

OCRWM-HQ QUALITY ASSURANCE SURVEILLANCE REPORT
SURVEILLANCE OF THE YMP QA AUDIT (89-05) OF
REYNOLDS ELECTRICAL AND ENGINEERING CO., INC. (REECO)

SURVEILLANCE NUMBER OCRWM-HQ-SR-89-015

CONDUCTED SEPTEMBER 25-29, 1989

Prepared by: R.W. Clap Date 10/31/89
Surveillance Team Leader

Approved by: [Signature] Date 11/3/89
Director, OQA

**SURVEILLANCE REPORT NUMBER
OCRWM-HQ-SR-89-015**

A. INTRODUCTION

A surveillance to assess the adequacy (compliance and effectiveness) of the YMP QA audit of REECo was performed by the Office of Quality Assurance from September 25 through 29, 1989.

The surveillance was performed by Robert W. Clark (WESTON).

Personnel contacted during the surveillance included as follows:

J. Blaylock, DOE	B. Camp, SAIC
E. Wilmot, DOE	F. Ruth, SAIC
D. Hedges, SAIC	N. Cox, SAIC

This surveillance was performed in accordance with QAAP 18.3, Rev. 0, "Surveillance Program".

B. SURVEILLANCE SCOPE

The scope of this surveillance was the YMP QA audit (89-05) of REECo. The purpose of the surveillance was to assess the adequacy of the YMP QA audit program. To a lesser degree (based on results of the audit), the surveillance included an assessment of those aspects of REECo's program which were included within the scope of the audit.

The surveillance included investigation of the following elements:

1. Audit team.
2. Audit planning.
3. Pre and post audit conferences.
4. Audit conduct.
5. Audit results.
6. Interfaces.

Note: Due to lack of actual QA program implementation by REECo, evaluation of implementation and overall QA program effectiveness was limited.

C. REQUIREMENTS SURVEILLED

1. YMP Quality Assurance Plan 88-9, Rev. 2
2. YMPO Quality Assurance Program Plan 88-1, Rev. 0
3. QMP-16-03, Rev. 1, Standard Deficiency Reporting System
4. QMP-18-01, Rev. 3, Audit System for the Waste Management Project Office

D. RESULTS OF SURVEILLANCE

There were no deficiencies and no observations identified as a result of this surveillance. The overall conclusion was that the audit was performed in accordance with YMP QA Program requirements. The following is a summary of the specific areas included in the surveillance:

Audit Team

Due to Privacy Act concerns, objective evidence of the qualifications of the audit team was not made available during this surveillance; therefore, the qualification of the audit team members were not evaluated.

Observation of the entire audit process and interview with audit team members indicated that the team members were knowledgeable in the areas audited and of the audited organization's program and that the audit was conducted in a professional and effective manner.

Audit Planning

Based on interview with the audit team leader and review of the audit scope and checklist, it is concluded that the audit was effectively planned. The scope was appropriate for REECO's scope of work and the checklist was comprehensive enough to fully address the stated purpose and scope of the audit.

Pre/Post Audit Conferences

The pre and post audit conferences were conducted in an appropriate manner. At the pre-audit conference, the scope of the audit was clearly explained, team members and observers were introduced to REECO staff, and contacts between the audit team and REECO staff were established. At the post-audit conference, the audit team provided clear explanations of the deficiencies and opportunity for REECO to respond.

Audit Conduct

The audit was conducted in a professional and effective manner. The techniques utilized by the audit team were appropriate and objective evidence was reviewed to the depth required to determine the extent of program adequacy.

Interfaces

The auditors kept REECO personnel informed of potential findings. The audit team (including observers) had daily caucuses to discuss the results of each day's auditing activities and to allow questions/comments from observers. The audit team leader held daily "TPO meetings" to inform REECO senior management of the audit results. Overall, the interaction between the audit team, REECO, and the observers was satisfactory.

Audit Results

Five (5) deficiencies were identified during the audit. One (1) of these was under Criterion 2, "Quality Assurance Program" and identified deficiencies with personnel position descriptions. One (1) was under Criterion 6, "Document Control" and identified failure to develop a required "controlled documents list." One (1) was under Criterion 16, "Corrective Action" and identified REECO's failure to identify significant deficiencies on corrective action reports. One (1) was under Criterion 17, "QA Records" and identified quality assurance records that were not identified as such. The final deficiency was under Criterion 18, "Audits" which identified several discrepancies (classified as non-significant) in the implementation of the REECO audit process. There were also five (5) observations identified during this audit.

