONS, Continued

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.

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

Responsible	<u> </u>	Procedure <u>T</u>
Individual(s)	Step	
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.

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

Responsible Individual(s)	Step	Procedure
LRRO (Continued)	11	Shall complete processing of records/record packages by:
	,	a. generating a listing of the records being transmitted;
		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;
		c. transmitting records to the YMP Records Processing Center (RPC) within 90 days of completion.
	12	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.
		Note: 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.

### 4.2 Storing and Protecting CRWM QA Records

Responsible Individual(s)	Step	Procedure
LRRO		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.

### 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 Larea(s) of the LRRO by				
		a. locking all entrances to the LRRO when LRRO staff are not present and				
		b posting a list that designates those personnel who shall have access to records, including privileged records				
	4	Maintains control and accountability for records within the LRRO by				
		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;				
		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.				
		c providing documentation of access to DOE-28 (training certification, and qualification) records; and				
		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.				

### 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

DATE:

29 July 1996

**WBS 1.2.12** 

OA:L

1 PAGE

TO:

Peggy Warner

FROM:

Marlene Tucker

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.

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

# RECORDS TRANSHITTAL FORM LOCAL RECORDS CENTER - SHL DEPARTMENT 6310 YUCCA MOUNTAIN PROJECT

02/26/97

Туре	Record_	Title / Subject	Pages	RHS Number	Other Info.
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NUMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR BIENIAUSKI, Z. T.	<b>3</b> 5	\$L*150747	SCBB missing YMP CRF oh at record late
PACK	<b>0</b> 6/ <b>25/9</b> 6	RECORD PACKAGE TABLE OF CONTENTS, SNL/NIMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR YEAGER, JAMES G	32	SL*150748	SCPB missing
PACK	<b>0</b> 6/ <b>25/9</b> 6	RECORD PACKAGE TABLE OF CONTENTS, SHL/NUMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR CHENG, MJ-CHING	17	\$L*150749	YMP CRF okat record late
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SML/NUMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR MANSEN, KATHERINE M	51	\$L*150750	- same -
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SHL/NUMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR PANTHAKI, N J	11	SL*150751	- 5eme -
PACK	06/25/96	RECORD PACKAGE TABLE OF CONTENTS, SNL/NUMP CERTIFICATION, QUALIFICATION AND TRAINING RECORDS FOR THOMPSON, T W	10	\$L*150752	- Same -
• :		Total Documents in Transmittal:			

Regeneration of review conducted 11/4/96
2/27/97 Peggy Judance

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## RECORDS TRANSHITTAL FORM LOCAL RECORDS CENTER - SNL DEPARTMENT 6310 YUCCA MOUNTAIN PROJECT

Page 1 of 1 Transmittal # 612

<u>Type</u>	Record		Title / Subject	ct		<u>Pages</u>	RMS Numbe	other In	· · ·
PACK	09/27/95	QRP: 1.2.5.3.5, DTP FOR SEISHIC DATA COLLECTED AT 1449 SL*150233  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 (DTN: however, two other no SCP B  SNF08112294001.001, TDIF #304849)  Likestifiers					T.C		
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#### OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

	Perl	formano	e Report Report
Ŀ	<b>☑</b> Def	iciency	Report

NO. YM-96-D-085 PAGE

QA: L

PR/DR	CONT	TALINI	ION	PAGE
FNUA	<b>WUILL</b>			

#### 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 Name Printed

Rev. 07/03/95

#### 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 Dispute Resolution Documentation Dispute Evaluations Dispute Escalations	(L) (L) (L) (L)
1-5	Original Work Agreement Work Agreement Revisions Completed Document Review and Comment Forms for Mandatory Comments Records Documenting Any Temporary Revisions Memoranda	(L) (L) (N) (L) (N)
2-2	Study Plan Draft and Subsequent Revisions (The final is maintained by OCRWM.) 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) Training Assignment Form (Appendix A) Training Confirmation Form (Computer Generated) Individual Training Attendance Record (Appendix D) Qualification of Trainer (Appendix B) Lesson Plan Cover Sheet (Appendix C and Attachments) Course Evaluation (Developed by Trainer) Request to Provide Training (Appendix E) Memorandum of Instruction	(L) (L) (L) (L) (L) (L) (L)
2-6	Certification of Personnel Qualifications Form Related Records such as Resumes, Correspondence, Records of Telephone Conversations, and "Employee Placement Reports" if necessary to support the certification Periodic Evaluation of Personnel Proficiency Form	(L) (L)
2-9	Notification to Perform Readiness Review Review Plan Review Report Other Documentation Providing Objective Evidence of Process Completion	(N) (N) (L) (N)

2AIP 3-4	Record  Design Investigation Memo (DIM) and All Revisions  Closing Memo  DIM Task File	Designato (N) (N) (N)
3-12	Certification of Peer Reviewer Qualifications and Independence Peer Review Initiation Letter Peer Review Plan and Revisions Peer Review Notification Letter and Revisions Document Review and Comment Sheets or Equivalent Peer Review Meeting Report(s) and Revisions Peer Review Report and Revisions Peer Review Checklist (if used) All Dissenting Opinions Any Related Correspondence or Data Required to Complete the Record of the Peer Review and Actions	(r) (r) (r) (r) (r)
<b>4-1</b>	Procurement Planning Checklist (PPC). Purchase Requisition (PR) Request for Quotation/Proposal (RFQ/RFP) Contract Change Requisition(s) (CR) Amendment(s) Support Documentation (e.g. Sole-source/sole-make justification forms, memoranda, acquisition plans, supplier evaluation reports, etc.)	(X) (Y) (Y) (X) (X)
5-1	No records	
6-1	Original Copy of the Controlled Document Request for Distribution/Recall of a Controlled Document Form	(L) (N)
6-2	Document Review and Comment (DRC) Forms for Independent Technical, QA, and Management Reviews Cross Reference to Peer Review Records Submitted to the LRRO in accordance with QAIP 3-12 (Peer Reviewed Documents Only) Manuscript Review Sheet or Letter Report Review Sheet	(L) (N)
	TPO Transmittal Letter to YMPO without enclosures (SAND Documents Only)  Other Transmittal Letters to/from YMPO Regarding Comment Resolution (SAND Documents Only)  YMPO Approval Letter with Competed DRSs (SAND Documents Only)  Final SAND or SLTR Document as Published or Issued	(N) (N) (L)
6-3	No records	
7-1	Documentation of Acceptance of Services (e.g. Copies of SNL Invoice Action Forms)  Certificates of Conformance	(N) (N)
<b>7-3</b>	Contractor's QA Program Document and Transmittal Letter DRC Form or Review Checklist (Final Resolution Copy) QA Program Evaluation Transmittal Letter (Final Resolution Copy) QA Program Acceptance Letter (Final Resolution Copy)	(L) (N) (N)
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	(Ĺ)
20-3	Original Chain of Custody Forms and Photocopies of the Forms After Each Sample Transfer	(L)
	Any Special Shipping Documentation	(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 <u>any</u> 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 <u>everything</u> in the package is non-QA, then the entire record pacakge is designated QA:N/A.

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

Joe Schelling 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	Date: 10/16/96
Concurrence	QA Reviewer R.R. Richards	Date <u>15 16 , 92</u>
Approval:	SNL CRWM Lab Lead  M.C. Brady approval signature on faxed copy of this page in Document Control Records.	Date: 10/3/96

## CONTROLLED DOCUMENT

Gopy Muschen

### **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.
<b>0</b> 6	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

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).

#### 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.

#### 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.

### 3.0 DEFINITIONS, Continued

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

### 4.1 Preparation of New Procedure (continued)

Responsible Individual(s)	Step	Procedure -
QA Department Manager (Continued)	2 Cont	Note: 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.
Procedure Author	3	Shall identify applicable requirements and controls in the following sources:
		a. Quality Assurance Requirements and Description     (QARD)
		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])
		c. SNL CRWM commitments (e.g. corrective action for audit findings)
	4	Shall draft the new procedure:
		a. Refers to Appendix B for procedure format and content.
		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.
		c. Uses the auxiliary verbs "shall," "should," or "may" as described in Appendix B.
		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.)

### 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:
		a. Document Review and Comment (DRC) forms in accordance with QAIP 6-3 for the use of the QA Reviewer and Lab Lead.
		b. A Request to Provide Training on Controlled Documents form in accordance with QAIP 2-5.
•		c. A Request for Distribution/Recall of a Controlled Document form in accordance with QAIP 6-1.
	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.
		a if approved, selects a Procedure Author and sends the original request to the Author with copies to the Requester and Procedure Coordinator.
		b if rejected, returns the original request with an explanation to the Requester.

#### 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,	3	Shall d	raft the procedure change:
Requester		a.	Complies with Subsection 4.1, steps 3 through 5, as appropriate.
		b.	Numbers revisions sequentially beginning with 01.
		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.
		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.
	-	e.	Performs steps 6 through 8 of Section 4.1 for the procedure change as appropriate.

### 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.

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

Responsible Individual(s)	Step	Procedure
QA Reviewer, Lab Lead	3	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:
	,	a. Shall verify inclusion of applicable quality requirements and controls.
		b. Should verify that referenced documents, including those generated outside of the SNL CRWM, are appropriate, current, and not in conflict with applicable requirements.
	•	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.
		Note 1: The QA Reviewer serves as the independent reviewer for procedures.
		Note 2: The QA Reviewer is the only required reviewer of minor changes:
		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.
Procedure Author	4	Shall resolve comments and incorporate the applicable comments in the procedure or revision.

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

Responsible Individual(s)	Step	Procedure -
Procedure Author, QA Reviewer, Lab Lead	5	Shall sign the procedure or revision for authorship (Procedure Author), concurrence (QA Reviewer), and approval (Lab Lead) as appropriate.
		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.
		Note 2: The Procedure Author and QA Reviewer are the only required signers for minor changes.
Lab Lead or QA Department Manager	6	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.
		Note: The effective date may be left blank, in which case it will be assigned by Document Control.

#### 4.4 Issuance and Control

Responsible Individual(s)	Step	Procedure	
Procedure Coordinator	1	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:	
•		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.	

### 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	Revis	ses Orientation Manual Abstracts as necessary for changes ssues new abstracts for new procedures.

### 4.5 Requirements Matrix Preparation and Change

Responsible (ndividual(s)	Step	Procedure
QA Staff	1	Shall develop a QARD requirements matrix. This matrix shall identify  a. Where the QARD requirements are directly addressed.
·		<ul> <li>b. Where QARD requirements are not applicable based on scope of work.</li> </ul>
		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.

#### 4.6 Implementation

Responsible Individual(s)	Step	Procedure
SNL CRWM Personnel	1	Shall perform activities in accordance with approved procedures.
		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).
		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.

### 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.

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

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### 6.0 REFERENCES

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

### APPENDIX A

CIVILIAN RADIOACTIVE WASTE MANAGEMENT	Procedure Action Re	guest (PAR)
Sandia National	Flocedule Addidition	
Laboratories Section I: To Be Completed by	by Requester	•
To: QA Manager		
From: (Requester's Name)	Org. Date	
QAIP Title (or subject if new QAIP):		White Mr.
Check Action Requested:	[ ] Change Procedure	Form
[ ] Develop New Prod	cedure [ ] Change Existing P	rocedure
Reason for Request and Suggested A	ction:	
Attachment: [ ] YES	[ ] NO Hryes, Number of Pages:	
Other QAIPs/Documents Affected:	The state of the s	
Other CAN Discounting	Chi activity	
Continue to the Completed	by QA Manageror Designee	
Connict with axis.		
Request Is: [ ] Approved [ ] Rej	ected [ ]iOther Disposition Comments:	
QAIP Number:	Title:	
If New Purpose:		
Scope:	<b>9</b>	
Forward To: (Procedure Author)		Org
Please Issue New CAIP or Change by	y Date: (Optional)	
Signature and Date:		
		Date:
QA Department Manager		
		Date:
SNL CRWM Lab Lead		Jaic.

Copy to: Requester

Procedure Coordinator

CRWM 5-1.1./1-1(10-16-96)

#### **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.
- 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.
- define terms exactly the same as the definitions used in the OCRWM QARD unless there is justification for use of an SNLunique 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 <u>does not</u> imply that the actions be <u>mandatorily</u> 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.

#### 5.0 RECORDS

If records are generated as a result of implementing the procedure, this section shall include the instructions given below as appropriate for processing the records

If the record is a	then use the statement, modified as appropriate -
QA (or non-QA) record that is generated and processed by the procedure	"QA (or "non-QA") records and record packages, including corrections and changes thereto, generated as a result of implementing this procedure shall (should) be prepared and submitted to the Local Records Receiving Organization ("in a separate non-processed records package") in accordance with QAIP 17-1, "Protecting, Preparing, and Submitting CRWM QA Records", and, if applicable, add QAIP 17-2, "Processing of Technical Data on the Yucca Mountain Site Characterization Project".  and "The QA (or "non-QA") records, record package segments and record packages include: (List the individual records, record package segments, or record packages contents that are generated by the procedure and include the appropriate retention designator [LIFETIME or NONPERMANENT].). "
QA (or non-QA) record that is generated by the procedure but processed by another procedure (as does QAIP 5-1, see Section 5.0)	"The following QA (or "non-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:  OA Records  Procedure  (list QA (or non-QA) records) (list applicable procedure)"
No records are generated	"No records are generated as a result of implementing this procedure"

If none of the standard statements above fit the specific situation for the procedure, the author may use different wording as long as it clearly indicates what records are generated as a result of implementing the procedure and how those records are to be processed. The procedure author should seek assistance from Local Records Receiving Organization personnel in developing this statement.

#### 6.0 REFERENCES

This section should include a list of all documents referenced in this procedure. Referenced documents, including those generated outside of SNL CRWM Projects, should be applicable and current, and should not be in conflict with applicable requirements.

