

*Rec'd with letter
dated 12/8/93*

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

QUALITY ASSURANCE AUDIT PLAN

FOR AUDIT YMP-94-03

OF

RAYTHEON SERVICES NEVADA

LAS VEGAS, NEVADA

JANUARY 24 THROUGH 28, 1994

Prepared by: *Amelia I. Arceo* Date: 12/16/93
Amelia I. Arceo
Audit Team Leader
Yucca Mountain Quality Assurance Division

Approved by: *Donald G. Horton* Date: 12/7/93
Donald G. Horton
Director
Office of Quality Assurance
1028

1.0 SCOPE

This audit, by a team of auditors from the Yucca Mountain Quality Assurance Division (YMQAD) will evaluate the Raytheon Services Nevada (RSN) Quality Assurance (QA) Program to determine whether it meets the requirements and commitments imposed by the Office of Civilian Radioactive Waste Management (OCRWM). This will be done by verifying implementation and effectiveness of the system in place, as well as verifying compliance with requirements.

In addition to the follow-up on open Corrective Action Requests (CARs), a representative sample of discrepancies identified during previous QA audits and surveillances of RSN may be included in the scope of this audit to determine the effectiveness of RSN corrective actions.

The programmatic elements to be audited during this limited scope audit are identified in Section 4.0 of this plan.

2.0 AUDIT SCHEDULE

| | |
|---------------------------------|--|
| Pre-audit Team/Observer Meeting | 8:00 a.m., January 24, 1994 Las Vegas, Nevada |
| Pre-audit Conference | 9:00 a.m., January 24, 1994 Las Vegas, Nevada |
| Audit Activities | 10:00 a.m. to 4:00 p.m. January 24, 1994 Las Vegas, Nevada |
| | 8:00 a.m. to 4:00 p.m. January 25 through 27 1994 |
| | 8:00 a.m. to 11:30 a.m. January 28 1994 |
| Daily Team Debriefing | 4:00 p.m., January 25 through 27, 1994 |
| Post-audit Conference | 2:00 p.m., January 28, 1994 Las Vegas, Nevada |

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.

- OCRWM Quality Assurance Requirements and Description document
- RSN Implementing Procedures
- Applicable Yucca Mountain Site Characterization Project Administrative Procedures (Quality)

The conduct of the audit will be guided by the documents listed below:

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

4.0 ACTIVITIES TO BE AUDITED

Programmatic Elements

RSN activities associated with the following QA Program elements will be audited:

- 1.0 Organization
- 2.0 Quality Assurance Program
- 3.0 Design Control
- 4.0 Procurement Document Control
- 5.0 Implementing Procedures
- 6.0 Document Control
- 7.0 Control of Purchased Items and Services
- 10.0 Inspection
- 11.0 Test Control
- 12.0 Control of Measuring and Test Equipment
- 14.0 Inspection, Test and Operating Status
- 15.0 Nonconformances
- 16.0 Corrective Action
- 17.0 Quality Assurance Records
- 18.0 Audits
- Supplement I, Computer Software
- Supplement II, Sample Control
- Supplement IV, Field Surveying

The following programmatic elements were considered during development of this audit scope and determined to be not applicable since RSN has no activities for which these elements apply.

8.0 Identification and Control of Items

9.0 Control of Processes

13.0 Handling, Storage, and Shipping

Supplement III, Scientific Investigation

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

Technical Elements

None

5.0 AUDIT TEAM MEMBERS

Amelia I. Arceo, YMQAD, Las Vegas, Nevada, Audit Team Leader

Sandra D. Bates, YMQAD, Las Vegas, Nevada, Auditor

Raul A. Hinojosa, YMQAD, Las Vegas, Nevada, Auditor

John R. Matras, YMQAD, Las Vegas, Nevada, Auditor

Kenneth T. McFall, YMQAD, Las Vegas, Nevada, Auditor

Thomas E. Rodgers, YMQAD, Las Vegas, Nevada, Auditor

Richard L. Weeks, YMQAD, Las Vegas, Nevada, Auditor

6.0 AUDIT CHECKLISTS

YMP-94-03-01, Programmatic Checklist, will be used during the programmatic portions of this audit.

