

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT YMP-93-05

OF

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

TECHNICAL AND MANAGEMENT SUPPORT SERVICES

LAS VEGAS, NEVADA AND NEVADA TEST SITE, NEVADA

FEBRUARY 1 - 5, 1993

Prepared by: Robert B. Constable Date: 12.21.92.

Robert B. Constable  
Audit Team Leader  
Yucca Mountain Quality Assurance Division

Approved by: D. G. Horton Date: 12/23/92

Donald G. Horton  
Director  
Office of Quality Assurance

## 1.0 SCOPE

This audit to be performed by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD), will evaluate the Science Applications International Corporation Technical and Management Support Services (T&MSS) Quality Assurance (QA) Program to determine whether it meets the requirements and commitments imposed by the Office of Civilian Radioactive Waste Management. This will be done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements.

In addition to a follow-up on any open Corrective Action Requests, a representative sample of discrepancies identified during previous QA audits and surveillances of T&MSS will be included in the scope of this audit to determine the effectiveness of T&MSS corrective actions.

The programmatic and technical elements to be audited, as well as those programmatic elements not included in this audit, are identified in Section 4.0 of this plan.

## 2.0 AUDIT SCHEDULE

Pre-Audit Team/Observer Meeting	8:30 a.m., February 1, 1993 Las Vegas, Nevada
Pre-Audit Conference	9:30 a.m., February 1, 1993 Las Vegas, Nevada
Audit Activities	10:30 a.m. to 4:00 p.m. February 1, 1993
Audit Activities	8:00 a.m. to 4:00 p.m. February 2-4, 1993
Audit Activities	8:00 a.m. to 10:30 a.m. February 5, 1993
Post-Audit Conference	11:00 a.m., February 5, 1993 Las Vegas, Nevada

There will be a daily YMQAD audit team/Observer meeting at 4:00 p.m., and also a daily Audit Team Leader/Observer/T&MSS management meeting starting at 8:30 a.m. to discuss potential deficiencies and establish needed liaison.

### 3.0 REQUIREMENTS TO BE AUDITED AND APPLICABLE REFERENCES

The requirements to be audited will be contained in the programmatic and technical checklists. These checklists will be developed from the latest available revision of the following documents:

- T&MSS Quality Assurance Program Description Document and implementing procedures
- Applicable Yucca Mountain Site Characterization Project Office Administrative Procedures - Quality

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

- Quality Assurance Administrative Procedure (QAAP) 18.2, "Audit Program"
- QAAP 16.1, "Corrective Action"

### 4.0 ACTIVITIES TO BE AUDITED

#### Programmatic Elements

- 3.0 Design Control
- 4.0 Procurement Document Control
- 7.0 Control of Purchased Items and Services
- 8.0 Identification and Control of Items, Samples, and Data
- 10.0 Inspection
- 14.0 Inspection, Test and Operating Status
- 15.0 Control of Nonconforming Items
- 19.0 Software Quality Assurance
- 20.0 Scientific Investigation Control

The following programmatic element was considered during development of this audit plan and determined to be not applicable, since T&MSS currently has no activity for which this element applies:

- 11.0 Test Control

### Technical Areas

#### Work Breakdown Structure WBS 1.2.13.4.2, "Air Quality/Meteorology"

Evaluation of the above activity by Technical Specialist will include a determination of adequacy in the following areas:

1. Technical qualifications of personnel assigned to this area.
2. Understanding of procedural requirements as they pertain to Meteorological Monitoring.
3. Adequacy of technical procedures and their implementation.

If the audit team identifies a need to verify additional programmatic or technical areas during the audit, they will be added to the audit checklists and verified accordingly.

#### 5.0 AUDIT TEAM MEMBERS

Robert B. Constable - Audit Team Leader, YMQAD, Las Vegas, Nevada  
Donald J. Harris - Auditor, YMQAD, Las Vegas, Nevada  
Frank J. Kratzinger - Auditor, YMQAD, Las Vegas, Nevada  
John R. Matras - Auditor, YMQAD, Las Vegas, Nevada  
Kenneth T. McFall - Auditor, YMQAD, Las Vegas, Nevada  
Dale S. Ambos - Technical Specialist, U.S. Geological Survey, Las Vegas, Nevada

#### 6.0 AUDIT CHECKLISTS

The following checklists will be used during this audit:

YMP-93-05-01, Programmatic Checklist  
YMP-93-05-02, Technical Checklist

AUDIT YMP-93-05

TENTATIVE SCHEDULE OF AUDIT ACTIVITIES

MONDAY 2/1/93	TUESDAY 2/2/93	WEDNESDAY 2/3/93	THURSDAY 2/4/93	FRIDAY 2/5/93
8:30 Team/Obser. Mtg. 9:30 Preaudit Mtg.  <u>WBS 1.2.13.4.2</u> Ambos/McFall - 3, 20  Harris - 4, 7 Kratzinger - 10 Matras - 19	8:30 Management Mtg.  <u>WBS 1.2.13.4.2 (NTS)</u> Ambos/McFall - 3,20  Harris - 4,7 Kratzinger - 15 Matras - 19	8:30 Management Mtg.  <u>WBS 1.2.13.4.2</u> Ambos/McFall - 3,20  Harris - 4,7 Kratzinger - 15 Matras - 19	8:30 Management Mtg.  <u>WBS 1.2.13.4.2</u> Ambos/McFall - 3,20  Harris - 8 Kratzinger - 14 Matras - 19	8:30 Management Mtg.  Team Follow-up Activities    11:00 Postaudit Conference

LUNCH 11:30 - 12:30				
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<u>WBS 1.2.13.4.2</u> Ambos/McFall - 3,20  Harris - 4,7 Kratzinger - 10 Matras - 19	<u>WBS 1.2.13.4.2 (NTS)</u> Ambos/McFall - 3,20  Harris - 4,7 Kratzinger - 15 Matras - 19	<u>WBS 1.2.13.4.2</u> Ambos/McFall - 3,20  Harris - 4,7 Kratzinger - 15 Matras - 19	<u>WBS 1.2.13.4.2</u> Ambos/McFall - 3,20  Harris - 8 Kratzinger - 14 Matras - 19	
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4:00 TEAM CAUCUS	4:00 TEAM CAUCUS	4:00 TEAM CAUCUS	4:00 TEAM CAUCUS	
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## MEETING ROOMS

