



Department of Energy
Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
P.O. Box 98608
Las Vegas, NV 89193-8608

DEC 28 1994

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Technical Project Officer
for Yucca Mountain
Site Characterization Project
TRW Environmental Safety Systems, Inc.
Bank of America Center, Suite P-110
101 Convention Center Drive
Las Vegas, NV 89109

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE ACTION REQUEST (CAR) YM-94-056 RESULTING FROM U.S. DEPARTMENT OF ENERGY/HEADQUARTERS QUALITY ASSURANCE DIVISION'S AUDIT HQ-94-02 OF THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM MANAGEMENT AND OPERATING CONTRACTOR (SCPB: N/A)

The Yucca Mountain Quality Assurance Division staff has verified the corrective action to CAR YM-94-056 and determined the results to be satisfactory. As a result, the CAR is considered closed.

If you have any questions, please contact either Robert B. Constable at 794-7945 or James T. Schmit at 794-7709.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-1521

Enclosure:
CAR YM-94-056

cc w/encl:
T. A. Wood, HQ (RW-14) FORS
~~James T. Schmit~~, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
R. L. Robertson, M&O/TRW, Vienna, VA
Richard Jiu, M&O/Duke, Las Vegas, NV
R. P. Ruth, M&O/Duke, Las Vegas, NV
D. G. Horton, OQA (RW-3) NV
R. M. Nelson, Jr., YMSCO, NV

cc w/o encl:
W. L. Belke, NRC, Las Vegas, NV
D. G. Sult, YMQAD/QATSS, Las Vegas, NV

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CORRECTIVE ACTION REQUEST

¹ Controlling Document M&O QAP-5-2, Rev 0, P01, Preparation of M&O Implementing Line Procedures ² Related Report No. HQ-94-02

³ Responsible Organization CRWMS M&O ⁴ Discussed With R. Ruth, C. Bartley

⁵ Requirement:
Section 2. SCOPE, states that the procedure is applicable to the preparation and maintenance of ILPs used to perform work subject to QARD requirements.

⁶ Adverse Condition:
Several deficiencies associated with the preparation of Implementing Line Procedures indicates that the ILPs were not prepared in accordance with QAP-5-2. Examples include:
History of Changes forms were not completed for NLP-3-10, R1, NLP-3-16, R0, P03, and NLP-17-5, R1 (examples).
Change Histories reviewed were not listed for MGP-3-8, R0, P03, and NLP-17-4, R0, P02 (examples).
ILP Review Records for NLP-3-17, R1 were missing information.
Nonmandatory comments were submitted with IRRs for NLP-3-10, R1, NLP-3-20, R0, and NLP-17-5, R0.
NLP-17-5, R1 has responses to comments made by someone other than the procedure author.
Several ILP Record Packages did not contain the required review drafts.

⁹ Does a significant condition adverse to quality exist? Yes x No ¹⁰ Does a stop work condition exist? Yes No x ; If Yes - Attach copy of SWO If Yes, Circle One: A (B) C D E ¹³ Response Due Date: 20 working days from issuance

¹¹ Required Actions: Remedial Extent of Deficiency Preclude Recurrence Root Cause Determination

¹² Recommended Actions:
Evaluate the adequacy of implementation of the QAP-5-2 preparation process.

⁷ Initiator CL Loran for ¹⁴ Issuance Approved by: AC Spence
Dennis Threatt Date 6-24-94 QADD AC Spence Date 7/12/94

¹⁵ Response Accepted Amst. Schmit ¹⁶ Response Accepted AC Spence
QAR Amst. Schmit Date 8/24/94 QADD AC Spence Date 8-25-94

¹⁷ Amended Response Accepted ¹⁸ Amended Response Accepted
QAR Amst. Schmit Date QADD Date

¹⁹ Corrective Actions Verified Amst. Schmit ²⁰ Closure Approved by: AC Spence
QAR Amst. Schmit Date 12/21/94 QADD AC Spence Date 12/28/94

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CORRECTIVE ACTION REQUEST (CONTINUATION PAGE)

1. Corrective Action Response

A. Remedial Action-All records packages for Implementing Line Procedures (ILP) which were generated in accordance with QAP-5-2, Revision 0 will be reviewed to verify that they contain the required records and that the records are properly completed. Any discrepancies identified will be corrected, if possible, and for those which can not be corrected an explanation describing the circumstances will be included as a supplement to the records package.

