



## Department of Energy

Washington, DC 20585

QA: QA

FEB 26 2002

K. G. Hess  
President and General Manager  
Bechtel SAIC Company, LLC  
1180 Town Center Drive, M/S 423  
Las Vegas, NV 89144

U.S. DEPARTMENT OF ENERGY (DOE) OFFICE OF CIVILIAN RADIOACTIVE WASTE  
MANAGEMENT (OCRWM) OFFICE OF QUALITY ASSURANCE (OQA) AUDIT  
LLNL-ARC-02-07 OF LAWRENCE LIVERMORE NATIONAL LABORATORY (LLNL)  
LIVERMORE, CALIFORNIA

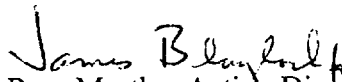
Please be advised that a team of auditors representing the OQA will conduct an audit of LLNL's implementation of the OCRWM Quality Assurance Program, as described in the DOE/RW-0333P, Revision 10, *Quality Assurance Requirements and Description* document and implementing procedures, in Livermore, California, April 15-19, 2002. The audit will be conducted in accordance with the enclosed audit plan.

Observers from the state of Nevada, U.S. Nuclear Regulatory Commission, and other interested parties may accompany the audit team.

You are hereby requested to arrange for appropriate space to conduct meetings, provide cognizant personnel to support the audit, and provide audit team access to appropriate LLNL documentation and records.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or John R. Doyle at (702) 794-5021.

OQA:JB-0708

  
Ram Murthy, Acting Director  
Office of Quality Assurance

Enclosure:  
Audit Plan LLNL-ARC-02-07



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FEB 26 2002

cc w/encl:

L. H. Barrett, DOE/HQ (RW-1) FORS  
N. K. Stablein, NRC, Rockville, MD  
Robert Latta, NRC, Las Vegas, NV  
Alan Kalt, Churchill County, Fallon, NV  
Irene Navis, Clark County, Las Vegas, NV  
George McCorkell, Esmeralda County, Goldfield, NV  
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Andrew Remus, County of Inyo, Independence, CA  
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V. J. Barish, BSC/LLNL, Livermore, CA  
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FEB 26 2002

cc w/encl: (continued)

J. R. Doyle, NQS, Las Vegas, NV

R. P. Hasson, NQS, Las Vegas, NV

L. W. Wagner, NQS, Las Vegas, NV

File, NQS, Las Vegas, NV

J. R. Dyer, DOE/YMSCO, Las Vegas, NV

B. V. Hamilton-Ray, DOE/YMSCO, Las Vegas, NV

J. M. Replogle, DOE/YMSCO, Las Vegas, NV

B. M. Terrell, DOE/YMSCO, Las Vegas, NV

QA: QA

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE**

**QUALITY ASSURANCE AUDIT PLAN**

**FOR**

**AUDIT LLNL-ARC-02-07**

**OF**

**LAWRENCE LIVERMORE NATIONAL LABORATORY  
LIVERMORE, CALIFORNIA**

**APRIL 15-19, 2002**

Prepared by: John R. Doyle Date: 2/20/2002  
John R. Doyle  
Audit Team Leader  
Navarro Quality Services

Approved by: Ram Murthy Date: 2/20/02  
Ram Murthy  
Acting Director  
Office of Quality Assurance

**ENCLOSURE**

## 1.0 SCOPE

A team of auditors from the U.S. Department of Energy, Office of Quality Assurance (OQA) will conduct a full scope compliance-based audit to evaluate Lawrence Livermore National Laboratory's (LLNL) implementation of the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program as defined in DOE/RW-0333P, Revision 10, *Quality Assurance Requirements and Description* (QARD) document and applicable implementing procedures. The audit team will evaluate the implementation, compliance, adequacy, and effectiveness of the QA program and procedures in place for activities supporting the Yucca Mountain Site Characterization Project Office.