TEAM OBSERVER MEETING - ROOM 450

PREAUDIT CONFERENCE - ROOM 450

POSTAUDIT CONFERENCE - ROOM 450

TPO/MANAGEMENT MEETING - ROOM 1005

AUDITOR/OBSERVER CAUCUS  
(QA CONFERENCE ROOM 660)

AUDITOR/OBSERVER COMMAND CENTER  
(ROOM 12 OF TRAINING CENTER)

**CONTACT INFORMATION FOR DOE  
AUDIT OF T&MSS QA PROGRAM**

<b>PROGRAMMATIC ELEMENT</b>	<b>APM TELEPHONE/ROOM NUMBER</b>	<b>PRINCIPAL CONTACT TELEPHONE/ROOM NUMBER</b>	<b>BACKUP CONTACT TELEPHONE/ROOM NUMBER</b>
(II) DESIGN CONTROL	M. HARRIS 4-7766/434	D. SORENSEN 4-7867/244	J. CLARK 4-7748/240
IV PROCUREMENT DOCUMENT CONTROL	R. BOSTIAN 4-7336/464	S. JOHNSON 4-7074/418	R. GONZALES 4-7421/460
VII CONTROL OF PURCHASED ITEMS AND SERVICES	J. HARPER 4-7745/270	K. JOHNSON 4-7751/268	J. HARPER 4-7745/270
VIII IDENTIFICATION AND CONTROL OF ITEM SAMPLES AND DATA	M. HARRIS 4-7766/434	D. SORENSEN 4-7867/244	J. CLARK 4-7748/240
X INSPECTION	J. HARPER 4-7745/270	R. RINDERMAN 4-7277/266	F. LOFFTUS 4-7190/265
XIV INSPECTION, TEST AND OPERATING STATUS	J. HARPER 4-7745/270	R. RINDERMAN 4-7277/266	F. LOFFTUS 4-7190/265
XV NONCONFORMANCE CONTROL	J. HARPER 4-7745/270	R. RINDERMAN 4-7277/266	F. LOFFTUS 4-7190/265
XIX SOFTWARE QUALITY ASSURANCE	T. TAIT 4-7884/314	V. ROCHESTER 4-7666/352	A. TEMPLE 4-7100/265
XX SCIENTIFIC INVESTIGATION CONTROL	M. HARRIS 4-7766/434	D. SORENSEN 4-7967/244	J. CLARK 4-7748/240

*Dale Ambos*

OCRWM AUDIT CHECKLIST NO. YMP-93-05-02

1 ORGANIZATION

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-1	SP 8.3.1.12.2.1, Rev. 0	Explain the rationale for citing the weather stations to meet the objectives of this study. Why were four stations added to the original five.			
T-2		Why is there no precipitation gauge installed at the new knothed Gap site? What are the parameters measured at the new sites?			

9 AUDITOR SIGNATURE

10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-3	Section 2.2	Explain why calculations of "precision" are not possible for the instrumentation. Is this not accomplished during calibration?			
T-4	WI-MET-007, Rev. 0	Have all data, collected before July 1, 1991, been processed?			
				<p>9 AUDITOR SIGNATURE _____ 10 DATE _____</p>	

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-5	WI-MET-007, Rev. 0 WI-MET-003, Rev. 3	Explain the difference in data processing procedures for data collected before and after July 1, 1991.			
T-6 ✓	WI-MET-002, Rev. 2	Have there been instances since May 15, 1992 where data have been lost due to equipment malfunction?			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-7	General	Explain the reason for procedure WI-MET-009 for calibrating MSTE for the purpose of calibrating wind speed sensors. This seems to be unnecessary in light WI-MET-001 which states that wind equipment is sent to qualified outside vendor for calibration.			
T-8	WI-MET-002 WI-MET-003 WI-MET-006	Trace the data flow from the sensor to the final report, i.e., explain data processing from the field to the final data base.			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-9	SP 8.1.3.12.2.1, Rev. 0	Have any meteorological data sets been transferred to the radiation monitoring program?			
T-10	WI-MET-001, Rev. 2, Section 5.4.2	Verify that the atmosphere stability parameter, suitable for dispersion model input, has been generated from raw data. What data parameters are used in the calculation?			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-11 ✓	WI-MET-002, Rev. 3	How does the site technician verify that the sensors are giving reasonable results during site visits?			
T-12	SP 8.3.1.12.2., Rev. 0, Section 3.1.1	Explain the methodology used to determine proper instrument placement for wind speed and direction and for delta-T at: <ul style="list-style-type: none"> <li>o Main Site</li> <li>o Remote Sites</li> </ul>			
9 AUDITOR SIGNATURE _____				10 DATE _____	

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-13	WI-MET-002, Rev. 3	Explain how it is determined when delta-T is out-of-tolerance. Explain the calibration procedure for delta-T sensors.			
T-14	WI-MET-001, Rev. 2	Who is the vendor who calibrates the wind speed and direction sensors? What is the calibration frequency. When does the timeclock for recalibration begin. When the instruments are received from the vendor or when they are installed in the field.			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-15	WI-MBT-003, Rev. 3	What software routines are used for data verification and to identify out-of-tolerance data?			
T-16		Demonstrate the generation of a wind rose for the main site.			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-17	WI-MET-006, Rev. 0	Explain the procedure for generating required reports. Verify the most recent reports to the State of Nevada and to the DOE.			
T-18	WI-MET-001, Rev. 2, Exhibit 6	Verify that the site technician performs PM at each site according to the schedule.			
9 AUDITOR SIGNATURE				10 DATE	

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-19	WI-MET-002, Rev. 2	Verify that the sites are checked at least once every nine days.			
T-20	WI-MET-002, Rev. 2, Section 5.2	Are all site visits documented using the Meteorological Site Routine Checklist (Form TMSS/110)? Is the operational status of each sensor determined?			
				<p align="right">9 AUDITOR SIGNATURE _____ 10 DATE _____</p>	