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QUALITY ASSURANCE CHECKLIST

| | | | |
|-----------------------------------|---|--|--|
| ORGANIZATION EVALUATED RSN | <input checked="" type="checkbox"/> EXTERNAL <input type="checkbox"/> INTERNAL | <input checked="" type="checkbox"/> AUDIT <input type="checkbox"/> SURVEILLANCE | PREPARED BY <u>ATL AMELIA I. ARCEO</u> DATE <u>1/18/94</u> |
| DATES OF EVALUATION 1/24-28/94 | | | |

| | |
|--|--------------------|
| CONTROLLING DOCUMENT (Title, Number, Revision) | ACTIVITY EVALUATED |
|--|--------------------|

| ITEM NO. | CHARACTERISTICS TO BE EVALUATED | REMARKS Record objective evidence reviewed, method of verification, personnel contacted | RESULTS |
|----------|--|--|---------|
| | <p>CRITERIA TO BE AUDITED:</p> <p>KEN MCFALL - CRITERIA 1, 3, AND 18</p> <p>SANDRA BATES - CRITERIA 2, 15, AND 16</p> <p>RAUL HINOJOSA - CRITERIA 10 AND 14</p> <p>JOHN MATRAS - CRITERIA 1, 3, 17 AND 19</p> <p>TOM RODGERS - CRITERIA 4, 5, 6, AND 7</p> <p>RICHARD WEEKS - CRITERIA 11 AND 12</p> | | |

* INDICATE RESULTS: SATISFACTORY (SAT), UNSATISFACTORY (UNSAT), NOT APPLICABLE (N/A)

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| 1-1 | <p>QARD, SECTION 1</p> <p>Para. 1.2.2</p> <p>The QA Manager's position shall be at the same or higher organization level as the highest line manager directly responsible for performing work subject to QARD requirements.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |
| 1-2 | <p>Para. 1.2.2</p> <p>The QA Manager's position shall have the organizational freedom to effectively communicate with other senior management positions.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 1-3 | <p>Para. 1.2.4</p> <p>The positions or organizations making the delegation shall retain overall responsibility for the delegated work.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> <p> </p> <p>QAP-1.1(Y), ORGANIZATION</p> | | |
| 1-4 | <p>Para. 5.2</p> <p>The responsibilities of the SQA/YMP are to:</p> <p>Overview Program QA activities by conducting internal and external verifications and selectively participating in verification activities, such as assessments, readiness reviews, or audits.</p> <p>Issue schedules for audits and surveillance.</p> <p>Verify compliance with these requirements.</p> | | |

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| 1-5 | <p>Para. 5.3</p> <p>The QA engineering functions are as follows:</p> <ul style="list-style-type: none"> - Qualification of RSN subcontractors and maintenance of the ASL. - Performing Trend analyses. - Developing source and field verification plans. <p>Verify compliance with these requirements.</p> | | |
| 1-6 | <p>Para. 5.4</p> <p>The QA Audits and Surveillance functions are as follows:</p> <ul style="list-style-type: none"> - Scheduling of audits and surveillances. - Performance of audits and surveillances. - Deficiency reporting and CARs. - Training and qualification of auditors. <p>Verify compliance with these requirements.</p> | | |

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| 1-7 | <p>Para. 5.5</p> <p>The Quality Control functions are as follows:</p> <ul style="list-style-type: none"> - Issuing NCRs and control of nonconforming items. <p>Verify compliance with this requirement.</p> | | |
| 1-8 | <p>Para. 6.0</p> <p>Delegation of Authority - A listing of names of individuals assigned to positions is maintained and periodically issued by RSN Management in the form of Organization Charts.</p> <p>The responsibilities of the Managers/Supervisors within the QA organization may be delegated by signed letters.</p> <p>Verify compliance with these requirements.</p> | | |

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| 1-9 | <p>PP-01-05, REVISION 1, ORGANIZATION</p> <p>Para. 6.1.3</p> <p>The organizational structure is graphically defined in Figure 1.</p> <p>Verify that Figure 1 accurately reflects the organizational structure of RSN on YMP.</p> | | |
| 1-10 | <p>Para. 6.3.3</p> <p>Individual position skill (e.g., engineering, quality, administrative, clerical, etc. (requirements are determined and job descriptions for each position are written (see PP-02-02).</p> <p>Verify compliance with this requirement.</p> | | |

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| 1-11 | <p>Para. 6.3.4</p> <p>For each individual hired, education and experience are verified.</p> <p>Verify compliance with this requirement.</p> | | |
| 1-12 | <p>Para. 6.5</p> <p>A listing of names of individuals assigned to positions is maintained and periodically issued by the TPO.</p> <p>A written delegation of authority/responsibility is required when delegating actions to organizational subordinates or laterally (same level of authority).</p> <p>Verify compliance with these requirements.</p> | | |
| 1-13 | <p>Para. 7.0</p> <p>Letters delegating responsibility or authority are lifetime QA records generated by this procedure.</p> <p>Verify compliance with this requirement.</p> | | |

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|----------|--|--|---------|
| 2-1 | <p>PROGRAM ELEMENT II: QUALITY ASSURANCE PROGRAM QAP-2.1(Y), REV. 1, QUALITY ASSURANCE PROGRAM STATUS REPORTING</p> <p>Section 6.0</p> <p>Verify that the following information is included in the YMP QA monthly report from RSN:</p> <ul style="list-style-type: none"> - status of the development of the QA Program, - status of resolution of issues, trends, and significant conditions adverse to quality, and - summary of required management and QA overview results. | | |

