



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

WBS 1.2.9.3
QA

NOV 20 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

VERIFICATION OF CORRECTIVE ACTIONS AND CLOSURE OF CORRECTIVE ACTION REQUESTS (CARS) YM-91-028, YM-91-029, AND YM-91-030 RESULTING FROM YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION (YMQAD) AUDIT YMP-91-02 OF REYNOLDS ELECTRICAL & ENGINEERING CO., INC.

The YMQAD staff has verified the corrective actions to CARS YM-91-028 through YM-91-030 and determined the results to be satisfactory. As a result, the CARS are considered closed.

If you have any questions, please contact either Robert B. Constable at 794-7945 or John S. Martin at 794-7881.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-880

Enclosure:
CARS YM-91-028, YM-91-029,
and YM-91-030

cc w/encl:
K. R. Hooks, NRC, Washington, DC
S. W. Zimmerman, NWPO, Carson City, NV
W. J. Glasser, REECO, Las Vegas, NV

cc w/o encl:
J. W. Gilray, NRC, Las Vegas, NV
N. J. Brogan, SAIC, Las Vegas, NV, 517/T-08

Add: K. R. Hooks 4/11

WM-11
108.7

DHOB
11

23

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

14 CAR NO.: YM-91-028
DATE: 03/07/91
SHEET: 1 OF 2
QA
WBS No.: 1.2.9.3

CORRECTIVE ACTION REQUEST

1 Controlling Document
Quality Procedure 9.1

2 Related Report No.
AUDIT NO. 91-02

3 Responsible Organization
REECO QSD

4 Discussed With
S. Archuleta, J. Donaldson

10 Response Due
20 Days After Issue

11 Responsibility for Corrective Action
R. F. Pritchett

12 Stop Work Order Y or N
No

5 Requirement:
QP-9.1, Rev. 3, "Welding Procedure Qualification," Para. 6.2.3 states, "when required by the applicable code, arrange for nondestructive testing of the sample weld, (i.e., ultrasonic, radiographic, etc.) and attach a copy of the nondestructive evaluation report to the original PQR for retention."

6 Adverse Condition:
Contrary to the above requirement, NDE reports were not attached to the PQRs for those weld procedure qualifications for which NDE was performed.

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. Identify these deficiencies and provide the

8 Initiator: J. S. Martin Date: 02/26/91

9 Severity Level -
1 2 3

13 Approved By: John H. [Signature] Date: 3-8-91

15 Verification of Corrective Action:
see attached verification sheet dated 11/14/91 John - 11-14-91

16 Corrective Action Completed and Accepted:
OAR [Signature] Date 11-14-91

17 Closure Approved By:
OAR [Signature] Date 11/19/91

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

CAR NO.: YM-91-028
DATE: 03/07/91
SHEET: 2 OF 2

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

CAR NO. YM-91-028
DATE: 04-01-91
SHEET: 1 OF 1

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-028

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # 1

A. Extent of Deficiency:

Review of Procedure Qualification Records (PQRs) indicated this condition exists for PQRs 1422, 2119, 3113, 3116A, and 3225.

B. Root Cause:

These Welding Procedure Specifications (WPSs) were originally qualified for a non-YMP welding program in which the attachment of NDE reports to the PQR was not required. When the subject PQRs were incorporated as YMP WPS support, management failed to assure compliance with this requirement.

C. Remedial Actions: (All Actions To Be Completed By 04/15/91)

The required NDE records were filed in the original non-YMP PQR files. Copies of the required NDE reports have been retrieved and filed in the YMP PQR records. A statement shall be added to the PQRs and WPSs to identify the date of issue and code or standard title utilized for generation of the welding document.

