PROJECT OFFICE QUALITY ASSURANCE AUDIT REPORT FOR

THE YUCCA MOUNTAIN PROJECT OFFICE AUDIT OF

REYNOLDS ELECTRICAL & ENGINEERING CO., INC.

AUDIT NO. 89-5

CONDUCTED: SEPTEMBER 25-29, 1989

Prepared By: _____ Date: 10-13-89
William H. Camp
Audit Team Leader/Lead Auditor

Approved By: _____ Date: 10-18-89
Dale Hedges, Manager
Verification Department

Approved By: _____ Date: 10-19-89
Edwin L. Wilmot, Acting Director
Quality Assurance Division
Yucca Mountain Project

ENCLOSURE

EXECUTIVE SUMMARY

PROJECT OFFICE AUDIT REPORT NO. 89-5

REYNOLDS ELECTRICAL & ENGINEERING CO., INC.

LAS VEGAS, NEVADA

SEPTEMBER 25-29, 1989

In the opinion of the Yucca Mountain Project Office (Project Office) audit team, Reynolds Electrical and Engineering Co., Inc. (REECo) currently has a sufficient Quality Assurance (QAPP) program plan (568-DOC-115, Revision 7) in place.

During the review of objective evidence (REECo's internal audit No. REECo-001-89) covering REECo's matrixed organization (Operations Equipment Department), the excessive findings that were identified were judged as a failure to effectively implement the Yucca Mountain Project QA program. Since this is a participant identified deficiency, the Project Office has determined that criteria 2, 5, 6, 12, and 17 have not been implemented well enough to support quality affecting work in the Operations Equipment Department.

Also, due to the limited amount of quality related work being performed at the time of the audit, the effectiveness of the implementation of the REECo QA program cannot be determined at this time.

Six Standard Deficiency Reports (SDRs) were issued as a result of this audit. A total of three observations were issued during the course of the audit. It should be noted that during the course of the audit, REECo was able to correct five concerns identified by the auditors.

It was apparent to the audit team that REECo had put forth a considerable effort in bringing their program into compliance with the requirements of NNWSI/88-9, Revision 2. REECo personnel should be commended for the cooperation extended during the audit and the effort necessary to bring their QA program to this level.

1.0 INTRODUCTION

This report contains the results of a Quality Assurance (QA) audit of the Reynolds Electrical & Engineering Co., Inc. (REECo) Yucca Mountain Project activities. The audit was conducted at the REECo facilities in Las Vegas, Nevada, and on the Nevada Test Site (NTS) during September 25-29, 1989. The audit was conducted in accordance with the requirements of Quality Management Procedure QMP-18-01, Revision 3, Audit System for the Waste Management Project Office. The QA program requirements to be verified were taken from the Project QA Plan, NNWSI/88-9, Revision 2.

2.0 AUDIT SCOPE

The following program elements were audited to assess compliance with NNWSI/88-9, Revision 2, and the REECo Quality Assurance Program Plan (QAPP), 568-DOC-115, Revision 7:

1.0 Organization
2.0 QA Program
3.0 Design Control
(limited to change control and technical assessment review)
4.0 Procurement Document Control
5.0 Instructions, Procedures, and Drawings
6.0 Document Control
7.0 Control of Purchased Items and Services
8.0 Identification and Control of Items
9.0 Control of Processes
10.0 Inspection
11.0 Test Control
12.0 Control of Measuring and Test Equipment
13.0 Handling, Shipping, and Storage
14.0 Inspection, Test, and Operating Status
15.0 Control of Nonconforming Items
16.0 Corrective Action
17.0 Quality Assurance Records
18.0 Audits

3.0 AUDIT TEAM PERSONNEL

William Camp	Audit Team Leader/Lead Auditor
James Blaylock	Audit Manager
Amelia Arceo	Auditor
Neil Cox	Auditor
Mario Diaz	Auditor
Robert Klemens	Auditor

3.0 AUDIT TEAM PERSONNEL (CONTINUED)

Frank Kratzinger	Auditor
Catherine Hampton	Auditor-In-Training
Don Miller	Auditor-In-Training
William Belke	Observer (Lead), Nuclear Regulatory Commission (NRC)
John Gilray	Observer, NRC
Alonzo Handy	Observer, USGS
Richard Maudlin	Observer, MACTEC
John Peshel	Observer, NRC
Thomas Tribovich	Observer, NRC
Robert Clark	Surveillant, DOE/HQ Weston

4.0 SUMMARY OF AUDIT RESULTS

4.1 STATEMENT OF PROGRAM EFFECTIVENESS

It was determined by the audit team that the Operation Equipment Department of REECo's matrixed organization has failed to effectively implement the Project QA program. Until objective evidence demonstrates technical adequacy and program implementation, effectiveness will remain indeterminate. All quality implementing procedures were either found to meet or were amended (during the course of the audit) to meet the requirements of NNWSI/88-9, Revision 2.