In addition, a review of past OCRWM deficiency documents identified during previous QA audits and surveillances will be included in the scope of this audit to determine the effectiveness of completed corrective actions

The programmatic sections to be audited are identified in Section 4.0 of this audit plan.

## 2.0 AUDIT SCHEDULE

Pre-Audit Team/Observer Meeting	1:30 p.m., April 15, 2002 Livermore, CA
Pre-Audit Conference	2:00 p.m., April 15, 2002 Livermore, CA
Audit Activities	2:30 p.m. to 4:00 p.m. April 15, 2002 Livermore, CA
	8:00 a.m. to 4:00 p.m. April 16-18, 2002 Livermore, CA
	8:00 a.m. to 11:30 a.m. April 19, 2002 Livermore, CA
Post-Audit Conference	1:00 p.m. April 19, 2002 Livermore, CA

There will be a daily OQA Audit Team/Observer meeting at 4:00 p.m. to review audit progress. Beginning on Tuesday, April 16, 2002, there will also be a daily Audit Team Leader/Observer/LLNL management meeting at 8:15 a.m. to communicate audit progress, discuss potential deficiencies, and establish needed liaisons. All meetings will be held at locations arranged and provided by LLNL.

### **3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES**

The requirements to be audited will be contained in the checklists. This checklist will be developed from the latest available revision of the following documents:

- QARD
- OCRWM Quality Program Procedures
- LLNL Quality Program Procedures
- Bechtel SAIC Company, LLC Quality Program Procedures

The conduct of the audit will be guided by the documents (latest revision) listed below:

- Quality Assurance Procedure QAP 18.2, *Internal Audit Program*
- Administrative Procedure AP-16.1Q, *Management of Conditions Adverse to Quality*

### **4.0 ACTIVITIES TO BE AUDITED**

The audit team will evaluate the effectiveness of applicable QA program sections as they apply to the activities associated with LLNL - Livermore, CA as follows:

Section 1.0	Organization
Section 2.0	Quality Assurance Program
Section 5.0	Implementing Documents
Section 6.0	Document Control
Section 7.0	Control of Purchased Items and Services
Section 12.0	Control of Measuring and Test Equipment
Section 15.0	Nonconformances
Section 16.0	Corrective Action
Section 17.0	Quality Assurance Records
Supplement I	Software
Supplement II	Sample Control
Supplement III	Scientific Investigation
Supplement V	Control of the Electronic Management of Data
Appendix C	Monitored Geologic Repository

The following QA program sections were considered during the development of this audit plan and were found to not be applicable, since LLNL - Livermore, CA currently has no activities to which these sections apply:

Section 3.0	Design Control
Section 4.0	Procurement Document Control
Section 8.0	Identification and Control of Items
Section 9.0	Control of Special Processes
Section 10.0	Inspection
Section 11.0	Test Control
Section 13.0	Handling, Storage and Shipping
Section 14.0	Inspection, Test and Operating Status
Section 18.0	Audits
Supplement IV	Field Surveying
Appendix A	High-Level Waste Form Production
Appendix B	Storage and Transportation

If the team identifies a need to verify additional programmatic areas during the audit, these areas will be added to the audit scope and evaluated accordingly.

## **5.0 AUDIT TEAM MEMBERS**

John R. Doyle, Navarro Quality Services (NQS), Las Vegas, NV, Audit Team Leader  
Robert Toro, NQS, Las Vegas, NV, Auditor  
Lester W. Wagner, NQS, Las Vegas, NV, Auditor  
Christian M. Palay, NQS, Las Vegas, NV, Auditor

## **6.0 AUDIT CHECKLISTS**

LLNL-ARC-02-07, Compliance Checklist.