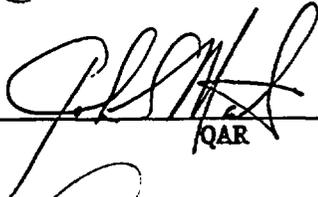
D. Corrective Action to Prevent Recurrence: (Actions To Be Completed By 09/09/91)

The YMP welding program shall be revised to assure compliance to requirements. The revision of the YMP welding program shall assure the date of issue and code or standard title utilized for generation of the welding document (WPS, PQR, and WQR) are defined on the document. The revised YMP program will stipulate the format and methodologies for development of the WPSs, PQRs, and WQRs. The revision of the YMP welding program shall be completed by September 9, 1991. Additional revision or generation of new PQRs, WPSs, and WQRs shall be as required per engineering design criteria when received from the project.

Response Approved: 27 Pritchett 4/1/91
Responsible Manager Date

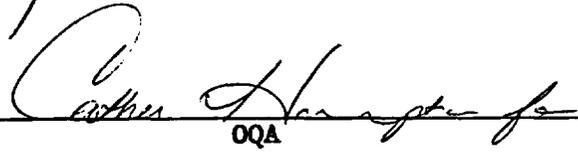
ltd dtd 4/1/91 - 580-01-337

Response Accepted:


QAR

4-5-91
Date

Response Accepted:


OQA

4-8-91
Date

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

CAR NO.: YM-91-028
DATE: 09-05-91
SHEET: 1 OF 1

CORRECTIVE ACTION REQUEST
(continuation sheet)

AMENDED RESPONSE

CORRECTIVE ACTION RESPONSE: CAR YM-91-028

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # 1

A. Extent of Deficiency:

Review of Procedure Qualification Records (PQRs) indicated this condition exists for PQRs 1422, 2119, 3113, 3116A, and 3225.

B. Root Cause:

These Welding Procedure Specifications (WPSs) were originally qualified for a non-YMP welding program in which the attachment of NDE reports to the PQR was not required. When the subject PQRs were incorporated as YMP WPS support, management failed to assure compliance with this requirement.

C. Remedial Actions: (Complete)

Copies of the required NDE reports have been retrieved and filed in the following YMP PQR files: 1422, 2119, 3113, 3116A, and 3225.

D. Corrective Action to Prevent Recurrence: (Actions To Be Completed By 11/01/91)

The current YMP welding program is scheduled to be superseded by the REECO Welding Manual which is presently under development. This program will clarify the requirements to attach the required information and will be a comprehensive welding program that will meet or exceed the current YMP program requirements.

Response Approved:

Bruce Gardella For RFP
Responsible Manager

9/6/91
Date

Response Accepted:

[Signature]
QAR

9-9-91
Date

Response Accepted:

[Signature]
QQA

9-13-91
Date

Ltr dtd 9/6/91 - 580-01-633

VERIFICATION OF CORRECTIVE ACTION FOR CARs YM-91-028, 029 & 030

During the Department of Energy Audit 91-02 of REECO three CAR conditions were identified relative to the REECO Weld and Test Program. The three CARs referenced above were issued to detail these programmatic deficiencies. The following is a synopsis of the deficiencies, corrective action taken by REECO and verification accomplished to ensure that this action has been completed. Verification was accomplished on 11/11 through 11/12, 1991.

YM-091-028

Deficiency: Nondestructive Examination (NDE) Reports were not attached to the Procedure Qualification Records (PQR) as procedurally mandated.

Corrective Action: REECO retrieved the NDE Reports and attached them to the PQRs. In addition, REECO clarified requirements within the REECO Welding Manual.

Verification: Reviewed PQRs 1422, 2119, 3113, 3116A, 3325 to ensure that the NDE Reports had been attached as required and randomly reviewed the following PQRs for same 1112, 1117 and 3914. Review found NDE Reports to be attached as required. Additionally, a review of the REECO Welding Manual has provided evidence that REECO has clarified when NDE Reports are required to be attached relative to AWS D 1.1 and ASME Section IX. The new REECO Welding Manual was issued on 11/1/91.

YM-91-029

Deficiency: No Code of Record had been established (i.e., year or addenda) in procedures.

Corrective Action: Add date of issue and code or standard utilized for qualification to welding documents and revise Quality Procedures (QPs) 9.0, 9.1 and 9.2.