4.2 SUMMARY OF TECHNICAL ACTIVITIES

Since REECo was not performing any QA Level I or II work, the scope of the audit did not include a review of technical activities.

4.3 SUMMARY OF FINDINGS

A total of six Standard Deficiency Reports (SDRs) were generated as a result of this audit. Information copies of these SDRs are included as Enclosure 3. Three Observations were generated. A synopsis of SDRs and Observations is given in Section 6 of this report, which includes five concerns that were corrected during the course of the audit.

5.0 AUDIT MEETINGS

5.1 PRE-AUDIT CONFERENCE

A pre-audit conference was held with the REECo Technical Project Officer (TPO) and his staff at 8:00 a.m. on September 25, 1989, in Las Vegas, Nevada. The purpose, scope, and proposed agenda for the audit were presented and the audit team was introduced. A list of attendees for this and subsequent meetings is provided in Enclosure 1.

5.2 PERSONS CONTACTED DURING THE AUDIT

See Enclosure 1.

5.3 POST-AUDIT CONFERENCE

The post-audit conference was held at 10:00 a.m. on September 29, 1989, in Las Vegas, Nevada. A synopsis of the preliminary SDRs and Observations identified during the course of the audit was presented to the TPO and his staff. A list of those attending is provided in Enclosure 1.

5.4 AUDIT STATUS MEETINGS

Audit status meetings were held with the REECo TPO and his key staff at 8:00 a.m. each day of the audit. The status of audit progression and identification of discrepancies were discussed.

6.0 SYNOPSIS OF STANDARD DEFICIENCY REPORTS, OBSERVATIONS, AND ITEMS CORRECTED DURING THE AUDIT

6.1 STANDARD DEFICIENCY REPORTS

SDR No. 450 ...Contrary to the requirements of the Project QA plan, Section II, Quality Assurance Program, para 5.1.1, "Position Descriptions" (PD) for the General Manager, does not define what the minimum education experience requirements are for that position.

In revision of the PDs, the required education and training have been identified. However, in 16 of the 65 PDs reviewed the position required a bachelor's degree in a specific area, but went on to state "equivalent experience." The equivalent experience in lieu of a bachelor's degree has not been identified.

6.1 STANDARD DEFICIENCY REPORTS (CONTINUED)

SDR No. 451 ...A Corrective Action Report (CAR) was not identified as a result of Audit Finding No. 1 of Audit Report No. REECo-001-89 (dated 8/2/89). The finding states, "With 59 unsatisfactory findings out of 86 requirements, the overall finding is a failure to effectively implement the YMP QA Program."

SDR No. 452 ...Numerous violations of the REECo Quality Procedure, QP 18.0, Revision 6.

- o An audit schedule has not been developed. However, one audit has been performed and others should be performed in the near future.
- o Date of audit plan of REECo-001-89 is missing.
- o Signature on Audit Plan done by L. Lykens is missing. Therefore, the document is not valid as a QA record.
- o Signature on Checklists done by A. Tonda are missing. Therefore, the document is not valid as a QA record.
- o Objective evidence of the items found acceptable was not documented on the checklists. Therefore, these documents do not contain all required data.
- o Audit report did not include the identification of persons contacted during audit activities.
- o Audit report did not provide a description of each reported adverse audit finding in sufficient detail to allow them to be grouped - based on each criteria of the REECo QAPP - in an order that would produce a comprehensive trend analysis.
- o Audit Plan was not included with the Audit Report.
- o Audit response was requested by September 1, 1989. An extension was requested and approved, but this method is not recognized by the procedure as acceptable.
- o Extension report was requested one week after due date of response.

