

PROJECT OFFICE QUALITY ASSURANCE REPORT FOR

THE YUCCA MOUNTAIN PROJECT OFFICE CORRECTIVE ACTION REVIEW OF

THE YUCCA MOUNTAIN PROJECT OFFICE,

TECHNICAL AND MANAGEMENT SUPPORT SERVICES,

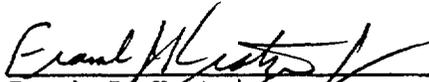
AND

MAC TECHNICAL SERVICES COMPANY

CORRECTIVE ACTION REVIEW I-02

CONDUCTED JUNE 11-15, 1990

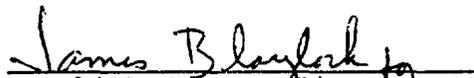
Prepared by:

  
Frank J. Kratzinger  
Review Team Leader

Date:

7/5/90

Approved by:

  
Donald G. Horton, Director  
Quality Assurance  
Yucca Mountain Project Office

Date:

7/6/90

## EXECUTIVE SUMMARY

The following is the Corrective Action Review Team's summation of the acceptability of each individual criterion of the Yucca Mountain Project Office (Project Office) Quality Assurance Plan (QAP), as reviewed, and the implementation of the requirements of the Systems Engineering Management Plan (SEMP). The summation is the result of measuring the implementation of the Project Office Quality Management Procedures (QMPs), Administrative Procedures (Quality) (AP-Qs), and Branch Technical Procedures (BTPs).

For instances in which open Standard Deficiency Reports (SDRs) or Headquarters's Deficiency Reports (DRs) had already been issued against the criterion being reviewed, no additional SDRs were generated.

### 1. Criterion II--Quality Assurance Program (Graded QA)

The implementation of AP-6.17Q has been adequate and effective in developing a review package. Limited portions of AP-5.28Q and BTP-QRB-001 have been adequately and effectively implemented to date in setting up a review by the Quality Review Board (QRB).

### 2. Criterion III--Scientific Investigation and Design Control (Study Plans and the SEMP)

Except for SDR No. 521, previously written on the timeliness of the reviewers' qualifications, the study plans reviewed for Midway Valley and Calcite-Silica were in compliance with the procedural requirements and are acceptable.

Two areas of implementation of the requirements of the SEMP were reviewed; readiness reviews and technical assessments. During the corrective action review, it was determined that no readiness reviews had been conducted between December 1988 and the present. Two technical assessment review packages were available and met the procedural requirements. Based on this review, the implementation of technical assessments review package requirements of the SEMP appear to be adequate.

### 3. Criterion IV--Procurement Document Control Criterion VII--Control of Purchased Items and Services

The review team for procurement activities selected a documentation review that was generated subsequent to Headquarters Surveillance OCRWM-SR-89-008 and Project Office Surveillance OMP-SR-89-069. These two surveillances addressed procurement activities performed by Yucca Mountain Project Office and Technical and Management Support Services (T&MSS) from December 1988 through July 1989, and identified deficiencies in both criteria. The extent of the deficiencies, accentuated by the fact that many of the reports remain open, provided the basis for selecting the scope of this portion of the review.

Based on the previous deficiencies and the issuance of a Corrective Action Request by the Project Office (which summarizes the procurement issues) the review team concludes that procurement activities subject to the requirements of QAP Sections IV and VII performed prior to the two referenced surveillances were performed to a deficient procurement system. The procurement system was evaluated to be ineffective.

4. Criterion VIII--Identification and Control of Items, Samples, and Data

Activities reviewed were in compliance with procedural requirements and appear to be acceptable.

5. Criterion XII--Control of Measuring and Test Equipment

The Air Quality Monitoring and Meteorological Monitoring Programs are operating under open SDRs that have been written against the calibration of measuring and test equipment in addition to the SDR identified during this review. Work is continuing, but the data being obtained must be considered indeterminate because of the use of instruments and equipment that have not been calibrated or are out of calibration. This area is considered ineffective.

Calibration of measuring and test equipment in the Radiological Monitoring area could not be verified since work has been stopped since September 1989, by internal directive. This area must be considered indeterminate.

Activities associated with the Control of Measuring and Test Equipment have been turned over to T&MSS effective May 1, 1990.

6. Criterion XIII--Handling, Storage, and Shipping

Activities reviewed were in compliance with procedural requirements and appear to be acceptable.