FEB 26 2002

cc w/encl:

L. H. Barrett, DOE/HQ (RW-1) FORS  
N. K. Stablein, NRC, Rockville, MD  
Robert Latta, NRC, Las Vegas, NV  
Alan Kalt, Churchill County, Fallon, NV  
Irene Navis, Clark County, Las Vegas, NV  
George McCorkell, Esmeralda County, Goldfield, NV  
Leonard Fiorenzi, Eureka County, Eureka, NV  
Andrew Remus, County of Inyo, Independence, CA  
Mickey Yarbrow, Lander County, Battle Mountain, NV  
Lola Stark, Lincoln County, Caliente, NV  
Judy Shankle, Mineral County, Hawthorne, NV  
L. W. Bradshaw, Nye County, Pahrump, NV  
R. R. Loux, State of Nevada, Carson City, NV  
S. W. Lynch, State of Nevada, Carson City, NV  
Josie Larson, White Pine County, Ely, NV  
Mifflin and Associates, Las Vegas, NV  
R. L. Bisping, Fluor Hanford, Richland, WA  
S. A. Orrell, BSC/SNL, Albuquerque, NM  
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B. M. Terrell, DOE/YMSCO, Las Vegas, NV

11/15/02  
11/15/02





## Department of Energy

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QA: QA

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K. G. Hess  
President and General Manager  
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1180 Town Center Drive, M/S 423  
Las Vegas, NV 89144

U.S. DEPARTMENT OF ENERGY (DOE) OFFICE OF CIVILIAN RADIOACTIVE WASTE  
MANAGEMENT (OCRWM) OFFICE OF QUALITY ASSURANCE (OQA) AUDIT  
SNL-ARC-02-04 OF SANDIA NATIONAL LABORATORIES (SNL)

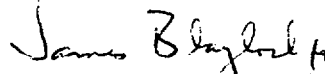
Enclosed is the Audit Report SNL-ARC-02-04 conducted by representatives of OQA on  
January 14-18, 2002, at SNL's facilities in Albuquerque, New Mexico.

The audit team determined that overall SNL is satisfactorily and effectively implementing the  
examined portions of the OCRWM Quality Assurance (QA) Program in accordance with  
OCRWM DOE/RW-0333P, Revision 10, *Quality Assurance Requirements and Description*,  
OCRWM program procedures, and SNL's implementing procedures with no new deficiency  
documents being initiated as a result the audit.

The audit team was impressed with the excellent attitude and cooperation of SNL employees  
during the course of the audit. In addition, SNL was recognized for good practices in the areas of  
Training and Verification of Education and Experience and involving the QA On-Site  
Representative in the acceptance of measuring and test equipment calibration certificates.

The audit is considered completed and closed as of the date of this letter. Response to this audit  
report is not required.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or  
Donald J. Harris at (702) 794-1467.

  
Ram Murthy, Acting Director  
Office of Quality Assurance

OQA:JB-0706

Enclosure:  
Audit Report SNL-ARC-02-04



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QA: QA

U. S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
OFFICE OF QUALITY ASSURANCE

AUDIT REPORT SNL-ARC-02-04  
  
OF  
  
SANDIA NATIONAL LABORATORIES  
  
AT  
  
ALBUQUERQUE, NEW MEXICO

JANURY 14-18, 2002

Prepared by: Donald J. Harris Date: Feb 20, 2002  
Donald J. Harris  
Audit Team Leader  
Navarro Quality Services

Approved by: Ram Murthy Date: 2/26/02  
Ram Murthy  
Acting Director  
Office of Quality Assurance

ENCLOSURE

## 1.0 EXECUTIVE SUMMARY

As a result of Quality Assurance (QA) Audit SNL-ARC-02-04, the audit team determined that the Sandia National Laboratories (SNL) located in Albuquerque, New Mexico is satisfactorily and effectively implementing the applicable portions of the U.S. Department of Energy (DOE), Office of Civilian Radioactive Waste Management (OCRWM) QA Program in accordance with DOE/RW-0333P, Revision 10, *Quality Assurance Requirements and Description* (QARD), OCRWM program procedures and SNL implementing procedures.

### Good Practices

Engineering Assurance provided each SNL staff member a copy of their Training Matrix and Training Status Report from the Training Server. Staff members that were interviewed during the audit had their Training Matrix available and knew the status of their training assignments.