Verification: Reviewed PQRs listed in CAR YM-91-028 for date of issue and code or standard utilized. Review was satisfactory. In addition, reviewed Procedure Change Notices to QPs 9.0, 9.1, 9.2 to verify that in the absence of a clearly defined applicable code; i.e., year and addenda, the organization using the code (i.e., ASME, AWS, ANSI,...) shall use the current year and addenda. This review was found to be satisfactory.

YM-91-030

Deficiency: Welder qualification renewed improperly.

Corrective Action: Pulled welders qualification and clarified REECO Welding Manual as to how welders qualifications would be extended.

Verification: Performed review of the REECO Welding Manual to ensure that REECO had clarified their intent on how welder qualifications would be extended. Review of Volume II, Section GWS-WQ-1, subparagraph 6.4.1, paragraph 6.6 and its subparagraphs now clearly delineate how welders qualifications would be extended and the requirements for such an extension to be granted.

Based upon the above verification no further action is required of REECO at this time and subject CARs are considered closed.

QAR - *John S. Mendel*

11-14-91

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

14CAR NO.: YM-91-029
DATE: 03/07/91
SHEET: 1 OF 2
QA
WBS No.: 1.2.9.3

CORRECTIVE ACTION REQUEST

1 Controlling Document QAPP 568-DOC-115		2 Related Report No. AUDIT NO. 91-02	
3 Responsible Organization REECO QSD		4 Discussed With S. Archuleta, J. Donaldson	
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: Quality Assurance Program Plan (QAPP), Revision 8, Section V, Para. 1.0 states in part, "Documents shall include or reference appropriate quantitative or qualitative acceptance criteria for determining that prescribed activities have been satisfactorily accomplished."			
6 Adverse Condition: Typically the NNWSI Volumes I through III reference that the governing codes (i.e., ASME, AWS, ANSI,...) be utilized and consulted for further information and applicable criteria. The deficiency that exists is that no code of record has been established within the procedures to designate which year or addenda is applicable.			
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. Identify these deficiencies and provide the			
8 Initiator J. S. Martin <i>[Signature]</i>	Date: 02/26/91	9 Severity Level - 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>	13 Approved By: OQA <i>[Signature]</i> 38-91 Date:
15 Verification of Corrective Action: <i>see attached verification sheet dt dated 11-14-91</i>			
16 Corrective Action Completed and Accepted: OAR <i>[Signature]</i> Date <u>11-14-91</u>		17 Closure Approved By: OQA <i>[Signature]</i> 11/19/91	

ENCLOSURE

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

CAR NO.: YM-91-029
DATE: 03/07/91
SHEET: 2 OF 2

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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WASHINGTON, D.C.

CAR NO.	YM-91-029
DATE:	04-12-91
SHEET:	1 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-029

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

A. Extent of Deficiency:

REECo has reviewed the identified adverse condition and, after review of our current quality procedures, considers that the condition is limited to those activities governed by quality criteria IX, Control of Processes. REECo's procedures for this criteria contain a general requirement that special processes be conducted in accordance with applicable codes, standards, specifications, criteria, and other special requirements. The NNWSI Volumes I through III make reference to the governing codes but have not provided a reference to the actual code used. In general, the required codes to conduct an activity are set as part of a license application or by the design agency as part of a design specification. However, for the qualification of nondestructive test personnel, Supplement 2S-2 of NQA-1-1989 edition has specified SNT-TC-1A, June 1980 edition as the specific requirement. This appears to be the only specific code which has an effect on Control of Processes, i.e. nondestructive testing. REECo currently does not perform quality related nondestructive testing on the YMP project.

B. Root Cause:

The welding organization, in the absence of a defined code of record, did not recognize a need to identify the specific code used to determine the acceptability of the activity.

C. Remedial Actions: (All Actions To Be Completed By 09/09/91)

As part of the corrective actions identified for corrective action CAR-YM-91-028, REECo indicated that a statement shall be added to the Procedure Qualification Records (PQRs) and Weld Procedure Specifications (WPSs) to identify the date of issue and code or standard title utilized for generation of the welding document. This action is to be completed by April 15, 1991.