## 1.0 INTRODUCTION

This report contains the results of a corrective action review of Yucca Mountain Project Office (Project Office), Technical and Management Support Services (T&MSS), and MAC Technical Services Company (MACTEC) support of the Yucca Mountain Project for the time period from December 1988 until the present. The review was conducted at facilities located in Las Vegas and the Nevada Test Site, Nevada, on June 11-15, 1990. The Quality Assurance (QA) program requirements to be verified were taken from the Project Office Quality Assurance Plan (QAP) (NNWSI/88-9, Revision 4).

## 2.0 CORRECTIVE ACTION REVIEW SCOPE

The following program elements were reviewed to assess compliance with the Project Office QAP and the Project Office implementing Quality Management Procedures (QMPs), Administrative Procedures (Quality) (AP-Qs), and Branch Technical Procedures (BTPs):

- 2.0 Quality Assurance Program (Graded QA)
- 3.0 Scientific Investigation Control and Design Control (study plans and implementation of the System Engineering Management Plan)
- 4.0 Procurement Document Control
- 7.0 Control of Purchased Items and Services
- 8.0 Identification and Control of Items, Samples and Data
- 12.0 Control of Measuring and Test Equipment
- 13.0 Handling, Shipping, and Storage

The following program elements of the Project Office QAP are considered not applicable to the scope of work at the present time:

- 9.0 Control of Processes
- 10.0 Inspection
- 11.0 Test Control
- 14.0 Inspection, Test, and Operating Status

The balance of the program elements were reviewed during the first review and addressed in Corrective Action Review Report I-01, dated May 8, 1990.

## 3.0 REVIEW TEAM PERSONNEL

The Corrective Action Review Team consisted of the following personnel:

<u>Individual</u>	<u>Responsibility</u>
Frank J. Kratzinger	Review Team Leader
Neil D. Cox	Reviewer

Kenneth O. Gilkerson	Reviewer
Gerard Heaney	Reviewer
Richard A. Kettell	Reviewer
Robert H. Klemens	Reviewer
Richard Spence	Reviewer
Art Spooner	Reviewer
Rod Schaffer	Observer, DOE/HQ

#### 4.0 SUMMARY OF REVIEW RESULTS

##### 4.1 Statement of Program Effectiveness

The following is the Corrective Action Review Team's summation of the acceptability of each individual criterion of the Project Office QAP (as reviewed) and the implementation of the requirements of the Systems Engineering Management Plan (SEMP). The summation is the result of measuring the implementation of Project Office QMPs, AP-Qs, and BTPs.

For instances in which open Standard Deficiency Reports (SDRs) or Headquarters's Deficiency Reports (DRs) had already been issued against the criteria being reviewed, no additional SDRs were generated.

##### 1. Criterion II--Quality Assurance Program (Graded QA)

The implementation of AP-6.17Q has been adequate and effective in developing a review package. Limited portions of AP-5.28Q and BTP-QRB-001 have been adequately and effectively implemented to date in setting up a review by the Quality Review Board (QRB).

##### 2. Criterion III--Scientific Investigation and Design Control (Study Plans and the SEMP)

Except for SDR No. 521, previously written on the timeliness of the reviewer's qualifications, the study plans reviewed for Midway Valley and Calcite-Silica were in compliance with the procedural requirements and are acceptable.

Two areas of implementation of the requirements of the SEMP were reviewed; readiness reviews and technical assessments. During the corrective action review, it was determined that no readiness reviews had been conducted between December 1988 and the present.

Two technical assessment review packages were available and met the procedural requirements. Based on this review, the implementation of technical assessment review package requirements of the SEMP appear to be adequate.

3. Criterion IV--Procurement Document Control  
Criterion VII--Control of Purchased Items and Services

The review team for procurement activities selected a documentation review that was generated subsequent to Headquarters Surveillance OCRWM-SR-89-008 and Project Office Surveillance YMP-SR-89-069. These two surveillances addressed procurement activities performed by Yucca Mountain Project Office and T&MSS from December, 1988 through July, 1989, and identified deficiencies in both criteria. The extent of the deficiencies, accompanied by the fact that many of the reports remain open, provided the basis for selecting the scope of this portion of the review.