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|----------|---|--|---------|
| 2-2 | <p>QAP-2.1(Y), Rev. 1</p> <p>Section 7.0</p> <p>Verify that YMP QA monthly reports are handled as lifetime quality assurance records in accordance with PP-17-01.</p> | | |
| 2-3 | <p>QAP-2.2(Y), REVISION 1, TRAINING AND INDOCTRINATION OF QUALITY ASSURANCE PERSONNEL</p> <p>Section 6.1.1.1</p> <p>Verify that RSN QA personnel read the current version of the following documents prior to performing quality-affecting work:</p> <ul style="list-style-type: none"> - 10CFR60 Subpart G - 10CFR50 Appendix B - DOE/RW-0333P - RSN YMP Quality Assurance Procedures - RSN YMP Project Procedures - additional documents as determined by QA Management | | |

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|----------|--|--|-----------|
| 2-4 | <p>QAP-2.2(Y), Rev. 1</p> <p>Section 6.3</p> <p>Verify that Nondestructive Testing Personnel are qualified and certified in accordance with an approved procedure.</p> | | |
| 2-5 | <p>Section 6.4</p> <p>Verify that Inspection Personnel are qualified and certified in accordance with QAP-2.6(Y), Training, Qualification and Certification of Quality Control Inspection Personnel.</p> | | |

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| 2-6 | <p>QAP-2.2(Y), Rev. 1</p> <p>Section 7.0</p> <p>Verify that the following are maintained in accordance with requirements of PP-17-01 as lifetime QA records:</p> <ul style="list-style-type: none"> - required reading lists - completed Training Forms (see PP-02-01) | | |
| 2-7 | <p>QAP-2.4(Y), REVISION 2, STOP WORK ORDER</p> <p>Section 6.1</p> <p>Verify that Stop Work Orders (SWOs) are initiated for the following conditions:</p> <ul style="list-style-type: none"> - those required by a Corrective Action Request as per QAP-16.2(Y), - other reporting methods and escalation have been ineffective, and - deficient conditions exist that potentially affect (nuclear) safety, waste isolation, or ability to characterize the site. | | |

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| 2-8 | <p>QAP-2.7(Y), REVISION 0, DEVELOPMENT OF THE QUALITY ASSURANCE PROGRAM</p> <p>Section 6.0, Step 3.</p> <p>Verify that an impact letter regarding the QARD revision was issued to OCRWM/YMP QA and that it included the following:</p> <ul style="list-style-type: none"> - description of implementing documents required to be developed or revised, - applicability of QARD requirements to RSN with a justification for exceptions, - indication of whether or not training to the qard is required, and - a target date for implementing the QARD/revision. | | |

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| 2-9 | <p>QAP-2.7(Y), REVISION 0</p> <p>Section 6.0, Step 5. a., b., c.</p> <p>Verify that, where impacted by procedural preparation or revision, the OCRWM Requirements Traceability Network (RTN) Matrix is updated and that it provides traceability to the following:</p> <ul style="list-style-type: none"> - where QARD requirements are addressed in RSN implementing documents, - where QARD requirements are not applicable to RSN, including justification, and - where RSN has taken exceptions to requirements, including justification. <p>(If the RTN matrix is not impacted, no further action is required.)</p> | | |

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| 2-10 | <p>QAP-2.7(Y), Rev. 0</p> <p>Section 6.0, Step 6.</p> <p>Verify that if changes to the RTN matrix degrade the QA Program, OCRWM/YMP QA is notified.</p> | | |
| 2-11 | <p>Section 6.0, Step 7.</p> <p>Verify that comments from OCRWM/YMP QA are resolved and the matrix is updated according to Steps 4, 5, 6, and 7 of this procedure.</p> | | |

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| 2-13 | <p>QAP-2.7(Y), Rev. 0</p> <p>Section 7.0</p> <p>Verify that impact letters generated during the implementation of this procedure are maintained as lifetime QA Records in accordance with PP-17-01.</p> | | |
| 2-14 | <p>PP-02-01, REVISION 3, INDOCTRINATION AND TRAINING</p> <p>Section 6.0, Step 1</p> <p>Verify that prior to performing quality-affecting activities, RSN employees are indoctrinated/trained to the QARD, applicable codes, regulations, standards, and implementing documents as they relate to a particular function.</p> | | |

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| 2-15 | <p>PP-02-01, Rev. 3</p> <p>Section 6.0, Step 1</p> <p>Verify that prior to performing quality-affecting activities, RSN employees are indoctrinated/trained to their respective job responsibilities and authority (documented by signature on the Job Description).</p> | | |
| 2-16 | <p>Section 6.0, Step 2</p> <p>Verify that minimum documentation is maintained for designated subject matter experts regarding area of expertise, certifications (if applicable), statement of technical and training qualifications demonstrated by education and experience, and the date, title, and signature of the Manager/Supervisor.</p> | | |