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-21	WI-MET-001, Rev. 0, Section 5.5	Demonstrate the rain gauge field calibration procedure at a remote site.			
T-22	WI-MET-001, Rev. 2, Section 5.10	Demonstrate the procedure to conduct a performance check on the wind speed and direction sensors.			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-23	WI-MET-003, Rev. 3, Exhibit 1	How are data from the monitoring sites integrated into a common data base?			
T-24	WI-MET-001	Demonstrate a performance check on a data logger and a strip chart recorder.			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
T-25		Verify that all sensors currently in the field are within tolerance (review forms TMSS/259 and TMSS/285).			
T-26	WI-MET-002, Section 5.3.1	Demonstrate <u>ODESSA</u> data logger cartridge exchange.			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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<b>3 AUDIT ITEM NO.</b>	<b>4 QUALITY REQUIREMENT REFERENCE(S)</b>	<b>5 QUALITY REQUIREMENT/GUIDELINE</b>	<b>6 RESULTS S,X,N/A</b>	<b>7 SUMMARY OF INVESTIGATION</b>	<b>8 PERSON CONTACTED</b>
4-1	Paras. 5.2.1, 5.2.2, and 5.2.3	<p>QA PROGRAM ELEMENT 4.0, PROCUREMENT</p> <p>SP 1.28, REVISION 6, ICNS 1 AND 2, PROCUREMENT OF QUALITY AFFECTING ITEMS AND SERVICES</p> <p>Verify the purchase package consists of the Purchase Requisition (PR) form 1-932-023, checklist for Preparation/Review of Quality Affecting Procurement Documents (TMSS/293) and a procurement quality specification based on the requirements indicated on form TMSS/293.</p>			
4-2	Paras. 5.3.2 and 5.3.5	<p>Verify the Responsible Manager and QA Representative reviewed the procurement package and signed and dated the package.</p>			

**9 AUDITOR SIGNATURE**

**10 DATE**

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-3	Para. 5.3.8	Verify the correct project number and appropriate management level approved the PR package (reference signature authority matrix).			
4-4	Para. 5.4.5	Verify the potential supplier is identified on the QSL prior to issuance of the procurement document.			
4-5	Paras. 5.5.1, 5.5.2 and 5.5.3	Verify the Purchase Order (PO) is consistent with the requirements of the PR and bid analysis, and was reviewed by the requester or CAM, by documenting the review on the PO review section of the checklist.			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-6	Paras. 5.5.4 and 5.5.5	Verify QA reviewed the PO to ensure the QA requirements are consistent with the PR and the PO and checklist was signed and dated by QA.			
4-7	Para. 5.5.10	Verify upon issuance of a subcontract/PO for support services, technical advisory service, or professional service work, the procurement organization provided the training manager the names of the responsible technical organization and each individual identified to perform work.			
4-8	Para. 5.6.1.1	Verify non-administrative changes/cancellations are necessary, the original PR form is changed in pen and ink and initialed and dated by the requester. If canceled, line through PR and mark "canceled" and return PR to purchasing.			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-9	Para. 5.6.1.2	Verify additional management approval signature(s) when the required changes cause the purchase value to exceed the signature authority for the previous signatories.			
4-10	Para. 5.6.1.3	Verify initials and dates of persons or their representatives reviewing the original requirement for technical and QA acceptability were made for changes.			
4-11	Para. 5.6.3	Verify when changes/cancellations are necessary after the PO award, when the proposed changes modify the cost technical or QA requirements of the items or services requested, and the items or services have NOT been shipped or performed by the supplier at the time of the proposed changes, a PR which details the changes is processed in the same manner as the original PR per Section 5.2. The new PR shall indicate clearly that it is a change order and shall indicate the original PO number on the face of the document.			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-12	Para. 5.6.3.2	Verify when there is a cancellation due to a suppliers removal from the QSL, the requester evaluates the impact of the procurements on quality.			
4-13	Para. 5.6.3.3	Verify where the procurement involves a violation of the QA Program, the requester documents and processes the deficiency in accordance with SP 1.37. If the procured item or service involves a nonconformance, it is documented and processed as a nonconformance in accordance with SP 1.23.			
4-14	Para. 5.6.3.5	Verify when procurement is verbally notified to have a supplier cease work by the requester. Procurement contacts and instructs the supplier to cease work until further notice. Upon receipt of an approved PR, proces the PR package in accordance with this procedure.			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-15	Para. 5.7.2	Verify QA monitors the extent of verification activities, i.e., source inspections, surveillances and audits, including designated hold points and notification time. These verification activities shall be conducted as early as practicable.			
4-16	Para. 5.7.3	Verify the responsible technical organization coordinates with the QA Manager to assure qualified personnel perform appropriately identified verification activities, such as inspection (including verification of critical characteristics), surveillance and audits during the period of contract performance.			
4-17	Para. 5.7.4	Verify QA conducts and requires performance evaluations of suppliers on the QSL to determine supplier's QA program effectiveness.			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-18	Para. 5.8.3	Verify QA/requester performed receipt inspection and acceptance of items or services in accordance with SP 1.25.			
4-19	Para. 5.8.3	Verify QA notified procurement when PO package can be closed and forwarded to procurement any documentation needed to support closure.			
4-20	Para. 5.9.1	Verify procurement, upon receipt of documentation for PO closure, compiled the records to close the PO, and transmit to the LRC.			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-21	Para. 6.0	<p>Verify the procurement records include the following:</p> <ul style="list-style-type: none"> <li>o PR package consisting of:                             <ul style="list-style-type: none"> <li>- SAIC form 1-932-023, PR (include changes/cancellations)</li> <li>- Form N-QA-107 (as applicable)</li> <li>- Form TMSS/293, Standard Quality Assurance Clauses</li> <li>- Technical requirements or technical basis/justification for QA-CG procurement (as applicable)</li> <li>- Form TMSS-008, checklist for Preparation/Review of Quality Affecting Procurement Documents</li> </ul> </li> <li>o PO, SAIC form 9-932-018 (include changes/cancellations).</li> <li>o Requested supplier QA documentation, including acceptance of requirements.</li> <li>o Supplier generated NCRs.</li> <li>o Receiving Inspection Report (as applicable).</li> <li>o Basis for Acceptance of Services (as applicable)</li> </ul>			
9 AUDITOR SIGNATURE				10 DATE	