Based on the previous deficiencies and the issuance of Corrective Action Request CAR-90-003 by the Project Office (which summarizes the procurement issues) the review team concludes that procurement activities subject to the requirements of QAP Sections IV and VII performed prior to the two referenced surveillances were performed to a deficient procurement system. The procurement system was evaluated to be ineffective.

4. Criterion VIII--Identification and Control of Items, Samples, and Data

Activities reviewed were in compliance with procedural requirements and appear to be acceptable.

5. Criterion XII--Control of Measuring and Test Equipment

The Air Quality Monitoring and Meteorological Monitoring Programs are operating under open SDRs that have been written against the calibration of measuring and test equipment, in addition to the SDR identified during this review. Work is continuing, but the data being obtained must be considered indeterminate because of the use of instruments and equipment that have not been calibrated or are out of calibration. This area is considered ineffective.

Calibration of measuring and test equipment in the Radiological Monitoring Area could not be verified since work has been stopped since September 1989, by internal directive. This area must be considered indeterminate.

#### 6. Criterion XIII--Handling, Storage, and Shipping

Activities reviewed were in compliance with procedural requirements and appear to be acceptable.

In the opinion of the Corrective Action Review Team, the Project Office QA Program is ineffective in the following areas:

1. Plans and procedures identified in Criteria IV, VII, and XII (ineffective)
2. Implementation of procedures identified in Criteria IV and XII (ineffective)

Based on the information discussed above, additional actions are required by the Project Office to ensure that sufficient controls are in place for the overall control of its quality-related activities.

#### 4.2 Summary of Technical Activities

There were no technical activities conducted during this review.

#### 4.3 Summary of Findings

A total of two Standard Deficiency Reports (SDRs) were generated as a result of this review. Information copies of the SDRs are included in Enclosure 2. Committed corrective action dates obtained during the review are indicated in parentheses after the synopsis of the SDRs in Section 6. Additionally, 10 recommendations were made by the review team and are included in Section 6 of this report.

### 5.0 CORRECTIVE ACTION REVIEW MEETINGS

#### 5.1 Pre-review Conference

A pre-review conference was held with Project Office, T&MSS, and MACTEC personnel at 10:00 a.m. on June 11, 1990. The purpose, scope, and proposed agenda for the review were presented and the review team was introduced. A list of those attending is provided in Enclosure 1.

#### 5.2 Personnel Contacted During the Review

(See Enclosure 1).

### 5.3 Post-review Conference

The post-review conference was held at 2:00 p.m. on June 15, 1990, at the offices of the Yucca Mountain Project in Las Vegas, Nevada. The preliminary SDRs and recommendations were presented to the Project Office, T&MSS, and MACTEC. A list of those attending the post-review conference is provided in Enclosure 1.

## 6.0 SYNOPSIS OF STANDARD DEFICIENCY REPORTS AND RECOMMENDATIONS

### 6.1 Standard Deficiency Reports (Committed Corrective Action Completion)

SDR No. 548 Procurement activities for QA Level I and II items, which were stopped by an SDR commitment until QMP-04-01 was revised, were continuing to occur without the required revision to the QMP. (06/15/90)

SDR No. 549 Required calibration data was missing when the form used for the data recording was revised to remove the space allocated to record the data. (07/30/90)

### 6.2 Recommendations

#### 1. Criterion III

- a. AP-1.10Q requires study plan review requests by the Project Office to establish review criteria. Although the letters for the study plans reviewed by the Corrective Action Review Team (i.e., "Location and Recency of Faulting Near Prospective Surface Facilities" and "Characterization of the Quaternary Regional Hydrology") direct the reviewing organizations to review the study plans in accordance with procedure AP-1.10Q, the procedure does not in itself establish explicit review criteria. The procedure requires the Project Office to provide review criteria and establishes guidelines for the types of criteria for management, QA, and regulatory reviews (e.g., QA will review for compliance to Project quality assurance requirements). These general guidelines identified in the procedure do not provide adequate review criteria. It should be noted that these study plans were reviewed to Revision 0 of AP-1.10Q. Revision 1 to that document provides some minimum review criteria for QA for future studies, but still requires the Project Office to provide review criteria.

The Project Office should identify the review criteria that were applicable at the time of the study plan reviews (applicable QA requirements, applicable regulatory requirements, applicable DOE requirements and Project plans) and determine that the reviewers utilized this criteria during their reviews. Assurances should be established that no applicable requirements or regulatory documents were missed. If any discrepancies are identified, a new review should be conducted.