6.1 STANDARD DEFICIENCY REPORTS (CONTINUED)

SDR No. 453 ...Contrary to NNSWI/88-9, Revision 2, Sect. V, para 1.0, the REECo Records Management Program has not developed implementing procedures at the (matrix) division level. The implementing procedures at the division level are in draft state; hence, it is not possible to assess full implementation capabilities. Until all necessary procedures in the matrix organizations are developed, REECo cannot fully implement the Records Management System.

SDR No. 454 ...in accordance with Administrative Procedure AP-1.7Q, Revision 2, para. 5.5.1.3, "Designation of Records as QA Records." Contrary to the requirements, five records were not appropriately designated.

SDR No. 455 ...NNWSI/88-9, Revision 2, Sect. VI, para 1.2, states in part, "Implementation of document control shall provide for the following: A master list or equivalent to identify the correct and updated revision of documents." Deficiencies were noted, such as:

- The master list of Project controlled documents (dated 8/23/89) did not include all controlled documents in existence.
- QP 6.0, Revision 5 does not provide a mechanism for QA to be notified of controlled documents generated within departments.
- Implementing procedures are not being presented to the Project QA Manager (PQAM) for his final approval.

6.2 OBSERVATIONS

1. A procedure describing each type of status indicator and its use referneced in Section XIV of the REECo QAPP does not exist (see 568-DOC-115, Revision 7, para. 2.0). Since REECo has not received QA Level I or II qualification to date and is not scheduled to receive one in the near future, this is an Observation.

2. Although no QA Level I or II items have been received to date, personnel have not been trained to the requirements of QP 8.0, Revision 4.

6.2 OBSERVATIONS (CONTINUED)

3. Although no QA Level I or II items have been received to date, personnel have not been trained to the requirements of QP 13.0, Revision 5.

6.3 CONCERNS CORRECTED DURING THE AUDIT

- Three organizations (Power, Electronics, and Communications Department; Industrial Hygiene Department; and Operations Department) did not submit a list of personnel authorized to authenticate QA records and the Records Administrator's name. This was resolved on 9/27/89 when the three departments submitted their authentication lists, along with the Record Administrator's name.

- One room in the Local Records Center (LRC) was designated as a smoking room. This was resolved by changing the "Smoking Room" sign to a "Non-Smoking Room" sign.

- Copies of the records transmitted to the Central Records Facility (CRF) were removed from the vault prior to receiving the receipt acknowledgment of records transmittal form by the CRF. This was resolved by filing these records back into the vault.

- There was no documented approval by the PQAM of IM-LRC-IP-01, Revision 0, "Yucca Mountain Project Records Management" (implementing procedure). This was resolved when the PQAM generated a memo approving the procedure on 9/26/89.

- The form numbers of documentation to be completed, referenced in QP 9.2, Revision 3, Welder Certification, were changed by the issue of QPCN-89-03 (dated 9/27/89) to reflect the corrected form numbers.

7.0 RECOMMENDED ACTION

A written response is required for each SDR delineated in Section 6.0. Responses to each SDR are due within 20 working days from the date of the SDR transmittal letter. Upon response, acceptance, and satisfactory verification of all remedial and corrective actions, the SDRs will be closed and REECo notified by letter.

A written response is required for the Observations contained in Enclosure 2 of this report. Responses are due within 20 working days from the date of the transmittal letter of this report.

ENCLOSURE 1

ORIGINAL
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YUCCA MOUNTAIN PROJECT OFFICE

N-QA-012
4/89

[1] YMPO OBSERVATION NO. 89-05-01

Completed by Originating Organization

[2] Noted During: Audit 89-5	[3] Identified By: Mario R. Diaz	[4] Date: 9/25/89
[5] Organization: REECo	[6] Person(s) Contacted: Robert Holiday	[7] Response Due Date is 20 Days from Date of Transmittal

[8] Discussion:

(14-1-2) Procedure describing each type of status indicators and their use within Section XIV of the REECo's QAPP does not exist. (Ref. 568-DOC-115, Rev. 7, Para. 2.0).

NOTE: Based on the fact that REECo has not received any Level I or II items to date and is not scheduled to receive them in the near future, this is an observation.

[9] QAE/Lead Auditor	Date	[10] Branch Manager	Date
William H. Camp	10/10/89	Dale Hedges	10-16-89

Completed by Respondee

[11] Response:

[12] Signature: Date:

Completed by QA Org.