The overall evaluation of the REECO QA Program, by the audit team, was that, for the most part, the appropriate controls were in-place and were adequate to support quality affecting work. However, due to the lack of attention to YMP QA Program requirements by one (1) REECO matrix organization supporting the REECO YMP work, the audit team could not recommend that the REECO QA Program was fully qualified to support new site characterization activities.

Two (2) specific areas of the REECO QA Program were concentrated on during the audit, "procurement" and "the standards and calibration laboratory". The audit team members responsible for those areas concluded that both were satisfactory. With respect to the investigation of the standards and calibration lab, the audit team commended REECO and highly recommended to the YMPQ that the REECO lab be considered as the mechanical calibration facility for the entire Yucca Mountain Project.

E. DEFICIENCIES/REQUIRED ACTION

There were no deficiencies or observations identified during this surveillance; therefore, no action is required by the YMP in response to this report.



Department of Energy

Nevada Operations Office
P. O. Box 98518
Las Vegas, NV 89193-8518
MAR 01 1990

WBS 1.2.9.3
QA

Dwight E. Shelor, Acting Director, Quality Assurance Division, HQ (RW-3) FORS

YUCCA MOUNTAIN PROJECT OFFICE (PROJECT OFFICE) ACCEPTANCE OF THE REYNOLDS ELECTRICAL & ENGINEERING CO., INC. (REECO) QUALITY ASSURANCE (QA) PROGRAM

Reference: Letter, Gertz to Shelor, dtd. 12/26/89

The purpose of this memorandum is to provide an update documenting the Project Office acceptance of the Yucca Mountain Project QA Program of REECO. This acceptance is based upon the following:

1. The U.S. Nuclear Regulatory Commission (NRC) has accepted the REECO Quality Assurance Project Plan (QAPP), Revision 8, based upon the safety evaluation letter dated October 3, 1989, from Linehan to Stein. All NRC staff comments were resolved before issuance of the safety evaluation letter.
2. Project Office QA surveillance of the REECO QA Program procedures for adequacy to control the subject activities and conformance with applicable REECO QAPP requirements (reference enclosure 1 for surveillance report numbers, scope, and summary of results).
3. Project Office performance of the REECO QA Program Qualification Audit 89-5, conducted September 25-29, 1989 (reference letter, Wilnot to Pritchett, dated October 24, 1989). To date, any NRC observations generated as a result of the audit have not been received. This audit concluded that the QA Program is capable of identifying, tracking, and closing deficiencies.
4. Project Office review of outstanding REECO QA Program deficiencies that could have technical or quality impact on output products (reference enclosure 2 for outstanding deficiency numbers and descriptions).

The Severity Level Checklist criteria established in Project Office Quality Management Procedure-16-03 were used to determine impact of the open deficiencies (reference enclosure 3). If the deficiency did not meet Severity Level I criteria, it was regarded as not having significant impact on the start of Title II activities or in support of new site characterization activities.

MAR 01 1990

Based on the above, the Project Office has concluded that the REECO QA Program is in conformance with the applicable requirements of the Yucca Mountain Project QA Plan, NWWSI/88-9, and is adequate to support the start of Title II or new site characterization activities, with the following exception:

Records Management - This activity should not constrain the start of new site characterization activities or Title II; however, Standard Deficiency Report (SDR) 453, initiated during Project Office QA Program Qualification Audit 89-5, will require prompt resolution and follow-up. The SDR does not involve a Severity Level I condition.

The Project Office will verify and document resolution of this exception by Yucca Mountain Project QA surveillances.

If you have any questions or comments regarding the Project Office position on this matter, please contact Donald G. Horton of my staff at FTS 544-7504 or (702) 794-7504.