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| 2-17 | PP-02-01, Rev. 3 Section 6.0, Step 3 Verify that lesson plans or outlines are prepared and include the title, content, length, objectives, methods, activities, and materials for instruction. | | |
| 2-18 | Section 6.0, Step 8 Verify that self study training and indoctrination forms are either returned within 10 working days of the second notice or that the Technical Project Officer (TPO) is notified and further action is taken. | | |

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| 2-19 | <p>PP-02-01, Rev. 3</p> <p>Section 6.0, Step 10</p> <p>Verify that the following records are maintained as lifetime records in accordance with PP-17-01:</p> <ul style="list-style-type: none"> - Attendance Record - Self-Study Record - Training Evaluation Report-Outside Training Program Form - Instructor's qualification records - Lesson Plans/Outlines | | |
| 2-20 | <p>PP-02-02, Rev. 2, PERSONNEL SELECTION</p> <p>Section 6.0, Step 1</p> <p>Verify that the Manager/Supervisor develops, signs, and dates job descriptions for all personnel who perform quality affecting activities.</p> | | |

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| 2-21 | <p>PP-02-02, Rev. 2</p> <p>Section 6.0, Step 1</p> <p>Verify that the job description sets forth job duties that include the quality affecting responsibilities of the job and the minimum education and experience required commensurate with the scope, complexity, and nature of the work.</p> | | |
| 2-22 | <p>Section 6.0, Step 2</p> <p>Verify that education and experience of RSN employees and subcontractors of the RSN YMP Office is verified prior to their performing quality affecting activities. (Include Auditors-in-Training, if applicable.)</p> | | |

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| 2-23 | PP-02-02, Rev. 2 Section 6.0, Section 7.0 Verify that Job Descriptions, Personnel Qualification Evaluation Forms, and Proficiency Evaluation Forms are maintained as lifetime Quality Assurance Records in accordance with PP-17-01. | | |
| 2-24 | Section 6.0, Step 3 Verify that a statement and justification for personnel assignment is provided by the Manager or Supervisor for employees failing to meet minimum education and experience established for the position. | | |

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| 2-25 | <p>PP-02-03, Rev. 2, MANAGEMENT ASSESSMENT</p> <p>Section 6.0, Step 1</p> <p>Verify that a Management Assessment is scheduled annually.</p> | | |
| 2-26 | <p>PP-02-03, Rev. 2</p> <p>Section 6.0, Step 6</p> <p>Verify that the Management Assessment is conducted to consider the following:</p> <ul style="list-style-type: none"> - adequacy of organizational structure and staff, - adequacy and effectiveness of the QA program, - adequacy of the personnel qualification and training program, - effectiveness of the nonconformance and corrective action program, and - adequacy of the QA program management information tracking, evaluation, and reporting system. | | |

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| 2-27 | PP-02-03, Rev. 2 Section 6.0, Step 7 Verify that the Management Assessment report contains approval signatures from all Assessment Team Members. | | |
| 2-28 | Section 6.0, Step 8 Verify that each manager/supervisor is on a distribution list for the final distribution of the Management Assessment Report. | | |

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|----------|--|--|---------|
| 2-29 | <p>PP-02-03, Rev. 2</p> <p>Section 6.0, Steps 9 and 10</p> <p>Verify that RSN Managers/Supervisors implement or schedule necessary corrective action including methods to prevent recurrence and notify the TPO in writing. Verify that the TPO tracks same until resolution is completed.</p> | | |
| 2-30 | <p>Section 7.0</p> <p>Verify that the following are handled as lifetime QA records:</p> <ul style="list-style-type: none"> - Management Assessment Report - documentation of resolution and disposition of comments, recommendations, and corrective actions. | | |

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| 3-1 | <p>QARD, SECTION 3.0, DESIGN CONTROL</p> <p>Para. 3.2.1.C</p> <p>Design Input Control</p> <p>Changes from approved design inputs and reasons for the changes, shall be identified, approved, documented, and controlled.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-2 | <p>Para. 3.2.1.D</p> <p>Design inputs based on assumptions that requires reverification shall be identified and controlled.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-3 | <p>Para. 3.2.2.F</p> <p>Applicable information derived from experience, as set forth in reports or other documentation, shall be made available to cognizant design personnel.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-4 | <p>Para. 3.2.2.I</p> <p>Drawings, specifications, and other design output documents shall contain appropriate inspection and testing acceptance criteria.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-5 | <p>Para. 3.2.3.C</p> <p>Design Analyses</p> <p>Calculations shall be identifiable by subject (including structure, system, or component to which the calculation applies), originator, reviewer, and date, or by other designators such that the calculations are traceable.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-6 | <p>Para. 3.2.3.E.4</p> <p>Identification of assumptions and designation of those that must be verified as the design proceeds.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> <p>How are assumptions identified.</p> | | |
| 3-7 | <p>Para. 3.2.3.E.6</p> <p>Documentation of design analysis shall include identification of the review and approver.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-8 | <p>Para. 3.2.4</p> <p>Design Verification</p> <p>The following design control requirements shall be applied to verify the adequacy of design.</p> <p>A. Design verification shall be performed using one or a combination of the following methods:</p> <ol style="list-style-type: none"> 1. Design review. 2. Alternate calculations. 3. Qualification testing. <p>B. The particular design verification method shall be identified and its use justified.</p> <p>C. The results of design verification shall be documented, including the identification of the verifier.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with these requirements.</p> <p>PP-03-04 states that RSN can use Peer Reviews to replace Nos. 1, 2, and 3 above. Discuss.</p> | | |

