



Department of Energy

Washington, DC 20585

QA: QA

APR 06 2000

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Technical Support
Civilian Radioactive Waste Management System
Management and Operating Contractor – SAIC
Yucca Mountain Site Characterization Project
1211 Town Center Drive, M/S 423
Las Vegas, NV 89144-6352

VERIFICATION OF CORRECTIVE ACTIONS AND CLOSURE OF DEFICIENCY REPORT (DR) LVMO-00-D-049

The Office of Quality Assurance staff has evaluated the corrective actions of DR LVMO-00-D-049 and determined the results to be satisfactory. As a result, the DR is considered closed.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or Kristi A. Hodges at (702) 794-1464.

OQA:JB-1123

James Blaylock
Robert W. Clark, Director
Office of Quality Assurance

Enclosure:
DR LVMO-00-D-049



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

8. DEFICIENCY REPORT
 CORRECTIVE ACTION REPORT

NO. LVMO-00-D-049

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DEFICIENCY/CORRECTIVE ACTION REPORT

1. Controlling Document:
AP-SI.1Q, Software Management

2. Related Report No.:

n/a

3. Responsible Organization:
M&O
Information Technology Department, Software Development

4. Discussed With:
Ruth Belanger, Harry Leake, Jerome Weiser

5. Requirement:
AP-SI.1Q, ¶5.1.1.1, "Direct the Software Developer of a software routine or macro that is used in a quality-affecting application to document the software routine or macro in accordance with applicable procedures."

6. Description of Condition:
On nine occasions Software Development developed macros to make changes to references in the Document Input Reference System (DIRS). Six of these macros were developed to remove invalid documents from DIRS; two were intended to copy old revision references to the new revision of the document; and one macro was intended to convert all document titles to upper case. Software Development failed to follow the requirements of AP-SI.1Q to control the macros.

7. Initiator:
Ruth H. Belanger *R Belanger* Date 3/7/00

9. Does a stop work condition exist? (Not required for a DR)
 Yes No
If Yes, Check One: A B C D

10. Recommended Actions:
NONE

11. QA Review: *Kristi A. Hodges*
QAR *Kristi A. Hodges* Date 03/09/00

12. Response Due Date:
10 Work Days From Issue

13. DOQA Issue Approval:
Printed Name Robert W. Clark Signature *James B. Blaylock Jr* Date 3/19/00

22. Corrective Actions Verified:
QAR *Kristi A. Hodges* Date 04/04/00

23. Closure Approved by:
DOQA *James B. Blaylock Jr* Date 4/5/00

TYPE RESPONSE:

- Initial
- Complete
- Amended

5-9-00

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DEFICIENCY/CORRECTIVE ACTION REPORT (RESPONSE)

14a. Immediate Actions:

The macros that were used in DIRS will be documented in accordance with the requirements of AP-SI.1Q.

Compliance Date: 3/8/00

14. Remedial Actions:

No additional remedial actions are needed.

15. Extent of Condition:

All changes to the references were logged in the history tables before the changes were made. The logging permits restoration of the information to its status prior to modification if necessary. This condition is limited to the specific macros identified in Block 6.

16. Cause: (Attach results of root cause determination prepared in accordance with AP-16.4Q for a significant deficiency.)
The requirements of AP-SI.1Q were misunderstood.

17. Action to Preclude Recurrence:

Software Development has been instructed (see attached documentation) to follow AP-SI.1Q requirements.

18. Corrective Action Completion Due Date: 3/8/00

- For submittal of complete response
- For completion of corrective action

19. Response by:

R. E. Fray
R. E. Fray Date 3/7/00 Phone (702) 295-1692

20. Evaluation: Accept Partially Accept Reject

QAR *Kristi St. Hodges* Date 03/09/00

21. Concurrence:

DOQA *James Blaylock Jr* Date 3/14/00