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,NA	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-22	Para. 5.1.1	<p>SP 1.72, REVISION 0, UPGRADE OF ITEMS PROCURED AS NON-QUALITY AFFECTING</p> <p>Verify responsible manager upon identification of an item procured as QA-N/A, which is desired for use in QA service, assign a staff member the responsibility of preparing an Item Upgrade Request.</p>			
4-23	Para. 5.1.2	<p>Verify the assigned staff member (preparer) initiates the Item Upgrade Request form (TMSS/307). The following information is required as a minimum for Part I of the form (attach additional documentation as necessary):</p> <ul style="list-style-type: none"> <li>a. Item description per the manufacturer's published product description (for example, catalog number) and method of establishing item identity.</li> <li>b. Identification of original procurement documents, if possible.</li> <li>c. Current and proposed item usage and location.</li> <li>d. Item specification (including critical characteristics and technical and functional requirements).</li> <li>e. Acceptance criteria</li> <li>f. Identification of preparer</li> </ul>			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-24	Para. 5.1.3	Verify the preparer signed as preparer in Part I of the form and forward to the responsible manager.			
4-25	Para. 5.1.4	Verify the responsible manager reviewed the Item Upgrade Request. If unacceptable, coordinate with preparer to produce an acceptable Part I. If acceptable, sign Part I and forward to the QA Manager.			
4-26	Para. 5.2.2	Verify the assigned QA staff member reviewed Part I of the Item Upgrade Request for completeness with respect to technical information required to determine inspection and documentation requirements. If acceptable, enter the inspection and documentation requirements on the Item Upgrade Request form and sign Part II of the form. If unacceptable, return to the responsible manager for additional information.			
				9 AUDITOR SIGNATURE	10 DATE

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4-27	Para. 5.3.2	<p>Verify the QA staff conducted an item inspection and document results in Part III of the Item Upgrade Request form.</p> <p>It is mandatory that during this activity, the following be determined and documented:</p> <ul style="list-style-type: none"> <li>a. The item does not show detectable damage.</li> <li>b. The item is that described on the Item Upgrade Request form.</li> <li>c. The item meets inspection acceptance criteria.</li> </ul> <p>NOTE: The QA staff inspector shall be qualified and certified and identified in Part III of the Item Upgrade Request form.</p>			
4-28	Para. 5.3.3	<p>Verify the responsible manager performs acceptance testing and documents results as required. Acceptance testing shall be accomplished as necessary to assure conformance with the manufacturer's published requirements, as appropriate, and the user-defined critical characteristics.</p>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-29	Para. 5.3.4	<p>Verify the QA staff conducts a quality engineering review of the item acceptance process:</p> <ul style="list-style-type: none"> <li>a. Review the Item Upgrade Request form and associated documentation to assure completeness and accuracy.</li> <li>b. Assure that the results of acceptance testing, if required, support item acceptance.</li> <li>c. Assure that the critical characteristics of the item are confirmed.</li> <li>d. Assure that documentation of the results of QA item acceptance on Part III of the Item Upgrade Request form. Acceptance requires marking "yes" or "N/A" on the form. If the item is found to be nonconforming, indicate in Part III. Document the condition and identify the item by tagging or other means as nonconforming in accordance with SP 1.23 and resubmit the item, as applicable, and the documentation and Item Upgrade Request form to the responsible manager. If the item is found acceptable or dispositioned such that the item may be used in QA service, complete and sign Part III of the Item Upgrade Request form and continue with this procedure.</li> </ul>			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,NA	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
4-30	Para. 5.4.1	Verify the QA manager approved the release of the item for service by signing Part IV of the Item Upgrade Request form and forward to the responsible manager.			
4-31	Para. 5.4.2	Verify the responsible manager approves the release of the item for service by signing Part IV of the Item Upgrade Request form.			
4-32	Para. 5.4.2	<p>Verify the responsible manager prepared a QA records package and submits in accordance with SP 1.36 and in accordance with Section 6.0 of this procedure and provides an information copy to the QA Manager.</p> <p>NOTE: A copy of the Item Upgrade Request and associated documentation may be retained by the QAD staff.</p>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-1	Para. 5.1.1	<p>QA PROGRAM ELEMENT 7.0, CONTROL OF PURCHASED ITEMS AND SERVICES</p> <p>OP 1.3, REVISION 3, ICN NO. 1, SUPPLIER EVALUATION</p> <p>Verify a supplier evaluation audit in accordance with OP 1.1, Quality Assurance Audits, was performed for each supplier.</p>			
7-2	Para. 5.1.1, b(1)	<p>Verify, when a supplier evaluation audit was not performed, Block 16 of the Supplier Evaluation Report (SER) was annotated to explain the reason for not performing the audit and specific action or inspection performed to assure compliance with SP 1.28.</p>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,NA	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-3	Para. 5.1.2	Verify appropriate elements of forms TMSS/018/8 or TMSS/019/10, were evaluated based on the requirements of the procurement documents.			
7-4	Para. 5.1.3	Verify that SER TMSS/016/4, in addition to the appropriate audit report, documents the results of the supplier audit.			
7-5	Para. 5.1.4	Verify the QA Manager signed Block 17 of the SER to signify approval of the information.			
				9 AUDITOR SIGNATURE	10 DATE

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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,NA	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-6	Para. 5.4.1	Verify suppliers are re-evaluated annually for those suppliers shown on the QSL in accordance with OP 1.7.			
7-7	Para. 5.4.1.2	Verify the following indicators or attributes were considered when performing the annual supplier evaluations: <ol style="list-style-type: none"> <li>1) Status of current QA program and procedures</li> <li>2) Status of national certificates</li> <li>3) Supplier correspondence (Technical)</li> <li>4) Trend indicators, Receiving Inspection Reports, past acceptance testing, and NCRs</li> <li>5) Previous audits and surveillances</li> <li>6) Available industry information</li> </ol>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-8	Para. 5.4.1b	Verify the annual supplier evaluations are documented on the SER.			
7-9	Para. 5.4.1, b(1)	Verify that for unfavorable annual evaluations, that the using organization and purchasing was notified.			
7-10	Para. 5.5	Verify suppliers qualified by audit are re-scheduled for a triennial audit based on the date of the original audit.			
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7-11	Para. 6.1	Verify QA records packages were submitted to the LRC and that the package contains an SER, as a minimum and as applicable.  1) Supplier Evaluation Checklist Cover Sheet (TMSS/017/1)  2) Supplier Evaluation Checklist (Items) (TMSS/018/8)  3) Supplier Evaluation Checklist (Calibration Services) (TMSS/019/10)			
				9 AUDITOR SIGNATURE	10 DATE