- b. During the review of the DRSs for the Location and Recency of Faulting Near Prospective Surface Facilities Study Plan, two unresolved issues raised concern as to how the Project Office tracks future commitments and unresolved issues to ensure adequate resolution. One reviewer's comments regarding the Quality Assurance Level Assignment (QALA) approvals resulted in an open-ended commitment to revise the study plan following full implementation of NUREG 1318. The criteria for determining quality assurance levels changed in December 1988 with the revision to the Project Office QAP. This study plan was approved in May 1989 with QALAs inconsistent with the Project Office QAP requirements. Subsequent to this, the study plan has not been revised and the methodology for application of graded quality assurance has once again changed. Another issue regards a comment on this study plan submitted by Sandia National Laboratories (SNL) to the Project Office in September, 1989 after approval of the study plan (correspondence Hunter to Gertz dated 09/15/89). Although this comment was identified after approval of the study plan, it was identified as an action item and placed in the records package. No other information could be found in records regarding how the comment in this letter was resolved. Interviews of Project Office/T&MSS personnel has yet to determine how this comment was handled. The Project Office should develop controls for tracking (1) issues that will not be immediately resolved during the issuance of a document or (2) issues identified subsequent to document approval to ensure that documents are revised as necessary.
- c. AP-1.10Q, Paragraph 5.2.6, requires that the review of study plans is performed by qualified staff. Documentation of the qualifications of reviewers are required to be completed prior to initiation of the review.

The qualifications of reviewers for Study Plan 8.3.1.5.2.1, "Characterization of the Quaternary Regional Hydrology," and Study Plan 8.3.1.17.4.2, "Location and Recency of Faulting Near Prospective Surface Facilities," were documented after the review was completed.

This deficiency was previously identified during Corrective Action Review I-01 in SDR No. 521. It is recommended to include these study plans in the corrective action response for SDR No. 521.

- d. The QMP-06-03 review of the MGDS Systems Requirements (SR) document showed inconsistencies in the manner in which the document review sheets were being completed. Examples include:

- o The revision number of the document was not always indicated.
- o The type of review was not always indicated.
- o Comments responded to were not always accepted by the commentator.
- o No resolution was indicated for several comments.

These examples are similar to those identified by James Blaylock in a letter to Donald G. Horton in which it is recommended to perform another review of the document.

- e. Ensure that requirements from the SEMP are clearly addressed in the implementing procedure QMP-02-08. It was noted that some of the requirements were addressed only by definitions in the procedure and not as required actions in the procedure, which normally implement requirements. An example of this condition is the requirement from the SEMP for items to be included in the review record memorandum that documents the technical assessment review. Presently, this information is only addressed in the definition of a review record memorandum in QMP-02-08, Revision 0. The requirements contained in a definition were addressed in the review record memorandum for those technical assessments that were reviewed.
- f. Ensure that the procedure contains the necessary level of detail to provide a consistent report and documentation. As an example of this condition, it was noted that different forms were being created for generic applications such as documenting qualifications. A form of this type could be developed and included in the procedure to save time, and to provide uniform documentation and consistency between reviews.
- g. Include a records package concept in the indexing practice of the Local Records Center (LRC) and Central Records Facility (CRF). This type of indexing provides for the retrieval of the total package versus the individual subparts of the package and provides other valuable information, such as the number of completed packages. Information regarding the

total number of completed packages was unavailable during this review. Package or unit information will also assist in the retrieval of the technical assessment records and other related review information.

2. Criteria IV and VII

- a. An interagency agreement with the United States Geologic Survey for services utilized on the Yucca Mountain Project is being processed in the absence of approved Project Office procedures for quality-affecting procurements. The absence of such procedures is identified in both Headquarters and Project Office deficiency reports and should be resolved as soon as possible.
- b. The existing DRs and SDRs that have been issued against the procurement process should be closed as soon as possible. The conditions cited on the DRs and SDRs, when implemented after completion of the corrective action, should provide elements for an acceptable procurement program.
- c. While reviewing receipt inspection records, the following was noted:
  - o Some receipt inspection records were not legible. This condition has been identified in a previous SDR.
  - o For records pertaining to Purchase Order PO 14-900170, the attached documentation did not reference the PO number. If these documents became detached, they would not be traceable to the PO.