B. Extent of Deficiency-Enough records packages have been reviewed during the audit to determine that the types of problems identified may be found(to some degree) in most of the records packages for ILPs.

C. Root Cause Determination-Evaluation of the implementation of QAP-5-2 ILP preparation process has determined Human factors, personnel not paying attention to details and following approved procedures has been determined as the root cause. Record packages were developed, authenticated, and submitted to the Local Records Center with incomplete information, using out-of-date forms, missing information, and procedure process steps not being followed in detail. Record Packages for procedures in Vienna and Las Vegas were reviewed during the audit and all record packages in accordance with QAP-5-2, Revision 0 will be reviewed as part of the Remedial Action. Record Packages for Charlotte were not reviewed during the audit but will be included as part of the Remedial Action. Discrepancies were created in the record packages by the record sources who in this case are the procedure authors. Record Sources not paying attention to details, not following procedure steps and process requirements, and not reviewing procedures before completing record packages to ensure all requirements for development of the record packages were completed are the reasons for the discrepancies in the record packages.

D. Corrective Action to Preclude Recurrence-

a) Supervisors/Responsible Managers must ensure that no work is started until the necessary training is completed and recorded. Individuals who are assigned to be authors by Supervisors/Responsible Managers are required to meet M&O training requirements per the QA program. This includes each time there is a revision to QAP-5-2 the authors are required to meet the training requirements before performing work to QAP-5-2. This is done to maintain authors qualifications. M&O procedure QAP-2-1, Section 5.3.2 requires training on the latest procedure revision prior to performing work.

b) QAP-5-2, Revision 1 has been approved and was effective 8/1/94. All ILP authors (who are the records sources) will be identified to attend classroom training on QAP-5-2, Revision 1. This training will address the changes in QAP-5-2, what records are required for record packages, and the need to follow details and requirements in developing record packages. This will be complete by 10/1/94 and documented per QAP-2-1. Any personnel identified as an author on the ILP cover sheet (ILPs already approved and issued) but no longer has that responsibility will not be included in the training.

c) All ILP authors will be required to read QAP-17-1 RECORD SOURCE RESPONSIBILITIES FOR QA RECORDS and document it on the reading/self-study form per QAP-2-1. This will be completed by 10/1/94. The M&O QA program requires newly hired personnel who will be performing work under the M&O QA program to attend M&O training indoctrination which includes training for QAP-17-1. M&O procedure QAP-2-1, Section 5.2.3 requires indoctrination classroom training for QAP-17-1.

2. Action for 1A above (review of the records packages) will be completed by Charles F. Bartley (Las Vegas) and Michael J. Donovan (Vienna & Charlotte) with a completion date of 11/01/94. Corrections of discrepancies (when possible) will be performed by records sources and verified by Quality Assurance, to be completed by 11/01/94.

Action 1D.b and 1D.c above will be completed by Charles F. Bartley and M&O training department with a completion date of 10/01/94.

3. Responsible Manager: 

Date: 8-10-94

8/10/94 LV.QA.BRJ:08-94-220

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VERIFICATION OF CAR YM 94-056

VERIFICATION OF CORRECTIVE ACTION WAS COMPLETED ON 12-21-94 BY JAMES T. SCHMIT YMCAD/COALS. THE FOLLOWING OBJECTIVE EVIDENCE WAS VERIFIED. M&O PROCEDURE CAP 5-2, RO, POI WAS USED AS THE BASIS FOR THIS VERIFICATION.

A. REMEDIAL ACTION

1. VERIFIED THAT RECORDS PACKAGES FOR PROCEDURES DEVELOPED UTILIZING CAP 5-2, RO, POI ^{with prior} WERE REVIEWED BY THE M&O FOR INCORPORATION OF PROPER RECORDS. SEE ATTACHMENT 1, RECORDS PACKAGES REVIEWED FOR CAR YM-94-056.

2. REVIEWED DEFICIENCIES IDENTIFIED BY M&O FOR THE FOLLOWING PROCEDURES AND DETERMINED THAT THE M&O REVIEW OF THESE PROCEDURES WAS ADEQUATE.

- NLP 3-10 REV 1
- NLP 3-16, RCO, POZ, REV 0
- NLP 3-17 REV 1
- NLP 3-20 REV 0
- NLP 17-4, RCO, POZ, REV 0
- NLP 17-5 REV 1
- NLP 17-5 REV 0
- MAP 3-8, RCO, POZ, REV 0.