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WASHINGTON, D.C.

CAR NO. YM-91-029
DATE: 04-12-91
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-029 (Continued)

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

C. Remedial Actions: (Continued)

To ensure that applicable codes are defined, a revision to the YMP welding program shall assure that date of issue and code or standard title utilized for generation of the welding document (WPS, PQR, and Welder Qualification Record (WQR)) are defined on the document. This action which is also part of the corrective action for YM-91-028 is scheduled for completion September 9, 1991.

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

A clarification will be added to REECO's Quality Procedures for Control of Processes (QP 9.0, QP 9.1, and QP 9.2) to identify that in the absence of a clearly defined applicable code, i.e. year and addenda, the organization using a governing code (i.e., ASME, AWS, ANSI,...) shall use the current year and addenda and clearly identify on the documentation what specific code was used in the performance of the process. This requirement will also be included in any future procedures prepared for the Control of Processes. The clarification will be implemented through a Quality Procedure Change notices by June 15, 1991.

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

RESPONSE ACCEPTED: [Signature] 4-15-91
QAR Date

RESPONSE ACCEPTED: [Signature] 4-16-91
OQA Date

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

CAR NO.: YM-91-029
DATE: 09-05-91
SHEET: 1 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

AMENDED RESPONSE

CORRECTIVE ACTION RESPONSE: CAR YM-91-029

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

A. Extent of Deficiency:

REECO has reviewed the identified adverse condition, and after review of our current quality procedures, considers that the condition is limited to those activities governed by quality criteria IX, Control of Processes. REECO's procedures for this criteria contain a general requirement that special processes be conducted in accordance with applicable codes, standards, specifications, criteria, and other special requirements. The NNWSI Volumes I through III make reference to the governing codes but have not provided a reference to the actual code used. In general, the required codes to conduct an activity are set as part of a license application or by the design agency as part of a design specification. However, for the qualification of nondestructive test personnel, Supplement 2S-2 of NQA-1-1989 edition has specified SNT-TC-1A, June 1980 edition as the specific requirement. This appears to be the only specific code which has an effect on Control of Processes; i.e., nondestructive testing. REECO currently does not perform quality related nondestructive testing on the YMP project.

B. Root Cause:

The welding organization, in the absence of a defined code of record, did not recognize a need to identify the specific code used to determine the acceptability of the activity.

C. Remedial Actions: (Complete)

A statement has been added to the Procedure Qualification Records (PQRs) addressed on CAR, YM-91-028, to identify the date of issue and code or standard title utilized for generation of the welding document. This action is complete.

Ltr dtd 9/6/91-580-01-633

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WASHINGTON, D.C.

CAR NO.: YM-91-029
DATE: 09-05-91
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-029 (Continued)

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # ALL

D. Corrective Action to Prevent Recurrence: (Actions To Be Completed By 11/01/91)

The current YMP welding program is scheduled to be superseded by the REECo Welding Manual which is presently under development. This program is comprehensive and will meet or exceed all YMP program requirements. The REECo Welding Manual will state that new or revised Welding Procedure Specifications (WPSs) are and will continue to be qualified in accordance with the latest version or addenda of the governing code. Issuance of the REECo Welding Manual is scheduled for October 1, 1991, and further review and acceptance by YMP to be completed by 11/01/91. Quality Procedures (QP 9.0, QP 9.1, and QP 9.2) have been revised to require that in the absence of a clearly defined applicable code; i.e., year and addenda, the organization using a governing code (i.e., ASME, AWS, ANSI,...) shall use the current year and addenda.

Response Approved: Bruce Eadell For RFP 9/16/91
Responsible Manager Date

Response Accepted: [Signature] 9-9-91
QAR Date

Response Accepted: [Signature] 9-13-91
OQA Date

VERIFICATION OF CORRECTIVE ACTION FOR CARS YM-91-028, 029 & 030

During the Department of Energy Audit 91-02 of REECO three CAR conditions were identified relative to the REECO Weld and Test Program. The three CARS referenced above were issued to detail these programmatic deficiencies. The following is a synopsis of the deficiencies, corrective action taken by REECO and verification accomplished to ensure that this action has been completed. Verification was accomplished on 11/11 through 11/12, 1991.