It is recommended that legible copies be maintained of receipt inspection records and that each page of the document be clearly identified with a PO number to assure traceability of the documentation.

7.0 RECOMMENDED ACTION

A written response is required for each SDR delineated in Section 6. Responses to each SDR are due within five 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 the Project Office will be notified (by letter) of the closure.

Written responses to the recommendations are not required.

ENCLOSURE 1

CORRECTIVE ACTION REVIEW I-02  
PERSONNEL CONTACTED

NAME	ORGANIZATION	TITLE	CONTACTED		
			PRE- REVIEW	DURING REVIEW	POST- REVIEW
Barton, Robert V.	YMP	Deputy Director RSED	X	X	X
Blaylock, James	YMP	Project Office QA	X	X	X
Clark, James E.	SAIC	PO QA Liaison		X	
Constable, Robert B.	YMP	Project Office QA	X		
Conway, Z. J.	SAIC	Site Technician		X	
Cox, Neil D.	SAIC	Project Office QA	X	X	X
Dussman, Monica M.	SAIC	Mgr. Env. Programs		X	
Dymmel, George D.	YMP	Branch Chief Systems		X	
Edwards, Roxanne	YMP	Systems Engeering	X	X	X
Estella, John W.	SAIC	Staff Advisor		X	
Gilkerson, Ken O.	SAIC	QA Eng.	X	X	X
Gilray, John	NRC	Observer			X
Grant, Terry A.	SAIC	Senior Geologist		X	
Gron, Laura	SAIC	LRC Supervisor		X	
Hardin, Ernest L.	SAIC	Assessment Team Leader		X	
Harris, Michael W.	YMP	Manager RSD			X
Heaney, Jerry	SAIC	Project Office QA	X	X	X
Horton, Donald G.	YMP	Director QA	X		X
Karas, Nadine R.	SAIC	QRB Admin. Ass't.		X	
Kettell, Richard A.	SAIC	Project Office QA	X	X	X
Kirk, Ann R.	SAIC	Staff Member		X	
Klemens, Robert H.	SAIC	Project Office QA	X	X	X
Kratzinger, Frank J.	SAIC	Project Office QA	X	X	X
LaMonica, Larry B.	SAIC	Assessment Team Leader		X	
Lewis, Chris	Harza	Acting Curator		X	
Luthiger, Peter J.	SAIC	Site Technician		X	
Maxwell, Frank R.	YMP	Physical Science			X
Merritt, David W.	Harza	Tech. Staff Assistant		X	
Milsap, Brenda	SAIC	LRC Staff		X	
Murthy, Ram B.	YMP	QRB Chairman	X		X
Pendleton, Martha W.	SAIC	Integrator		X	
Petrie, Ted	YMP	Branch Chief			X
Phillips, Garth	YMP	Contract Specialist		X	
Prowell, Grover H.	SAIC	Staff Member		X	
Ryan, James F.	SAIC	Senior Buyer		X	
Samuolis, Peter A.	SAIC	Engineer		X	
Schaffer, Rod	Weston	QA Engineering	X	X	
Shaler, John E.	SAIC	APM Tech. Support		X	X
Smith, Steve G.	SAIC	QRB Secretary		X	
Spence, Richard E.	SAIC	Project Office QA	X	X	X

CORRECTIVE ACTION REVIEW I-02  
PERSONNEL CONTACTED

NAME	ORGANIZATION	TITLE	CONTACTED		
			PRE- REVIEW	DURING REVIEW	POST- REVIEW
Spooner, Art	Westin	QA Engineering		X	X
Taylor, Charles T.	SAIC	QA Engineering		X	
Therien, John E.	SAIC	QA Integrator			X
Voltura, Nancy A.	YMP	Project Office QA		X	
Waddell, John D.	SAIC	System Engrg. Manager		X	
Wilmot, Edwin L.	YMP	Deputy Project Manager	X	X	
Wilson, Winfred	YMP	Site Manager	X		
Woolfolk, Steve W.	SAIC	RFPD Manager		X	X