#### 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: 10-31-910

Author:	Thomas F. Ehrhorn	Date: 16/4/14
Concurrence:	QA Reviewer K. R. Richards	Date 1914/96
Approval:	for M.C. Brade  SNL CRWM Lab Lead  M.C. Brady approval signature on faxed copy	Date: 70/3/96 FU4 10/31

of this page in Document Control Records.

CONTROLLED DOCUMENT

060001

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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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	APPENDIX A: Document	Review and C	comment (DR	RC) Form (Exa	mple)	

#### 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.

### 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.

#### 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	Shall determine the personnel who are to perform the review.
•		a Shall ensure that each organization affected by a document reviews the document and changes to it.
		b. Shall ensure that each technical discipline affected by a document reviews the document and changes to it.
		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.
		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.

## 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	1	Shall resolve comments with the reviewer's assistance to reach agreement on resolutions.
		Note 1: 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.
		Note 2: 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".
·		Note 3: Discretionary comments do not need to be resolved.
	2	Document comment resolutions on the DRC form and forward to the reviewer for acceptance.
	3	If mandatory comments are noted in the technical review, then the potential impact of these conditions on other documents will be assessed
		Note: 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.
Reviewer	4	Document acceptance of comment resolution on the DRC form and return to author/requester.
		Note 1: 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.
		Note 2: 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.
		Note 3: Comments resulting from the review shall be documented and mandatory comments shall be resolved before submitting the document for approval.

Continued on Next Page

## 4.0 PROCEDURE, Continued

#### 4.3 Comment Resolution (continued)

Responsible Individual(s)	Step	Procedure
Author/Requester	,	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	Document Review and Comment (DRC) Form
REQUESTER	
From Requester/Orgn.	Date:
To Reviewer/Orgn.	Due Date:
Document Number	Revision:
Title (optional):	
	nt Technical
	viewed and Review Criteria (sample criteria on back) document is to be reviewed using the criteria on the reverse of this form appropriate to the
REVIEWER	
Comment number	of Location:
This comment is:	atory Discretionary
	<b>/</b>
,	IL, EL
Reviewer's Signature:	Date OCK
REQUESTER	
Resolution:	SANTICE INTERIOR
	SMIFTER
	5, V. C.
	-4, C.
Requester's Signature	Date:
	Cont.
REVIEWER	
Resolution Review Status: Conditionally Accepte	Not Accepted Not Accepted
Conditionally Accepte	
Reviewer's Signature	Date:
CRWM 6-3 1/1-2 (10/1/96)	

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## **APPENDIX A (Continued)**

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

#### INSTRUCTIONS

CRWM 6-3.1/2-2(10/1/96)

- 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
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 clear understands how the solution was obtained?	ty
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 accurate reported?	
reported?	10
is there sufficient background information or major of proving a proving a sufficient background information or major of proving a sufficient background information or major or	
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 report.  Are the assumptions stated appropriate for the problem and are these data capable of producing results with the accuracy report.	:đ
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?	
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?	
Limited to any address to	
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 in accounts	
A Quality Assurance review assures that documentation is consistent with procedures and that appropriate QA requirements are met and	
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 the document	
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)	
Management review confirms acceptance of the documentation being reviewed and assesses impact to YMP.	
Is there evidence that it is consistent with YMP organizing propriets (requirements decuments A.P., VA.P.,	
Is there significant impact on Project milestones, budget, or schedule?	
Is the position presented supported by Sandia National Laboratories?	
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NO. YM-96-D088

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P	ERFORMANCE/DE	FICIENCY REPORT		
1 Controlling Document:		2 Related Report No.		
QARD, Revision 5		Audit YM-ARC-96-1	8	
3 Responsible Organization:		4 Discussed With:		
SNL		R. Richards	<u>.</u> .	
5 Requirement/Measurement Criteria:				
	•		•	•
Section 5.2.2. states "Implementing performed:	documents shall inc	lude the following inform	ation as appropriate to the work	to be
H. Identification of the lifetime and I	nonpermanent qualit	y assurance records ger	nerated by the implementing doc	ument."
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6 Description of Condition:				· · · · · · · · · · · · · · · · · · ·
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Technical Procedures are being improcedures do not identify records of	plemented and generated as lifetime	rating quality assurance or nonpermanent as rec	records; however, the technical quired by the QARD.	
Examples are: TP-236, Revision 00	); TP-237, Revision (	00; TP 244, Revision 00;	TP-246, Revision 00; TP-248, F	Revision
00; TP 250, Revisio		· · · · · · · · · · · · · · · · · · ·		
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7 Initiator	· · · · · · · · · · · · · · · · · · ·	9 Is condition an isolated occur	rence?	· · · · · · · · · · · · · · · · · · ·
AII. Y	e <b>8/1/9</b> 6	□ Yes ■ No	□ Unknown; Must be Yes if P	P
	: 0/1/30	D 162 E 140	C Officially, Must be Testi T	
10 Recommended Action: (Not required for PR)		•		
1) Correct Technical Procedures that	at wore identified as	deficient	•	
i) Correct reclinical Procedures the	at were identified as	denoient.		• •
2) Evaluate other technical procedu	res to determine cor	npliance with this require	ement and make appropriate	•• •
corrections to deficient procedure	es. Provide objective	e evidence of evaluation	and corrective actions.	
11 QA Review:	0 + 0(	12 Response Due Date		
QAR Mario R. Diaz You do	Date 8-1-96	20 working day	s from issuance	
13 Affected Organization QA manager Issuance	Approval: (QAR for PR)	01 100	111 90	2 ~!
Printed Name 12.E.SPE	NCE Signat	ure labort 15 La	molable Pate Y	.t.46
22 Corrective Action Verified		23 Closure Approved by:		
QAR James & Clark	Date 5/15/9	7/ 400AM	Dates	12/97

## OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT. U.S. DEPARTMENT OF ENERGY

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4 Remedial Actions:					
See Continuati	Lon Page.				·
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5 Extent of Condition:	(Not required for PR)	· · · · · · · · · · · · · · · · · ·	·	<u> </u>	
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6 Root Cause Determin	nation: (Not required 1	for PR) R	equired TYes	<b>™</b> No	
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17 Action to Preclude R	ecurrence: (Not requi	red for PR) R	oquired Yes	X No	
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18 Corrective Action C	ompletion Due Date:	19 Response by		US FER	
N/A		Initial		9/4/94	Phone HE-0641
20 Response Accepted		Amended	Date 21 Response Accep	7/7/74  ted (N/A for PR):	Phone PIF-0C II
	NIA		AOQAM	NA	Date
QAR	Date		LAGGAM		Rev. 07/15/5

2/5/96 Brilly to Spiner

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8		Performance Report
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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.

Performance Report  Deficiency Report	
NO. <u>YM-96-D-088</u>	
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QA: L	

#### PR/DR CONTINUATION PAGE

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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PERFORMANCE/DEFICIENCY REPORT RESPONSE
14 Remedial Actions:
SEE AMENDED RESPONSE CONTINUATION PAGE.
SET MINERALL MESTANSE CHAMMAN MAGE.
15 Extent of Condition: (Not required for PR)
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SEE AMENDED RESPONSE CONTINUATION PAGE.
16 Root Cause Determination: (Not required for PR) Required Yes Tho
SER AMENDED RESPONSE CONTINUATION PAGE.
JEE FIMENUED VIESIONE
17 Action to Preclude Recurrence: (Not required for PR) Required Yes No
SEE AMENDED RESPONSE CONTINUATION PAGE.
18 Corrective Action Completion Due Date: 19 Response by:
SEE A R CONTINUATION PAGE Phone
20 Response Accepted (N/A for PR):
DATE 10-15-96 ADDAM Jams Blayfol from Date 10/18/96
Exhibit AP 16.1Q.2 Rev. 07/15

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#### PR/DR CONTINUATION PAGE

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 OP I Warner

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

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NO. YM-	96-D-088
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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 Name Printed JAMES E. CLARK



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.

Attachment (10 pages)

F. Joseph Schelling SNL YMP QA Lead

Sincerely

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

05/16/97 FRI 09:29 FAX 5058480739 213/97 Attachment p 1 of 10 F95

TP-236 Revision 02 Page 1 of 5

### SANDIA NATIONAL LABORATORIES

### YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

#### TECHNICAL PROCEDURE

TP-236

Tape Extensometer Measurements

Revision 02

Author:

Ron Taylor, Principal Investigator

Date: \_\_

Approved:

Quality Assurance Review

Date: 1/3//97

SNL YMP Manager

Date: 1/3/97

Effective Date: 1/3//97

TP-236 Revision 02 Page 2 of 5

## REVISION HISTORY

Revision 00	Effective Date 8/7/95	Summary 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

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ATTACHMENT 2/3/97

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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

TP-236 Revision 02 Page 4 of 5

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.

TP-236 Revision 02 Page 5 of 5

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"

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SNL YMP

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## Sandia National Laboratories Yucca Mountain Site Characterization Project

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TECHNICAL PROCEDURE (TP)

TP-237 Revision 01

Installation and Verification of Instrumentation Wiring

Author:	Ron S. Taylor	Date:	1/30/97
Approved:	Club Luc Independent Technical Review	_ Date:	1/30/97
Approved:	SNL YMP QA Review	Date:	1/31/97
Approved:	Danneels, 6853 CNL YMP Manager	Date:	1/31/97

Effective Date: //3//97

Attachment p7 of 10 113/97 695

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Sandia National Laboratories

Yucca Mountain Site Characterization Project

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
Approved:	Plute hu Date: 1/30/97 Independent Technical Review
Approved:	On 7 Pellet Date: 1/3/197 /SNL YMP QA Review
Approved:	Date: 1/3/97  Milliannbels, 6853  SNL YMP Manager

Effective Date: 1/3/ /97

Attachment p8 of 10 95 43/97

SNL YMP

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#### Sandia National Laboratories Yucca Mountain Site Characterization Project

#### TECHNICAL PROCEDURE (TP)

TP-246 Revision 01

Co	ntrol of Measuring and Test Equipment Us	ed in the Exploratory Studies Fac
Author:	Ron S. Taylor Date:	1/30/97
Approved:	Clutchu Date: Independent Technical Review	1/30/97
Approved:	Ooln 7 Pelletin Date: SNL YMP QA Review	1/3//97
Approved:	J. J. Dannedis, 6853 SNL YMP Manager	1/31/97
	Effective Date:	1/31/97

2/3/97 ATTACHMENT P9, 10 CG/5

SNL YMP

TP-248 Revision 01 Page 1 of 10

Sandia National Laboratories
Yucca Mountain Site Characterization Project

TECHNICAL PROCEDURE (TP)

TP-248
Revision 01

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

Author:	Ron S-Taylor	_ Date:	1/30/9
Approved:	Clute Luc Independent Technical Review	) . Date:	1/30/97
Approved:	John 7 Relleti ENL YMP QA Review	Date:	1/31/97
Approved:	J/Mannegls SNL YMP Manager	Date:	1/31/97

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SNL YMP

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Sandia National Laboratories
Yucca Mountain Site Characterization Project

### TECHNICAL PROCEDURE (TP)

TP-250 Revision 01

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

Author:	<u>Ron S. Taylor</u> Date: 1/30/97
Approved:	Celeta Mu Date: 1/30/97 Independent Technical Review
Approved:	John 7 Pelletin Date: 1/31/97.  SNL YMP QA Review
Approved:	J. M. Date: 1/3/97  J. M. Date: 1/3/97  SNE YMP Manager

\*IEPArtomanitification of the Policy Report

NO. YM-96-D090

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PERFORMANCE/DEFICIENCY REPORT			
1 Controlling Document:	2 Related Report No.		
AP-16.1Q, Revision 0; AP 16.2Q, Revision 0; QAIP 17-1 Revision 02	, Audit YM-ARC-96-18		
3 Responsible Organization:	4 Discussed With:		
SNL	R. Richards		
5 Requirement/Measurement Criteria:	to a strong in Plack 12 of		
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."			
	es 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 proc	edural 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)	9 Is condition an isolated occurrence?		
Mario R. Diaz laus for Date 8/1/96	□ Yes   No □ 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: 12 Response Due Date			
QAR Mario R. Diaz Jain Jay Date 8-1-96 20 working days from issuance			
	ature Cobert B. Quantable Pate 8.7.96		
22 Corrective Action Verified  QAR  Date 3	Date 5/2/97		
Exhibit AP-16. FQ.1	ENCLOSURE 4 Rev. 07/15/96		

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SEE A/R CONTINUATION PAGE   Initial SEE A/R COT	Phone
20 Response Accepted 21 Response Accepted (N/A	
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NO. <u>YM-96-D090</u>

<sup>8</sup> Derformance Report

#### 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-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.

Exhibit AP-16.1Q.3

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Performance Report  Deficiency Report
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NO. YM-96-D090
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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 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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NO. YM-96-D090 PAGE 5 OF 5

#### 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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no. <u>YM-96-D-090</u>
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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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Exhibit AP-16, 10, 3

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No. YM-96-D-090	NO 37M-96-T-090	

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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 Name Printed HANK GREENE

Exhibit AP-16.1Q.3

Operated for the U.S. Department of Energy by

Sandia Corporation

Albuquerque, New Mexico 87185-1326

January 10, 1997 WBS: 9.1.3.2

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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

Copy (w/o attachments) to:

Attachment (6 pages)