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7-15	Para. 5.3-1	Verify revisions of the QSL between quarters utilized a QSL Change Notice (QCN).			
7-16	Para. 5.3-3	Verify the QCN describes the changes to the QSL, which includes revision to the Index, added or deleted QSL forms, a new Cover Sheet, and directions for revising the QSL document.			
7-17	Para. 5.3-5	Verify the effective date on the QSL Cover Sheet includes the applicable revision number.			
				<sup>9</sup> AUDITOR SIGNATURE _____	<sup>10</sup> DATE _____



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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-19	Para. 5.1.1.5	<p>SP 1.25, REVISION 5, ICN NO. 1, ACCEPTANCE OF ITEMS AND SERVICES</p> <p>Verify that supplier furnished items were procured from a supplier identified on the QSL and that the supplier approval was current at the time of the procurement.</p>			
7-20	Para. 5.1.1.7	<p>Verify item acceptance activities as required by the Receiving Inspection Report (RIR) for receiving inspection or source verification was performed.</p>			
7-21	Para. 5.1.2	<p>Verify the required inspections were performed using the applicable procurement documents, RIR and procedure Exhibit 5, acceptance by receiving inspection.</p>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-22	Para. 5.1.3	Verify acceptance by Certificate of Conformance (COC) was based on the procurement documents, RIR, Exhibit 3 acceptance by COC for items procured.			
7-23	Para. 5.1.4	Verify acceptance by source verification was indicated in the "Acceptance Method" block of the RIR and the applicable procurement documents, RIR, and Exhibit 4 acceptance by source verification.			
7-24	Para. 5.1.4.3	Verify for those item source verified, that at the receiving location, completed and documented inspection of the remaining characteristic following arrival at the receiving location.			

9 AUDITOR SIGNATURE \_\_\_\_\_ 10 DATE \_\_\_\_\_

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7-25	Para. 5.1.5.1	Verify RIR or each line item inspected contains a "SAT" in the "Results" block.			
7-26	Para. 5.1.5.3	Verify the RIR "Remarks" section was annotated to indicate an accept tag was attached.			
7-27	Para. 5.1.7	Verify quantity received was entered on the RIR and "UNSAT" was entered for each line item inspected which was unsatisfactory. The NCR number is recorded in the "Remarks" section.			
				<b>9 AUDITOR SIGNATURE</b>	<b>10 DATE</b>

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7-28	Para. 5.2	Verify for acceptance of items by past receipt testing was performed to the criteria contained on Exhibit 5 and this method was indicated on the RIR.			
7-29	Para. 5.3.2.1	Verify acceptance of Calibration Services was in accordance with the Procurement Package, Section 5.1.2 of the procedure with the results documented on TMSS forms 038 and 094.			
7-30	Para. 5.3.2.3	Verify the QA staff performed a verification of the requester acceptance of services and documented it on TMSS forms 038 and 094.			
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7-31	Para. 5.1.2	<p>SP 1.65, REVISION 1, CONTROL OF VENDOR MANUALS AND VENDOR TECHNICAL INFORMATION</p> <p>Verify the department manager assigns a custodian who is competent in the subject matter of the VMs/VTIs to be responsible for the review and approval.</p>			
7-32	Para. 5.1.3	<p>Verify the custodian documented the results of the review of the VM/VTI on TMSS/095/2 and TMSS/093/1 forms.</p>			
7-33	Para. 5.1.6	<p>Verify QA documented their review and concurrence on TMSS/095/2 and TMSS/098/1 forms.</p>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-34	Para. 5.1.9	Verify for those VM/VTIs requiring to be controlled, the custodian stamps the first page with an approval stamp that contains at a minimum, signature/date to document, prior to issue, the review by the technical reviewer and approval by department manager and QA.			
7-35	Para. 5.1.11	Verify the custodian contacted the vendor/supplier of approved VM/VTIs on an annual basis and assured that the project has been informed of all changes to the VMs/VTIs since the last contact. Inform the Contract Services Organization of the results of the communications. Results of their contact shall be documented in a memorandum.			
				9 AUDITOR SIGNATURE _____	10 DATE _____

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7-36	Para. 5.2.1	Verify the requisitioner determined the need for a VM/VTI and includes the following VM/VTI information in requisition and FO:  a. Number of copies of VM/VTI required.  b. Instructions to send the VMs/VTIs with the items ordered.  c. Organization name and address where changes to the VM/VTI should be sent.			
7-37	Para. 5.2.4	Verify revised VM/VTI are reviewed the same as the original.			
7-38	Para. 5.3.3	Verify update to VM/VTI are submitted to the DCC for control in accordance with SP 1.34.			
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7-39	Para. 5.4.1	Verify the DCC issued controlled copies of VM/VTI to the Site Document and Records Center (DRC) in accordance with SP 1.34.  WI-AQ-006, REVISION 0, ICNS 1 AND 2, AIR QUALITY MONITORING: RECEIVING, ACCEPTANCE TESTING AND PERFORMANCE AUDITING OF GASEOUS MONITORING EQUIPMENT			
7-40	Para. 4.2	Verify a Site Technician/Field Operation Supervisor perform acceptance testing and record anomalies on a Gaseous Analyzer Acceptance Test Form (GAATF), form TMSS/080/1.			
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7-41	Para. 4.2	<p>Verify a Site Technician/Field Operations Supervisor performed the following:</p> <p>a. Operated the equipment for an initial adjustment period, as specified by the operation manuals. Indicate on the GAATF how long the equipment was allowed to run once the initial adjustment run is complete.</p> <p>b. Perform a multipoint calibration of each analyzer in accordance with the following WIs:</p> <ol style="list-style-type: none"> <li>1. WI-AQ-007 for the ozone analyzer.</li> <li>2. WI-AQ-008 for the carbon monoxide analyzer.</li> <li>3. WI-AQ-009 for the nitrogen oxides analyzer.</li> <li>4. WI-AQ-010 for the sulfur dioxide analyzer.</li> </ol>			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
7-41 Cont.		c. Verify that the performance characteristics and design features of the equipment given in the analyzer operating manuals have been met and record this information on the GAATF.  d. Enter comments on performance characteristics, design features, equipment adjustments, or other pertinent information on the GAATF.  e. If any nonconformances are noted, identify them in accordance with SP 1.23.  f. Use a Miscellaneous Acceptance Test Form (MATF), form YMSS/124/2, for any components not specifically included in other acceptance test forms.  g. Carefully repack any equipment to be shipped to the field in its original shipping carton.  h. Forward a copy of the acceptance test results to QA in accordance with SP 1.25.			