The Engineering Assurance designee assembled folders for each employee, consisting of the Training Matrix (Revision 2), Training Status Report from the Training Server, Position Description and completed Verification of Education and Experience form. This provided SNL management assurance that all employees were current in regards to Training, Position Description, and Verification of Education and Experience. In addition, it demonstrated compliance during the audit.

The SNL Measuring and Test Equipment Custodian involved the QA On-Site Representative in the review and acceptance of the Calibration Certificates and the required Acceptance Report, which they both signed. This helped to ensure an acceptable process.

In addition, the effectiveness of corrective actions related to five previously closed Deficiency Reports (DR) were evaluated with satisfactory results. The details are described in paragraph 5.5.5.

## 2.0 SCOPE

Auditors representing the DOE's Office of Quality Assurance (OQA) conducted a compliance audit to evaluate SNL's implementation of the OCRWM QA Program as described in the QARD and applicable implementing procedures at the SNL facilities. In addition, observers representing the Clark County, Nevada Department of Comprehensive Planning, and Fluor Hanford Analytical Services observed the audit.

The audit team, through interviews of cognizant personnel, reviews of documentation, and evaluation of procedures, assessed implementation, adequacy, and effectiveness of SNL's implementation of the QA Program.

In addition, the audit team also reviewed recently closed OCRWM deficiency documents of SNL activities to determine the effectiveness of completed corrective actions.

In accordance with the approved audit plan, the following QA Program Sections were evaluated.

1.0	Organization
2.0	Quality Assurance Program
3.0	Design Control
5.0	Implementing Documents
6.0	Document Control
7.0	Control of Purchased Items and Services
12.0	Control of Measuring and Test Equipment
15.0	Nonconformances
16.0	Corrective Action
17.0	Quality Assurance Records
Supplement I	Software
Supplement II	Sample Control
Supplement III	Scientific Investigation
Supplement V	Control of the Electronic Management of Data
Appendix C	Monitored Geologic Repository (as applied to QARD Section 7.0)

The following QA Program Sections were not evaluated, as SNL is currently not implementing them:

4.0	Procurement Document Control
8.0	Identification and Control of Items
9.0	Control of Special Processes
10.0	Inspection
11.0	Test Control
13.0	Handling, Storage, and Shipping
14.0	Inspection, Test, and Operating Status
18.0	Audits
Supplement IV	Field Surveying
Appendix A	High-Level Waste Form Production
Appendix B	Storage and Transportation

### 3.0 AUDIT TEAM AND OBSERVERS

The following is a list of audit team members and assigned areas of responsibility:

<u>Name/Title/Organization</u>	<u>QA Program Sections</u>
Donald J. Harris, Navarro Quality Services (NQS) Las Vegas, NV, Audit Team Leader	1.0, 2.0, 7.0, 12.0, and Supp V

**Name/Title/Organization**

Kristi A. Hodges, NQS, Las Vegas, NV, Auditor  
F. Harvey Dove, NQS, Las Vegas, NV, Auditor  
James Blaylock, OQA, Las Vegas, NV, Auditor

**QA Program Sections**

5.0, 6.0, Supp I and III  
2.0, 3.0, and Supp III  
2.0, 15.0, 16.0, 17.0, Supp II  
and III

**Observers**

Englebrecht von Tiesenhausen, Clark County, NV, Representative  
Tilak R. Verma, Fluor, Hanford, WA  
Russ Bisping, Fluor, Handford, WA

**4.0 AUDIT TEAM MEETINGS AND PERSONNEL CONTACTED**

The pre-audit meeting was held at SNL's offices in Albuquerque, New Mexico on January 14, 2002. Daily debriefings were held to apprise SNL management and staff of the progress of the audit and any conditions adverse to quality. The audit was concluded with a post-audit meeting held on January 18, 2002, at SNL's Albuquerque, New Mexico offices.

Personnel contacted during the audit, including those who attended the pre- and post-audit meetings, are listed in Attachment 1, "Personnel Contacted During the Audit."

**5.0 SUMMARY OF AUDIT RESULTS**

**5.1 Program Effectiveness**

The audit team concluded that, overall SNL's implementation of the QA program is adequate and effective. The results for each QA program section evaluated are contained in Attachment 2, "Summary Table of Audit Results."

1. Technical Reviews: No concerns were identified during the audit other than a procedure issue that leads one to believe that an AP-2.14Q, Revision 2, *Review of Technical Products and Data*, review of submitted data is completed prior to submittal to the Technical Data Management System database. In actuality, AP-2.14Q reviews are conducted on data from a scientific notebook (SN); however, data is submitted as preliminary if it is an input to a technical product that will be reviewed per AP-2.14Q.
2. Procedures: There has been limited activity in the area of procedures and no deficiencies were identified. Procedure changes noted were editorial in nature and required no formal review. SNL utilizes AP-2.14Q for all substantive changes, and has not implemented AP-6.28Q, Revision 0, BSCN 1, *Document Review*.

3. Document Control: SNL, as well as all the remote locations, are increasingly relying on electronic documents; therefore, the opportunity for working to a superseded procedure, or failing to update obsolete controlled documents is greatly reduced. The follow-up on DR BSC-01-D-127, which was written based on BSC-ARC-01-08, was not entirely successful because the DR response only addressed controlled documents issued out of BSC, Las Vegas. However, the description of the condition adverse to quality also identified documents controlled by the laboratories and U.S. Geological Survey (USGS). The document holdings at SNL issued from BSC, Las Vegas, were decontrolled, which was coordinated with the BSC document control organization.
4. Software: Although there is limited implementation of AP-SI.1Q, Revision 3, ICN 2, *Software Management*, SNL needs to provide specific attention to the area of software in order to preclude future documentation errors and deficiencies. The following issues were addressed during the audit:
  - A request was submitted to the BSC and subsequently approved, to acquire one software code (DATAVE); and, a second request was submitted to acquire ABACUS, which had not yet received approval at the time of the audit. Preliminary qualification documentation for DATAVE, representing initial implementation of AP-SI.1Q, was reviewed during the audit. Although in a draft status, it was apparent that extra attention will be needed in order to successfully complete the qualification process to meet the current requirements.
  - Twelve Level 3 software codes (routines) that had received Software Tracking Numbers and were initiated for qualification as part of DR LVMO-00-D-039 effort, were retracted from Software Configuration Management with a statement on a Software Baseline Request (SBR) that the codes were documented within SNs. During the audit, the twelve SBRs were appended to state that the single-use codes were documented within the technical product. The product (ANL-NBS-TH-000001, Revision 0, ICN 1) was reviewed and verified to include the codes. Note that the appended information clarified the record rather than corrected a deficiency during the audit.
  - Several Level 3 software codes (routines) developed prior to the software stand-down, which is associated with BSC-01-C-002, were not qualified or approved for interim use. These codes were not used in any product, although they may be used in a future product. Essentially, approval for interim use may have been appropriate, but the software stand-down pre-empted further processing. There is no apparent deficiency in the status of the codes; however, a path forward to move them from this status was being discussed by SNL during the audit.

**5.2 Stop Work or Immediate Corrective Actions Taken**

There were no stop work orders or immediate corrective actions as a result of the audit.

**5.3 QA Program Implementation**

Attachment 2, "Summary Table of Audit Results," provides results for each QA program section audited. The details of the audit, including the objective evidence reviewed, are documented in the audit checklist. The checklist is maintained as a QA record.

**5.4 Technical Audit Activities**

There were no technical activities evaluated during this audit.

**5.5 Summary of Deficiencies**

There were no conditions adverse to quality identified during the audit.

**5.5.1 Corrective Action Reports**

None.

**5.5.2 Deficiency Reports**

None.

**5.5.3 Deficiency Identification and Referrals**

None.

**5.5.4 Deficiencies Corrected During the Audit**

None.

**5.5.5 Follow-up of Previously Identified Conditions Adverse to Quality**

Five deficiency documents were evaluated for effectiveness of corrective action.

SNL-00-D-098 - SNL Management failed to ensure training assignments were developed and processed for newly assigned personnel. Effective correction was confirmed by sampling 10 personnel, each had a copy of their Training Matrix and updated Training Status from the Train Server database.

SNL-00-D-109 - The disposition of an Nonconformance Report (NCR) was revised and an approval signature was not obtained. Effective correction was confirmed by review of the NCR database, no NCRs have been issued by SNL or against SNL since September 1, 2000.

SNL-01-D-012 - SN or approved implementing document was not on location during testing. Effective correction was confirmed by review of the DR database and a review of the only SN (in process) in Albuquerque, New Mexico and discussions with the SNL Technical staff.

SNL-01-D-045 - Record packages not submitted to the Records Processing Center (RPC) within the 60-day time frame. Effective correction was confirmed by verifying that the records were being submitted to the RPC as collected. There was no records backlog detected during the audit.

SNL-01-D-123 - SN initial entries were incomplete. Effective correction was confirmed by verification of SNL-SCI-022, Vol. I. The initial entry referenced the Technical Work Plan (TWP), subsequently the TWP changed. The SN was updated by pen and ink changes

BSC-01-D-127 - Document holders possessed superseded documents. The DR response addressed controlled documents issued out of BSC, Las Vegas. However, the description of conditions adverse to quality also identified documents controlled by the laboratories and USGS. Therefore, this DR is being re-evaluated for additional action to resolve the full extent of the identified conditions.

## **6.0 RECOMMENDATIONS**

No recommendations were documented for SNL management consideration.

## **7.0 LIST OF ATTACHMENTS**

Attachment 1 "Personnel Contacted During the Audit"  
Attachment 2 "Summary Table of Audit Results"  
Attachment 3 "Acronyms/Abbreviations"



**ATTACHMENT 1**  
**Personnel Contacted During the Audit**

Name	Organization	Pre-audit Meeting	Contacted During Audit	Post-audit Meeting
James Graff	QA On-Site Representative/BSC	X	X	X
Richard Powe	On-Site Representative/BSC		X	
Pat Gibson	Document Control/BSC		X	
Engelbrecht vonTiesenhausen	Observer/Clark County	X		X
Russ Bisping	Observer/Fluor Hanford	X		X
Tilak Verma	Observer/Fluor Hanford	X		X
Bill Glasser	QA Specialists/NQS		X	
Bob Hasson	Verification Manager/NQS		X	
Jim Voigt	QA Specialist/NQS		X	
Kathleen Economy	Sat Zone/Management Solutions, LLC		X	
Joe Archuleta	Engineering Assurance Lead/SNL	X	X	X
Richard Aguilar	Performance Assessment/SNL	X		
Bill Arnold	Principle Technical Staff/SNL	X	X	
Nancy Brodsky	Geomechanics/SNL		X	
David Bronowski	Geomechanics/SNL		X	
Iris Castagna	Records Coordinator/SNL/SAIC	X		X
John Cochran	TSPA/SNL	X		
Delene Cox	Financial Analysts/SNL	X	X	
Nina Garcia	Records Coordinator/SNL/SAIC	X	X	
Eloise James	Technical Data Coordinator/SNL/SAIC	X	X	X
Robert Jones	Repository Testing/SNL			X
Carlos Jove-Colon	TSPA/SNL		X	
Hong-Nian Jow	Manager, Sub Performance Analyses/SNL	X	X	X
Stephanie Kuzio	Sub Performance Assessment/SNL		X	
Robert MacKinnon	TSPA/SNL		X	X
Steve Miller	TSPA/SNL		X	
James Nowak	Sub Performance Assessment/SNL		X	
Andrew Orrell	Lab Lead/SNL	X	X	X
Marie Owens	Science Organization/SNL		X	
James Ramsey	Sub Performance Assessment/SNL		X	
Albert Schenker	Technician/SNL (LATA)	X		
Julia Schneider	Performance Assessment Software Coordinator/SNL	X	X	X
Sylvia Sweeney	Records Coordinator/SNL/SAIC	X		X
Peter Swift	Manager, TSPA/SNL	X	X	X
Ronnie Taylor	M&TE Coordinator/SNL		X	

## ATTACHMENT 2

### SUMMARY TABLE OF AUDIT RESULTS

QARD Sections	Implementing Documents	Checklist Pages	Deficiencies/ DIRs	CDA	REC	Program Adequacy	Procedure Compliance	Overall
1.0	LP-1.0Q-M&O, Rev 0 QAIP 01-02, Rev 15	1, 2 & 3 2	N/A N/A	N/A N/A	N/A N/A	SAT SAT	SAT SAT	SAT
2.0	AP-2.1Q, Rev 2 AP-2.2Q, Rev 1 AP-2.14Q, Rev 2 AP-2.20Q, Rev 0, ICN 1	4-8 9-10 11-14 15-18	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	SAT SAT SAT SAT	SAT SAT SAT SAT	SAT
3.0	AP-3.10Q, Rev 2, ICN 4 AP-3.12Q, Rev 0, ICN 4 AP-3.15Q, Rev 3	19-22 23-25 26-28	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	SAT SAT SAT	SAT SAT SAT	SAT
5.0	QAIP 5-1, Rev 11 QAIP 20-1, Rev 7	29 29	N/A N/A	N/A N/A	SAT SAT	SAT SAT	SAT SAT	SAT
6.0	AP-6.28Q, Rev 0, BSCN 1	30-33	N/A	N/A	N/A	SAT	NI	SAT
7.0	AP-7.7Q, Rev 0, ICN 1	34-35	N/A	N/A	N/A	SAT	SAT	SAT
12.0	AP-12.1Q, Rev 0, ICN 1	36-42	N/A	N/A	N/A	SAT	SAT	SAT
15.0	AP-15.2Q, Rev 0, ICN 1	43	N/A	N/A	N/A	SAT	NI	SAT
16.0	AP-16.1Q, Rev 4, ICN 1	44-47	N/A	N/A	N/A	SAT	SAT	SAT
17.0	AP-17.1Q, Rev 2, ICN 1	48-52	N/A	N/A	N/A	SAT	SAT	SAT
Supp. I	AP-SI.1Q, Rev 3, ICN 3	53-60	N/A	N/A	N/A	SAT	SAT	SAT
Supp. II	AP-SII.2Q, Rev 0	61-63	N/A	N/A	N/A	SAT	SAT	SAT
Supp. III	AP-SIII.1Q, Rev 1, ICN 1 AP-SIII.2Q, Rev 0, ICN 3 AP-SIII.3Q, Rev 1, ECN 1	64-67 68-69 70-77	N/A N/A N/A	N/A N/A N/A	SAT N/A N/A	SAT SAT SAT	SAT SAT SAT	SAT
Supp. V	AP-SV.1Q, Rev 0, ICN 2	78 - 79	N/A	N/A	N/A	SAT	SAT	SAT

**Legend:** CDA = Corrected During Audit  
NA = Not Applicable  
REC = Recommendation

DR = Deficiency Report  
NI = No Implementation  
SAT = Satisfactory

**ATTACHMENT 3**  
**ACRONYMS/ABBREVIATIONS**

BSC	Bechtel SAIC Company, LLC
DOE	U.S Department of Energy
DR	Deficiency Report
NCR	Nonconformance Report
NQS	Navarro Quality Services
OCRWM	Office of Civilian Radioactive Waste Management
OQA	Office of Quality Assurance
QA	Quality Assurance
QARD	Quality Assurance Requirements and Description
RPC	Records Processing Center
SBR	Software Baseline Request
SN	Scientific Notebook
SNL	Sandia National Laboratories
TWP	Technical Work Plan