Carl P. Gertz, Project Manager
Yucca Mountain Project Office

YMP:DGH-2175

Enclosures:

1. Task Force Surveillances of the REECO QA Program
2. REECO Open QA Deficiencies
3. SDR Severity Level Checklist

cc w/encls:

Ralph Stein, HQ (RW-30) FORS
J. W. Gilray, NRC, Las Vegas, NV
S. R. Dippner, SAIC, Las Vegas, NV, 517/T-08
R. F. Pritchett, REECO, Las Vegas, NV
M. A. Fox, REECO, Las Vegas, NV

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-085	QP, 4.0, R-5, "Procurement Document Control"	Project Office generated 1 SDR which encompassed:	SDR-311 (Closed)
		<p>QP, 4.0 did not address:</p> <ul style="list-style-type: none"> - submittal and correction of supplier quality programs - requirements for the purchase of test equipment - review of changes to purchasing documents or access to pertinent information by those persons performing reviews - factoring changes made during the bid process into the procurement documents 	
	QP, 7.0, R-5, "Control of Purchased Materials, Equipment and Services"	<p>QP, 7.0 did not address:</p> <ul style="list-style-type: none"> - conformance of purchased material to procurement documents - supplier interface measures 	

Enclosure 1

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-085 (continued)	QP 7.0, R-5 "Control of Purchased Materials, Equipment, and Services"	<ul style="list-style-type: none"> - details of verification activities - documentation for conformance of services, source surveillance activities, and corrective actions - control of supplier documentation - methods of acceptance for items or services - post-installation testing - alternate commercial-grade items 	SDR-311 (Closed)
YMP-SR-89-086	QP 6.0, R-4, "Document Control"	<p>Procedural deficiencies identified were:</p> <ul style="list-style-type: none"> - methods were not delineated to control the preparation, review, and approval of Quality Procedures or Work Procedures - exhibits referenced within the procedure were not available for reviews 	SDR-311 (Closed)

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-087	QP 5.0, R-4, "Instructions, Procedures, and Drawings"	- six deficient items were identified in QP 5.0 dealing with lack of specifics or details within the procedure to delineate how requirements were to be implemented	SDR-311 (Closed)
	QP 5.1, R-0, "Preparation, Review, and Approval of Quality Procedures"	- three deficient items were identified in QP 5.1 which concerned the lack of specifics for issuance of documents and control thereof, and not distinguishing between major and minor changes	
	QP 5.2, R-0, "Preparation, Issue, and Control of Work Procedures"	- two deficient items were identified in QP 5.2 which regarded the lack of an independent review by the originating organization and improper format of the procedure	

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-088	QP 1.0, R-5, "Organization"	Deficient items identified included:	SDR-311 (Closed)
		<u>QP 1.0</u> - lack of organizational charts - lack of specifics regarding organizational responsibilities toward QA policy	
	QP 1.1, R-2, "Resolution of Disputes"	<u>QP 1.1</u> - improper format	
	QP 1.2, R-0, "Stop Work Order"	<u>QP 1.2</u> - stop work authority of the QA Manager was not explicit - lack of reference or attachment of a Corrective Action Request even though it is identified in several places - improper format	

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-088 (continued)	QP 2.0, R-4, "Quality Assurance Program"	<u>QP 2.0</u> - procedure does not delineate or define the review and approval process for the QAPP or Quality documentation - improper format	SDR-311 (Closed) (continued)
YMP-SR-89-089	QP 2.2, R-4, "Personnel Qualification and Certification" QP 2.4, R-0, "Indoctrination and Training"	Deficient items identified included: <u>QP 2.2</u> None <u>QP 2.4</u> - lack of training prior to assignment to conduct quality affecting activities. - improper procedural format <u>QP 8.0</u> - physical separation not addressed - procedural control	SDR-311 (Closed)

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-089 (continued)	QP 8.0, R-3, "Identification and Control of Materials, Parts, and Components"	<p><u>QP 8.0</u> (continued)</p> <ul style="list-style-type: none"> - shelf-life not addressed - effect of markings not addressed - improper procedural format - responsibilities for content, maintenance, control, and distribution of documents relating to purchased items not addressed 	SDR-311 (Closed) (continued)
	QP 10.0, R-4, "Inspection"	<p><u>QP 10.0</u> The following are not addressed:</p> <ul style="list-style-type: none"> - procedure applicability to scientific investigation - inspection planning activities - examination of quality records - waiver provisions for hold/witness points 	