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7-42	Para. 5.3	<p>Verify a performance audit was performed by a multipoint calibration of each analyzer using a separate calibrator and gas standards. Compare this calibration to the previous calibration and document on the Gaseous Analyzer Performance Audit Form (GAPAF):</p> <ul style="list-style-type: none"> <li>a. Ozone Audit Data sheet and Procedure Summary, form TMSS/140/10.</li> <li>b. SO<sub>2</sub> and CO Audit Data Sheet and Procedure Summary, form TMSS/141/8.</li> <li>c. NO<sub>x</sub>/NO/NO<sub>2</sub> Audit Data Sheet and Procedure Summary, form TMSS/139/14, and</li> </ul> <p>record anomalies encountered during the audit on the appropriate GAPAF.</p>			
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8-1	Paras. 5.1.2 and 5.1.3	<p>QA PROGRAM ELEMENT 8.0</p> <p>SP 1.2, REVISION 1, POSSESSION, PROCUREMENT, SHIPMENT, AND RECEIPT OF RADIOACTIVE MATERIAL</p> <p>Verify the RFPD Manager evaluated and documented the hazards of possessing radioactive material and recommend appropriate measures to assure compliance with radiological safety regulations. Recommendations may include training, storage, radiation surveys, posting, and As Low As Reasonably Achievable (ALARA) considerations.</p>			
8-2	Para. 5.2.5	<p>Verify the RFPD Manager reviewed the procurement documentation for compliance, if appropriate controls are being implemented, he signs and dates to indicate review and approval for procurement and completes a "Procedure Compliance Documentation" form per SP 1.31.</p>			
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8-3	Para. 5.3.2	Verify the RFPD Manage provided user with information on packaging criteria, labels, labeling specifications, shipping form(s), and other controls as appropriate to the specific shipment classification and regulatory agency criteria.			
8-4	Para. 5.3.3	Verify the user packaged the material and initiated documentation in accordance with regulations. Minimum documentation includes: <ul style="list-style-type: none"> <li>o Shipper's Certification for Radioactive Material (SCFRM). Exhibit 1 provides an example of SCFRM.</li> <li>o Packing list with identification that references the SCFRM.</li> </ul>			
				<sup>9</sup> AUDITOR SIGNATURE _____	<sup>10</sup> DATE _____

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8-5	Paras. 5.3.5 and 5.3.6	Verify the RFPD staff reviewed the documentation of the radioactive material being shipped meets or exceeds the quantities in 49 CFR for "normal form Type A," and sends the documentation to the Radiological/Environmental Field Programs Department (REFFD) Manager for concurrence of the shipment.			
8-6	Para. 5.3.7	Verify the REFFD Manager signed and dated the Shipper Certification for Radioactive Material.			
				9 AUDITOR SIGNATURE	10 DATE



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10-1	WI-QA-008, R0 Para. 4.4	Verify that the QA Manager provides the Training Department with inspector certifications and associated documentation for the purpose of tracking training requirements and recertification dates for QA personnel.			
10-2	WI-QA-008, R0 Para. 5.1.5	Verify that the QA Manager documents on form TMSS/144 the completion of training, testing, and/or experience and signifies the method of qualification.			

9 AUDITOR SIGNATURE \_\_\_\_\_ 10 DATE \_\_\_\_\_

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10-3	WI-QA-008, R0 Para. 5.2.2	Verify that the certification candidate has undergone a visual acuity examination to the criteria provided in Exhibit 3 of this instruction.			
10-4	WI-QA-008, R0 Para. 5.2.2 Note	Verify that the person administering the tests is qualified to do so.			
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10-7	WI-QA-008, R0 Para. 5.4.1	Verify that the QA Manager conducts annual visual acuity examinations in accordance with the requirements of Exhibit 3 of this instruction.			
10-8	WI-QA-008, R0 Para. 5.4.4	Verify that the QA Manager documents proficiency evaluation on form T&MSS/144 and maintains the proficiency evaluation in the candidate's training files.			
				<sup>9</sup> AUDITOR SIGNATURE _____	<sup>10</sup> DATE _____