3. REVIEWED RESPONSES TO DEFICIENCIES IDENTIFIED BY M&O FOR THE FOLLOWING PROCEDURES AND DETERMINED THAT THE RESPONSES WERE ADEQUATE.

- NLP 17-5 REV 0
- NLP 3-10 REV 1

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B. EXTENT OF DEFICIENCY.

SEE REMEDIAL ACTION ITEM 1 FOR ACTION TAKEN

C. ROOT CAUSE

SEE COLLECTIVE ACTION TO PRECLUDE REURRENCE
FOR ACTION TAKEN.

D. COLLECTIVE ACTION TO PRECLUDE REURRENCE

1. VERIFIED THAT THE AUTHORS OF THE
FOLLOWING IN-PROCESS PROCEDURES WERE
TRAINED TO THE REQUIREMENTS OF OAPS-2 REV 1.

- NLP 3-10, REV 4 - W. LEONARD
- NLP 3-21, REV 0 - J. HEARNEY
- NLP 3-23, REV 0 - A. WATKINS

2. VERIFIED THAT THE AUTHORS OF THE FOLLOWING
NLPs WERE TRAINED (BY CLASSROOM TRAINING) TO
THE REQUIREMENTS OF OAPS-2, REV 1.

- NLP 3-10 REV 3 - W. LEONARD PROC. EFF. DATE: 10/18/94
- * • NLP 3-18, REV 2 - R.S. SAUNDERS PROC. EFF. DATE: 12/15/94
- NLP 17-4, REV 3 - TERI BADREDINE PROC. EFF. DATE: 11/15/94

3. VERIFIED THAT THE FOLLOWING AUTHORS OF
NLPs READ OAP 17-1 AND DOCUMENTED READING
ON FORM PER MEO OAP 2-1

- R.S. SAUNDERS
- J. CLARK
- P. HASTINGS
- T. JUSTICE

* SEE PAGE 3

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* REVIEW OF TRAINING RECORDS INDICATE THAT R. SAUNDERS DID NOT ATTEND CLASSROOM TRAINING ON OAP 5.2, REV. 1, HOWEVER, AFTER REVIEWING THE RECORDS PACKAGE ASSOCIATED WITH NLP 3-18, REV. 2 I HAVE DETERMINED THAT R. SAUNDERS WAS NOT THE AUTHOR OF NLP 3-18, REV. 2. BASIS FOR THIS DECISION IS AS FOLLOWS:

- COMMITTEE RESOLUTION FOR ALL COMMITTEES WAS PROVIDED BY W.J. LEONARD
- PROCEDURE REVIEW RECORD INDICATED THAT R. SAUNDERS WAS ONE OF ESW SURFACE DESIGN REVIEWERS.
- PROCEDURE ACTION REQUEST IDENTIFIED W.J. LEONARD AS THE RESPONSIBLE INDIVIDUAL TO PREPARE NLP 3-18, REV. 2.
- ESN MATRIX UP-DATE SIGNED BY W.J. LEONARD AS "AUTHOR".

THE MEO HAS INITIATED A PROCEDURE ACTION REQUEST TO REVISE NLP 3-18, REV. 2 TO CHANGE THE AUTHOR FROM R.S. SAUNDERS TO W.J. LEONARD. W.J. LEONARD WAS TRAINED (CLASSROOM TRAINING) ON OAP 5-2 REV. 1 AS REQUIRED BY THE COMMITTEE ACTION TO PREVENT RECURRENCE.

CONCLUSION:

BASED ON OBJECTIVE EVIDENCE REVIEWED, CAR YM-94-056 MAY BE CLOSED.