TASK FORCE SURVEILLANCES OF THE REECo QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-089 (continued)	QP 10.0, R-4, "Inspection"	<u>QP 10.0</u> (continued) - maintenance of qualification examinations for inspectors of quality records	SDR-311 (Closed) (continued)
	QP 11.0, R-4, "Test Control"	<u>QP 11.0</u> Deficient in areas of: - requiring preparation of instructions, procedures, and drawings for tests - criteria for determining when a test is required and how it is to be performed	
	QP 13.0, R-4, "Handling, Storage, and Shipping"	<u>QP 13.0</u> - packaging, shipping, and cleaning are not addressed - marking and labeling requirements for items not addressed	

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-089 (continued)	QP 14.0, R-4, "Inspection, Test, and Operating Status"	<u>QP 14.0</u> - operating status requirements not addressed - improper procedural format	SDR-311 (Closed) (continued)
YMP-SR-89-090	QP 10.1, R-4, "Surveillance"	<u>QP 10.1</u> Deficient areas identified were: - accuracy of equipment used in surveillances not recorded - entries on the surveillance report form are nonspecific and unclear - "Surveillance Report Log" not adequately described in the procedure - insufficient instructions for completing the referenced exhibits. - procedure not specific as to what action the PQAM takes upon rejection of a corrective action of a surveillance	SDR-311 (Closed)

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-090 (continued)	QP 15.0, R-5, "Nonconformances"	<p><u>QP 15.0</u></p> <ul style="list-style-type: none"> - procedure did not include an exhibit of a hold tag nor instructions for completing one - improper procedural format - a Technical Inspection Report (TIR) is not adequately described in the procedure 	SDR-311 (Closed)
	QP 16.0, R-5, "Corrective Action"	<p><u>QP 16.0</u></p> <ul style="list-style-type: none"> - references inadequate - exhibits referenced in the procedure not available for review 	
	QP 18.0, R-5, "Audits"	<p><u>QP 18.0</u></p> <ul style="list-style-type: none"> - trending and the tracking system are not addressed - supplier evaluations not addressed 	

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-090 (continued)	QP 18.0, R-5, "Audits"	<p>QP 18.0 (continued)</p> <ul style="list-style-type: none"> - multi-discipline audits not addressed - exhibit of the audit report not available for review - maintenance of auditor certifications not addressed 	SDR-311 (Closed)
YMP-SR-89-097	QP 2.3, R-0, "Management Assessment"	Project Office issued one Standard Deficiency Report to document five deficient areas of TPO-4 which included:	SDR-338 (Closed)
	QP 16.2, R-1, "Trend Analysis"		
	QP 17.0, R-4, "Quality Assurance Records"		
	TPO-3, R-2, "Procedure for Litigation Discovery Process of Yucca Mountain Project Records"	- prevention of damage to records from moisture, temperature, and pressure not addressed	
	TPO-4, R-1, "Yucca Mountain Project Records Management"	<ul style="list-style-type: none"> - not addressing replacement of lost or damaged records - not addressing planned retrieval times - definitions not consistent with Appendix A of NNWSI/88-9, Rev. 2. 	

TASK FORCE SURVEILLANCES OF THE REECo QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-097 (continued)	TPO-4, R-1, "Yucca Mountain Project Records Management"	- no QA Records section is included	SDR-338 (Closed)
YMP-SR-89-098	QP 2.1, R-3, "Certification of Inspection and Personnel"	<p><u>QP 2.1</u></p> <ul style="list-style-type: none"> - process for certifying personnel not detailed enough - improper procedural format - specific QA Records not listed <p>NOTE: All of these deficient conditions were resolved by issuance of Revision 4 to this procedure</p>	NONE
	QP 9.0, R-4, "Control of Processes"	<p><u>QP 9.0</u></p> <ul style="list-style-type: none"> - process control applicable to scientific investigations not addressed - processes not controlled in accordance with instructions/procedures 	

