



Department of Energy

Washington, DC 20585

MAY 29 1997

QA: 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

ISSUANCE OF DEFICIENCY REPORTS (DR) YM-97-D-044 THROUGH YM-97-D-046
RESULTING FROM OFFICE OF QUALITY ASSURANCE (OQA) SUPPLIER AUDIT
OQA-SA-97-019 OF TERRACON WESTERN CONSULTANTS, INC.

Enclosed are DRs YM-97-D-044 through YM-97-D-046 generated as a result of OQA Supplier
Audit OQA-SA-97-019.

Please provide responses to these deficiencies that meet the applicable requirements of
Administrative Procedure 16.1Q, Performance/Deficiency Reporting. Send the originals of your
responses to Deborah Sult, OQA/QATSS, P.O. Box 30307, Mail Stop 455, North Las Vegas,
Nevada 89036-0307. Responses to the DRs are due 20 working days from the date of this letter.
Extensions to due dates must be requested in writing, with appropriate justification, prior to the
due dates.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or
Lester W. Wagner at (702) 794-1304.

Donald G. Horton, Director
Office of Quality Assurance

OQA:JB-1573

Enclosure:
DRs YM-97-D-044 through
YM-97-D-046

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PDR WASTE
WM-11 PDR



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

8 Performance Report
 Deficiency Report

NO. YM-97-D-044

PAGE 1 OF 2

QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: Quality Systems Manual, Revised 1/4/97	2 Related Report No. OQA-SA-97-019
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3 Responsible Organization: Terracon Western Consultants, Inc.	4 Discussed With: R. Ludwig, W. Sturm
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5 Requirement/Measurement Criteria:
Quality System Manual, Section II, B.1 states, "Each position within the company has a written job description in the company policy manual...All personnel are placed according to experience, education/training, certification, and performance."

6 Description of Condition:
Contrary to the above stated requirement, it was determined that a Level I Technician was performing duties outside the scope of his Position Description, i.e., performing compressive strength and shear tests rather than assisting a Level II Technician in the performance of these tests. It should be noted that this individual had been trained to the implementing standards and was qualified to perform the tests in question; however, his Position Description had not been modified to indicate that, in addition to the Level I tasks, he was also qualified to perform additional activities normally associated with a Level II Technician. Additionally, training records for another Level I Technician could not be located, although a checklist from a recently completed (02/19/97) Internal Quality System Review indicated that training/evaluation records were reviewed and updated as necessary.

7 Initiator Michael Malone <i>[Signature]</i> Date 05/12/97	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
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10 Recommended Action: (Not required for PR)

1. Perform investigative action to determine the extent of deficiency and impact, if any, on the work performed.
2. Identify remedial action necessary to correct the deficiency.
3. Based on the results of the investigation, perform root cause determination, or provide justification if not required.
4. Determine and implement actions to prevent recurrence.

11 QA Review: QAR <i>Michael Malone</i> Date 5/14/97	12 Response Due Date 20 working days from issuance
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13 Affected Organization QA Manager Issuance Approval: (QAR for PR) Printed Name Donald G. Horton	Signature <i>[Signature]</i> Date 5/29/97
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22 Corrective Action Verified QAR _____ Date _____	23 Closure Approved by: (N/A for PR) AQAM _____ Date _____
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U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.

PR/DR NO. YM-97-D-044
PAGE 2 OF 2
QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

15 Extent of Condition: (Not required for PR)

16 Root Cause Determination: (Not required for PR)

Required Yes No

17 Action to Preclude Recurrence: (Not required for PR)

Required Yes No

18 Corrective Action Completion Due Date:

19 Response by:

Initial

Amended

Date

Phone

20 Response Accepted

QAR

Date

21 Response Accepted (N/A for PR):

AOQAM

Date

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8 Performance Report
 Deficiency Report
 NO. YM-97-D-045
 PAGE 1 OF 2
 QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document: Terracon's Quality Systems Manual (QSM), Revised 1/4/96	2 Related Report No. OQA-SA-97-019
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3 Responsible Organization: Terracon Western Consultants, Inc., Las Vegas Lab.	4 Discussed With: Ron Ludwig, Bill Sturm
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5 Requirement/Measurement Criteria:

- QAM, Section III-A requires that each laboratory maintain a master equipment list for major equipment requiring calibration, verification, and checking.
- QAM, Section III-B requires that each piece of equipment to be calibrated will have a completed data sheet for each calibration, verification, and check performed.
- QAM, Section VI-B-2 requires whenever, during calibration or verification and checks, test equipment is found to be beyond acceptable limits, it will be red tagged and removed from service pending repair or disposal/replacement.

6 Description of Condition:

- The Master Equipment Test List was found not to be current.
- 1995, 1996 & 1997 calibration records for the Compression Machine Transducers (#1483, #1545, and #1611) and the Cure Room Temperature Chart Recorder #248095 were not available for review.
Note: Faxed copies of the calibration worksheets generated during the January 1997 calibration of the Transducers were obtained for review. These copies were provided by the National Calibration Services' (NCS) individual who performed the calibration.
- While Terracon does remove equipment from service when it is found to be beyond acceptable limits, there were no "red tags" available for identifying out of acceptable limits equipment.