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| 3-9 | <p>Para. 3.2.4.H</p> <p>Use of previously proven designs shall be controlled according to the following requirement:</p> <p>Changes in previously verified designs shall require reverification. Such verifications shall include the evaluation of the effects of those changes on the overall previously verified design and on any design analyses upon which the design is based.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-10 | <p>QAP-3.1(Y), REVISION 2, QUALITY ASSURANCE REVIEW OF DESIGN OUTPUT DOCUMENTS</p> <p>Para. 6.2</p> <p>Transmittal - A record of all design output documents reviewed and the status of that review is maintained in a log by QA.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-11 | <p>Para. 6.3.1</p> <p>Design Output Document Review - The design output document is reviewed to assure that it contains the necessary information to provide a satisfactory answer to each listed checklist item. Any item marked with "NO" requires an explanation in the "COMMENTS" section. If the item is not applicable, then the "N/A" column is marked.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-12 | <p>Para. 6.3.3</p> <p>Quality Assurance Comments - When the design output document is disapproved, the reason is provided in the "COMMENTS" section of the checklist and the QA checklist is marked as not approved, signed, dated, and returned to the document originator for resolution. The document disapproval is logged and a copy of the QA checklist is retained in the QA working file for use when the document is resubmitted for review and approval.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-13 | <p>Para. 6.3.4</p> <p>When the QA review is satisfactory, the QAR completes, signs, and dates the checklist.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-14 | <p>Para. 7.0</p> <p>Quality Assurance Records</p> <p>The following are lifetime QA Records generated in accordance with this procedure and are processed in accordance with PP-17-01.</p> <p>Quality Assurance Specification Review Checklist Form LV-326</p> <p>Quality Assurance Study and Analysis Review Checklist Form LV-328</p> <p>Quality Assurance Drawing Review Checklist Form LV-305</p> <p>Verify retention of these documents.</p> | | |

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| 3-15 | <p>PP-01-02, REVISION 1, WORK INITIATION</p> <p>Para. 6.1.1</p> <p>The WI shall be used to initiate applicable work requested and directed by RSN in support of the YMP.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-16 | <p>Para. 6.1.2</p> <p>The WI shall be completed in accordance with the applicable detailed instructions in Attachment 1.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-17 | <p>Para. 6.2.1</p> <p>The WI Log (Attachment 2) shall be maintained to provide a history of each WI and revisions thereto.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-18 | <p>Para. 6.3.2</p> <p>Applicable codes, standards, and regulations, if not contained in the criteria documents, shall be identified with effective dates in Item 15 on the WI.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-19 | <p>Para. 6.3.3</p> <p>WI issued for surveys shall contain the appropriate accuracy requirements.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-20 | <p>Para. 6.5.2</p> <p>WI revisions shall be issued when there is a change to a referenced criteria document that has an impact on the work to be performed; when the scope of work changes from the original WI; when the schedule changes; when the budget changes; or in the event the identification number changes.</p> <p>The WI Log will be updated. Revisions to WIs shall be reviewed and approved in the same manner as the original WI.</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-21 | <p>Para. 6.6</p> <p>When the work has been completed or needs to be stopped, the department responsible for issuing the WI shall issue a final revision indicating that the WI is closed by putting an (X) by "CLOSURE" in Block 20 of the WI form.</p> <p>Verify compliance with this requirement.</p> <p>PP-03-02, REVISION 1, DESIGN METHODOLOGY</p> | | |
| 3-22 | <p>Para. 6.1.2</p> <p>Review, Evaluation, and Acceptance of Design Input - Design inputs applicable to RSN design output documents shall be identified, documented and their selection reviewed by the RSN YMP design organization.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-23 | <p>Para. 6.1.2.6</p> <p>All verbal inputs, received by RSN personnel, shall be documented on YMP Record of Verbal Communication, Form LV-186. A copy of Form LV-186 shall be sent to the communicant(s) for concurrence.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-24 | <p>Para. 6.1.3</p> <p>Application of Graded Quality Assurance (QA) - Specific QA programmatic and procedural controls and specifications needed to assure the quality of an item or activity shall be determined and documented in accordance with PP-02-05.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-25 | <p>Para. 6.4.1</p> <p>Design information transmitted across interfaces will be documented and controlled.</p> <p>These transmittals will identify the status of the design information or document provided and, where necessary, identify incomplete items which require further evaluation, review, or approval.</p> <p>Verify compliance with these requirements.</p> | | |
| 3-26 | <p>Para. 6.4.2</p> <p>Where it is necessary to initially transmit design information orally or by other informal means, the transmittal will be confirmed promptly by use of the Record of Verbal Communication (RVC).</p> <p>A copy of the RVC shall be sent to the communicant(s) for concurrence.</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-27 | <p>PP-03-20, REVISION 1, SURFACE BASED BOREHOLE PROGRAMS</p> <p>Para. 6.2</p> <p>Drilling Program Document(s) - Each drilling program includes site preparation activities, drilling activities, and perhaps one or more additional work activities. These activities may be written as separate work programs, or as a part of an overall drilling program document. If prepared separately, each document shall contain the following information:</p> <p>a. General Requirements, as specified under Paragraph 6.2.1, and the</p> <p>b. Specific Requirements, as specified under Paragraphs 6.2.2, 6.2.3, or 6.2.4, as applicable.</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-28 | <p>The Program documents shall contain the following types of information, as applicable:</p> <p>Para. 6.2.1</p> <p>General Requirements - General information applicable to all drilling and additional work activities programs shall include as a minimum, the following:</p> <p>c. References: Criteria documents, letters, etc.</p> <p>g. Hole designation.</p> <p>j. RSN QA Grading Report number applicable to the work program.</p> <p>k. Signature approval and date by RSN Project Engineer, RSN TPO, RSN QA, User or Participating Organization Representative, and DOE/YMPO Representative. The DOE/YMP approval date is the effective date of the drilling program.</p> | | |