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-098 (continued)		NOTE: All of these deficient conditions were resolved by issuance of Revision 4 to this procedure	NONE
YMP-SR-89-103	<p>AP-3.0, R-0, "Readiness Review"</p> <p>QP 3.0, R-2, "Scientific Investigation Control and Design Control"</p> <p>QP 3.1, R-2, "Design Review"</p> <p>QP 3.2, r-0, "Change Control"</p> <p>QP 3.3, R-0, "Technical Assessment Review"</p> <p>QP 5.3, R-0, "Preparation, Review, and Approval of Implementing Procedures"</p> <p>QP 16.0, R-6, "Corrective Action"*</p>	<p>Procedures QP 3.0 and 3.1 were deleted because REECO has no design function for the Yucca Mountain Project</p> <p>Project Office issued two SDRs which encompassed:</p> <p>* (1) The use of a quality document without providing for unique identification or tracking in a log book for accountability. This condition was identified in QP 16.0 which was reviewed during surveillance YMP-SR-89-090. The quality document, "Deficiency Notice", Exhibit I, was not available for review at that time; it was available during this surveillance, and hence the SDR was generated.</p>	<p>SDR-342 (Closed)</p> <p>SDR-344 (Closed)</p>

TASK FORCE SURVEILLANCES OF THE REECO QA PROGRAM

SURVEILLANCE NUMBER	PROCEDURE AND SCOPE	SUMMARY OF RESULTS	DEFICIENCIES ISSUED
YMP-SR-89-103 (continued)	QP 12.0, R-5, "Control of Measuring and Test Equipment"	(continued) (2) Storage and handling was not addressed in the implementing procedures of the calibration laboratory.	SDR-344 (Closed)

REECO OPEN QA DEFICIENCIES

DEFICIENCY NO.	ISSUED BY	DESCRIPTION OF DEFICIENCY	COMMENTS
SDR-451	Project Office (Audit)	A Corrective Action Report (CAR) was not issued as a result of an audit finding.	Amended response pending evaluation by the Project Office; As the evaluation pertains to a matter of interpretation as to when a CAR is required and adequate controls are in place via the participant's Audit Finding Report, which address causative factors and corrective action, there is no impact to Title II work. In addition, this SDR was previously evaluated for severity level and it was determine to be Level 2. This evaluation concluded that the deficiency did not result in a loss of licensing data, an error in the design or construction of an engineered item nor the potential for an adverse impact to the public health and safety or safety of the operations personnel.

REECO OPEN QA DEFICIENCIES

DEFICIENCY NO.	ISSUED BY	DESCRIPTION OF DEFICIENCY	COMMENTS
SDR-452	Project Office (Audit)	Audit requirements as detailed in accordance with QP 18.0, Rev. 6, were not fully implemented for REECO Audit REECo-001-89.	Amended response pending evaluation by Project Office; The deficiencies identified are typical of items detected during programmatic and implementation audits and surveillances. In addition, this SDR was previously evaluated for severity level and it was determined to be Level 2. This evaluation concluded that the deficiency did not result in a loss of licensing data, an error in the design or construction of an engineered item nor the potential for an adverse impact to the public health and safety or safety of the operations personnel. Consequently, there is no impact to Title II work.

REECO OPEN QA DEFICIENCIES

DEFICIENCY NO.	ISSUED BY	DESCRIPTION OF DEFICIENCY	COMMENTS
SDR-453	Project Office (Audit)	The REECO Records Management Program has not developed implementing procedures of the (matrix) division level.	Amended response pending evaluation by the Project Office; As the REECO/YMP Records Management Manual will be issued as an implementing procedure for matrix level personnel and trained to by Feb. 1990, there will be no impact to Title II work. In addition, this SDR was previously evaluated for severity level and it was determined to be Level 2. This evaluation concluded that the deficiency did not result in a loss of licensing data, an error in the design or construction of an engineered item nor the potential for an adverse impact to the public health and safety or safety of the operations personnel.

REECO OPEN QA DEFICIENCIES

DEFICIENCY NO.	ISSUED BY	DESCRIPTION OF DEFICIENCY	COMMENTS
SDR-454	Project Office (Audit)	Various records were not appropriately designated as QA, non-QA or indeterminate.	Amended response pending evaluation by the Project Office; As corrective measures are in place to include printed guidelines for designation of records and retraining of personnel and the deficiency identified is not severe in nature but rather one of day-to-day implementation, there is no impact to Title II work. In addition, this SDR was previously evaluated for severity level and it was determined to be Level 2. This evaluation concluded that the deficiency did not result in a loss of licensing data, an error in the design or construction of an engineered item nor the potential for an adverse impact to the public health and safety or safety of the operations personnel. Consequently, there is no impact to Title II work.