7 Initiator Lester W. Wagner / Michael Malone. Date <u>5/14/97</u>	9 Is condition an isolated occurrence? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown; Must be Yes if PR
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10 Recommended Action: (Not required for PR)

- Perform investigative action to determine the extent of deficiencies and impact, if any, on work performed.
- Provide remedial actions necessary to correct the identified deficiencies.
- Provide indoctrination/orientation in affected areas to minimize the possibility of recurrence.

11 QA Review: QAR <u>[Signature]</u> Date <u>5/14/97</u>	12 Response Due Date 20 working days from issuance
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13 Affected Organization QA Manager Issuance Approval: (QAR for PR) Printed Name <u>Donald G. Horton</u> Signature <u>[Signature]</u> Date <u>5/19/97</u>
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22 Corrective Action Verified QAR _____ Date _____	23 Closure Approved by: (N/A for PR) AOQAM _____ Date _____
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PR/DR NO. YM-97-D-045

PAGE 2 OF 2
QA: L

PERFORMANCE/DEFICIENCY REPORT RESPONSE

14 Remedial Actions:

15 Extent of Condition: (Not required for PR)

16 Root Cause Determination: (Not required for PR)

Required Yes No

17 Action to Preclude Recurrence: (Not required for PR)

Required Yes No

18 Corrective Action Completion Due Date:

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Amended

Date

Phone

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Date

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AOQAM

Date

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8 Performance Report
 Deficiency Report

NO. YM-97-D-046

PAGE 1 OF 2

QA: L

PERFORMANCE/DEFICIENCY REPORT

1 Controlling Document:

Kiewit/Parsons Brinckerhoff (Kiewit/PB) Management Control Procedure (MCP)-4.0, Procurement, Revision 15.

2 Related Report No.

OQA-SA-97-019

3 Responsible Organization:

Kiewit/PB

4 Discussed With:

Dave Haas

5 Requirement/Measurement Criteria:

MCP-4.0, Section 3.4.2.D.1. QA Program, states in part, "POs for items and services that are not considered commercial grade shall require the supplier to have a documented QA program that implements applicable QARD requirements or shall require the supplier to conduct some or all of its work under the Kiewit/PB QA program."

6 Description of Condition:

Kiewit/PB Purchase Order 19801090, Amendment 1, to Terracon, required all work to be performed in accordance with Terracon's Quality Systems Manual. The PO did not contain any requirements for Terracon to work under any portion of the Kiewit/PB QA program. Terracon's Quality Systems Manual, as submitted and approved by Kiewit/PB, does not contain any requirements for control of procurement activities (i.e., procurement documents to include technical and quality requirements, supplier qualification, etc.).

NOTE: The only procurement activity provided by Terracon for the work performed under the Kiewit/PB PO is for calibration services. Procurement of calibration services by Terracon is accomplished via a telecon to the local National Calibration Services Rep who performs the calibration. There are no technical and quality requirements invoked nor any evaluation of the suppliers' capabilities. The calibration supplier did provide a record of calibration with a NIST traceability number listed.

7 Initiator

Lester W. Wagner

Date 5/23/97

9 Is condition an isolated occurrence?

Yes No Unknown; Must be Yes if PR

10 Recommended Action: (Not required for PR)

1. Re-review Terracon's QSM in accordance with Kiewit/PB MCP-7.2, "Supplier Quality Evaluation and Approval," to identify and document the applicable QARD requirements not covered by the Terracon QSM.
2. Investigate to determine the impact of the QARD requirements not covered on work performed by Terracon on Kiewit/PB Purchase Order 19801090.
3. Assure future procurements include, as appropriate, technical and quality requirements not covered by the supplier's quality program but necessary to meet the QARD requirements for the type of work being performed.

11 QA Review:

QAR

Date 5/23/97

12 Response Due Date

20 working days from issuance

13 Affected Organization QA Manager Issuance Approval: (QAR for PR)

Printed Name Donald G. Horton

Signature

Date 5/29/97

22 Corrective Action Verified

QAR

Date

23 Closure Approved by: (N/A for PR)

AOQAM

Date

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PAGE 2 OF 2

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Amended

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Date

21 Response Accepted (N/A for PR):

AOQAM

Date

L. D. Foust

-2-

MAY 29 1997

cc w/encl:

T. A. Wood, DOE/HQ (RW-55) FORS
J. O. Thoma, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
D. S. Haas, M&O, Las Vegas, NV
B. R. Justice, M&O, Las Vegas, NV
R. A. Morgan, M&O, Las Vegas, NV

cc w/o encl:

W. L. Belke, NRC, Las Vegas, NV
L. W. Wagner, OQA/QATSS, Las Vegas, NV
D. G. Sult, OQA/QATSS, Las Vegas, NV
R. W. Clark, DOE/OQA, Las Vegas, NV