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| 3-28 Cont' | <p>1. Pre-construction conditions.</p> <p>m. Present Conditions - A statement describing existing conditions at the drillsite.</p> <p>n. Quality Control (QC) - Include requirements for QC to perform verifications.</p> <p>o. Lifetime Records - QA records generated by the work program shall be identified as lifetime records.</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-29 | <p>Para. 6.2.3</p> <p>Drilling Program Requirements - The requirements for drilling all types of boreholes for the YMP include, but are not limited to, the following:</p> <ul style="list-style-type: none"> a. Recommended class of drill rig to be used. b. Bit size and minimum depth of hole to be drilled/cored. c. Required circulating system. d. Types of geophysical logs and surveys to be conducted and the UDCL. e. User Designated Representative. f. Mobilization and demobilization of drill rig and equipment. | | |

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| 3-29 Cont' | <p>g. Other pertinent information such as:</p> <ol style="list-style-type: none"> 1. Estimated depth to water table. 2. Covering of unattended hole. 3. Marking and identifying hole. 4. Geologic data. 5. Estimated drilling time, if required. <p>h. Requirements for casing and cementing.</p> <p>i. Requirements for any additional work to be performed.</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-30 | <p>Para. 6.2.4</p> <p>Additional Work Activities Program Requirements - The requirements for the Additional Work Activities Program shall include a detailed description of the work to be performed.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-31 | <p>Para. 6.3.3</p> <p>A draft of the drilling program shall be circulated for review. The reviewers shall include: 1) an RSN Project Engineer, 2) RSN QAR, 3) User or Project Participant, 4) REECo drilling representative, and 5) YMPO representative. The reviewers shall document their comments on RSN Review Comment Record Form LV-495 (see PP-06-06 for Form).</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-32 | <p>Para. 6.3.5</p> <p>When the resolution of comments process is completed, the final document (drilling program) shall be signed by the authorized representatives of the participating organizations as specified in 6.2.1.k.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-33 | <p>Para. 6.4</p> <p>Revisions/Changes - Revisions or changes to the previously approved drilling program that have an impact on program scope of work or cost, shall be issued as an approved revision e.g., Revision 1, Revision 2, etc., as applicable; the review and approval requirements of Paragraph 6.3 of the procedure shall apply.</p> <p>Verify compliance with this requirement.</p> | | |

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| 3-34 | <p>Para. 6.4.3</p> <p>A history of changes, i.e. work programs including drilling and additional work activities and the reasons for the changes, shall be documented and maintained.</p> <p>Verify compliance with this requirement.</p> <p>PP-03-23, REVISION 1, FIELD CHANGE CONTROL PROCESS</p> | | |
| 3-35 | <p>Para. 6.1</p> <p>The TPO shall appoint an RSN employee to be the FCCBR of RSN on the FCCB.</p> <p>The FCCBR also has the authority delegated to him to sign Section 2 of the FCRs submitted by RSN on behalf of the TPO.</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-36 | <p>Para. 6.2.3</p> <p>The responsible CTI shall complete the Internal Participant Evaluation Checklist, determine which documents require a change, sign and date the checklist, obtain the QARs concurrence on the checklist, and forward the package to the FCCBR with any recommendations.</p> <p>Verify compliance with this requirement.</p> | | |
| 3-37 | <p>Para. 6.3</p> <p>The evaluations (of FCRs) shall be logged in the FCR Evaluation Log (Attachment 5) kept by the Field Engineering Office.</p> <p>The CE form will be signed by the cognizant technical evaluator or in the case of the evaluation being conducted by FAX or phone, the evaluators name shall be entered on the form and initialed by the FCCBR or alternate who spoke with the cognizant technical evaluator and an explanation of the circumstances entered in Block 6 of the CE form.</p> <p>NOTE: Information/evaluations transmitted orally shall be documented on a RVC Form LV-186 (see PP-03-20).</p> <p>Verify compliance with these requirements.</p> | | |