YM-091-028

Deficiency: Nondestructive Examination (NDE) Reports were not attached to the Procedure Qualification Records (PQR) as procedurally mandated.

Corrective Action: REECO retrieved the NDE Reports and attached them to the PQRs. In addition, REECO clarified requirements within the REECO Welding Manual.

Verification: Reviewed PQRs 1422, 2119, 3113, 3116A, 3325 to ensure that the NDE Reports had been attached as required and randomly reviewed the following PQRs for same 1112, 1117 and 3914. Review found NDE Reports to be attached as required. Additionally, a review of the REECO Welding Manual has provided evidence that REECO has clarified when NDE Reports are required to be attached relative to AWS D 1.1 and ASME Section IX. The new REECO Welding Manual was issued on 11/1/91.

YM-91-029

Deficiency: No Code of Record had been established (i.e., year or addenda) in procedures.

Corrective Action: Add date of issue and code or standard utilized for qualification to welding documents and revise Quality Procedures (QPs) 9.0, 9.1 and 9.2.

Verification: Reviewed PQRs listed in CAR YM-91-028 for date of issue and code or standard utilized. Review was satisfactory. In addition, reviewed Procedure Change Notices to QPs 9.0, 9.1, 9.2 to verify that in the absence of a clearly defined applicable code; i.e., year and addenda, the organization using the code (i.e., ASME, AWS, ANSI,...) shall use the current year and addenda. This review was found to be satisfactory.

YM-91-030

Deficiency: Welder qualification renewed improperly.

Corrective Action: Pulled welders qualification and clarified REECO Welding Manual as to how welders qualifications would be extended.

Verification: Performed review of the REECO Welding Manual to ensure that REECO had clarified their intent on how welder qualifications would be extended. Review of Volume II, Section GWS-WQ-1, subparagraph 6.4.1, paragraph 6.6 and its subparagraphs now clearly delineate how welders qualifications would be extended and the requirements for such an extension to be granted.

Based upon the above verification no further action is required of REECO at this time and subject CARs are considered closed.

CAR - *John S. Munn*
11-14-91

ORIGINAL

THIS IS A RED STAMP

14 CAR NO.: YM-91-030

DATE: 03/07/91

SHEET: 1 OF 2

QA

WBS No.: 1.2.9.3

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

CORRECTIVE ACTION REQUEST

1 Controlling Document
American Society of Mechanical Engineers, Sec. IX

2 Related Report No.
AUDIT NO. 91-02

3 Responsible Organization
REECO QSD

4 Discussed With
S. Archuleta, J. Donaldson

10 Response Due
20 Days After Issue

11 Responsibility for Corrective Action
R. F. Pritchett

12 Stop Work Order Y or N
No

5 Requirement:
Procedure NWP, Revision 0 "NNWSI Standard Welder, Welding Operator, Brazier and Brazing Operator, Certification Specification," Para. 2.2 references that "ANSI/AIME, Section IX (American Society of Mechanical Engineers), "Welding and Brazing Qualifications." be utilized for welder certification. ASME Section IX, Part QW, "Welding," paragraph QW-322, "Renewal of Qualification," states, "The performance qualifications of a welder or welding operator shall be affected under the following conditions: (a) when he has not welded with a process during a period of 3 months or more, his qualifications or that process shall be expired; except when he is welding with another process, the period may be extended to 6 months; (b) when he has not welded with any process during a period of 3 months, all his qualifications shall be expired including any which may extend beyond 3 months by virtue of (a) above;..."

6 Adverse Condition:
Contrary to the above, welder with stamp No. 2-001 had his qualifications renewed for weld procedures N-1112, N-1117G, and N-3914, without the performance of any welding process for a period greater than 3 months.

