



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

WBS 1.2.11  
QA: N/A

OCT 12 1993

William C. Kopatich  
Technical Project Officer  
for Yucca Mountain  
Site Characterization Project  
Raytheon Services Nevada  
101 Convention Center Drive  
Phase II, Suite P-250  
Las Vegas, NV 89109

**VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE ACTION REQUEST (CAR) YM-93-076 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-93-13 OF RAYTHEON SERVICES NEVADA (SCP: N/A)**

The YMQAD staff has verified the corrective action to CAR YM-93-076 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 Stephen R. Dana at 794-7176.

Richard E. Spence, Director  
Yucca Mountain Quality Assurance Division

YMQAD:RBC-266

Enclosure:  
CAR YM-93-076

cc w/encl:

\* K. R. Hooks, NRC, Washington, DC \*  
S. W. Zimmerman, NWPO, Carson City, NV  
D. J. Tunney, RSN, Las Vegas, NV  
P. G. Jones, M&O/TRW, Las Vegas, NV  
J. C. de la Garza, YMP, NV

cc w/o encl:

J. W. Gilray, NRC, Las Vegas, NV  
N. J. Brogan, YMQAD/QATSS, Las Vegas, NV

180022

Add: *[Signature]* to End

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

CAR NO. YM-93-076  
DATE: 7/21/93  
PAGE: 1 OF 2  
QA

CORRECTIVE ACTION REQUEST

<sup>1</sup> Controlling Document  
QARD, Rev. 0 & PP-02-08, Rev. 1, Training,...of MTL Personnel

<sup>2</sup> Related Report No.  
YMP-93-13

<sup>3</sup> Responsible Organization  
RSN

<sup>4</sup> Discussed With  
W. Kopatch & J. Rue

<sup>5</sup> Requirement:

QARD Section 2.2.11, states in part "Each affected organization shall establish a program for the evaluation, selection, indoctrination, training, and qualification of personnel performing work subject to QARD requirements. The program shall: .... F. Ensure minimum education and experience are verified or, when minimum education and experience cannot be specifically be verified, provide a statement and justification for the personnel assignment .... G. Ensure supervisors evaluate and assess the need for additional indoctrination and training as assignments, positions, and implementing documents change. H. Ensure the required indoctrination and training for a specified task is completed prior to performing the task."

<sup>6</sup> Adverse Condition:

The following deficiencies were found:

- 1) Documented verification of education and experience had not been accomplished for V. Thummala.
- 2) The annual evaluation for Level I, Level II, and Level III MTL personnel was not documented on the Record of Certification.
- 3) Training to ASTM C 42-90 was not accomplished prior to work initiation for D. Anderson nor D. Herrington.

<sup>9</sup> Does a significant condition adverse to quality exist? Yes\_\_\_ No X  
If Yes, Circle One: A B C

<sup>10</sup> Does a stop work condition exist? Yes\_\_\_ No X; If Yes - Attach copy of SWC  
If Yes, Circle One: A B C D

<sup>11</sup> Response Due Date:  
20 Working Days  
from Issuance

<sup>12</sup> Required Actions: ☒ Remedial ☒ Extent of Deficiency ☒ Preclude Recurrence ☒ Root Cause Determination

<sup>13</sup> Recommended Actions:

Identify the remedial action to be taken to correct the deficiencies identified in Block 6.  
Identify the extent of the condition and the planned corrective action to prevent recurrence.  
In addition, identify the root cause of the deficiencies.

<sup>7</sup> Initiator  
S. Dana Date 7/21/93

<sup>14</sup> Issuance Approved by:  
QADD R. Kopatch Date 7/27/93

<sup>15</sup> Response Accepted  
QAR S. Dana Date 9/9/93

<sup>16</sup> Response Accepted  
QADD R. Kopatch Date 9/14/93

<sup>17</sup> Amended Response Accepted  
QAR \_\_\_\_\_ Date \_\_\_\_\_

<sup>18</sup> Amended Response Accepted  
QADD \_\_\_\_\_ Date \_\_\_\_\_

<sup>19</sup> Corrective Actions Verified  
QAR S. Dana Date 10/1/93

<sup>20</sup> Closure Approved by:  
QADD R. Kopatch Date 10/12/93

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U.S. DEPARTMENT OF ENERGY  
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CAR NO. YM-93-076  
DATE: 7/21/92  
PAGE: 2 OF 2  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**REQUIREMENT (continued)**

In implementation of these requirements RSN has generated the following:

- 1) PP-02-02, Rev. 1, "Personnel Selection" paragraph 6.2, which states in part "The Manager, Human Resources shall be responsible for verifying the education and experience of employees and subcontractors of the RSN YMP Office, prior to their performing quality affecting activities."
- 2) PP-02-08, Rev. 1, "Training, Qualification, and Certification of Materials Testing Laboratory Personnel" paragraph 6.9.1, states "Level I, Level II, and Level III MTL personnel shall be evaluated annually by the Examiner. The results of the annual evaluation shall be documented on the Record of Certification."
- 3) PP-02-01, Rev. 1, "Indoctrination and Training" paragraph 6.1.2, states in part "Prior to performing any quality-affecting activity, the employee shall be indoctrinated/ trained as a minimum to the following topics as they relate to a particular function: General criteria, including the QARD, Applicable codes, regulations, and standards. ...."