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| 3-38 | <p>Para. 7.0</p> <p>The following are lifetime QA records:</p> <ul style="list-style-type: none">- Completed FCRs- Completed Internal Participant Evaluation Checklists- Completed Change Evaluations- Completed RVCs <p>Verify retention of these documents.</p> | | |

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| 4-1 | <p>QARD, REVISION 0, SECTION 4.0, PROCUREMENT DOCUMENT CONTROL</p> <p>Verify that the following QARD requirements are incorporated into the RSN implementing procedures:</p> <p>Section 4.2.1</p> <p>Procurement documents issued by each affected organization shall include the following provisions, as applicable to the item or service being procured:</p> <p>A. A statement of the scope of work to be performed by the supplier.</p> <p>B. Technical requirements including:</p> <ol style="list-style-type: none"> 1. Design bases shall be identified or referenced. 2. Specific documents that describe the technical requirements of the items or services to be furnished shall be specified. The revision level or change status of these documents shall also be identified. 3. Tests, inspections, or acceptance requirements that the purchaser will use to monitor and evaluate the performance of the supplier shall be specified. | | |

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| 4-1 Cont' | <p>C. Quality Assurance Program Requirements including:</p> <ol style="list-style-type: none"> 1. A requirement for the supplier to have a documented quality assurance program that implements applicable QARD requirements prior to the initiation of work. 2. A requirement for the supplier to incorporate the appropriate QARD requirements into any subtier supplier-issued procurement document. 3. When deemed appropriate, the purchaser shall permit some or all supplier work to be performed under the purchaser's quality assurance program provided the work is adequately addressed. <p>D. Right of access to supplier facilities and records for inspection or audit by the purchaser, OCRWM, or other designee authorized by the purchaser.</p> <p>E. Provisions for establishing hold points beyond which work cannot proceed without purchaser authorization.</p> | | |

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| 4-1 Cont' | <p>F. Documentation required to be submitted to the purchaser for information, review, or acceptance.</p> <p>1. The document submittal schedule shall be identified.</p> <p>2. If the purchaser requires the supplier to maintain documentation that will become quality assurance records, the retention times and disposition requirements shall be identified.</p> <p>G. Purchaser requirements for supplier to report nonconformances and the purchaser approval of the disposition of nonconformances.</p> <p>H. Identification of any spare and replacement parts or assemblies and the appropriate technical and quality assurance data required for ordering.</p> | | |

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| 4-2 | <p>Section 4.2.2</p> <p>A. Procurement document reviews shall be performed and documented prior to issuance of the procurement documents to the supplier.</p> <p>B. A review of the procurement documents and any changes thereto shall be made to verify that documents include appropriate provisions to ensure that items or services will meet the governing requirements.</p> <p>C. Reviews shall ensure that all applicable technical and quality assurance program requirements are included.</p> <p>D. Reviews shall be performed by personnel who have access to pertinent information and who have an adequate understanding of the requirements and scope of the procurement.</p> <p>E. Procurement document reviewers shall include representatives from the technical and quality assurance organizations.</p> <p>F. Procurement documents shall be approved.</p> | | |

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| 4-3 | <p>Section 4.2.3</p> <p>A. Changes to the scope of work, technical requirements, quality assurance program requirements, right of access, documentation requirements, nonconformances, hold points, and lists of spare and replacement parts delineated in procurement documents, shall be subject to the same degree of control as used in the preparation of the original documents.</p> <p>PP-04-01, REVISION 1, PIC 3, PURCHASING (SERVICES)</p> <p>Based on a representative sample of recent quality-affecting procurements, verify implementation and effectiveness of the following RSN procedural requirements:</p> | | |
| 4-4 | <p>Section 6.1</p> <p>Appropriate Quality Assurance (QA) participation will be requested for evaluation and selection of suppliers, verification of suppliers activities and receivables.</p> | | |

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| 4-5 | <p>Section 6.2</p> <p>The PR Form RSN 219 will be sent to Procurement with the technical requirements, any known sources, applicable Quality requirements, and the work order number. A review and concurrence by QA, Environment Safety and Health, Project Control, Financial Control, and Logistics and approval by the TPO is required.</p> | | |
| 4-6 | <p>Section 6.4</p> <p>Procurement will review the PR and technical requirements to ensure that they are accurate, complete and clear.</p> | | |