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

Exhibit AP-16.1Q.1

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Deficiency Report

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NO. YM-96-D090

PAGE 1 OF. 75 75

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

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1 Convoling Document:	2 Releve	d Report No.	•	
AP-16.1Q, Revision 0; AP 16.2Q, Revision 0; QAIP 17- Revision 02		YM-ARC-96	-18	
3 Responsible Organization:	4 Discussed	With:	_	
SNL	R. Richa	rds		
\$ Requirement/Measurement Criteria:			•	•
AP-16.1Q, Revision 0, Section 5.3.b states, "The responsible DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR, with signature and date in Block 13 and a proportion of the DR.	nsible indiv osed due d	idual (RI) do ate in Block	cuments remedial 14."	actions in Block 12 of
Section 5.3.e states in part, "The RI, based on a review the root cause determination and action to preclude rec	of the reco urrence."	e bebnemme	ctions in Block 17	of the DR, indicates
Section 5.7.a states, "The QAR performs verification an identifying the objective evidence reviewed."	d documer	nts the verific	cation on a DR Cor	ntinuation Page,
Section 7.1 states, "Completed DRs, Continuation Page	es and all n	elevant corre	spondence are life	etime QA records."
AP-16.2Q, Revision 0, Section 5.4.5 states, "The affecte evaluation by signing the appropriate justification corres (Continued on page 3)	ed organiza spondence.	ation QA Ma	nager concurs with	the extension request
6 Description of Condition:				
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Examples are:  SNL-96-D5 proposed due date for remedial action SNL-96-D2 remedial actions and proposed due of SNL-96-D5 root cause determination and action SNL-96-D2 was verified and closed; however, the SNL-96-D2 and D5 are missing some relevant of SNL-96-C-01 an extension request letter signed QA records package. However, docudes not exist.  (Continued on page 3)	dates are mandates	nissing. recurrence evidence re ince. ly and dated	viewed is missing. 2/27/95 was issue	ed and made part of the
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Mario R. Diaz Volum Gou Date 8/1/96	10163		D OTRIBUTE, IN	1031 00 103 11 11
<ol> <li>Correct documentation identified as deficient.</li> <li>Review other deficiency documentation to verify соп</li> </ol>				nake corrections as
appropriate. Provide objective evidence of review at	nd correctiv	e actions ta	Ken.	
11 QA Review.	12 Respons	e Due Date		
QAR Mario R. Diaz Him Lay Date 8-1-96	20 work	king days	from issuance	
13 Affected Organization QA manager Issuance Approval: (QAR for PR)  Printed Name PESPENCE Signat	ture	AB.C	Brotablas	- Date 8.7.96
22 Corrective Action Verified	23 Clos	ure Approved by:		
QAR Date	AC	MAG	•	Date

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Exhibit AP-16.10.2
9/5/96 Brady & Spence

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## RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C. PERFORMANCE/DEFICIENCY REPORT RESPONSE 14 Remedial Actions: See Amended RESPONSE CONTINUATION PAGE. 16 Extent of Condition: (Not required for PR) SEG AMENDED RESPONSE CONTINUATION PAGE. Yes 16 Root Cause Determination: (Not required for PR) Required SEE AMENDED RESPONSE CONTINUATION PAGE. ☐ Yes 17 Action to Préclude Recurrence: (Not required for PR) Required SEE AMENDED RESPONSE CONTINUATION PAGE.

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

## 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-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.

Exhibit AP-16.1Q.3

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8 Performance Report    Deficiency Report				
NO. YM-	96-D090			
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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.

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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.

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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.

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Performance Report Deficiency Report				
NO. YM- PAGE 5	96-D090 of 5 QA: L			

## 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.

B Performance Report Deficiency Report	
NO. <u>YM-96-D-</u> 090	
PAGE Of all	

## 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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PP&C-96-17.0N	
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QA: L

## 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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NO. YH-96-D494 PAGE OF QA: L

## 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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	NO.YM-	96-D494
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QA: L

## 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

Exhibit AP-16.TQ.3

Block 19, Response by:

✓ Amended R. R. Richards

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

P. 23 of 126

Pay 07/03/95

Operated for the U.S. Department of Energy by Sandia Corporation Albuquerque, New Mexico 87185-1326

date: December 20, 1996

Deficiency Document Package Record Sources

from: 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 is 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.

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

date: December 16, 1996

T. E. Ehrhorn, 6811, MS-1335

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

from: F. J. Schelling, \$250, 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

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.

Continuation pages provided with the amended response are not numbered. Numbered the continuation pages.

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.

The continuation page, block 8, no "pages of". Added the "pages of". (% 3+4)
On the DDEF, the deficiency sequence number is a sequence of the instructions for DDEF block 1 [AP-16.3Q] and AP-16.1Q, section 6.3d). Prepared a superseding DDEF with the number constructed correctly.

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.





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

- 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.
- 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.
- S. On the DDEF, the date correction was improperly done. Replaced the DDEF with a superseding DDEF negating the correction.
- 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.
- 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

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1. The "Pages of" numbers are not complete. Corrected in a supplemental record done by Bob Richards 10/17/96.

12. 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.

∴ The QAR did not complete the DDEF. Bob Richards (the QAR) signed the superseding DDEF.

SNL-96-D004

OK From UNGAS

On the DR form, block 2 is not marked NA. Entered N/A in block 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 in 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 WH

RMS SL\* 15/732

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 Report SNL-96-D-04  Deficiency Document Encoding Form RNATION ONLY  Memo, from R. R. Richards, to File, re: Verification of Completion of	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 f DR SNL-96-D-4	For 3	

TOTAL PAGES

24

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.

Signature of Record Source

12/11/14\_

THOMS & BHRHORN

Record Source (Printed)

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

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27 Corrective Actions Verified

Exhibit AP-16.1Q.2

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## PR/DR CONTINUATION PAGE

#### CONTINUED : Block 6

- for list of unolved participants (suppliers) :
  - E. Ryder / N. Francis/M. Piggus/E. Dunn/S. Sobolik/T. George/J. Pott/M. Lee
- Training Files and Database show no evidence to support WA-0182. training requirement for RAIPS 2-5 and 2-6 for All participants 8:

## - B. Arnold /R. Fully /T. George /J. Pott /E. Lyder

## NOTE:

- 1) The SNL Training Database continues to be unconsistent with LRC YMP Personnel Training Files (Handespy) evidence and lacks credit for training completions, as tollows:
  - L. Coster/B. Arnold/E. Dunn/R. Fully /T. George/J. Pott/E. Ryder/S. Sabolik/ N. Françis have completed QAIP 1-5 training. The database does Not dow this completed training.
  - B. Arnold /T. Ecorge / J. Pott /E. eyder have completed WA-0182 terming. The Eatstage does not show this empleted training.

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## 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.

Deficiency Report	١
NO. SNL-96-04	
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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 assingments were made, i.e. all personnel were assinged all procedures regardless of applicability.

The results of the investigation suggest that the root cause of this deficiency is that there is no perminent 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.

Ax. 1,1996.

	OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT DEFICIENCY DOCUMENT ENCODING FORM
1.	Document No.  Issuing Org. Code  Fiscal Yr. (last 2 digits)  Document Type  Seq. Number  Extension number (for multiple deficiencies)
	Doc. Type Codes:  C - Corrective Action Request D - Deficiency Report P - Performance Report N - Nonconformance Report T - STIR
2.	Initiation Date 61/1—12157—19161 (MWDDYY)
3.	Deficiency Code: 101212 41-196
	Deficiency Code: [0 2 ] INROEQUATE TEMBER OF 13/3/96
	Deficiency Code: [ *
4.	Deficiency Cause Code: 1214 - 41-196
	Deficiency Cause Code: [ ZICL LACK of ATTENTION GIVEN TO TASK OT 13/3/14
•	Deficiency Cause Code: [] •
5.	Hardware Code: (if applicable)
6.	Supplier: (if applicable)
7.	Miscellaneous: (If applicable)
8.	Data File Review:
•	Open deficiency found: No Ses - DD#
	Three or more recurring deficiencies in the same organization noted in last 4 quarters? Who TYEST TRAINING ASSIGNMENTS IN CORDINATION WILLIAM ASSIGNMENT If Yes, STIR initiated?    Yes - STIR No.   No - If No, provide justification:
•	
	C 1 . ~ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

• Sec latest revision of Trending Codes List

## **Sandia National Laboratories**

Albuquerque, New Mexico 87185

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 NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NH 87185-1330

#### TRAINING SNAPSHOT

\*\*\* COSTIN, LAURENCE S. \*\*\* SNL 6852 M/S 1325

YMP

WBS Assigned:

Last Certified: YMP

01/20/92

TYPE	NUH	REV ICN	TITLE	TARGET	COMPLETE		PROJ	TRAIN	ROLL
	,			DATE	DATE	DUE		STAT	OVEF
			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	<b>A</b> ,	
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		YNP	A	
CLASS			GET 1.4: SAFETY & REALTH INDOCTRINATION	03/09/93	03/09/93	•	YMP	A	
CLASS			SCIENTIFIC NOTEBOOKS, GAIP 20-02	05/25/95	05/25/95		YMP	A .	
CLASS			NOW DO WE ENSURE PROFICIENCY GAIP 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	
CLASS			YMP ORIENTATION				YMP	A	
MANUAL		•	YMP Orientation		12/09/86		YMP	A .	٠.
MANUAL			GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	05/31/94	05/05/94		YMP	1	
'Al	•		PACS AND 10,000 YEAR TEST		12/09/86	*	YMP	A ·	
0			PACS AND 10,000 TEAK TEST					٠.	
		•	Release of Unpublished Information to Monparticipants		08/23/89		YMP	1	
APQ	01.06	0	Release of Unpublished Information to Nonparticipants		08/23/89		YMP	1	
APQ	01.06	01	Configuration Hanagement	10/19/90	09/30/90		YMP	I	
APQ	03.06	0	Configuration Hanagement	07/30/93	09/09/93		YMP	1 -	
APQ	03.06	0 1	Configuration Management	07/30/93	09/09/93		YMP	ı	
APQ	03.06	0 2	Configuration Management	07/30/93	09/09/93		YNP	1	
APQ	. 03.06	-	Technical Information Flow To and From the Yucca Mountain Si	06/15/92	06/02/92		YMP	1	
APQ	05.02	03	Technical Information Flow To and From the Yucca Mountain Si	07/30/93	09/09/93	•	YMP	ı	
APQ.	05.02	04	TECHNICAL INICIALITICAL PLOR TO BIRD TO CHE THE THE TECHNICAL THE TECHNICAL PROPERTY OF THE TECH	,	08/23/89		THP	1	
APQ	05.04	0	. C Lidiantian of Evicting Data	07/30/93	09/09/93		YMP	I	
APQ	05.09	02	Qualification of Existing Data Qualification of Existing Data	10/19/90	09/30/90		YMP	1	
APQ	05.09	1	quatification of existing beta	10, 11, 11	08/23/89		YMP	1	
APQ	05.17	0	t-acciona Cambral	07/30/93	09/09/93		YMP	A	
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	07/19/91	08/05/91		YMP	1.	
APQ	05.19	1	Interface Control	01717771	08/23/89		YMP	1 .	
APQ	05.20	0	Document Hold Control	07/30/93	09/09/93		YMP	A	
APQ	05.20	01	Document Hold Control		09/09/93		YMP	I	
APQ	06.01	04	Project Office Document Development, Review, Approval, and R		08/04/91		YMP	1	
APQ	06.01	3	Project Office Document Development, Review, Approval, and R	10/25/95	12/15/95		YMP	Ā	
APQ :	16.01	00	Performance/Deficiency Reporting	10/25/95	12/15/95		YKP	· K	
APQ	16.02	00	Corrective Action And Stop Work	10/23/73	11/27/89		YMP	1	
DOP	02-03	, A	Work Plans	0/ /10/00	04/18/90		YMP	I	
	02-03	A 1	Work Plans	04/19/90	08/22/89		YMP	1	
<u>(</u> .	02-04	A	Analysis Control and Verification	05 /04 /00	04/09/90		YMP	i	
DOP	02-04	A 1	Analysis Control and Verification	05/01/90	-		YMP	1	
DOP	03-10	В	Routine Calculations	05/04/90	05/01/90		YMP	1	
DOP	03-10	B 1	Routine Calculations	02/26/91	02/06/91			10	,
					Ψ,	<b>38</b>	0+	121	0

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### Sandia National Laboratories SNL NUMP 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	COMPLETE	OVER	PROJ	TRAIN
•				• • • •		DATE	DATE	DUE		STAT
	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	1
	DOP	03-17	0	1	Preparing Technical Information Documents		10/25/89		YMP	1
	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 '
	PIAD	01-03	04		Stop Work Orders	08/26/94	08/25/94		YMP	1.
	QAIP	01-04	00		Resolution of Quality Assurance Disputes	09/23/92	09/03/92		YMP ,	<b>A</b>
	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		AMb	1
	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
	<b>'</b> P	01-05	07		Establishing Work Agreements	09/25/94	08/26/94		YMP	1 .
•	, P	01-05	80		Establishing Work Agreements	04/20/95	03/24/95		YMP	I
	PIAP	01-05	09		Establishing Work Agreements	03/01/96	02/06/96		YMP	A
	QAIP	02-02	02		Study Plan Requirements	03/01/96	02/06/96		YMP	Α,
•	CAIP	02-04	02		Conducting and Documenting Analyses and Calculations	03/04/96	02/01/96		YMP	A
	CAIP	02-05	00		Training	05/01/92	04/17/92		YMP	1
	GAIP	02-05	00	1	Training	01/04/93	01/18/93		YMP,	1
	CAIP	02-05	01		Training	10/01/93	09/03/93		YMP	1
	QAIP	02-05	02		Training	06/10/94	05/12/94	•	YMP	1
	QAIP	02-05	03		Training	06/30/95	07.440.407		YMP	!
	QAIP	02-06	01		Qualification and Certification of Personnel	03/31/93	03/19/93		YMP	1
	QAIP	02-06	02		Qualification and Certification of Personnel	03/03/95	01/27/95		YMP	1
	QAIP	02-06	03		Qualification and Certification of Personnel	06/30/95			YMP	1
	QAIP	02-10	01		Determination of Applicable QA Controls	03/26/93	02/28/93		YMP	1
	QAIP	03-02	02		Software Quality Assurance Requirements	09/04/92	09/03/92		YMP	ī
•	QAIP	03-02	02	1	Software Quality Assurance Requirements	02/12/93	02/02/93		YMP	1
	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	ı
	QAIP	03-12	00		Peer Reviews	06/30/93	06/17/93	·	YMP	. [
	QAIP	03-12	01		Peer Reviews	06/03/94	05/05/94		YMP	, , ,
	QAIP	04-01	03		Procurement	04/22/93	04/12/93		TMP	
	QAIP	04-01	03	1	Procurement	05/17/93	07/01/93		YMP	1
	QAIP	04-01	04		Procurement	01/09/94	12/14/93		YMP	1
	QAIP	04-01	05		Procurement	06/10/94	06/14/94 10/31/94		YMP	•
	GAIP	04-01	06		Procurement	10/23/94	•			•
į		05-01	02		Quality Assurance Implementing Procedures	02/26/93 04/22/93	02/04/93		YMP	
•	0410	06-01	00		Document Control System		04/12/93		YMP YMP	
	CAIP	06-01	01		Document Control System	06/03/94	05/05/94		YMP	
	CAIP	06-01	02		Document Control System  Reviewing Approving and Issuing Technical Information Deau	10/28/94	09/29/94			t
	QAIP	06-02	02		Reviewing, Approving, and Issuing Technical Information Docu	05/17/93	07/02/93	) -	YMP	٠.