James Helms 12/21/94

RECORDS PACKAGES REVIEWED FOR CAR YM-94-056

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- CLP-3-1 Rev 1
- CLP-3-1 Rev 0
- PCN#CLP-3-1,R00,P01 Rev 0
- CLP-3-2 Rev 0
- CLP-3-2 Rev 1
- NLP-2-0 Rev 0
- NLP-2-2 Rev 0
- PCN#NLP-2-2,R00,P01 Rev 0
- NLP-2-3 Rev 0
- NLP-3-8 Rev 1
- NLP-3-9 Rev 1
- PCN#NLP-3-10,R00,P01 Rev 0
- PCN#NLP-3-10,R00,P02 Rev 0
- PCN#NLP-3-10,R00,P03 Rev 0
- NLP-3-10 Rev 1 (HISTORY OF CHANGES NOT COMPLETE) (NON MANDATORY COMMENT
SUBMITTED W/ IRR.)
- PCN#NLP-3-10,R01,P01 Rev 0
- NLP-3-13 Rev 1
- NLP-3-13 Rev 0
- PCN#NLP-3-13,R00,P01 Rev 0
- PCN#NLP-3-13,R00,P02 Rev 0
- PCN#NLP-3-13,R00,P03 Rev 0
- NLP-3-14 Rev 0
- PCN#NLP-3-14,R00,P01 Rev 0
- PCN#NLP-3-14,R00,P02 Rev 0 & Supplement
- PCN#NLP-3-14,R00,P03 Rev 0
- NLP-3-15 Rev 0
- NLP-3-15 Rev 1
- PCN#NLP-3-15,R01,P01 Rev 0
- PCN#NLP-3-15,R01,P02 Rev 0
- PCN#NLP-3-15,R01,P03 Rev 0 & Supplement
- NLP-3-16 Rev 0
- PCN#NLP-3-16,R00,P01 Rev 0
- PCN#NLP-3-16,R00,P02 Rev 0 (HISTORY OF CHANGES NOT COMPLETE)
- PCN#NLP-3-16,R00,P03 Rev 0 & Supplement
- * NLP-3-17 Rev 1 (REVIEW RECORDS MISSING INFORMATION)
- NLP-3-17 Rev 0
- NLP-3-18 Rev 1
- PCN#NLP-3-18,R01,P01 Rev 0
- PCN#NLP-3-18,R01,P02 Rev 1
- PCN#NLP-3-18,R01,P02 Rev 0
- PCN#NLP-3-18,R01,P03 Rev 0
- NLP-3-18 Rev 0

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PCN#NLP-3-18,R00,P01 Rev 0

NLP-3-19 Rev 0

✓ NLP-3-20 Rev 0 & Supplement (NON MANDATORY COMMENTS SUBMITTED W/ IRRs)

PCN#NLP-3-20,R00,P01 Rev 0

NLP-6-1 Rev 2

PCN#NLP-6-1,R02,P01 Rev 0

NLP-10-1 Rev 1

NLP-17-1 Rev 2

PCN#NLP-17-1,R02,P01 Rev 0

NLP-17-4 Rev 1

NLP-17-4 Rev 0

PCN#NLP-17-4,R00,P01 Rev 1

PCN#NLP-17-4,R00,P01 Rev 0

* PCN#NLP-17-4,R00,P02 Rev 0 (CHANGE HISTORIES REVIEWED WHILE NOT LISTED)

NLP-17-5 Rev 2

• NLP-17-5 Rev 1 (HISTORIES OF CHANGES NOT COMPLETE)

✓ NLP-17-5 Rev 0 (NON MANDATORY COMMENTS SUBMITTED W/ IRRs)

NLP-19-1 Rev 0

* PCN#MGP-3-8,R00,P03 Rev 0 (CHANGE HISTORIES REVIEWED WHILE NOT LISTED)

PCN#MGP-3-8,R00,P02 Rev 0

PCN#MGP-3-8,R00,P01 Rev 0

PCN#MGP-3-9,R00,P01 Rev 0

PCN#MGP-7-1,R00,P02 Rev 0

PCN#MGP-7-1,R00,P01 Rev 1

PCN#MGP-7-1,R00,P01 Rev 0

PCN#NSP-6-1,R01,P04 Rev 0

PCN#NSP-6-1,R01,P03 Rev 0

PCN#NSP-6-2,R01,P02 Rev 0

PCN#NSP-6-2,R01,P01 Rev 0

PCN#NSP-17-1,R01,P02 Rev 0

PCN#QLP-2-1,R02,P02 Rev 0

PCN#QLP-2-1,R02,P01 Rev 0

PCN#QLP-10-2,R00,P01 Rev 0

PCN#QLP-10-3,R00,P01 Rev 0

VLP-17-8 Rev 0

PCN#VLP-17-8,R00,P01 Rev 0

o (SEVERAL PACKAGES DID NOT CONTAIN RECD'S REVIEW DRAFTS)