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| 4-7 | <p>Section 6.5</p> <p>Procurement will prepare the request for proposal, provide a copy to QA and the responsible technical department for review prior to issuance of the request for proposal. The technical review will be conducted using YMP Procurement Document Technical Review Checklist, Form LV-383 (Attachment 3). The QA review and approval will be conducted using the Quality Assurance Procurement Document Review Checklist, Form LV-354 (Attachment 4). When changes (modifications) to the procurement documents are required, the changes require the same review and approval as the original documents with the exception of changes that do not have an impact on quality or technical requirements.</p> | | |
| 4-8 | <p>Section 6.6</p> <p>Upon completion of the evaluation by procurement personnel, the total package will be sent to the responsible technical department or group and to QA for their evaluation and concurrence.</p> | | |

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| 4-9 | <p>Section 6.6.3</p> <p>Prior to the issuance of a subcontract or PO for quality-affecting work, suppliers shall be qualified in accordance with QAP-7.1(Y).</p> | | |
| 4-10 | <p>Section 6.8</p> <p>The TPO will send a copy of the subcontract/PO to the appropriate YMP personnel. Procurement will also send a copy of all quality-affecting subcontracts/POs to QA.</p> | | |

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| 4-11 | <p>Section 6.16</p> <p>All subcontracts and POs issued by Procurement for the YMP shall designate whether or not the procurement is quality-affecting. For quality-affecting procurement and for non-quality affecting procurement, when determined by QA to be appropriate, the Subcontractor shall be required to have a QA Program Plan and submit this Plan to RSN for approval.</p> | | |
| 4-12 | <p>Section 7.0</p> <p>Approved and completed Technical Review Checklists, PRs, POs, subcontracts, and approved submittals, if they are determined to be quality-affecting, are lifetime QA records.</p> | | |

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| 5-1 | <p>QARD, REVISION 0, SECTION 5.0, IMPLEMENTING DOCUMENTS</p> <p>Verify that the following QARD requirements are incorporated into the RSN implementing procedures:</p> <p>Para. 5.2</p> <p>Work shall be performed according to controlled implementing documents.</p> | | |
| 5-2 | <p>Para. 5.2.1</p> <p>The type of document to be used to perform work shall be appropriate to the nature and circumstances of the work being performed.</p> | | |

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| 5-3 | <p>Para. 5.2.2</p> <p>Implementing documents shall include the following information as appropriate to the work to be performed.</p> <p>A. Responsibilities of the organizations affected by the document.</p> <p>B. Technical and regulatory requirements.</p> <p>C. A sequential description of the work to be performed.</p> <p>D. Quantitative or qualitative acceptance criteria.</p> <p>E. Prerequisites, limits, precautions, process parameters, and environmental conditions.</p> <p>F. Quality verification points and hold points.</p> <p>G. Methods for demonstrating that the work was performed as required.</p> <p>H. Identification of the lifetime or nonpermanent QA records.</p> <p>I. Identification of associated items and activities.</p> | | |

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| 5-4 | Para. 5.2.3 Implementing documents shall be reviewed, approved, and controlled according to the requirements of Section 6.0. | | |
| 5-5 | Para. 5.2.4 Individuals shall comply with implementing documents, however: A. When work cannot be accomplished as described in the implementing document, or accomplishment of such work would result in an undesirable situation, the work shall be stopped. B. Work shall not resume until the implementing document is changed (according to Section 6.0) to reflect the correct work practices. | | |

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| 5-6 | <p>Based on a representative sample of recent procedural revisions, verify implementation and effectiveness of the following RSN procedural requirements:</p> <p>PP-05-01, REVISION 2, PREPARATION AND CONTROL OF PROCEDURES</p> <p>Section 6.1, Originator</p> <p>Submit written proposal or verbal request for a new procedure, revision to existing procedure, or PIC to SEPE (for PPs) or SQA/YMP (for QAPS). <i>J Ruc</i></p> | | |
| 5-7 | <p>Section 6.2, SEPE or SQA/YMP</p> <p>Evaluate the proposal for acceptance. If rejected, notify the Originator and provide justification for the rejection.</p> | | |

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| 5-8 | <p>Section 6.3, SEPE or SQA/YMP</p> <p>Assign personnel to coordinate the processing of the procedure.</p> | | |
| 5-9 | <p>Section 6.4, Originator</p> <p>a. For New/Revised Procedures: Develop draft of new procedure or procedure revision, as appropriate, considering the following:</p> <ol style="list-style-type: none"> 1. Incorporate all outstanding PICs. 2. Ensure that applicable requirements of the QARD have been met. 3. Review previous revisions of the procedure (including PICs) to assure that the change is not in violation of previous commitments (e.g., