



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

TO: Ken Hooks  
WBS 1.2.9.3  
QA

MAY 09 1991

Robert F. Pritchett  
Technical Project Officer  
for Yucca Mountain  
Site Characterization Project  
Reynolds Electrical &  
Engineering Co., Inc.  
P.O. Box 98521  
Las Vegas, NV 89193-8521

EVALUATION OF RESPONSES TO CORRECTIVE ACTION REQUESTS (CARs) YM-91-025, YM-91-027, AND YM-91-034 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YM 91-02 OF REYNOLDS ELECTRICAL & ENGINEERING CO., INC. (REECO)

The YMQAD staff has evaluated the responses to CARs YM-91-025, YM-91-027, and YM-91-34. The responses have been determined to be satisfactory. Verification of completion of the corrective actions will be performed after the effective dates provided. Any extension to these dates must be requested in writing, with appropriate justification, prior to the date. Please send a copy of extension requests to Nita J. Brogan, Science Applications International Corporation, Las Vegas, Nevada.

If you have any questions, please contact Catherine E. Hampton at 794-7973 or or Mario R. Diaz at 794-7974.

  
Donald G. Horton, Director  
Yucca Mountain Quality Assurance Division

YMQAD:CEH-3530

Enclosures:  
CARs YM-91-025, YM-91-027,  
and YM-91-034

cc w/encls:  
W. J. Glasser, REEC Co, Las Vegas, NV  
K. R. Hooks, NRC, Washington, DC  
S. W. Zimmerman, NWPO, Carson City, NV  
N. J. Brogan, SAIC, Las Vegas, NV, 517/T-08

cc w/o encls:  
J. W. Gilray, NRC, Las Vegas, NV

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14CAR NO.: YMP-91-025  
DATE: 3/7/91  
SHEET: 1 OF 2  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document  
568-DOC-115 QAPP

2 Related Report No.  
Audit 91-02

3 Responsible Organization  
REECo Quality Assurance

4 Discussed With  
M. Fox

10 Response Due  
30 days after issue

11 Responsibility for Corrective Action  
R.F. Pritchett

12 Stop Work Order Y or N  
N

**5 Requirement:**

QAPP, Revision 8, Section 1, Paragraph 2.1 states in part, "Full-time dedicated QA positions have been established by REECo. Personnel in these positions shall have the responsibility and authority to verify the adequacy and effectiveness of QA plans, requirements, and QA program implementation by REECo and its subordinate organizations."

QP 1.0, Revision 7, Paragraph 6.1.3, "The REECo Organizational Chart, Exhibit 1, denotes the lines of authority, communication, and responsibility assigned to key quality-related Project functions for the YMP."

**6 Adverse Condition:**

REECo has failed to assign adequate amount of full-time dedicated QA personnel to ensure that the required support for activities that affect quality is achieved accordingly.

Organizational charts issued in January 1, 1990 and updated during the audit indicated that a minimum of 4 full-time dedicated QA positions are required for the Quality Assurance Department. This was also stated by the QA Manager. However, at the time of the audit, only one full-time dedicated QA individual was in place.

**7 Recommended Action(s):**

Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 6. Investigate the program process, activities or documentation to determine the extent and depth of similar deficient conditions of the CAR. (Con't)

8 Initiator  
Mario R. Diaz 2/25/91

Date:  
9 Severity Level -  
1 ☐ 2 ☒ 3 ☐

13 Approved By: Date:  
OQA Cathy H. [Signature] 3-11-91

**15 Verification of Corrective Action:**

16 Corrective Action Completed and Accepted:

OAR \_\_\_\_\_ Date \_\_\_\_\_

17 Closure Approved By:

OQA \_\_\_\_\_

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*RWK 5/12/91*  
CAR NO.: YM-91-025  
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**CORRECTIVE ACTION REQUEST  
(continuation sheet)**

**7 Recommended Action(s) (continued)**

Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

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CAR NO. YM-91-025  
DATE: 04-12-91  
SHEET: 1 OF 2

CORRECTIVE ACTION REQUEST  
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-025

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

A. Extent of Deficiency:

REECo has reviewed the potential adverse condition described in the Corrective Action Request and agrees that the Quality Assurance (QA) organization staffing level at the time of the audit was insufficient to provide the minimum required quality assurance support. Further, an assessment of current quality commitments and activities confirms the need for at least four full-time dedicated QA positions. This finding is limited to the Quality Assurance department.

B. Root Cause:

It appears that management failed to closely monitor the affect of a reduced staffing level. In addition, it appears that management failed to initiate timely follow-up to requested actions to locate and hire dedicated QA personnel.

C. Remedial Actions:

Since completion of the audit, the REECo YMP Quality Assurance Manager resigned his position from REECo. However, REECo was successful in immediately identifying a qualified replacement from within the Company who has taken the following remedial actions:

1. An immediate search for suitable candidates for dedicated QA positions was initiated.
2. One candidate from REECo's Quality Systems Division, who is currently a lead auditor, was interviewed and an offer was extended. The individual has accepted the position and will report April 29, 1991.
3. On April 8, 1991, two potential candidates were interviewed for full-time dedicated QA positions. Both candidates were considered highly qualified and an offer is being extended to both.

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SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST  
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-025 (Continued)

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

C. Remedial Actions: (Continued)

Resolution to the lack of staff concern is dependent upon the acceptance of job offers by qualified candidates. Therefore, it is not appropriate at this time to identify a firm date by when the concern will be resolved. REECO will, however, provide a status update to this finding by June 1, 1991, to indicate what further actions, if any, will be required to obtain sufficient dedicated personnel to meet the quality assurance objectives.

D. Corrective Action to Prevent Recurrence: (Ongoing)

Periodic reviews of the QA staffing levels will be conducted by the Quality Assurance Manager to determine if the current level of quality related activities required to be performed by the QA department can be accomplished by the existing staff level. This review shall be conducted at least annually as part of the annual budget planning process and at anytime existing staff leave the QA department or whenever there is a significant unplanned change in quality related activity. Whenever the Quality Manager determines that the required level of support for quality affecting activities can not be maintained with existing staff, then immediate actions shall be initiated to hire or assign additional dedicated personnel within 60 days or sooner, if required.

Response Approved: Bruce Tardella For R.F.P. 4/12/91  
Responsible Manager Date

RESPONSE ACCEPTED: Waino Lau 4/19/91  
QAR Date

RESPONSE ACCEPTED: Catherine H. [Signature] 4-22-91  
OQA Date

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14CAR NO.: YM-91-027  
DATE: 03/07/91  
SHEET: 1 OF 2  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document 568-DOC-115 QAPP		2 Related Report No. AUDIT NO. 91-02	
3 Responsible Organization REECo, Logistical Support Dept.		4 Discussed With S. Straub, C. Barker	
10 Response Due 30 Days After Issue	11 Responsibility for Corrective Action R. F. Pritchett	12 Stop Work Order Y or N No	
5 Requirement: <p>QAPP, Rev. 8, Para. 5.1.6.2, states, "Records of indoctrination which include the objective and content of the indoctrination, date or dates of indoctrination, and other applicable information."</p> <p>QAPP, Rev. 8, Para. 5.1.3, states in part, "Prior to assigning personnel to perform activities affecting quality, they shall be indoctrinated as to the purpose, scope, method of implementation, and applicability of the following documents:</p> <ul style="list-style-type: none"><li>o QAPPs</li><li>o Implementing Procedures and Work Instructions (applicable to the individual's responsibilities)</li><li>o Regulations</li><li>o Project level documents</li></ul>			
6 Adverse Condition: <p>Documented evidence of indoctrination for some personnel who had performed quality affecting activities does not exist. In some other cases, the indoctrination has been performed after the individuals have been assigned to perform those activities.</p>			
7 Recommended Action(s): <p>Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 6. Investigate the program process, activities or documentation to determine the extent and depth of similar deficient conditions on the CAR. Identify these deficiencies and provide the</p>			
8 Initiator M. R. Diaz <i>Mario Diaz</i>	Date: 02/26/91	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: <i>Catherine H. [Signature]</i> 00 <i>3891</i>
15 Verification of Corrective Action:			
16 Corrective Action Completed and Accepted:  QAR _____ Date _____		17 Closure Approved By:  OQA _____	

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DATE: 03/07/91  
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**CORRECTIVE ACTION REQUEST  
(continuation sheet)**

**7 Recommended Action(s) (continued)**

measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

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CAR NO. YM-91-027

DATE: 04-12-91

SHEET: 1 OF 1

CORRECTIVE ACTION REQUEST  
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-027

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # A11

This finding is similar to specific indoctrination and training deficiencies recently identified on DOE Surveillance YMP-SR-91-007 for which REECO provided corrective action responses on March 22, 1991. At the time of the audit, REECO had not completed the investigation and corrective action planning on the surveillance findings for the audit team to review. Therefore, the audit identified similar problems which were deemed global in nature which required apparent additional action. As part of the investigation for the surveillance findings, REECO determined that the type of problems identified, some of which were identical to the adverse condition identified as part of this audit, were indeed global in nature and required corrective actions directed at all of our qualification records. The specific corrective actions documented on the March 22, 1991 response provides the corrective and preventive steps which also provides a global approach to the finding identified during the audit.

Based on the above discussion, REECO considers that the adverse condition identified by this audit finding will be adequately and effectively corrected in accordance with the corrective actions identified for YMP-SR-91-007.

Response Approved:

Bruce Gendall For R.F.P.  
Responsible Manager

4/12/91  
Date

RESPONSE ACCEPTED:

John Doe  
QAR

4/19/91  
Date

RESPONSE ACCEPTED:

Catherine J. Humphreys  
OQA

4-22-91  
Date



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14CAR NO.: YM-91-034  
DATE: 3/7/91  
SHEET: 1 OF 2  
QA  
WBS No.: 1.2.9.3

**CORRECTIVE ACTION REQUEST**

1 Controlling Document QP 2.4		2 Related Report No. Audit 91-02	
3 Responsible Organization REECo		4 Discussed With R. Pritchett	
10 Response Due 30 days after issue	11 Responsibility for Corrective Action R.F. Pritchett		12 Stop Work Order Y or N N
5 Requirement: QP 2.4, Revision 1, Paragraphs 6.6.1 and 6.6.3 state, "The TPO shall periodically, annually as a minimum, initiate an evaluation of the overall training program for the REECo Yucca Mountain Project Division."  The TPO shall document the evaluation and include the following information: <ul style="list-style-type: none"><li>o Names of evaluators</li><li>o Dates of evaluation</li><li>o Scope of evaluation</li><li>o Methodology</li><li>o Results</li><li>o Recommendations for changes, (if any) (Con't)</li></ul>			
6 Adverse Condition:  Documented evidence of the overall training program evaluation for the years 1989 and 1990 does not exist.			
7 Recommended Action(s):  Identify the remedial action(s) to be taken to correct the deficiencies noted in Block 6. Investigate the program process, activities or documentation to determine the extent and depth of similar deficient conditions on the CAR. (Con't)			
8 Initiator M. R. Diaz <i>Mario Diaz</i>	Date: 2/27/91	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: <i>Catharine Humphreys</i> OQA <i>38-91</i>
15 Verification of Corrective Action:			
16 Corrective Action Completed and Accepted:  QAR _____ Date _____		17 Closure Approved By:  OQA _____	

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CAR NO.: YM-91-034  
DATE: 3/7/91  
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**CORRECTIVE ACTION REQUEST  
(continuation sheet)**

**5 Requirements (continued)**

o Signature of TPO

**7 Recommended Action(s) (continued)**

Identify these deficiencies and provide the measures required to correct them. Identify the cause of the condition and the planned corrective action to prevent recurrence.

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CAR NO. YM-91-034  
DATE: 04-12-91  
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CORRECTIVE ACTION REQUEST  
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-034

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

A. Extent of Deficiency:

REECo has evaluated the identified adverse condition and has concluded that a separate, specific evaluation of the overall training program has never been implemented. However, a review of REECo's approved Quality Assurance Program Plan (568-DOC-115 revision 8) and DOE's Quality Assurance Requirements Document (DOE/RW-0214 revision 4) did not identify a requirement to conduct the assessment of training as a separate evaluation. The review did identify a requirement in DOE's Quality Assurance Requirements Document that the annual Management Assessment is to include Indoctrination and Training as one of the evaluation elements. This requirement is included in REECo's procedure for Management Assessment, QP 2.3. Although REECo management considered that the intent of the requirement had been met through REECo's Management Assessments, REECo does recognize that the requirement of QP 2.4 paragraph 6.6 for Training Program Evaluation had not been implemented.

B. Root Cause:

Management failed to recognize that when a procedure requirement is no longer applicable or does not describe the way an activity is currently being performed, then a change to the requirement must be initiated.

C. Remedial Actions: (All Actions To Be Completed By 06/15/91)

Since no specific requirement exists to perform separate, specific training evaluations, and since Indoctrination and Training is an element of the annual Management Assessment, a Quality Procedure Change Notice will be issued to delete paragraph 6.6 of QP 2.4 revision 1.

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DATE: 04-12-91  
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST  
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-034 (Continued)

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

D. Corrective Action to Prevent Recurrence: (Actions To Be Completed By 06/15/91)

In order to ensure that REECO YMP Managers clearly understand the need to maintain procedures current with practice, the Quality Manager will conduct a review training with the TPO and YMP department managers. This review will be documented to the managers' training file.

Response Approved: Bruce Gardella For R.E.P. 4/12/91  
Responsible Manager Date

RESPONSE ACCEPTED: Harris 4/19/91  
QAR Date

RESPONSE ACCEPTED: Catherine H. [Signature] 4-22-91  
OQA Date