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. Identify these deficiencies and provide the

8 Initiator
J. S. Martin
Date: 02/26/91

9 Severity Level -
1 2 3

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

15 Verification of Corrective Action:

see attached verification sheet dated 11-14-91
[Signature]
11-14-91

16 Corrective Action Completed and Accepted:
OAR [Signature] Date 11-14-91

17 Closure Approved By:
OQA [Signature] 11/19/91

ENCLOSURE

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

CAR NO.: YM-91-030
DATE: 03/07/91
SHEET: 2 OF 2

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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WASHINGTON, D.C.

CAR NO. YM-91-030

DATE: 04-01-91

SHEET: 1 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-030

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # 1

A. Extent of Deficiency:

At the time of subject YMP Audit, there was one active YMP welder, Z-001.

B. Root Cause:

The format that had historically been followed in the non-YMP program, from which the YMP procedure NWP-2 was developed, determined that the "Three Month" requirement would be adequately satisfied if the specified "Three Month" period was interpreted to be established by three successive calendar months beginning on the first day of the month following the month in which the welder was qualified in or used the specific process. Thus, if a welder used a process on any day in January his qualification for that process did not expire until the end of the third month after January, which would be April 30th. Documented usage of the process anytime before April 30th was considered to be within the required three month time frame. No attempt to extend one process through the usage of a second process was made. The YMP procedure NWP-2 failed to properly define and justify this interpretation.

C. Remedial Actions: (All Actions Are Completed)

The YMP qualifications for welder Z-001 has been rescinded. No welding has been performed on this project to date.

D. Corrective Action to Prevent Recurrence: (Actions To Be Completed By 09/09/91)

Research of ASME Section IX Code cases was conducted to determine if a committee interpretation of this question had been performed. No decision by the ASME code committee addressing the three month period was found. Two active members of the AWS D1.1 committee were contacted and neither member could shed light on the intended interpretation by their committee. Thus, it is a matter of interpreting the intent of the author in deciding if a deficiency exists or not; the only people who can decide this is the committee that wrote the requirement and that committee has been superseded by the 1989 committee for ASME Section IX and the 1990 committee for AWS D1.1. ASME Section IX was changed to specify a "Six Month" period by the winter 1990 addenda.

Ltr dtd 4/1/91 - 580-01-337

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

CAR NO. YM-91-030
DATE: 04-01-91
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-030 (Continued)

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # 1

D. Corrective Action to Prevent Recurrence: (Continued)

The REECo YMP welding program shall be revised and approved by September 9, 1991. The new YMP program will implement a six month expiration period; i.e., day of month to day of month six months later. Further details of controls to be implemented in the YMP welding program revision are defined in response to YM-91-28, "Corrective Action To Prevent Recurrence".

Response Approved:

127 Pritchett
Responsible Manager

4/1/91
Date

Response Accepted:

[Signature]
QAR

4-5-91
Date

Response Accepted:

[Signature]
OQA

4-8-91
Date

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

CAR NO.: YM-91-030
DATE: 09-05-91
SHEET: 1 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

AMENDED RESPONSE

CORRECTIVE ACTION RESPONSE: CAR YM-91-030

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # 1

A. Extent of Deficiency:

At the time of subject YMP Audit, there was one active YMP welder, Z-001.

B. Root Cause:

The format that had historically been followed in the non-YMP program, from which the YMP procedure NWP-2 was developed, determined that the "Three Month" requirement would be adequately satisfied if the specified "Three Month" period was interpreted to be established by three successive calendar months beginning on the first day of the month following the month in which the welder was qualified in or used the specific process. Thus, if a welder used a process on any day in January his qualification for that process did not expire until the end of the third month after January, which would be April 30th. Documented usage of the process anytime before April 30th was considered to be within the required three month time frame. No attempt to extend one process through the usage of a second process was made. The YMP procedure NWP-2 failed to properly define and justify this interpretation.

C. Remedial Actions: (All Actions To Be Completed By 11/01/91)

The YMP qualifications for welder Z-001 has been rescinded. No welding associated with quality affecting activity has been performed on the YMP to date.