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

CAR NO. YM-93-076

DATE: 8-23-93

PAGE: 1 OF 1

QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

**A. REMEDIAL:**

1. V. Thummala was an employee of Holmes & Narver (H&N) and continued employment through the transition to RSN. V. Thummala is a DOE "Q" level security cleared employee. A DOE requirement is that all personnel education and background be verified prior to submittal of application to DOE for a "Q" clearance.

V. Thummala's pre-employment verification was conducted on 6/26/85 by H&N and is present in the RSN Security records. This documentation is now included in the RSN/YMP files.

2. Evaluation for Level I, II and III MTL personnel is now current in RSN/YMP records.
3. Training of required MTL personnel to the ASTM C-42 Standard is conducted upon the release of all updates. Documentation is now current in the RSN/YMP records of training to ASTM C-42 1990 update, the version cited in CAR.

**B. INVESTIGATIVE ACTIONS:**

Minor. No YMP quality affecting items or work were compromised since all MTL personnel had been verified and trained. Documentation in RSN/YMP records was lacking.

**C. ROOT CAUSE DETERMINATION:**

Lack of monitoring to ensure that all necessary verification, training and certification documentation had been transmitted to the RSN/YMP records.

**D. CORRECTIVE ACTION TO PRECLUDE RECURRENCE:**

The Manager, RSN/YMP Field Operations; will monitor MTL personnel verifications, training and annual certifications, and will ensure that necessary documentation is in the records.

Response Approved: \_\_\_\_\_

Joe E. Watson  
Responsible Manager

Date

8/23/93

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CAR NO. YM-93-076

DATE: \_\_\_\_\_

PAGE: 1 OF 1  
QA

**CORRECTIVE ACTION REQUEST (Continuation Page)**

***Amended Response***

**A. REMEDIAL:**

1. V. Thummala was an employee of Holmes & Narver (H&N) and continued employment through the transition to RSN. V. Thummala is a DOE "Q" level security cleared employee. A DOE requirement is that all personnel education and background be verified prior to submittal of application to DOE for a "Q" clearance.

V. Thummala's pre-employment verification was conducted on 6/26/85 by H&N and is present in the RSN Security records. This documentation is now included in the RSN/YMP files.

2. Evaluation for Level I, II and III MTL personnel is now current in RSN/YMP records.
3. Training of required MTL personnel to the ASTM C-42 Standard is conducted upon the release of all updates. Documentation is now current in the RSN/YMP records of training to ASTM C-42 1990 update, the version cited in CAR.

**B. INVESTIGATIVE ACTIONS:**

The extent of the condition was minor. All MTL personnel files were verified for qualifications, certifications and training. No YMP quality affecting items or work were compromised because all MTL personnel had been qualified, certified and trained. Documentation in RSN/YMP records was lacking.

**C. ROOT CAUSE DETERMINATION:**

Lack of monitoring to ensure that all necessary verification, training and certification documentation had been transmitted to the RSN/YMP records.

**D. CORRECTIVE ACTION TO PRECLUDE RECURRENCE:**

The Manager, RSN/YMP Field Operations, has established a non-proceduralized log and checklist for monitoring of MTL personnel verifications, training, and annual certifications, and will ensure that necessary documentation is in the records.

Response Approved: *T. L. Bullock for L W*  
Responsible Manager

Date 9-3-93

*Str dtd 9/2/93 - YMP:188:93*

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WASHINGTON, D.C.

CAR NO. YM-93-076  
DATE: 10-1-93  
PAGE:        OF         
QA

CORRECTIVE ACTION REQUEST (Continuation Page)

VERIFICATION OF CORRECTIVE ACTION REQUEST  
(CAR) YM-93-076

Verification of corrective action was completed on 10/01/93 by Stephen Dana.  
The following objective evidence was verified:

- A. REMEDIAL ACTION - (1) Reviewed RSN Memorandum, from Tessie S. Landez to Personnel File (Venkatrao Thummala), dated 7/14/93, to certify that the background experience and education of Venkatrao Thummala had been verified; (2) Verified annual certifications had been completed on the Record of Certification for: James Aamodt, Darrin Anderson, Charles Herrington, Rajendar Singal, Roland Strote, and Venkatrao Thummala; (3) Reviewed RSN MTL Reading List of Standards for C. Herrington and D. Anderson. Verified that training has been accomplished to ASTM C-42 1990.
- B. INVESTIGATIVE ACTIONS - See items A and D.
- C. ROOT CAUSE - No action required.
- D. CORRECTIVE ACTION TO PRECLUDE RECURRENCE - Reviewed the "RSN/YMP Field Operations MTL Verification of Qualifications, Training and Annual Certification Log" (attached).

Stephen Dana  
Signature

Date: 10/1/93

[illegible]