ENCLOSURE 2

# YMPC STANDARD DEFICIENCY REPORT

N-QA-038  
4/89

Completed by Originating QA Organization	1 Date June 15, 1990		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2
	3 Discovered During CA Review I-02		3a Identified By R.H. Klemens		4 SDR No. 549 Rev. 0
	5 Organization T&MSS		6 Person(s) Contacted J. Conway/M. Dussman		7 Response Due Date is 20 Working Days from Date of Transmittal
	8 Requirement (Audit Checklist Reference, if Applicable) BTP-AQ-004, Revision 1, Para. 5.1, requires that when calibrating particulate samplers, the type, range, and accuracy of the pressure transducers will be recorded on the Particulate Sampler Calibration Check (PSCC) Form.				
9 Deficiency Contrary to the above requirement, this is not being done since Revision 1 of BTP-AQ-004 revised the PSCC form and deleted the space used to record the type, range, and accuracy.					
10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action to be taken to correct the deficiency noted in Block 9. Identify the cause of the condition and the planned action to					
Aprvl.	11 QAE/Lead Auditor/Date <i>R.H. Klemens 6/18/90</i>		12 Division Manager/Date <i>N/A</i>		13 Project Quality Mgr./Date <i>[Signature] 6-19-90</i>
	14 Remedial/Investigative Action(s)  <span style="float: right;">15 Effective Date _____</span>				
Completed by Organization in Block 5	16 Cause of the Condition & Corrective Action to Prevent Recurrence  <span style="float: right;">17 Effective Date _____</span>				
	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	

YMPO STANDARD DEFICIENCY REPORT  
CONTINUATION SHEET

N-QA-038  
2/89

SDR No. 549

Page 2 of 2

6 Persons contacted ( continued )

8 Requirement ( continued )

9 Deficiency ( continued )

10 Recommended Actions ( continued )

prevent recurrence.

# YMI STANDARD DEFICIENCY REPORT

N-QA-038  
4/89

Completed by: Originating QA Organization	1 Date June 15, 1990		2 Severity Level <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3		Page 1 of 2	
	3 Discovered During CA Review I-02		3a Identified By A.W. Spooner		4 SDR No. 548 Rev. 0	
	5 Organization T&MSS		6 Person(s) Contacted J. Ryan/J. Shaler		7 Response Due Date is 20 Working Days from Date of Transmittal	
	8 Requirement (Audit Checklist Reference, if Applicable) SDR Number 354, Revision 0, Remedial/Investigative Action(s) states in part, "All quality level 1 and 2 (sic) procurements will be suspended until approval of QMP-04-01, Revision 1."					
Completed by: Originating QA Organization	9 Deficiency Contrary to the remedial actions specified in the above SDRs, Quality Level I and II procurement activities have continued. Reference the following Purchase Requisitions/Orders:					
	10 Recommended Action(s): <input checked="" type="checkbox"/> Remedial <input checked="" type="checkbox"/> Investigative <input checked="" type="checkbox"/> Corrective Identify the remedial action to be taken to correct the deficiency noted in Block 9. Investigate the program, process, activities, or documentation to					
	11 QAE/Lead Auditor/Date <i>Frank Hester</i> 6/18/90		12 Division Manager/Date N/A		13 Project Quality Mgr./Date <i>[Signature]</i> 6/18/90	
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	

SDR No. 548

Page 2 of 2

6 Persons contacted ( continued )

8 Requirement ( continued )

SDR Number 348, Revision 0, Remedial/Investigative Action(s), Revision 1, item (3), states in part, "QMP-04-01, Revision 1 will supersede existing SAIC CPIs for T&MSS related procurements; future requisitions submitted through this office shall be reviewed and processed in accordance with QMP-04-01, Revision 1 for completeness."

In summary, Quality Level I and II procurements are suspended until Revision 1 of QMP-04-01 is approved/issued; or the Remedial/Investigative Action sections of the above SDRs are amended and approved. As of the date of this review, QMP-04-01, Revision 0, is current.

9 Deficiency ( continued )

PO 14-910009-65	Order Date	03/08/90
PO 14-900171-65	Order Date	12/18/89
PO 14-900170-65	Order Date	12/18/89
PO 14-910001-65	Order Date	02/06/90

PR R 5544376	Approved	05/02/90
PR R 5515997	Approved	05/02/90
PR R 5544400	Approved	05/02/90

10 Recommended Actions ( continued )

determine the extent and depth of similar deficient conditions listed as examples on the SDR. Identify the cause of the condition and the planned action to prevent recurrence.