[13] Response Receipt Acceptable ☐

Initiator	Date	QA/Lead Auditor	Date

[14] Remarks:

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YUCCA MOUNTAIN PROJECT OFFICE

N-QA-012
4/89

[1] YMPO OBSERVATION NO. 89-05-02

Completed by Originating Organization

[2] Noted During: Audit 89-5	[3] Identified By: F.J. Kratzinger	[4] Date: 9/27/89
[5] Organization: REECo	[6] Person(s) Contacted: Joe Warren, Dave Bauptista	[7] Response Due Date is 20 Days from Date of Transmittal

[8] Discussion:

Although no QA Level I or II items have been received to date, personnel have not yet been trained to the requirements of QP 8.0, Rev. 4.

[9] QAE/Lead Auditor	Date	[10] Branch Manager	Date
C. W. Dixon H. Camp	10/10/89	[signature]	10-10-89

Completed by Respondee

[11] Response:

[12] Signature: Date:

Completed by QA Org.

[13] Response Receipt Acceptable ☐			
Initiator	Date	QA/Lead Auditor	Date

[14] Remarks:

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YUCCA MOUNTAIN PROJECT OFFICE

N-QA-012
4/89

[1] YMPO OBSERVATION NO. 89-05-03

Completed by Originating Organization

[2] Noted During: Audit 89-5	[3] Identified By: K.J. Kratzinger	[4] Date: 9/27/89
[5] Organization: REECo	[6] Person(s) Contacted: Joe Warren, Dave Bauptista	[7] Response Due Date is 20 Days from Date of Transmittal

[8] Discussion:

Although no QA Level I or II items have been received to date, personnel have not been trained to the requirements of QA 13.0, Rev. 5.

[9] QAE/Lead Auditor	Date	[10] Branch Manager	Date
C. Quinn H. Camp	10/10/89		10-10-89

Completed by Respondee

[11] Response:

[12] Signature: Date:

Completed by QA Org.

[13] Response Receipt Acceptable ☐			
Initiator	Date	QA/Lead Auditor	Date

[14] Remarks:

ENCLOSURE 3

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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 9/28/89	2 Severity Level ☐ 1 ☒ 2 ☐ 3	Page 1 of 2
3 Discovered During Audit 89-5	3a Identified By F.J. Ruth	4 SDR No. 450 Rev. 0
5 Organization REECo	6 Person(s) Contacted A. Fowkes/M. Fox	7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
NNWSI Project QA Plan, NNWSI/88-9, Rev. 2, Section II, Quality Assurance Program Para. 5.1.1, "Position Description (PD)" minimum education and experience requirements shall be established and documented in position

9 Deficiency
1. The PD for the General Manager does not define what the minimum experience requirements are for that position.

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☐ Corrective
1. Remedial Action

Aprvl.

11 QAE/Lead Auditor/Date	12 Division Manager/Date	13 Project Quality Mgr./Date
William H. Camp 10/12/89	[illegible] 10-12-89	James Blaylock 10/12/89

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date

21 Remarks

22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

8 Requirement (continued)

descriptions for each position involved in the performance of activities that affect quality.

9 Deficiency (continued)

2. There is no PD for the Senior QC technician who is assigned responsibilities within the Calibration Lab.

3. In revision of the PDs, the required education and training have been identified. However, in 16 of 65 that were reviewed, the position required a bachelor's degree in a specific area, but went on to state "or equivalent experience." The equivalent experience in lieu of a bachelor's degree has not been identified.

10 Recommended Actions (continued)

a) Identify what the minimum experience requirements are for the General Manager.

b) Prepare a Position Description for the Senior QA Technician.

2. Investigative Action(s)

a) Review additional PDs to determine if equivalent experience is stated in lieu of a bachelor's degree.

b) Determine if there is a need to prepare additional PDs for individuals involved in the performance of activities that affect quality.

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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 9/28/89 | 2 Severity Level ☐ 1 ☒ 2 ☐ 3 | Page 1 of 3

3 Discovered During Audit 89-5 | 3a Identified By A.I. Arceo | 4 SDR No. 451 Rev. 0

5 Organization REECo | 6 Person(s) Contacted M. Fox | 7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
(CL # 16-2) NNWSI/88-9, Rev. 2, Sec. XVI, Para. 1.1

9 Deficiency
A Corrective Action Report (CAR) was not identiated as a result of Audit Finding No. 1 of Audit Report No. REECo-001-89 dated 8/2/89. The finding stated that, "With 59 unsatisfactory findings out of 86.