Ltd dtd 9/6/91 - 580-01-633

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

CAR NO.: YM-91-030
DATE: 09-05-91
SHEET: 2 OF 2

CORRECTIVE ACTION REQUEST
(continuation sheet)

CORRECTIVE ACTION RESPONSE: CAR YM-91-030 (Continued)

1. CORRECTIVE ACTION FOR DEFICIENT CONDITION # 1

D. Corrective Action to Prevent Recurrence: (Actions To Be Completed By 11/01/91)

Research of ASME Section IX Code cases was conducted to determine if a committee interpretation of this question had been performed. No decision by the ASME code committee addressing the three month period was found. Two active members of the AWS D1.1 committee were contacted and neither member could shed light on the intended interpretation by their committee. Thus, it is a matter of interpreting the intent of the author in deciding if a deficiency exists or not; the only people who can decide this is the committee that wrote the requirement and that committee has been superseded by the 1989 committee for ASME Section IX and the 1990 committee for AWS D1.1. ASME Section IX was changed to specify a "Six Month" period by the winter 1990 addenda.

The REECo Welding Manual, which is currently being revised by the Welding Operations Support Facility Supervisor, shall include for implementation, a six month expiration period; i.e., day of month to day of month six months later to comply with the current edition of ASME.

Response Approved: Bruce Stalla For RFP 9/6/91
Responsible Manager Date

Response Accepted: [Signature] 9-9-91
QAR Date

Response Accepted: Catherine H. [Signature] 9-13-91
OQA Date

VERIFICATION OF CORRECTIVE ACTION FOR CARs YM-91-028, 029 & 030

During the Department of Energy Audit 91-02 of REECO three CAR conditions were identified relative to the REECO Weld and Test Program. The three CARs referenced above were issued to detail these programmatic deficiencies. The following is a synopsis of the deficiencies, corrective action taken by REECO and verification accomplished to ensure that this action has been completed. Verification was accomplished on 11/11 through 11/12, 1991.

YM-091-028

Deficiency: Nondestructive Examination (NDE) Reports were not attached to the Procedure Qualification Records (PQR) as procedurally mandated.

Corrective Action: REECO retrieved the NDE Reports and attached them to the PQRs. In addition, REECO clarified requirements within the REECO Welding Manual.

Verification: Reviewed PQRs 1422, 2119, 3113, 3116A, 3325 to ensure that the NDE Reports had been attached as required and randomly reviewed the following PQRs for same 1112, 1117 and 3914. Review found NDE Reports to be attached as required. Additionally, a review of the REECO Welding Manual has provided evidence that REECO has clarified when NDE Reports are required to be attached relative to AWS D 1.1 and ASME Section IX. The new REECO Welding Manual was issued on 11/1/91.

YM-91-029

Deficiency: No Code of Record had been established (i.e., year or addenda) in procedures.

Corrective Action: Add date of issue and code or standard utilized for qualification to welding documents and revise Quality Procedures (QPs) 9.0, 9.1 and 9.2.

Verification: Reviewed PQRs listed in CAR YM-91-028 for date of issue and code or standard utilized. Review was satisfactory. In addition, reviewed Procedure Change Notices to QPs 9.0, 9.1, 9.2 to verify that in the absence of a clearly defined applicable code; i.e., year and addenda, the organization using the code (i.e., ASME, AWS, ANSI,...) shall use the current year and addenda. This review was found to be satisfactory.

YM-91-030

Deficiency: Welder qualification renewed improperly.

Corrective Action: Pulled welders qualification and clarified REECO Welding Manual as to how welders qualifications would be extended.

Verification: Performed review of the REECO Welding Manual to ensure that REECO had clarified their intent on how welder qualifications would be extended. Review of Volume II, Section GWS-WQ-1, subparagraph 6.4.1, paragraph 6.6 and its subparagraphs now clearly delineate how welders qualifications would be extended and the requirements for such an extension to be granted.

Based upon the above verification no further action is required of REECO at this time and subject CARs are considered closed.

CAR - *John S. Mendel*
11-14-91