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14-3	QAPD, R6 Section 14.1	Verify that examples of status indicators are provided in appropriate procedures.			
14-4	QAPR, R6 Section 14.2	Verify that procedures control altering the sequence of tests, inspections, and other operations important to safety or waste isolation and that such actions are subject to the same controls as the original review and approval.			
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15-3	SP 1.23, R4 Para. 5.2.7	Verify that the QA staff logs appropriate information in the NCR Log and files and retains NCR copy until original is received.			
15-4	SP 1.23, R4 Para. 5.3.4	Verify that a staff member signs and dates the disposition in Block 17.			
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3 AUDIT ITEM NO.	4 QUALITY REQUIREMENT REFERENCE(S)	5 QUALITY REQUIREMENT/GUIDELINE	6 RESULTS S,X,N/A	7 SUMMARY OF INVESTIGATION	8 PERSON CONTACTED
15-5	SP 1.23, R4 Para. 5.3.6	Verify that if the disposition is acceptable, the Department Manager signs and dates in Block 18.			
15-6	SP 1.23, R4 Para. 5.3.9 Para. 5.3.10	Verify that the QA Manager reviews the NCR and determines if the Nonconformance is a significant condition adverse to quality by checking YES or NO in Block 15.			
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15-7	SP 1.23, R4 Para. 5.3.11	Verify that the QA Manager reviews the disposition to assure all QA requirements have been addressed and signs and dates in Block 19.			
15-8	SP 1.23, R4 Para. 5.4.2	For a revision to an NCR, Verify that the person initiating a change: (1) revises the necessary blocks of the NCR to effect the changes, (2) signs and dates the form, and (3) submits it to the same organization that accepted the original for their acceptance signatures on the revised NCR form.			
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15-9	SP 1.23, R4 Para. 5.5.3	Verify, for implementation of disposition, that the staff member signs/dates the original NCR in Block 21, returns NCR, support documentation and Hold Tags removed to the QA organization.			
15-10	SP 1.23, R4 Para. 5.6.2	Verify that the QA staff signs and dates closure of the NCR in Block 22.			
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15-11	SP 1.23, R4 Para. 5.6.3	Verify that the QA staff assigns trend analysis codes to valid NCRs in Block 23.			
15-12	SP 1.23, R4 Para. 5.7.5	Verify that the QA staff logs in Conditional Releases in the NCR Log.			
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19-1	SP 1.56, Section 5.13	<p>Obtain a copy of the Configuration Management (CM) Log.</p> <p>Identify the following QA software identified in WI-MET-007:</p> <p>DOS Commands:</p> <ul style="list-style-type: none"> <li>o DATALOGGER (Campbell Scientific)</li> <li>o BEEMET (Bowman Environmental Engineering)</li> <li>o CONVERSION (T&amp;MSS developed auxiliary software)</li> </ul> <p>Plus the following from WI-MET-003, Revision 3:</p> <ul style="list-style-type: none"> <li>o ENVICIM (Odessa Engineering)</li> <li>o EVAID (Odessa Engineering)</li> <li>o PLOTCALL (Bowman Environmental Engineering)</li> <li>o WROSE (Bowman Environmental Engineering)</li> </ul>			
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19-2	Section 5.13.1	Verify that the CM Log is filled out in accordance with Exhibit 1.			
19-3	Section 5.1.2	<p>Select samples of the following forms:</p> <p>Software Summary Form (SSF)</p> <p>SSF-</p> <p>SSF-</p> <p>SSF-</p> <p>SSF-</p> <p>SSF-</p> <p>*Completed SSF means ready for use in quality-affecting activity</p> <p>Software Application Record (SAR)</p> <p>SAR-</p> <p>SAR-</p> <p>SAR-</p> <p>SAR-</p> <p>SAR-</p> <p>User Access Form (UAF)</p> <p>UAF-</p> <p>UAF-</p> <p>UAF-</p> <p>UAF-</p> <p>UAF-</p>			
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19-3 Cont.		Verify that the SSF, SAR, and UAF are entered in the CM Log.  Software Classification Form (SCF) SCF- SCF- SCF- SCF- SCF-			
19-4	Section 5.1.5	Verify that Software Development Folder (SDF) has been created for each SCF in 19-3.			
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19-5	SP 1.53, Section 5.1.5	Obtain a list of Software Verification and Validation Plans (SVVPs) SVVP- SVVP- SVVP- SVVP- SVVP-  Verify the SVVP is reviewed and approved in accordance with SP 1.55, Software Document Review.			
19-6	Section 5.1.3	Verify that V/V planning milestones are submitted to the Software Librarian. This may be part of the SVVP or separate memorandum.			

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19-7	Sections 5.2 thru 5.7	Verify that the SVVP was followed.			
19-8	Section 5.8	<p>Obtain a list of Software Verification and Validation Reports (SVVRs)</p> <p>SVVR- SVVR- SVVR- SVVR- SVVR-</p> <p>Verify that the SVVR is reviewed and approved in accordance with SP 1.55 and justification for use if unverified or invalidated software is documented in accordance with SP 1.53, Section 5.7.</p>			
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19-9	SP 1.56, Sections 5.2 and 5.3	Obtain a list of Software Problem Notices (SPNs) SPN- SPN- SPN- SPN- SPN- Verify the SPN was completed in accordance with 5.2 and 5.3. Identify if any corrective actions were identified in accordance with 5.4 and corrected in accordance with 5.5.			
19-10	Section 5.8	Obtain a list of Change Request Forms (CRFs) CRF- CRF- CRF- CRF- CRF- Verify that the approved CRF is located in the SDF and a copy is transmitted to the Originator and Team Leader			

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19-11	SP 1.52, Section 5.1.1	Obtain a list of SCFs and Scientific and Engineering Software (SES)			
		SCF-			
		SCF-			
		SCF-			
		Auxiliary Software (AUX)			
		SCF-			
		SCF-			
		SCF-			
		Technical Data Base (TDB)			
		SCF-			

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19-11 Cont.		Administrative Data Base (ADB) SCF-			
		Real-Time Software (RTS) SCF-			
		SCF-			
		SCF-			
		SCF-			
		Electronic Calculation (EC) SCF-			
		(EC classified software goes directly to SP 1.54, Software Use)			
		System Software (SS) SCF-			
		SCF-			
		SCF-			
SCF-					

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19-12	Section 5.2.1	Verify that the Software Users Requirements were prepared in accordance with Exhibit 2 and attached to the SCF.			
19-13	Section 5.3.2	<p>Select a random sample of Software Development Folders from the above list of SCFs. Verify that the Software Requirements Specification (SRS) and Software Design Specification (SDS) are reviewed and approved in accordance with SP 1.55.</p> <p>NOTE: Section 5.3.2a states that commercial-off-the-shelf SS and ES, this document is a procurement specification.</p> <p>If ES to be maintained by supplier, a contract is written.</p> <p>If software is developed by a supplier, it is a contract.</p>			
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19-14	Section 5.7.2	Obtain a list of acquired system software. Verify that the software was evaluated in accordance with Section 5.7.2.1, 2, 3, 4, 5, 6 and installed in accordance with Section 5.11.			
19-15	Section 5.7.3	Identify a list of ES that has been qualified.			
19-16	Section 5.7.4	Identify a list of Software Qualification Reports (SQRs) SQR- SQR- SQR- SQR- SQR- Verify that they have been reviewed and approved in accordance with SP 1.55.			
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*Ken Mettall*

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20-1 ✓	SP 1.62, Rev. 1, Para. 5.2.1, 1st Sentence Cognizant APM	<p>Prepare a peer review plan which, at a minimum, describes the work to be reviewed, the review scope and objectives, the size and composition of the peer review group, and the method and schedule for preparation of a peer review report.</p> <p>Verify that the above requirements are included in the Peer Review Plan.</p>			
20-2 ✓	Para. 5.2.1, 2nd Sentence Cognizant APM	<p>Identify potential reviewers, designate a chairperson and secretary and estimate costs for conducting the review.</p> <p>Verify the above requirements are met for the conduct of the review.</p>			

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20-3	Para. 5.3.2 Peer Review Group	<p>Prepare a peer review report and submit to the cognizant APH.</p> <p>Verify that the peer review report has been prepared and submitted as required.</p>			
20-4	Para. 5.4.1 Cognizant APH	<p>Review the peer review report, prepare responses to the opinions and recommendations, and propose resolutions to the comments. Submit to the chairperson of the peer review group.</p> <p>Verify that the above requirements have been met.</p>			
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20-5	Para. 5.4.3 Cognizant APM	<p>Prepare and submit a record package containing all comment resolution documentation in accordance with SP 1.36.</p> <p>Verify that all the required Peer Review records pertaining to comment resolution have been submitted according to the proper procedures.</p>			
20-6	Para. 7.1 Cognizant APM	<p>Submit a record package containing the following to the Local Records Center in accordance with SP 1.36: all correspondence regarding the peer review; minutes of all peer review group meetings; the peer review plan; the peer review report; and comment resolution documentation.</p> <p>Verify that all records have been submitted as required.</p>			
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20-8	Para. 5.1.9 Assigned Staff Member	<p>Compile a scientific investigation implementation package, if not already available, which contains:</p> <ul style="list-style-type: none"> <li>a. QA Grading Report</li> <li>b. Environmental Investigation Implementation Package Approval memorandum (see Exhibit 2), or equivalent approval sheet for other investigations.</li> <li>c. Scope of work</li> <li>d. WBS element reference</li> <li>e. Any other information needed to fully describe and control the investigation to be implemented.</li> <li>f. Schedule(s)</li> </ul> <p>Verify that the scientific investigation package contains "a" through "f" above.</p>			
20-9	Para. 5.1.9, 1st 2 Sentences of Note (1) Assigned Staff Member	<p>Note: The investigation implementation methodology may take two forms: technical procedures or scientific notebooks. The investigation shall use one or a combination of these two methods.</p> <p>Verify that one of two or a combination of the implementation methodologies are used.</p>			

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20-10	Para. 5.2.2, Assigned Staff Member	<p>Prepare and issue new or revised technical procedures in accordance with SP 1.1, and in accordance with the information provided in Exhibit 3.</p> <p>Verify that technical procedures are prepared in accordance with SP 1.1 and Exhibit 3.</p>			
20-11	Para. 5.3.1, Responsible Mgr.	<p>Authorize the use of scientific notebooks by stating in the scientific investigation planning document that such methodology will be used.</p> <p>Verify that if scientific notebooks are used, that the above requirement has been met.</p>			
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20-12	Para. 5.3.2 Responsible Mgr.	Assign a Principal Investigator (PI)/Experimenter responsibility for the scientific notebook.  Verify that this requirement has been met.			
20-13	Para. 5.3.3, PI/Experimenter	Prior to the initiation of the investigation, prepare a scientific notebook that includes, as a minimum, the appropriate information form Exhibit 4.  Verify that the above requirements have been met.			
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20-14	Para. 5.3.6 PI/Experimenter	<p>Sign the notebook at the conclusion of each volume of the notebook and at the completion of the investigation.</p> <p>Verify that the PI has signed as required.</p>			
20-15	Para. 5.3.7 Responsible Mgr.	<p>Obtain, in the notebook, the signature of a technical reviewer at the completion of the investigation.</p> <p>Verify that the notebook has been reviewed and signed as required.</p>			
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20-16	Para. 5.5.1 Assigned Staff Member	Conduct investigation in accordance with the approved scientific investigation package.  Verify that the investigation is being conducted as required by the investigation package.			
20-17	Para. 5.5.2 Responsible Mgr.	Monitor the scientific investigation by:  o Reviewing and approving the investigation package.  Verify approval of the package.			
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20-18	Para. 5.5.3 Responsible Mgr.	<p>If a change in the scientific investigation planning document is required, draft the changes and process the planning document in accordance with Sections 5.1.5 through 5.1.8 of this procedure. If a revision to the investigation implementation package is required, proceed with Steps 5.1.9 through 5.1.12 of this procedure.</p> <p>Verify that changes to planning documents are made in accordance to the above requirements.</p>			
20-19	Para. 5.6.5 Assigned Staff Member	<p>Prepare report on scientific investigation in accordance with the requirements outlined in Exhibit 6.</p> <p>Verify that reports on scientific investigations are prepared as required.</p>			
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20-20	Para. 5.6.6 Responsible Mgr.	Initiate report review in accordance with SP 1.62 or SP 1.35 as appropriate.  Verify that scientific investigation reports are reviewed as required.			
20-21	WI-MET-003, Rev. 3, General	Explain the difference between this procedure and WI-MET-007.			
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20-23	General	Establish reporting schedule requirements - Is the State parameter of 60 days proceduralized or is there some other agenda for reporting.			
20-24	General	Explain how the Quality train is followed from WI-MET-003 and 007 for past and present data to this procedure. What is the reporting and records link that ties these procedures together.			
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20-25	WI-MET-002, Rev. 3, General	Are the four new stations governed by this procedure? If so, verify compliance at the new sites.			
20-26	Para. 6.1.1 Site Tech	<p>Submit completed Data Transmittal packages to the data technician within 3 working days of completing the package; the package is to be complete within 5 working days of the beginning of the calendar month. The package includes:</p> <ul style="list-style-type: none"> <li>a. Data Transmittal, form TMSS/108.</li> <li>b. Meteorological Site Routine Visit Checklist, form TMSS/110.</li> <li>c. Strip charts and any hard-copy printouts.</li> </ul> <p>Verify that the above records requirements are being met.</p>			
20-27	Para. 6.1.1 Site Tech	What constitutes a calendar month? When to when?			
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