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

1) Remedial - Write a CAR.

Aprvl.

11 QAE/Lead Auditor/Date	12 Division Manager/Date	13 Project Quality Mgr./Date
William H. Camp 10/5/89	[illegible] 10-5-89	James Blaylock 10/6/89

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date

21 Remarks

22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

EMPLOYEE

8 Requirement (continued)

1.1 SIGNIFICANT ADVERSE CONDITIONS

For significant conditions adverse to quality the identification, cause, and corrective action taken to preclude recurrence shall be documented and reported to immediate management and upper levels of management for review and assessmment. A significant condition adverse to quality is one which, if not corrected, could have a serious effect on safety or operability. Significant conditions include, but are not limited to breakdowns in the Quality Assurance program and repetitive nonconformances. Upon discovering or receiving notification that a significant condition adverse to quality or unusual occurrence exists, each NNWSI Project Participant shall ensure that:

- o Immediate actions have been taken to remedy the specific conditions(s).
- o Causative factors have been determined.
- o Controls have been reviewed, implemented, monitored and revised, if necessary.
- o Affected managers at all levels have been notified of adverse condition(s) and of lessons to be learned to improve conditions or avoid similar occurrences.

QP 16.0, Rev. 7, Para. 5.1 & 5.2

5.1 REECo personnel connected with activities on the YMP shall be responsible for reporting to Project Quality Assurance (PQA) and their immediate management any observed condition which is adverse to Quality.

NOTE: No individual shall be deterred from reporting deficiencies or potentially adverse conditions to PQA.

5.2 Project Quality Assurance Manager (PQAM) - The Project Quality Assurance Manager is responsible for evaluating significant conditions adverse to quality or potentially adverse conditions; initiating the Corrective Action Request (CAR), Exhibit III; concurring with the proposed corrective action or providing other corrective action; ensuring that all significant conditions adverse to quality are properly documented and reported to upper levels of management for review and assessment; and implementing follow-up action to assure that corrective action is implemented in a manner which will preclude recurrence.

9 Deficiency (continued)

Requirements, the overall finding is a failure to effectively implement the

9 Deficiency (continued)

YMP QA Program. "The Audit Report stated in part, "There were 86 programmatic requirements identified on the audit checklist. Of the 86 requirements, compliance was unsatisfactory for 59 of them, resulting in a failure rate of 69.7%. This inordinate failure rate signifies a failure to effectively respond to the YMP QA program requirements."

10 Recommended Actions (continued)

2) Investigative and Corrective - Identify the cause of the deficiency and actions taken to prevent recurrence.

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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 9/26/89	2 Severity Level ☐ 1 ☒ 2 ☐ 3	Page 1 of 3
3 Discovered During Audit 89-5	3a Identified By M.R. Diaz	4 SDR No. 452 Rev. 0
5 Organization REECo	6 Person(s) Contacted A. Tonda/M. Fox	7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)

QP 18.0, Rev. 6, Para. 6.2.1 states, "Internal and external audits shall be scheduled in a manner such that the audits shall be initiated as early in the life of the activities as practical, consistent with the schedule for

9 Deficiency

Some of the audit requirements as detailed in item 8 above have not been implemented accordingly such as: AUDIT REECo-001-89

10 Recommended Action(s): ☒ Remedial ☐ Investigative ☒ Corrective

1. Remedial - Review all the QA records generated by the Audit REECo-001-89 to ensure that they contain requirements stipulated in REECo's

Aprvl.

11 QAE/Lead Auditor/Date	12 Division Manager/Date	13 Project Quality Mgr./Date
William H. Camp 10/12/89	11-12-89	10/12/89

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date

21 Remarks

22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

8 Requirement (continued)

accomplishing the activity to assure timely implementation of quality assurance requirements."

Para. 6.4.3 states in part, "The Lead Auditor shall complete the Auditor/ Survey Plan which shall contain the following:

- o -------
- o _____
- o Date of audit plan"

QP 17.0, Rev. 4, Para. 4.1.2 states in part, "A completed QA record is a document signed and dated by the originator."