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Sandia National Laboratories SNL NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NM 87185-1330

### TRAINING SNAPSHOT

\*\*\* COSTIN, LAURENCE S. \*\*\* SNL 6852 M/S 1325

YKP

WBS Assigned:

Last Certified: YMP

01/20/92

TYPE	NUM .	REV ICN	TITLE	TARGET	COMPLETE	OVER	PROJ	TRAIN	RC.
				DATE	DATE	DUE		STAT	OVE
QAIP	06-02	03	Preparing, Reviewing, Approving, & Issuing Technical Informa	10/16/94	09/21/94		YMP	I	-
CAIP		03 1	Preparing, Reviewing, Approving, & Issuing Technical Informa	03/31/95			YMP	1	
QAIP		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		AMb	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	1	
QAIP	06-03	03	Conducting and Documenting Reviews of Documents	09/13/95	08/28/95		YMP	۸.	
QAIP	07-01	00	Procurement Acceptance Verification	11/30/92	11/08/92		YMP ,	1	
CAIP	07-03	00	Evaluation of Contractor QA Program Documents	09/15/90	09/26/90		YMP	1	
QAIP	07-03	01	Evaluation of Contractor QA Program Documents	06/30/93	06/17/93		YMP	Α	
QAIP	10-01	01	Surveillances	06/19/92	08/21/92		YMP	1	
QAIP	15-01	00	Nonconformance Control and Reporting	06/08/92	08/21/92		YMP	1	
'P	16-01	00	Corrective Action	05/25/92	05/05/92		YMP	I,	
	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	.1	
QAIP	16-01	03	Corrective Action	06/15/94	07/28/94		YKP	I	
. QAIP	16-01	04	Corrective Action	10/28/94	09/28/94		YNP	I	
GAIP	16-01	05	Corrective Action	02/08/95	04/02/95		YMP	1	
QAIP	16-01	06	Corrective Action	08/06/95	07/07/95		YMP	1	
QAIP	17-01	00 ·	Protecting, Preparing, and Submitting YMP QA Records	06/10/92	06/02/92		YMP	1	
QAIP	17-01	01	Protecting, Preparing, and Submitting YMP QA Records	06/16/94	07/26/94		YMP	ı	•
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	. 1	
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	1	
QAIP	20-02	01	Scientific Notebooks	04/27/95	04/02/95	<b>,</b>	YMP	Å	
QAPD	•	00	Quality Assurance Program Description	09/02/91	08/17/91	l	YMP	I	
WA	-0162	00	Review of Rock-Mass Properties Models	03/24/95	04/02/99	5	YMP	A	
WA	-0163	00	Develop Triaxial Rock Testing Capability	03/08/95	02/12/99	5	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	02/12/9		YMP	A	
WA	-0183	00	Evaluate Sealing Requirements and Assumptions for ACD.	03/15/95	03/19/9		YMP	A	:
WA	-0190	00	INEL Laboratory Scale Experiments	03/22/95	02/24/9		YMP	A	Ì
WA	-0209	00	YMP SITE GEOTECHNICAL REPORT	02/28/96	02/01/9	6	YMP	A	.
YAP	02.020	00	Preparation, Review, Approval, and Revision of Site Characte	03/01/96	02/06/9	6	YMP		1
YAP	03.020	00 .	Configuration Management	03/25/94	02/28/9		YMP	٠,٨	. !
YAP	05.019	00	Document Development, Change, Review, and Approval Control	01/05/94	12/04/9	3 ,	YMP	. A	
	\$111.10		Qualification of Existing Data	04/15/94	04/27/9	4	YMP	A	
1	\$111.20		Technical Information Flow To and From the Yucca Mountain Si	09/16/94	08/22/9	4	YMP	A	
									1

Sandia National Laboratories SNL NUMP TRAINING Dept. 6752, NS 1330 Albuquerque, NM 87185-1330

### TRAINING SHAPSHOT

\*\*\* POTT, JOHN . \*\*\* SNL 6852 M/S 1399

WBS Assigned:

03/03/92 Last Certified: YMP

TYPE	NUM	REV ICN	TITLE	TARGET DATE	COMPLETE DATE	OVER DUE	PROJ	TRAIN STAT	RCL CVE
				01/27/93	01/27/93		YMP	A	
CLASS			GEOLOGY FOR NON-GEOLOGISTS	03/09/93	03/09/93	•	YMP	 A	
CLASS			GET 1.2: SITE ORIENTATION	03/09/93	03/09/93	•	YMP .	A .	
CLASS			GET 1.4: SAFETY & MEALTH INDOCTRINATION	05/07/93	05/17/93		YMP	A	
CLASS		•	NEW UNDERGROUND WORKER YMP TRAINING	03/11/73	03/09/93		YMP	A	
CLASS			GET: EMPLOYEE RADIOLOGICAL TRAINING	03/07/73	03/09/93	,	YMP	A	•
CLASS			GET 1.3: ENVIRONMENTAL REQUIREMENTS	05/25/95	05/25/95		YMP	Ä .	
CLASS			SCIENTIFIC NOTEBOOKS, GAIP 20-02	05/23/75	05/31/95		YHP	Ā	
CLASS			HOW DO WE ENSURE PROFICIENCY GAIP 2-5 AND 2-6	03/31/95	03/13/95		YMP	A	
CLASS			LICENSING PROCESS WORKSHOP		09/25/95		YMP	Ā	
CLASS			AP16.10 & AP16.20	09/25/95	11/04/94		YMP	Ä	
MANUAL			YMP ORIENTATION	0/ /01 /01	02/05/91		YMP	Ä	
NUAL			YMP Orientation	04/01/91			YMP	1	
LUAL			GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	05/31/94	05/27/94		YMP	Å	
VIDEO	•		PACS AND 10,000 YEAR TEST	04/01/91	02/05/91		inr	^	
APQ	01.06	O	Release of Unpublished Information to Nonparticipants	04/01/91	03/18/91		YMP	1 .	
APQ	01.06	01	Release of Unpublished Information to Konparticipants	04/01/91	03/18/91		YMP	I	
APQ	05.19	02	Interface Control	07/30/93	10/01/93		YMP	A	
•	05.19	.02 1	Interface Control	07/30/93	10/01/93	•	YMP	A	
APQ APQ	05.19	02 2	Interface Control	07/30/93	10/01/93		YMP	A	
	05.19	1	Interface Control	07/19/91	08/14/91		YMP	1	
APO	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		04	Project Office Document Development, Review, Approval, and R	07/30/93	10/01/93		YMP	1	
APQ	06.01		Project Office Document Development, Review, Approval, and R		07/18/91		YMP	1 .	
APQ	06.01	3	Performance/Deficiency Reporting	10/25/95	09/25/95		YMP	A	
APQ	16.01	00	Corrective Action And Stop Work	10/25/95	09/25/95		YMP	A	
APQ	16.02	00	Work Plans	04/01/91	03/12/91		MP	1	
DOP	02-03	A		04/01/91	03/12/91		YMP	1	
DOP	02-03	A 1	Work Plans Analysis Control and Verification	04/01/91	03/12/91		YMP	1	
DOP	02-04	A	• •	04/01/91	03/12/91		YHP	1	
DOP	02-04	A 1	Analysis Control and Verification	04/01/91	03/14/91		YMP	1	
DOP	03-10	8	Routine Calculations	04/01/91	03/14/91		YMP	1	
DOP	03-10	B 1	Routine Calculations	04/01/91	03/14/91		YMP	1	
DOP	03-12	Α.	Peer Reviews	04/01/91	03/14/91		YMP	1	
DOP	03-12	A 1	Peer Reviews	04/01/91	03/15/91		YMP	ı	
DOP	03-17	0	Preparing Technical Information Documents	10/28/92	10/22/97		YMP	,I	
DOP	03-17	0 3	•	10/14/93	09/14/93		YMP	1.	
•	01-03	01	Stop Work Orders	11/26/93	11/19/9		YMP	1	
	01-03	02	Stop Work Orders	06/03/94	05/05/9		YMP	1	
QAIP	01-03	03	Stop Work Orders	08/05/94	08/05/9		YMP	1	
QAIP	01-03	04	Stop Work Orders		08/24/9		YMP	Å	
QAIP	01-04	00	Resolution of Quality Assurance Disputes	09/23/92	VV/ E7/ 7			મ 15	6

### Sandia National Laboratories SNL NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NM 87185-1330

### TRAINING SNAPSHOT

\*\*\* POTT, JOHN . \*\*\* SNL 6852 M/S 1399

YMP

WBS Assigned:

Last Certified: YMP 03/03/92

			BEW 169		TARGET	COMPLETE	OVER	PROJ	TRAIN	R
	TYPE	NUM	REV ICK	TITLE .	DATE	DATE	DUE		STAT	0
		01 05	03	Establishing Work Agreements (WA)	04/19/93.	03/26/93		YMP	I	
	CAIP	01-05		Establishing Work Agreements	10/03/93	10/01/93		YMP	I	
	CAIP	01-05	04		12/31/93	12/22/93		YMP	1	
	QAIP	01-05	05		06/10/94	06/29/94		YHP	1 .	
	QAIP	01-05	06	EREADERSHING HOLK VALCOUNCES	09/25/94	09/12/94		YKP	ı	
	QAIP	01-05	07	Establishing work waterments	04/20/95	03/23/95		YMP	ı	
	QAIP	01-05	80	Establishing work Agreements	03/01/96	02/05/96		YMP	A	N
	CAIP '	01-05	09	Establishing work Agreements	03/01/96	02/05/96		YMP,	A	
	CAIP	02-02	02	Study Plan Requirements	07/16/93	07/09/93		YMP	i	
	CAIP	02-04	00	Conducting and Documenting Ameryscs	06/03/94	05/05/94		YMP	1	
	QÁIP	02-04	01	Conducting and pocumenting Ameryses		11/23/94		YMP	Ä	
	QAIP	02-04	02	torracting and occaning Analysis and	11/16/94			YMP	ī	
	QAIP	02-05	00	(FE)NING	05/01/92	04/20/92			1	
	MP	02-05	00 1	Training	01/04/93	12/15/92		YMP	•	
	(IP	02-05	01	Training	10/01/93	09/07/93		YMP		
•	CAIP	02-05	02	Training	06/10/94	05/12/94		YMP		
	QAIP	02-05	03	Training	06/30/95			YMP		
	QAIP	02-06	01	Qualification and Certification of Personnel	03/31/93	03/22/93		P	1	
	CAIP	02-06	02	Qualification and Certification of Personnel	03/03/95	01/27/95		YMP	1	
	QAIP	02-06	03	Qualification and Certification of Personnel	<b>06/3</b> 0/95			YMP	. 1	
	QAIP	02-09	.00	Readimess Review	05/10/95	05/18/95		YMP	A	
•	QAIP	02-10	01	Determination of Applicable GA Controls	10/14/93	09/14/93		YMP	ı	
	GAIP	02-10	01 1	Determination of Applicable QA Controls	10/14/93	09/14/93		YMP	ı	
	QAIP	03-02	02	Software Quality Assurance Requirements	09/04/92	09/03/92		YMP	1	
		03-02	02 1	Software Quality Assurance Requirements	02/12/93	01/28/93		YMP	ı	
	QAIP	03-02	02 .	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	Ä	
	QAIP		00	Routine Calculations	06/30/93	07/09/93		YMP	1	
	QAIP	03-10	00	Peer Revieus	06/30/93	07/09/93	•	YMP	I	
	QAIP	03-12		Peer Revieus	06/03/94	05/05/94		YMP	A	
	CAIP	03-12	01		04/22/93	04/23/93		YMP	1	
	QAIP	04-01	03	Procurement	05/17/93	05/26/93		YMP	1	
	QAIP	04-01	03 1	Procurement	01/09/94	12/22/93		YMP	1	
	QAIP	04-01	04	Procurement	06/10/94	06/29/94		YMP	1	
	QAIP	04-01	05	Procurement	10/23/94	10/24/94	,	YMP	1	
	QAIP	04-01	06	Procurement	04/22/93	04/23/93		YMP	1	
	QAIP	06-01	00	Document Control System	06/03/94	05/05/94		YMP	1	
	QAIP	06-01	01	Document Control System		09/28/94		YMP	Å	
	QAIP	06-01	. 02	Document Control System	10/28/94				ì	
	PIAP	06-02	02 .	Reviewing, Approving, and Issuing Technical Information Docu	05/17/93	05/26/93		YMP		
	· •р	06-02	03	Preparing, Reviewing, Approving, & Issuing Technical Informa	10/16/94	10/17/94		YMP	1	
٠	.1P	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		
	CAIP	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	<b>a</b> .	YMP	1	
				•			4. '	tol 0	t 15	V

### Sandia National Laboratories SNL NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NM 87185-1330

### TRAINING SNAPSHOT

\*\*\* POTT, JOHN . \*\*\* SNL 6852 M/S 1399

YMP

WBS Assigned:

Last Certified: YMP

03/03/92

	•								
	-	REV ICH	TITIE	TARGET	COMPLETE	OVER	PROJ	TRAIN	ROL
TYPE	NUM	KEY ICK		DATE	DATE	DUE		STAT	OVE
	04.07	02	Conducting and Documenting Reviews of Documents	10/26/94	09/26/94		YMP	1	
CAIP	06-03 06-03	03		09/13/95	10/01/95		YMP	A	
QAIP	07-01	00	Procurement Acceptance Verification	11/30/92	12/15/92		YMP	1	
QAIP	10-01	01	Surveillances	06/19/92	06/18/92	•	YMP	1	
QAIP	12-01	01	Measuring and Test Equipment Control	10/14/93	09/14/93	•	YMP	1	
QAIP	12-01	02	Measuring and Test Equipment Control	01/02/94	12/22/93		PKY	1	
QAIP	12-01	03	Measuring and Test Equipment Control	06/03/94	05/05/94		YMP	t .	
QAIP '	12-01	04	Heasuring and Test Equipment Control	09/07/94	08/08/94		YMP .	Į,	
QAIP	12-01	05	Measuring and Test Equipment Control	08/17/95	07/18/95		YMP	A	
QAIP		00	Corrective Action	05/25/92	05/11/92		YMP	1 .	
QAIP	16-01	01	Corrective Action	06/30/93	07/09/93		YMP	· 1	
QAIP	16-01	02	Corrective Action	01/21/94	12/03/93		YMP	ī	
QAIP	16-01	02	Corrective Action	01/02/94			YMP	ı	
19	16-01 16-01	03	Corrective Action	06/15/94	05/27/94		YMP	1	
.P	16-01	04	Corrective Action	10/28/94	09/28/94		YHP	.1	
QAIP QAIP	16-01	05	Corrective Action	02/08/95	01/13/95		YMP	. 1	
QAIP	16-01	06	Corrective Action	08/06/95	07/07/95		YMP	I	
QAIP	17-01	00	Protecting, Preparing, and Submitting YMP GA Records	06/10/92	06/10/92		YMP	1	
	17-01	01	Protecting, Preparing, and Submitting YMP QA Records	06/16/94	05/27/94		PAR	1	
QAIP	17-01	02	Protecting, Preparing, and Submitting YMP GA Records	10/26/94	10/24/94		YMP	A	
QAIP QAIP	17-01	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	1	
QAIP	18-01	02	Quality Assurance Audits	01/02/94	12/22/93		YMP	1	
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	1	•
QAIP	20-01	00	Technical Procedures	10/14/93	09/14/93	•	YMP	1	
QAIP	20-01	00	Scientific Notebooks	10/14/93	09/14/93		YMP	1	
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	1	
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	1	
	-0065	01	Construction Monitoring Activities in the North Ramp Starter	09/12/93	08/13/93		YMP	I	
WA WA	-0065	02	Construction Monitoring Activities in the North Ramp Starter		11/16/93		YMP	1	
	-0065	03	Construction Monitoring Activities in the North Ramp Starter		08/18/94		YMP	A	
WA 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	· <b>A</b>	
WA	-0182	00	Development of the YMP Thermal Testing Strategy	03/01/96	02/05/96	Ì	YMP	A	N7
WA	-0185	00	Supporting Analyses for an In Situ Thermal Testing Program	03/10/95	02/15/95		YMP	A	
W/A	-0189	00	X-Ray Powder Diffraction Analysis	03/22/95	02/25/95	ļ	YMP	A	;
į., ., .	02.029	00	Preparation, Review, Approval, and Revision of Site Characte	03/01/96	02/05/96		YMP	A	
YAP	05.019	00	Document Development, Change, Review, and Approval Control	01/05/94	12/22/93	;	YMP	A	
INC			··································						

P. 44 0+ 126

05/01/90

## Sandia National Laboratories SNL NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NM 87185-1330

### TRAINING SNAPSHOT

			SNL 6852 H/S 1325	YMP .	•			
WBS Ass	ER, ERIC	£. ***	SNL 0032 N/3 1323		• -	•		
	ertified:	WIPP	06/02/92			•		
	ertified:	•	11/28/95					
		•					TRATU	ROLL
TYPE	NUM	REV ICN	TITLE	TARGET		OVER PROJ	TRAIN	
				DATE	DATE	DUE	STAT	OVE
					'an inn an	w.s		
CLASS		•	HOW DO WE ENSURE PROFICIENCY GAIP 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 I	
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	^ .	
			•	40.407.405	44 447 405	WIP	A	
QAP	17-1	01	WIPP Quality Assurance Records Source Requirements.	12/07/95	11/13/95		î,	
QAP	19-1	01	WIPP Computer Software Quality Assurance Requirements.	12/07/95	11/13/95	WIP	ī	
QAP	19-1	01 1	WIPP Computer Software Quality Assurance Requirements.	12/07/95	11/13/95	WIP	À	-
QAP	19-1	02 .	WIPP Computer Software Quality Assurance Requirements.	12/27/95	11/27/95	WIP	Â	
QAP	2-1	01	Qualification and Certification of Personnel.	12/07/95	11/13/95	WIP	Â	
•	2-2	01	Orientation and Training Program	12/07/95	11/13/95	WIP	Ā	
	2-5	01	Issuing and Lifting Stop Work Orders.	12/07/95	11/13/95	WIP	Â	
QAP	2-6	01	Conducting and Documenting Readiness Reviews.	12/07/95	11/13/95	WIP	Ā	
QAP	3-1	01	Managing Design and Analysis Contracts.	12/07/95	11/13/95	WIP	Ā	Ĭ
QAP	6-1	01	Document Control System	12/07/95	11/13/95	WIP	Ä	
CAP	6-2	01	Preparing, Reviewing, and Approving Technical Information Do	12/07/95	11/13/95	WIP	Ā	
QAP	6-3	01	Conducting and Documenting Reviews of Documents.	12/07/95	11/13/95	WIP		:
QAP	9-1	01	Quality Assurance Requirements For Conducting Analyses	12/13/95	11/13/95	Wir	. <b>"</b>	
					08/17/89	YMP	1	•
APQ	01.06	0	Release of Unpublished Information to Nonparticipants		08/17/89	YMP	1	:
APQ	01.06	01	Release of Unpublished Information to Nonparticipants	10/19/90	10/01/90	YMP	1	
APQ	03.06	0	Configuration Management	07/30/93	10,01,70	YNP	ı	
APQ	03.06	0 1	Configuration Management	07/30/93		YMP	1	
APQ	03.06	0 2	Configuration Management	07/30/93		YMP	1	
APQ	03.06	0 3	Configuration Management		06/05/92	YMP	ı	
APQ	05.02	03	Technical Information Flow To and From the Yucca Mountain Si		09/08/93	YMP	I	
APQ	05.02	04	Technical Information Flow To and From the Yucca Mountain Si	01730773	08/17/89	YMP	1	
APQ	05.04	0		07/30/93	00, 11,0,	YMP		
APQ	05.09	02	Qualification of Existing Data	10/19/90	10/01/90	YMP		
APQ	05.09	1	Qualification of Existing Data	10/ 17/ 70	08/17/89	YMP	•	
APQ	05.17	. 0			08/17/89	YMF		
APQ	05.20	0	Document Hold Control	07/30/93		YMF		
APQ	05.20	01	Document Hold Control		09/08/93	YMY	_	
APQ	06.01	04	Project Office Document Development, Review, Approval, and R		07/08/91	YMY		
APQ	06.01	3	Project Office Document Development, Review, Approval, and R	10/25/95	10/09/95	YM	_	
APQ	16.01	00	Performance/Deficiency Reporting	10/25/95	10/09/95	YM!	_	
	16.02	00	Corrective Action And Stop Work	10/63/73	11/30/89	YM		•
1	02-03	<b>A</b>	Work Plans	04/19/90	04/18/90	YM	_	
DOP	02-03	A 1	Work Plans	U4/ 17/7U	08/18/89			
DOP	02-04	A	Analysis Control and Verification	05/01/90				

02-04

DOP

Analysis Control and Verification

#### Sandia National Laboratories SNL NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NK 87185-1330

#### TRAINING SHAPSHOT

\*\*\* RYDER, ERIC E. \*\*\* SNL 6852 M/S 1325

WBS Assigned:
Last Certified: WIPP 06/02/92
Last Certified: 11/28/95

TARGET

CEST C	ertilleu.					
TYPE	NUM	REV ICN	TITLE	TARGET	COMPLETE OVER DATE DUE	PROJ TRAIN RC
1112				DATE	04/30/90	YMP I
DOP	03-10	В	Routine Calculations	05/04/90		YMP I
	03-10	:B 1	Routine Calculations	02/26/91	02/08/91	YMP 1
DOP	03-10	A	Peer Reviews		08/17/89	
DOP	03-12	1	Peer Reviews		02/16/90	YMP I .
DOP	03-12	Ô	Preparing Technical Information Documents		08/17/89	****
DOP		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
DOP	03-17 01-03	04	Stop Work Orders	09/23/94	09/06/94	YMP I
QAIP	•	00	Resolution of Quality Assurance Disputes	09/23/92	08/21/92	AND Y
QA1P	01-04	03	Establishing Work Agreements (WA)	04/19/93	03/26/93	AWD I
QAIP	01-05	03	Establishing Work Agreements	10/03/93	09/09/93	YMP 1
QAIP	01-05	05	Establishing Work Agreements	12/31/93	12/07/93	YMP I
QAIP	01-05		Establishing Work Agreements	06/10/94	05/20/94	YMP I
'IP	01-05	06 07	Establishing Work Agreements	09/25/94	09/06/94	YMP I
	01-05	07	Establishing Work Agreements	04/20/95	03/27/95	YMP I
QAIP	01-05	80	Establishing Work Agreements	03/01/96	02/09/96	YMP A
QAIP	01-05	09	Study Plan Requirements	03/01/96	02/09/96	YMP A
QAIP	02-02	02	Conducting and Documenting Analyses	07/16/93	06/21/93	YMP I
QAIP	02-04	00	Conducting and Documenting Analyses	06/03/94	05/05/94	YMP I
CAIP	02-04	01	Conducting and Documenting Analyses and Calculations	11/16/94	11/08/94	YMP A
QAIP	02-04	02		10/01/93	09/07/93	YMP 1
CAIP	02-05	01	Training	06/10/94	05/12/94	YMP I
QAIP	02-05	02	Training	06/30/95		YMP I
QAIP	02-05	03	Training Qualification and Certification of Personnel	03/31/93	03/11/93	YMP I
QAIP	02-06	01	Qualification and Certification of Personnel	03/03/95	01/27/95	I GMY
GAIP	02-06	- 02	Qualification and Certification of Personnel	06/30/95		AND 1
QAIP	02-06	03	Readiness Review	05/10/93	04/12/93	YMP A
QAIP	02-09	.00	Determination of Applicable QA Controls	03/26/93	03/01/93	YMP I
QAIP	02-10	01		09/04/92	09/21/92	YMP I
QAIP	03-02	02	Software Quality Assurance Requirements	02/12/93	01/28/93	AWb 1
QAIP	03-02	02 1		02/26/93	02/05/93	YMP A
CAIP		01	Design Investigation Control	03/26/93	03/01/93	YMP A
QAIP		01 1		09/23/94	08/26/94	YMP A
QAIP		02	Design Analysis and Verification	06/30/93	06/10/93	YMP I
QAIP	03-10	00	Routine Calculations	06/30/93	06/10/93	YMP I
QAIP	03-12	00	Peer Reviews	06/03/94	05/05/94	YKP A
· QAIP	03-12		Peer Reviews	04/22/93	04/12/93	YMP I
QAIF	04-01	03	Procurement	05/17/93	04/22/93	YMP I
QATE	04-01		•	01/09/94	12/17/93	YMP I
	04-01		Procurement	06/10/94	05/20/94	YMP I
	04-01		Procurement	10/23/94	10/03/94	YMP 1
QAII	04-01		Procurement	04/22/93		I qwy
QAI	P 06-01		Document Control System	06/03/94		үкр 1
QA1	P 06-01	01	Document Control System			5 of 126
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Sandia National Laboratories SHL NUMP TRAINING Dept. 6752, MS 1330 Albuquerque, NH 87185-1330

#### TRAINING SNAPSHOT

RYDER, ERIC E. \*\*\* SNL 6852 M/S 1325

WBS Assigned:

06/02/92

	Last C	ertified:	WIPP	06/02/92		•			
		ertified:		11/28/95					
					TARGET	COMPLETE OVER	PROJ	TRAIN	R
	TYPE	NUM	REV ICN	TITLE	DATE	DATE DUE	,	STAT	C
		•			10/28/94	09/28/94	YNP	A	
	QAIP	06-01	02	Document Control System	05/17/93	04/22/93	YMP	1	
	QAIP	06-02	02	Paviautho Approving and Issuing fecinities	10/16/94	09/23/94	YMP	1	
	QAIP	06-02	03	preparing Keylewing, Approving, a tourns	03/31/95	07/23/74	YMP	1	
	QAIP	06-02	03 1	preparing, Reviewing, Approving, & tasting recimited	09/01/95	09/26/95	YMP	A	
	QAIP	06-02	04	Preparing, Reviewing, Approving, & Issuing Technical Informa	- · · ·	01/28/93	YMP	1	
	QAIP	06-03	00	Conducting and Documenting Reviews of Documents	02/12/93 08/13/93	07/16/93	YMP	ı	
	QAIP	06-03	01	Conducting and Documenting Keyleks of Documents		09/26/94	YMP.	1	
	QAIP	06-03	02	Conducting and Documenting Reviews of Documents	10/26/94	09/26/95	YMP	A	
	QAIP	06-03	03	Conducting and Documenting Reviews of Documents	09/13/95	11/04/92	YMP	1	
	QAIP	07-01	00 .	Procurement Acceptance Veriffication	11/30/92	08/23/90	YMP	1	
	QAIP	07-03	00	Evaluation of Contractor QA Program Documents	09/15/90	06/10/93	YMP	Ā	
	QAIP	07-03	01 .	Evaluation of Contractor QA Program Documents	06/30/93	06/16/92	YMP	i	
	119	10-01	01	Surveillances	06/19/92	08/26/94	YMP	. 1	
	IP	12-01	04	Measuring and Test Equipment Control	09/23/94		YMP	Ā	
	QAIP	12-01	05	Measuring and Test Equipment Control	08/17/95	07/18/95	YNP	ī	
	QAIP	15-01	00	Nonconformance Control and Reporting	06/08/92	05/27/92	YNP	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	40.407.407	•	1	
	QAIP	16-01	02	Corrective Action	01/21/94	12/03/93	YMP	1	
	QAIP	16-01	03	Corrective Action	06/15/94	05/20/94	YMP	1	
	QAIP	16-01	04	Corrective Action	10/28/94	09/28/94		1	
	QAIP	16-01	05	Corrective Action	02/08/95	01/18/95	YMP	. 1	
	QAIP		06	Corrective Action	08/06/95	07/07/95	AMb		
	CAIP		00	Protecting, Preparing, and Submitting YMP QA Records	06/10/92	06/05/92	YMP	I	
	QAIP		01	Protecting, Preparing, and Submitting YMP QA Records	06/16/94	05/20/94	· YMP	Ī	
	QAIP		02	Protecting, Preparing, and Submitting YMP QA Records	10/26/94	10/04/94	YMP	A .	
	QAIP		02	Participant Data Archive (PDA)	09/23/94	08/26/94	YMP	A .	
•	CAIP		00	Software Quality Assurance Requirements	01/09/94	12/17/93	YMP	1	
	QAIP		01	Software Quality Assurance Requirements	06/17/94	05/20/94	YMP	_	
	QAIP		00	Scientific Notebooks	09/23/94	08/26/94	YMP		
			01	Scientific Notebooks	04/27/95	04/17/95	· YMP		
	QAIF		00	Quality Assurance Program Description	09/02/91	08/16/91	YMP		
	QAPE		00	Non-1sothermal-PA/ Process Level Task	09/14/94	08/26/94	YMP		
	WA	-0137	00	Data Assumptions Updating	01/15/95	01/18/95	YMP		
	WA	-0161 -0166	00	Scientific Basis for Design	01/20/95	01/18/95	YMP		
	WA	-0164	. 00	Development of the YMP Thermal Testing Strategy	03/01/96	02/09/96	YMP		
	· WA	-0182		Preparation, Review, Approval, and Revision of Site Characte	03/01/96	02/09/96	YMP	A .	
	YAP			Configuration Management	03/25/94	03/05/94	YMP	<b>,</b>	
		03.020		Document Development, Change, Review, and Approval Control	01/05/94	12/07/93	YMP	• •	
	٠ الم	05.010		Technical Information Flow To and From the Yucca Mountain Si	09/16/94	08/26/94	YMF	) A	
	YAP	\$111.2	OO 0	Iscultical thinding tion to and the tion of the					

Sandia National Laboratories SNL NUMP 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

E	NUH	REV 1CI	TITLE	TARGET			PROJ	TRAIN STAT	ROI
-				DATE	DATE	DUE		3141	J.
		•	AP-16.10 AND AP-16.24	06/08/95	06/08/95		YMP	A	
ISS			PROBLEM IDENTIFICATION, CONTROL, & FEEDBACK	06/08/95	06/08/95		YMP	٨	
lss			LICENSING PROCESS WORKSKOP	03/13/95	03/13/95		YMP	A .	
ISS			SCIENTIFIC NOTEBOOKS, QAP 20-2	06/08/95	06/08/95	•	YMP	A	
ISS			GUIDEBOOK FOR INTERACTIONS BETWEEN DOE AND NRC	10/07/94	09/20/94		YMP	I	
NUAL			YMP Orientation	10/07/94	10/07/94		YMP	A .	
NUAL			YMP ORIENTATION		11/30/94		YMP	A	
NUAL DEO			PACS AND 10,000 YEAR TEST	10/07/94	09/20/94		YNP	<b>` A</b>	
				10/07/94	10/05/94		YMP	A	
<b>Q</b>	01.06	01 -	Release of Unpublished Information to Nonparticipants		06/08/95	•	YMP	A	
Q	16.01	00	Performance/Deficiency Reporting	10/25/95 10/25/95	06/08/95		YMP	A	
- 1	16.02	00 -	Corrective Action And Stop Work		09/21/94			ī	
	03-17	0	Preparing Technical Information Documents	10/07/94	09/21/94		••••	. 1	
P	03-17	0 1	Preparing Technical Information Documents	10/07/94	09/21/94		YMP	1	
P	03-17	0 2	Preparing Technical Information Documents	10/07/94 10/07/94	09/21/94		YMP	ı	
P	03-17	0 3	Preparing Technical Information Documents	-	97/21/74		YMP	1	
IP.	01-02	06	Organization	10/07/94	09/21/94		YMP	1	
ΙP	01-03	04	Stop Work Orders	10/07/94	09/21/94		YNP	Ā	
IP	01-04	00	Resolution of Quality Assurance Disputes	10/07/94	09/21/94	•	YMP	1	
(IP	01-05	07 .	Establishing Work Agreements	10/07/94 04/20/95	03/29/95		YMP	i	
\IP	01-05	80	Establishing Work Agreements	03/01/96	02/05/96		YMP	Ā	
\IP	01-05	09	Establishing Work Agreements	03/01/96	02/05/96		YMP	A	
AIP	02-02	0Ż	Study Plan Requirements	03/01/96	02/26/96		YMP	A	
AIP	02-04	02	Conducting and Documenting Analyses and Calculations	10/07/94	09/21/94		YMP	1	
AIP	03-10	00	Routine Calculations	10/07/94	10/05/94		YMP	1	
AIP	06-01	01	Document Control System	. 10/28/94	09/28/94		YMP	Ā	
AIP	06-01	02	Document Control System		10/05/94		YMP	1	
AIP	06-02	02	Reviewing, Approving, and Issuing Technical Information Docu		10/05/94		YMP	ı	
AIP	06-02	03	Preparing, Reviewing, Approving, & Issuing Technical Informa	10/ 10/74 07/71/05	(6/62/74		YNP	ī	
AIP	06-02	03	Preparing, Reviewing, Approving, & Issuing Technical Informa	03/31/95 09/01/95	09/07/95		YMP	Ā	
AIP	06-02	04	Preparing, Reviewing, Approving, & Issuing Technical Informa	•	07/17/95		YMP	I	
AIP	06-03	02	Conducting and Documenting Reviews of Documents	08/11/95 09/13/95	09/07/95		YMP	Ā	
AIP	06-03	03	Conducting and Documenting Reviews of Documents		10/05/94		YMP	ı	
AIP	16-01	.03	Corrective Action	10/07/94	09/28/94		YMP	ī	
AIP	16-01	04	Corrective Action	10/28/94 02/08/95	01/23/95		YMP		
AIP	16-01	05 ·	Corrective Action			•	YMP	I	
AIP	16-01	06	Corrective Action	08/06/95	07/07/99 10/05/94		YMP	1	
•	17-01	01	Protecting, Preparing, and Submitting YMP QA Records	10/07/94			YMP	Ā	
	17-01	02	Protecting, Preparing, and Submitting YMP QA Records	10/26/94	10/05/94 07/17/99		YMP	_	
QĂIP	19-01	01	Software Quality Assurance Requirements	08/11/95			YMP	-	
QAIP		01		08/11/95			YMP		
QAIP		01	Scientific Notebooks	06/13/95	06/13/9	, <b>~</b>		6 <del>-</del> f 13	

Sandia National Laboratories
SNL NUMP TRAINING
Dept. 6752, MS 1330
Albuquerque, NH 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	DATE	OVER DUE	PROJ	TRAIN STAT	ROL OVE
WA WA	-0182 -0185		Development of the YMP Thermal Testing Strategy Supporting Analyses for an In Situ Thermal Testing Program Develop Rounding Representations Of Unsaturated Fracture Flo	03/01/96 03/10/95 04/14/95	02/05/96 03/02/95 05/12/95	•		A 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	<del></del>	Date: <u>02/20/96</u>
		•	٠.
QA	•	•	
Review:	Original Signed By		Date: 02/23/96
		•	
			•
			•
	natures above serve to document the re		
Supplier sign	atures include comment resolution and	approval of the Work Agreement.	
		Effective Date: 03/04	3/06

# 6.0 TRAINING REQUIREMENTS

	· ne	Personnel
PROCEDU QAIP 1-3	Stop Work Orders	All SNL supplier personnel listed in WA Requirements Table
QAIP I-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
	Qualification and Certification of Personnel .	Larry Costin
QAIP 2-6 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:	
To: R.R. Richards, 6812	
From: <u>Mandette</u> Jaronul	L.
Request for Extension for DR SNL-90	6-D-4:
This extension is for a Response or	Corrective Action
Requested Due Date: 05/80/96	<b>-</b> •
The justification is:	
QAIP 1-5, is being revised	) you gard, Rub,
QAIP 1-5, is being revised and is delayed in the	seview process.
Extension Request Approval:	
Signed: Signed:	Date:4/1/96
Reason for Rejection:	
Extension Rejection:	
Signed:	Date:

Rev. 04/11/96

RRR:6812

# 4.0 PROCEDURE, Continued

#### 4.1 Preparing, Reviewing, and Approving a Work Agreement (continued)

Responsible Individual(s)	Ştep	Procedure -
QA/ Technical 7 Reviewer(s)		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 mandatory comments 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	· · · · · · · · · · · · · · · · · · ·	5/28/92 Date
Concurrence:	Robert Richards	<u> </u>	<u>5/28/96</u> Date
Approval:	Michaele C. Brady, SNL CRWM Lab Lead		5/29/90 Date

RMS SL\* 151763

QRP: 1.2.11 OA:L Page 1 of 1

#### 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

DATE

TITLE/DESCRIPTIVE DATA

**PAGE COUNT** 

Table of Contents

03/18/96

Revised Deficiency Report SNL-96-D-003

LRC NOTE

1
INFORMATION

**TOTAL PAGES** 

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

F. J. Schelling

Record Source (Printed)

YMP:1.2.11:AUD:OA:CAR SNL-96-D003 YMP RPC

5	pages

RECORD	ACCEPTED
AT LRC	4/18/94

# OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY

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		_	

AT LRC - 4/18/40	WASHINGTON, D.C.	· · · · · · · · · · · · · · · · · · ·	PAGE 1 OF Z QA: L
PE	ERFORMANCE/DEFICIENCY RE	PORT	
1 Controlling Document: SNL YMP QAIP 1-5		2 Related Re YMQAD-9	-
3 Responsible Organization: 6852	4 Discussed With: Eric E. Ryder	. •	
QAIP-1-5, Section 4.4, ste Upon completion check negotiate any addition through a final revis	to assure all deliverables be mal termination actions and c	nave been red document the	cieved and actions
•			
6 Description of Condition: For WA-0074, and WA-0130 t negotiated deliverable.	the final revision of the WA o	did not refl	ect the

DOUGIG L. MIGHET	Date 12/12/93	CAR	Primade	3010 1 0 1 0 1 0 1
10 Response Due Date		11 QA	Issuance Approval	
Jan. 10, 1996		QAR (I	PRI/ADDANT King and	Date 12/15/25
12 Remedial Actions:		<del></del>		
Memos to the WA-074 and WA-130 to document that the deliverables gene	file will be prepared ar craled under these WA	nd appen As were a	ded to the submitted records packa cceptable.	ges to
•	: -		•	
•				٠
			•	
13 Repedial Action, Response By:	<del> </del>	i4 Rem	edial Action Due Date	
Troll-	Date 2-12-96			Date 3-12-96
S Remedial Action Response Acceptance	:	16 PR 1	/enlication/Closure	

NA

Exhibit AP-16 10 1

Date

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

8 DR NO.	SNL-	96-D-0	2 8
PAGE	2	of 2	3/16/94
		QA; L	722

1 <b>~</b> 1 ~ 1	$\sim$	REPORT
16 38 H-153	( : Y	KEP(IKI
	$\mathbf{v}$	

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 VMQAD-95-D-10.

19 Root Cause Determination:

Competed as part of YMQAD-95-D-10.

20 Action to Preclude Recurrence:

Competed as part of YMQAD-95-D-10.

21 Response by:	22 Corrective Action Completion Due Date:
See #13 Date -	See # 14
23 Response Accepted	24 Response Accepted // /
CAR Claudette Javan Bate 2/13/96	AODAM Frehands Date 2/13/96
?5 Amended Response Apcepted	26 Amended Response Accepted
R N/A Date	AOQAM N/A Date
Corrective Actions Verified.	28 Closure Approved by:
OAR Akuhauds Date 3/18/96	ADDAM Tobalaces Date 3/18/96
F. L'L's AD 40 40 6	

Exhibit AP-16.1Q.2

Rev. 07/03/95

P.56 of 126

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 were completes remedial action for DR SNL-96-DO3, with regard to WA-130. I observed that their were has been received by the Local Resols Receiving Organization as a set recold to the recolds package identified directly above. Phachaelds 3/10/96

Albuquerque, New Mexico 87185-1325

to: WA-074 File

date: March 12, 1996

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

Hote: This weno completes the venedial action to DR SUL-96-203, with vegant to WA-074. I observed that Thus news has been received by the Local Records Receiving Org. as a QA record to be added to the words package wintified dwelly above Phallands 5/18/96

OFFICE C SIVILIAN RADIOACTIVE WASTE MANAGEMENT DEFICIENCY DOCUMENT ENCODING FORM
1. Document No.    Issuing Org. Code_J   RECORD ACCEPTED
2. Initiation Date リューロリーリン (MM/DD/YY)
3. Deficiency Code: 1015 191 . Inflementing Decuments - ETHER
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Deficiency Cause Code: [] *
5. Hardware Code: (if applicable)
6. Supplier: (if applicable)
7. Miscellaneous: (if applicable)
8. Data File Review:
Open deficiency found: No XYes - DD#
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:
NI4
OAR PRoblands Date 12/11/15
* See latest revision of Trending Codes List
Exhibit AP-16.3Q.2 Draft Rev. 06/20/9

QRP: 1.2.11 OA:L Page 1 of 1

#### 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

DATE

TITLE/DESCRIPTIVE DATA

Table of Contents

10/17/96

Revised Deficiency Report SNL-96-D-002

LRC NOTE
ORMATION ONLT

**TOTAL PAGES** 

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 Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-002 YMP RPC.

. RMS SI * 15064		· · · · · · · · · · · · · · · · · · ·			Qn:L 6 pages
RECORD ACCEPTED  AT LRC 4/16/94	RADIOACTIVE V U.S. DEPART	OF CIVILIAN VASTE MANAGEM MENT OF ENERGY NGTON, D.C.	1		y Report
	PERFORMANCE	DEFICIENCY REPO		•	
1 Controlling Document:			2 Related Re	port No.	•
SNL YMP QAIP 1-5		• •	YMQAD-9	95-D-010	
3 Responsible Organization:		4 Discussed With:			
6850		David S. Kesse	l .		•
5 Requirement/Measurement Crite	ria:			·	
negotiate any add through a final r	litional terminati revision to the WA	on actions and do	cument the	actions	
•	•				*
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					. Lavie
7 Initiator Donald P. Wro Donald P. Wrobel	Date 12/12/	9 OA Review 195 OAR How	hack		12/10/25
10 Response Due Date: 2/13/	a s	9 QA Review	hack		
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# OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

8DR NO. SWL-96-D462 ) PAR OF 3 10/17/9. of 3 QA: L

·	GTON, D.C.
DEFICIEN	CY REPORT
17 Recommended Actions:	
Tracommended redons.	
	• •
deliverables that differ from the delivera	from the customer for the acceptance of the stated in the WA, or omission of Record Center (LRC) to be added to the WA
·	
8 Investigative Actions:	
Completed as part	YMQ4-D-95-D-10
<b>V</b>	
9 Root Cause Determination:	
ì	· '
•	
Completed as part of	Y YMQAD-95-D-10.
·	
	· ·
O Action to Preclude Recurrence:	
	•
Completed as part of	YMQA-0-95-D-10
2/13/96	
response by:	22 Corrective Action Completion Due Date:
en Illicon W/D Kessebaren 2/5/96  B Response Accepted	N/A Ortelar
	24 Response Accepted
DAR Plandville Jarran Mare 2/13/96	ADDAM Halace Date 2/15/96
5 Amended Response Accepted	26 Amended Response Accepted
IR /Y//4 Date	AOQAM N/A Date
Corrective Actions Verified	28 Closure Approved by:
Date 2/20/96	ADDAM La Sular Soare 2/28/96
nibit AP-16.10.2 J.C.Freud	Rev. 07/03/95

Exhibit AP-16.10.2 J.C.FREWO

P. 62 of 126

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

Performance Report Deficiency Report
NO.SNL-96-DAPZ

QA: L

#### PR/DR CONTINUATION PAGE

Corrections made to this document, and their explanations, include:

Page I, block 8 - the page total for this form (3) was added; it had been omitted previously.

Page I, block 10 - the convected entry for the Response Due Date was added (\*2/13/96\*).

Originally, a convection to the Response Due Date of Jan. 10, 1996, was made by C.P. Javapillo.

The convection was made to change the date to 2/13/96; this convection was also actually made on 2/13/96. Since the convected entry and the date of the convection were the same Its.

Java millo in advertently failed to write the Java millo in advertently failed to write the convected entry. That has now been convected.

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.

10/17/96

SUPPLEMENT TO MCESSION Numa	ER 1701. 17460429. 0457	1-45-14/4

DEFICIENCY DOCUMENT ENCODING FORM
1. Document No.    Issuing Org. Code
2. Initiation Date [1]2]—[1]5]—[9]5] (MM/DD/YY)
3. Deficiency Code: [\$1519] * Interpreted Documents - other
Deficiency Code: [] *
Deficiency Code: [*
4. Deficiency Cause Code: [φ[2]0] * [κοιωνές μας μοτ υρέο ακ μας υρέο [πικεινένη
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 XYes - DD# 5~L-96-0 003 / NOT COMMINTO - O IFFOURT CRES
Three or more recurring deficiencies in the same organization noted in last 4 quarters?   No  Yes
If Yes, STIR initiated? Yes - STIR No
SNE- 96- 0-2 63 LIERE GENERATED AS A RESULT OF YMERO-95-0-10-
ALL USE REMED TO SAME INCIDENCE. THIS RETRESETED REMEDIAL
ACTIONS AWATED TO YA-95-0-10
Date 12/19/15
See latest revision of Trending Codes List

Exhibit AP-16.3Q.2

Draft Rev. 06/20/95

**ORP: 1.2.11** QA:L Page 1

#### SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE FOR CORRECTIVE ACTION REQUEST (CAR) SNL-96-C-01

DATE	TITLE/DESCRIPTIVE DATA Table of Contents	PAGE COUNT 1	LRC NOTE
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 Re	equest 2	
12/01/95	Defiency 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 Corrective Action Request SNL-96 C-01	to 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 of Due Date for CAR SNL-96-C-01	on l	•
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 Corre Action Request (CAR) SNL-96-C-01	ective 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 PAGE	s	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.

Signature of Record Source

12/10/94 Date

THOMAS F HIRHORN

Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-C-01

YMP CRF

#### RECORD ACCEPTED 8

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

CAR NO.	SNL	96-C-Ol
PAGE	1	05 25 06-c
		Oak Pag

U.S. DEPART	TMENT OF ENERGY
RMS SL * WASHI	INGTON, D.C.
CORRECTIVE	ACTION REQUEST
1 Controlling Document:	2 Related Report No.:
OCRWM "QA Requirements and Description	· · · · · · · · · · · · · · · · · · ·
	Discussed With:
	•
SNL · · · · · · · · · · · · · · · · · · ·	C. A. Rautman
SNL QAIP 1-5, para. 3.2 and 3.3: "Lower work prescription. Because of their 1st to prescribe technical activities define and allocate specific work scope controls and deliverables, and communic contractors."  8 OCRWM QARD, para. 2.2.1.8.1, and .3: "Each	tier WAs will be issued to provide a detailed ack of detail, upper tier WAs cannot be used (lower tier WAs) are prepared by TLs or PIs to e, identify graded QA and technical requirements cate this information to support staff and ch Affected Organization shall establish a ments The system shall provide positive
control over internal interfaces with	
(WBS 1.2.3.2.2.2) has not been assured,	
implementing instructions for exe of responsibilities, actions to be The one detailed implementing pro- Technical Procedure 162, applies WBS 1.2.3.2.2.1. Concerning WA 15, the two related only to work at Colorado State Ur	required interface control and detailed ecution of the work (e.g., identification be performed, deadlines, desired products, etc.) ocedure related to this work-that exists, to only one aspect of the activities within di lower-tier WAs, WA 177 and WA 178, apply niversity; all other work governed by this med at SNL by the Task Leader and others)
R. R. Richards Date 11/30/95	10: Does a stop work condition exist?  YesNo; If Yes, Attach copy of SWO
순 Recommended Actions: Pa. Revise WA 14 and WA 15 to reflect cur all appropriate QA controls.	If Yes, Check One: A B C D  rent content of the WBS element and to include  n, lower-tier work agreements for all work
governed by the upper-tier WAs.  c. Investigate all work done to date in determine how the quality of the work (correspondence, information to the I	WBS 1.2.3.2.2.1 and 1.2.3.2.2.2 to can be represented or initiate actions Sechnical Data Base, revisions to SAND Reports, work to be "unqualified" for use in the
1 QA Review:	المراسم
JES F Ell Date 12/1/95	12 Response Due Date:  Dec. 11, 1995  Extraction 100 100 100 100 100 100 100 100 100 10
Affected Organization OA Manager Issuance Approval:  Printed Name R.R. Richards Signa	sture Flendands Date 12-01-95

YMP: 1.2.11: AUD: OA: SNL-96-C-0

# OFFICE OF CIVILIAN DIOACTIVE WASTE MANAGEMENT

BCAR NO. SNL-96-C-OL PAGE Z OF X G QA: L DIST

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

8	区	Corrective Action
		Request

NO. SNL-96-C-01 PAGE 3 OF \$76

#### **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):

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):

- 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 uppertier 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.

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

8 Correctiv	e Action
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PAGE	G OF G 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

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

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.

Albuquerque, New Mexico 87185-1333

**WBS 1.2.11.5** 

to: Christopher A. Rautman, MS-1324 (6115)

QA

from: Robert R. Richards, 6812

date: December 1, 1995

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 <u>root cause</u> 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 Drevfus

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

	OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT DEFICIENCY DOCUMENT ENCODING FORM				
1		Document No.  Issuing Org. Code  Fiscal Yr. (last 2 digits)  Document Type  Seq. Number  Extension number (for multiple deficiencies)			
	•	Doc. Type Codes:  C - Corrective Action Request D - Deficiency Report P - Performance Report N - Nonconformance Report T - STIR			
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		unthin this organization. of 4/2/96			
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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.

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

CAR NO. SNL-96-C-OL

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

Corrective A Request	ction
NO. SNL-	-96-c-01

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

## Corrective Action Response, CAR No. SNL-96-C-01

#### Remedial Action (CAR Block 14):

- 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.
- 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. Javamle

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. Spychala). 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 exits, 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 Spychala 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 1.2.3.2.2.2.2 lists QAIP 3-2. WA-0015 under obsolete QA Control Section references QAGR 1.2.3.3.3.3.3 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 ere 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.

P. 85 4 126

- 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

WBS: 1.2.3.2.2.2.1 WA-0014
Systematic Acquisition of Site Specific Sub Surface Information

- 1) <u>Statement of Work</u> 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 WA-0015

<u>Develop 3 Dimensional Rock Characterization Models</u>

- 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

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 Spychala 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 80, 1996
TO: R. R. Richards, 6319 WS 1333
FROM: L.S. Costin, 6852, M/3 1325
RE: Request for Extension on Due Date for:
Audit No. M/A , CAR No. SNL _ 96-C-O1
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, reguest is: Regarding Remedial Actions - Concurrently with actions to develop the changes to cat -14 4WA-15 called for
in Paned. Act. #1 the over-al WA process is being adjusted by SNL CRUPT
wangsewent. As a consequence (resulting from management raries of the WA
revs.) These two was revisions need additional work to be appropriately into
the new work = chame.
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: Political DATE: 01 /31/96
reason for rejection: $\frac{\forall A}{}$
DAR: Request for Extension has been evaluated and Azcepted.
QtR W.R. Hawleus =/6/96
•
COPY to: L.S. Costin., MS 1325, K.G. Brady MS 1399 C.A. Rentman, MS 131" R.R. Richards, MS 1333 C.P. Jarmillo, MS 1399
RR:6319:bl

Rev. 08/31/93

P. 89 of 126,

### 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

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 QAIP 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 DOFQA. Be specific and make the criteria measurable.

Activity/Deliverable	Supplier	Duration			Page 4 of 4
		Duration (or end date)	# Days (or \$)	QAIPs	Acceptance Criteria
Conduct the technical review ofand participate in comment resolution	E. E. Ryder	1/2/96-1/20/96	3 days	QAJP 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.

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 subcentractor 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 #
		•	•	

#### 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**

### Sandia National Laboratories

Albuquerque, New Mexico 87185-

1996 0 1996 date: February 27, <del>1995</del>

to: Robert Richards, 6812, ms 1333

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, ms1325 C. P. Jaramillo, ms1333 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 uppertier 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:
  - Systematic Drilling Program An evaluation of the effect of the lack of written work instructions and detailed interface documents for those work areas, actvities, 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.

attachment to, R. Richards memo dated 4/21/93. M. Brady's memo to

P. 97 of 126

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 - March15, 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 67185

WBS: 9.1.3.2

OA:

to: Record File for CAR SNL-96-C01

date: March 21, 1996

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 1.2.3.2.2.2.1, Systematic Acquisition of Site-specific Subsurface Information, and WBS element 1.2.3.2.2.2.2, 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 Spychala. 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. Spychala 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. Spychala were performing functions for which they are qualified and appropriately trained.

Although the <u>organization</u> of the work (e.g., the functions of and relationships among Mr. Engstrom, Dr. Lum, Mr. Spychala, and Ms. Flint of the USGS) would have been more clearly portrayed had it been documented better, I conclude that the <u>quality</u> 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 <u>organization</u> 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 <u>quality</u> 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, rererences 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

#### <u>Journal</u>

SAND 91-0008J; issued 1991; no qualification statement, References Quality Level II

S/22/95-John C. Friend 3/22/96

ORP: 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

DATE

TITLE/DESCRIPTIVE DATA

PAGE COUNTON ONLY

Table of Contents

02/13/96

Revised Deficiency Report SNL-96-D-001

TOTAL PAGES

3

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 Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-001

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

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#### **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.

-			
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See attacked Response dated "/16/96.

19 Root Cause Determination:

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20 Action to Preclude Recurrence:

See attacked response dated "/11/25

21 Response by:	22 Correction Amino C
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#### 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.

FER -/83/73

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-ofcalibration 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.

Faxea response from Thoo Lee "/16/96.

P. 105 of 126

## **Sandia National Laboratories**

Albuquerque, New Mexico 87185-1399

date: February 5, 1996

WBS: 9.1.3.2.5 OA

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 CIPILIAN RADIOACTIVE WASTE MANAGEMENT DEFICIENCY DOCUMENT ENCODING FORM	
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If Yes, STIR initiated? Yes - STIR No No - If No, provide justification:	
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Exhibit AP-16.3Q.2

Draft Rev. 06/20/95

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Sandia National Laboratory, Dept., 6314	·	Moo Lee	and Joe Gran	t
5 Requirement/Measurement Criteria:				
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## OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

8 DR NO. SNL-96-D-1 PAGE 2 OF QA: L

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DEFICIENCY REPORT
17 Recommended Actions:
* For each device:
- have it calibrated.
<ul> <li>determine what measurements or calibration checks were performed with the device.</li> </ul>
- based on the recalibration result, determine whether any of those measurement
are now suspect and, if so, what other actions to take.
<ul> <li>Establish an effective recall system for calibrated measuring devices/standards.</li> <li>Determine whether any other devices are presently past-due for calibration.</li> </ul>
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18 Investigative Actions:
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19 Root Cause Determination:
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20 Action to Preclude Recurrence:
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21 Response by:

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23 Response Accepted

OAR Word R Hawkum Date

11/30/45

24 Response Accepted

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25 Amended Response Accepted

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28 Closure Approved by:

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Date

Exhibit AP-16.1Q.2

RMS SL\* 15/76/

AT LRC 3/5/47

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

DATE	TITLE/DESCRIPTIVE DATA	PAGE COUNT	LRC NOTE
•	Table of Contents	1	
02/13/96	Revised Deficiency Report SNL-96-D-001	2	
TOTAL PA	CES	3	

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

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	NCE/DEFICIENCY REP	ORT	
1 Controlling Document:	,	2 Related Report	No.
QAIP 12-1, Rev 05, Section 4.2, Step	7	YMP QA Sur	reillance 95-19
3 Responsible Organization:	4 Discussed With:		
Sandia National Laboratory, Dept., 63	14	Moo Lee and	i Joe Grant
5 Requirement/Measurement Criteria:			
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13 Remedial Action Response By:  Date	14 Remedial Action	Oue Date	Date
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# OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

B DR NO.	SNL	96-	D-1	
PAGE	2	OF	4	مو ادر
		QA	: L	. 17'

WASHINGTON, D.C.
DEFICIENCY REPORT
17 Recommended Actions:  ° For each device:
<ul> <li>have it calibrated.</li> <li>determine what measurements or calibration checks were performed with the</li> </ul>
- based on the recalibration result, determine whether any of those measurement 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:
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19 Root Cause Determination:
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20 Action to Preclude Recurrence:
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21 Response by: 22 Corrective Action Completion Due Date:
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Date 11/30/95

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25 Amended Response Accepted

Date 11/3/20

Date 2/15/96

Date

RMS SL\* 15/73/

-7 2/24/97

QRP: 1.2.11 QA:L Page 1

## SUPPORTING INFORMATION FOR CLOSE-OUT PACKAGE FOR DEFICIENCY REPORT SNL-96-D-05

DATE	TITLE/DESCRIPTIVE DATA	PAGE COUNT	LRC NOTE
·	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	Defiency 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. Blickly, re: Clarification of Training Assignments	3	· · · · · · · · · · · · · · · · · · ·
TOTAL PAG	RES	14	

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.

12/10/46

Record Source (Printed)

YMP:1.2.11:AUD:QA:CAR SNL-96-D-05 YMP CRF

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

8	Perl	icier	ance Report
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	PAGE	1	of 3
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PEDEODMANCE	DEFICIENCY REPO	DRT ·	
	DEI TOILLIOT TILL	2 Related Report	: No.
1 Controlling Document:		N/A	
QAIP 2-5, Rev. 04, Para. 4.1	4 Discussed With:		<del></del>
3 Responsible Organization:	Jud Blickley		
SNL Departments 6752 and 6853	. 344 322	<u> </u>	
5 Requirement/Measurement Criteria:			•
The paragraph of QAIP 2-5 cited above call The Department Manager to determine to proficiency training for (a newly-ass Training Assignment form to the Train The Training Manager to notify the tr	igned) individual ing Manager. ainee of the trai	ning assignme	•
The trainee to complete the assigned	training activiti	es	
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7 Initiator	9 QA Review		
R. R. Richards Labour Date Hav 2	Z, 86 CAR Clau	sille for	w Date 3/22/96
10 Response Due Date	11 QA Issuance	Approval	0 /
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April 18, 1996 12 Remedial Actions:			
see attachment (p	<u>5</u> .3)		

13 Remedial Action Response By:

N/A

Date

N/A

Date

16 PR Verification/Closure

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Date

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Date

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N/A

Date

Rev. 07/03/5

Exhibit AP-16.10.1

MP: /-2.1/: AAR: CAR: SNL -96 - D-5

Rev. 07/03/5

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

B DR NO. SNL -96-DOE OF 3 PAGE 2 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 attachmen + (pg.3)

19 Root Cause Determination:

See attachment (pg. 3)

20 Action to Preclude Recurrence:

See attachment (pg.3)

•	
21 Response by:	22 Corrective Action Completion Due Date:
De Schelling - See Mamo dated 1/1	196 05/30/96
23 Response Accepted	24 Response Accepted
DAR Clevette forambate 4/25/96	ADDAM PRuhaus . Date 4/23/94
25 Amended Response Adcepted	26 Amended Response Accepted
QAR WA Date	AOOAM N/A Date
27 Corrective Actions Verified	28 Closure Approved by:
DAR Claudell Strail Date 6/17/96	ADDAM Frehat Date 6/17/96
Exhibit AP-16.10.2/ /	Rev. 07/03

P. 115 of 126

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

Performance Report Deficiency Report		
SNL-90	6-0-5	
NO.	2	
PAGE &	of 3	
0	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 transmiting 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

Notify the Training Manager that to adequately complete QAIP 2-5, Step 4.1.6, the trainee 1. must be provided with a copy of the completed Training Assignment Form. Action: Bob Richards, to be completed by April 30, 1996.

Revise the Training Assignment Form and/or the instructions for the Training Assignment 2. 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

QA

date: March 22, 1996

to: F. J. Schelling, MS-1399 (6853)

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 <u>root cause</u> 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 <u>individual assigned responsibility</u> for completion of the action and the <u>anticipated completion date</u>.

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.

- 3/22/96

Enclosure: DR SNL-96-D-04

Copy to:

MS 1399 M. C. Brady

MS 1333 R. R. Richards

MS 1333 C. P. Jaramillo

MS 1333 J. C. Friend

	OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT DEFICIENCY DOCUMENT ENCODING FORM
1.	Document No.  Issuing Org. Code_J  Fiscal Yr. (last 2 digits)  Document Type  Seq. Number  Extension number (for multiple deficiencies)
	Doc. Type Codes:  C - Corrective Action Request D - Deficiency Report P - Performance Report N - Nonconformance Report T - STIR
.2. 1	Initiation Date (013)—[212]—[916] (MM/DDYY)
3. [	Deficiency Code: [0]21] * INADEQUATE TRAINING OF 12/3/16
	Deficiency Code:         *
[	Deficiency Code: [         *
	Deficiency Cause Code: 101214 LACK OF ATTIMIN CLIM TO TASIC OF 1212126
	Deficiency Cause Code:           *
	Deficiency Cause Code:           •
	Hardware Code: (if applicable)
	Supplier: (if applicable)
•	Aiscellaneous: (if applicable)
8. L	Data File Review:
	Open deficiency found: No Yes - DD#
	Three or more recurring deficiencies in the same organization noted in last 4 quarters? No Yes
lf	Yes, STIR initiated?  Yes - STIR No.  No - If No, provide justification:
_	
_	•
_	
<b>Q</b> .	AR Chulotte Javan Des Date 04/02/94
• See	latest revision of Trending Codes List

Exhibit AP-16.3Q.2

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

Albuquerque, New Mexico 87185-1399

date: April 17, 1996

R. R. Richards, MS-1333 (6812)

from: F. J. Schelling, 6853

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

8	Performance Report  X Deficiency Report
	NO. SNL-96-DOS
	PAGE 1 OF 3 QA: L

	WASHINGTON, D.C.	PAGE 1 OF 3
		QA: L
PERFO	RMANCE/DEFICIENCY REPORT	
1 Controlling Document:	2 Re	lated Report No.
QAIP 2-5, Rev. 04, Para. 4.1	•	N/A
3 Responsible Organization:	4 Discussed With:	-
SNL Departments 6752 and 6853	Jud Blickley	
5 Requirement/Measurement Criteria:	•	
proficiency training for (a n Training Assignment form to t	ermine the extent of required newly-assigned) individual, and the Training Manager.	to complete and submit a
<ul> <li>The Training Manager to notif</li> </ul>	y the trainee of the training.	assignment; and
• The trainee to complete the a	ssigned training activities	
• · · · · · · · · · · · · · · · · · · ·	,	
•	•	
6 Description of Condition:		
QAIP training in his initial ori confirmation form) provided by to one-on-one training on each QAIP to be accomplished was to read. perform the type of training that	he Training Manager to Mr. Spy was required; their wording i Consequently, Mr. Spychala di	chala do not specify that mplies that the training
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7 Initiator	9 QA Review	
R. R. Richards Halles Bate	· Har ZZ, 95 DAR Clausille	Jevanet Date 3/22/9
10 Response Due Date	11 QA Issuance Approval	200
April 18, 1996	OAR (PR)/AOOAM	Thelack Date 3/22/46
12 Remedial Actions:		
See attachmen	(t (pg.3)	
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		•
3 Remedial Action Response By:	1110	•
11/4	14 Remedial Action Due D	ate
5 Remedial Action Response Acceptance		Date
	16 PR Verification/Closure	
OAR N/A I Date	DAR N/A	0

QAR

Date

Date

## Faxed Copy of signature RADIOACTIVE WASTE MANAGEMENT

U.S. DEPARTMENT OF ENERGY WASHINGTON, D.C.

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#### 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 p. 3

19 Root Cause Determination:

See p. 3

20 Action to Preclude Recurrence:

See p. 3

21 Response by: F. J. Schellin	. Date 4/17/96	22 Corrective Action Comple	<u> </u>	4/17/90
23 Response Accepted		24 Response Accepted	·	
OAR	Date	AOOAM	Date	. }
25 Amended Response Accep	ted	26 Amended Response Acce	pted	
JAR	Date ·	MAQOA	Date	ł
_7 Corrective Actions Venified		28 Closure Approved by:		
QAR	Date	ADQAM	Date	
Exhibit AP-16.1Q.2			^	4.13a

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

Performa  Deficience	nce Report γ Report
SNL-90	6-0-5
NO.	•
PAGE A	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 transmiting 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

 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.

¿ lence a/ 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

Evidence of DC. 2

#### CIVILIAN RADIOACTIVE WASTE MANAGEMENT

Sandia National Laboratories

## **Training Assignment**

Lab	oratories			<u> </u>	·	·	· 		
Tra	inee Name		SNL Org. #	Mail	Stop Pos	ition			
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Со	mpany Name (if contractor)		Compan	y Mailing Add	dress			٠.	
SE	CTION I ORIENTATIO	ON -	•					•	
En	nployee's Orientation Mar	nual (assigned to	all new (CRWI	/i) staff an	d is provided l	oy Trainir	ng Dept.)		Σ
"1(	),000 Year Test" — Video	(assigned to ne	w employees ar	nd provide	d by Training	Dept.)	٠.		$\Sigma$
SE	CTION II TRAINING			REAL	PROCEDURE TRAINING	PLUS	Read		Un-
(0	ne block for each proce	dure must be c	hecked)	One on One	For One on One Training Indicate Trainer	СВТ	Abs- tract	Read Only	
1-2	Organization								_
1-4	Resolution of QA Dispute	25	<u></u>		· · · · · · · · · · · · · · · · · · ·	!		X	
1-5	Establishing Work Agree	ments							_
2-2	Study Plan Requirements	3							_
2-4	Conducting and Docume Calculations	nting Analyses/							
2-5	Training					İ			_
2-6	Qualification and Certifica	ation of Personnel							_
2-9	Readiness Reviews								
2-10	Determination of Applicat	ole QA Controls							
3-4	Design Investigation Con	trol							
3-12	Peer Reviews								_
4-1	Procurement								=
5-1	Quality Assurance Implem (QAIPs)	enting Procedure	S						_
Retu	rn completed form to Training N	fanager, Dept. 6352	, M/S 1330.						

Training Assignment							
SECTION II (continued) TRAINING	READ PROCEDURE PLUS TRAINING						
SECTION II (continued) TRAINING	One on One	For One on One Training Indicate Trainer	СВТ	Read Abs- tract	Read Only	Un- assign Training	
6-1 Document Control System							
6-2 Preparing, Reviewing, Approving and Issuing Technical Information Documents			-		. 🗆		
6-3 Conducting and Documenting Reviews of Documents		•					
7-1 Procurement Acceptance Verification							
7-3 Evaluation of Contractor QA Program Documents							
10-1 Surveillances			i 1				
12-1 Measuring and Test Equipment Control						_	
17-1 Protecting, Preparing, and Submitting CRWM QA Records					$\boxtimes$		
17-2 Participant Data Archive (PDA)			:				
17-3 Processing, Storing, and Protecting CRWM QA Records			i				
19-1 Software Quality Assurace (QA) Requirements							
20-1 Technical Procedures			•				
20-2 Scientific Notebooks		<u>.</u>					
20-3 Sample Control			:				
AP-16.1Q Performance/Deficiency Reporting • Training Available by Video			:	$\boxtimes$			
AP-16.2Q Corrective Action and Stop Work  * Training Available by Video		•	•	$\boxtimes$			
YAP-15.1Q Control of Nonconformances	Į. 🗆	-	!				
SECTION III ADDITIONAL TRAINING							
Enter additional training assignments below as applicable DOE Orders, Seminars, Workshops, University Courses	e, such as: or other acti	Technical Proc vities.	edures, \	Vork Ag	reemen	ts,	
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Department Manager Signature			Date	•			