REECO OPEN QA DEFICIENCIES

DEFICIENCY NO.	ISSUED BY	DESCRIPTION OF DEFICIENCY	COMMENTS
SDR-455	Project Office (Audit)	All controlled documents were not included on the master list of controlled documents and there is no mechanism provided for notifying QA of controlled documents being generated.	An extension request for completion of the corrective action to 2/28/90 is pending evaluation by the Project Office. As the remedial/ investigative actions have been determined satisfactory and the only item pending is completion of training by 2/28/90, there is no impact to Title II work. In addition, this SDR was previously evaluated for severity level and it was determined to be Level 2. This evaluation concluded that the deficiency did not result in a loss of licensing data, an error in the design or construction of an engineered item nor the potential for an adverse impact to the public health and safety or safety of the operations personnel. Consequently, there is no impact to Title II work.

REECO OPEN QA DEFICIENCIES

DEFICIENCY NO.	ISSUED BY	DESCRIPTION OF DEFICIENCY	COMMENTS
AFR 1-89	REECO (Audit)	Due to a lack of Management attention, the Operation Equipment Dept., a matrix support group to REECO, failed to adequately implement the YMP QA Program.	Corrective Action to be completed by the Operations Equipment Dept. by 2/28/90. Based on evaluation given in SDR-451, previously, there will be no impact to Title II work.
CAR 90-005	REECO (Surveillance)	<p>1) Qualification Records of the Property and Supply Dept. not on file with the REECO/YMP Training Administrator.</p> <p>2) Implementing Procedures of the Property and Supply Dept. not in the proper format as required by QP 5.3.</p>	<p>Awaiting response from the REECO Property and Supply Dept. This SDR was evaluated for severity level in accordance with QMP-16-03 and it was determined to be Level 2. This evaluation concluded that the deficiency did not result in a loss of licensing data, an error in the design or construction of an engineered item nor the potential for an adverse impact to the public health and safety or safety of the operations personnel. Based on the above, there is no impact to Title II work.</p>

YUCCA MOUNTAIN PROJECT OFFICE QUALITY MANAGEMENT PROCEDURE

N-QA-016
6/88

Title
STANDARD DEFICIENCY REPORTING SYSTEM

No. **QMP-16-03** Rev. **1**
Effective Date **6/5/89**
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FIGURE 5

SDR SEVERITY LEVEL CHECKLIST		N-QA-037 4/89
I. ASSIGN A SEVERITY LEVEL OF 1 IF ONE OR MORE OF THE FOLLOWING IS TRUE.		
	Yes	No
1. Did the deficiency result in significant damage to natural barriers, structures, systems, or components that will require extensive evaluation, extensive redesign, or extensive repair in order to assure public health and safety?	---	---
2. Does the deficiency involve loss of essential data or information needed for licensing?	---	---
3. Does the deficiency constitute a significant deficiency in design, construction, testing, or performance assessment that were detected subsequent to formal quality verification and acceptance?	---	---
4. Does the deficiency constitute a significant deficiency in design as approved for construction such that the design deviates extensively from design criteria and bases?	---	---
5. Does the deficiency constitute a significant deviation from performance objectives or specifications that will require extensive evaluation, extensive redesign, or extensive repair to establish the adequacy of a natural barrier, structure, system, or component to meet design criteria and bases?	---	---
6. Does the deficiency constitute a significant error detected in a computer program after it has been released for use?	---	---
7. Does the deficiency constitute a significant breakdown in a participant's QA program and/or repetitive, programmatic and hardware deficiencies for which previous corrective action has not been reasonably prompt or effective?	---	---
II. ASSIGN A SEVERITY LEVEL OF 2 IF THE ANSWERS TO ALL QUESTIONS IN PART I ARE NO AND ONE OR MORE OF THE FOLLOWING IS TRUE:		
	Yes	No
1. Could failure to correct deficiency have a potentially adverse impact on the health or safety of operations personnel?	---	---
2. Does the deficiency constitute operating outside the scope of the quality program or approved quality procedures where both remedial and corrective actions are required?	---	---
3. Does the deficiency constitute a repetitive hardware deficiency for which no previous corrective action measures exist?	---	---
III. ASSIGN A SEVERITY LEVEL OF 3 IF THE ANSWERS TO ALL QUESTIONS TO PARTS I AND II ARE NO.		
QAE/Lead Auditor	QA Division Manager	POM
_____	_____	_____
Signature/Date	Signature/Date	Signature/Date