QP 18, Rev. 6, Para. 6.4.4 states in part, "The audit team shall prepare an Audit/Survey Checklist."

Para. 6.5.5 states, "The auditor(s) shall document the objective evidence reviewed on the checklist."

568-DOC-115, Rev. 7, Para. 1.5 states in part, "The audit report shall include the following information:

- o Identification of the auditors
- o Identification of persons contacted during audit activities
- o Description of each reported adverse audit finding in sufficient detail to enable corrective action to be taken by the audited organization."

QP 18.0, Rev. 6, Para. 6.6.1.1 states in part, "The audit report shall consist of the QA Audit/Survey Plan, QA Audit/Survey Report and Audit Finding Reports."

Para. 6.6.3 states in part, "For Audit Reports which contain AFRs the report cover memo shall require management of the audited organization to submit to the PQAM a written response to each AFR within thirty (30) days after receipt of the audit report."

Para. 7.1 states, "Audit/Survey Plan, Audit/Survey Checklist, Audit/Survey Report, Audit/Finding Report, Audit Log, Evaluation Report, all correspondence relating to the audits and other documents generated by the implementation of this procedure are considered QA Records and shall be controlled and maintained in accordance with QP 17.0."

9 Deficiency (continued)

a. An audit schedule has not been developed. However, one audit has been performed and others should be performed in the near future.

b. Date of audit plan of REECo-001-89 is missing.

c. Signature on Audit Plan done by L. Lykens is missing. Therefore, the validity of the document as a QA record does not exist.

d. Signature on Checklists done by A. Tonda are missing. Therefore, the validity of the documents as QA records does not exist.

e. Objective evidence of the items found acceptable were not documented on the checklists. Therefore, these documents do not contain all required data.

f. Audit report did not include the identification of the auditors, identification of persons contacted during audit activities.

g. Audit report did not provide a description of each reported adverse audit finding in sufficient detail and to allow to group them - based on each criteria of the REECo's QAPP - in order to produce a comprehensive trend analysis.

h. The Audit Plan was not included with the Audit Report.

i. Audit response was requested by September 1, 1989. However, an extension was requested and approved but this method is not recognized by the procedure as acceptable.

j. Extension report was requested one week after due date of response.

10 Recommended Actions (continued)

568-DOC-115, Rev. 7 and implementing procedures.

2. Corrective - Develop an audit schedule to assure timely implementation of quality assurance requirements in areas such as: organization, training, document control, QA Records, corrective action.

3. Corrective - Revise audit procedure in order to include missing requirements addressed by REECo's QAPP.

4. Corrective - Retrain appropriate QA personnel to inform them of the revised procedural requirements.

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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 9/27/89 | 2 Severity Level ☐ 1 ☒ 2 ☐ 3 | Page 1 of 2

3 Discovered During Audit 89-5

3a Identified By
A.L. Arceo &
C.E. Hampton

4 SDR No. 453 Rev. 0

5 Organization
REECo

6 Person(s) Contacted
D. Warriner

7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
NNWSI 88-9, Rev. 2, Section V, Para. 1.0, states inpart, "Activities affecting quality shall be prescribed by and performed in accordance with documented instructions, procedures, or drawings...."

9 Deficiency
The REECo Records Management Program has not developed implementing procedures at the (matrix) division level. The implementing procedures at the division level are in draft state; hence, it is not possible to assess full implement-

10 Recommended Action(s): ☒ Remedial ☐ Investigative ☒ Corrective

1) Remedial - Prepare the implementing procedure at the matrix division level for Records Management.

Aprvl.

11 QAE/Lead Auditor/Date	12 Division Manager/Date	13 Project Quality Mgr./Date
William H Camp 10/12/89	10-12-89	James Blaylock 10/12/89

Completed by Organization In Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date

21 Remarks

22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

9 Deficiency (continued)

ation capabilities. Until such time that all necessary procedures in the matrix organizations are developed, REECo is not able to fully implement the Records Management System.

10 Recommended Actions (continued)

2) Corrective - Implement the written procedure.

3) Corrective - Conduct training to applicable personnel.

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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 9/26/89	2 Severity Level ☐ 1 ☒ 2 ☐ 3	Page 1 of 2
3 Discovered During Audit 89-5	3a Identified By A.I. Arceo & C.E. Hampton	4 SDR No. 454 Rev. 0
5 Organization REECo	6 Person(s) Contacted C. Thompson & D. Warriner	7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
(CL #17-16) AP 1.7Q, Rev. 2, Para. 5.5.1.3, Designation of Records as QA Records.

9 Deficiency
Contrary to the above the following records were not appropriately designated:

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective
1) Remedial - Make Corrections on the above listed records.

Aprvl.

11 QAE/Lead Auditor/Date	12 Division Manager/Date	13 Project Quality Mgr./Date
William H. Camp 10/6/89	10-6-89	James Blaylock 10/6/89

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date

21 Remarks

22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

ENCLOSURE

8 Requirement (continued)

Records shall be designated as QA records (QA), non-QA records (QA: N/A) or indeterminate (IND) by placing the appropriate designation on the front of the records, in the upper right-hand corner, immediately below the WBS number. (Record package segments shall not require a separate QA designation.)

9 Deficiency (continued)

LRC RMS No.	Subject	From/Originator/ Date	Designation
RE003223	YMP-Procedure BH-6221 Document Review	M.A. Fox 1/3/89	QA:NA
RE005683	Requirements - YMP Records Management Authentication List	D.L. Koss 7/27/89	QA:NA
RE005687	Requirements - YMP Records Management Authentication List	D.L. Koss 7/27/89	QA:NA
RE005343	YMP QA Orientation	M.A. Fox 7/11/89	QA:NA
RE003363	YMP Audit 88-07 of REECo	M.A. Fox 1/20/89	QA:NA

10 Recommended Actions (continued)

2) Investigative - Review other records to determine if this condition exists in other records.

3) Corrective - Instruct record resource personnel on the correct designation of records.

ORIGINAL
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YMPO STANDARD DEFICIENCY REPORT

N-QA-038
4/89

Completed by Originating QA Organization

1 Date 9/27/89 | 2 Severity Level ☐ 1 ☒ 2 ☐ 3 | Page 1 of 2

3 Discovered During: Audit 89-5

3a Identified By: A.I. Arceo & C.E. Hampton

4 SDR No. 455 Rev. 0

5 Organization: REECo

6 Person(s) Contacted: M. Fox, Steve Straub

7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)

CL #6-1 & 6-4

NNWSI Project QA Plan/88-9, Revision, Section VI, Para. 1.2, states in part: "Implementation of Document Control shall provide for the following: a master

9 Deficiency

a) Contrary to the above cited requirements:

1. The master list of project controlled documents (dtd 8/23/89) did not

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

1. Remedial - Include the listed LS-SP-IP-001 and LS-SP-IP-003 procedures on the master list of controlled documents.

Aprvl.

11 QAE/Lead Auditor/Date	12 Division Manager/Date	13 Project Quality Mgr./Date
William H. Camp 10/5/89	10-5-89	James Blaylock 10/6/89

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response Accepted	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date
20 Corrective Action Verif. Satisfactory	QAE/Lead Auditor/Date	Division Manager/Date	Project Quality Mgr./Date

21 Remarks

22 QA CLOSURE	QAE/Lead Auditor/Date	Division Manager/Date	PQM/Date

8 Requirement (continued)

list or equivalent to identify the correct and updated revisions of documents."

a) QP 6.0, Rev. 5

6.3.2 The PQAM shall develop and maintain a master list of the project's controlled docuemnts. The list shall identify the current revision of controlled documents issued for QA Level I & II activities.

b) QP 5.3, Rev. 0

6.4.5 After resolution of all comments, the procedure is prepared in final form by the responsible person who shall obtain final review and approval from the department manager and the PQAM.

9 Deficiency (continued)

include all controlled documents in existence.

2. QP 6.0, Rev. 5 does not provide a mechanism for QA to be notified of controlled documents generated within departments.

b) Implementing procedrue (LS-SP-IP-001, Rev. 0 dtd 7/20/89, LS-SP-IP-003, Rev. 0 dtd 9/18/89) were not approved by the PQAM. Implementing procedures are currently being reviewed by QA but are not being presented to QA in finalized form for approval. These procedures were not implemented to date.

10 Recommended Actions (continued)

2. Investigative - Verify if there are other controlled docuemnts issued and add them to the master list of controlled documents.

3. Corrective - Revise the affected implementing procedures to include a mechanism for QA to be notified when controlled documents are generated and issued.

4. Corrective - Inform other departments of the above requirements.

ENCLOSURE 2

REYNOLDS ELECTRICAL & ENGINEERING COMPANY, INC.
89-5 AUDIT ROSTER

NAME	ORGANIZATION	TITLE	PRE-AUDIT	CONTACTED DURING AUDIT	POST AUDIT
Arceo, Amelia I.	SAIC	Auditor	X		X
Amos, Suzy	REECo	Sr. Staff Asst.		X	
Bahorich, Richard	W	QA APM	X		
Barger, Robin	REECo	Staff Assistant	X		
Barker, Connie	REECo	Training Admin.		X	
Bauptista, Dave	REECo	Warehouse Super.		X	
Belke, Bill	NRC	QA Project Manager	X		X
Blaylock, James	DOE	Audit Manager			X
Burnett, D.	REECo	Procurement Mgr.	X		
Caldwell, J.	MACTEC	QA Consultant			X
Corder, Fran	REECo	Group Leader			X
Cox, Neil	SAIC	Auditor	X		X
Diaz, Mario	DOE	Auditor	X		X
Donaldson, Jack	REECo	Engineer III			X
Doyle, John	Harza	QA Engineer	X		X
Fehr, Gregory	SAIC	Deputy APM QA			X
Fowkes, Arnold	REECo	Chief, QA Services	X	X	X
Fox, Mono	REECo	QA Manager	X	X	X
Fouts, John	REECO	Superintendent	X		
Gibbons, William	MACTEC	Quality Sys. Mgr.			X
Gilray, John	NRC	On-Site Rep.	X		X
Glasser, William	REECo	Odm. Div. QC	X		X
Hampton, Catherine	DOE	QA Specialist	X		X
Handy, Al	USGS	QA Specialist	X		X
Hannaway, Dianne	REECo	Buyer			X
Hedges, Dale	SAIC	Mgr. QA Verification			X
Holliday, Robert	REECo	QA Specialist	X	X	X
Hughes, Sandra	REECo	Asst. Project Mgr.			X
Hurtado, Paul	REECo	QC Tech. I		X	
Johnson, Donald	REECo	Section Chief		X	
Kellner, Dick	REECo	Subcontract Adm.		X	
Key, Cliff	REECo	Warehouse Super.		X	
Klemens, Robert	SAIC	Auditor	X		X
Kotek, Larry	REECo	Sr. Staff Asst.	X		
Kratzinger, Frank	SAIC	Auditor	X		X
Kress, Ed	REECo	Sr. QC Tech.			X
Limon, Kristina	REECo	Div. Principal Staff	X		X
Mauldin, Richard	MACTEC	QA Specialist	X		X
McGoldrich, John	REECo	Purchasing Agent		X	
Miller, Don	CER	Auditor-in-Training	X		X
Miller, Robert	REECo	Chief PA	X	X	X
Moulder, M. Dee	REECO	Sr. Staff Asst.	X		

REYNOLDS ELECTRICAL & ENGINEERING COMPANY, INC.
89-5 AUDIT ROSTER

NAME	ORGANIZATION	TITLE	PRE-AUDIT	CONTACTED DURING AUDIT	POST AUDI
Peshel, John	NRC	Technical Observer	X		X
Pritchett, Robert	REECo	TPO	X		X
Pugmire, Wes	REECo	Sr. Engineer			X
Rommel, Bob	REECo	Project Engineer		X	
Ruth, Frederick	SAIC	Auditor	X		X
Sellards, J.	REECo	Sr. QA Specialist	X		X
Sellers, Theresa	REECo	Branch Chief		X	
Straub, Steve	REECo	Log. Spt. Dept. Mgr.	X	X	X
Thompson, Mary C.	REECo	IMO Manager	X	X	X
Tonda, Anthony	REECo	Sr. QA Specialist	X	X	X
Trbovich, Tom	NRC/CNWRA	Observer	X		X
Warren, Joe	REECo	Warehouse Super.		X	
Warriner, David	REECo	Manager, LRC	X		
Weintraub, E.	REECo	Dept. Gen. Mgr.			X
Wilmot, Edwin	DOE	QA Acting Director	X		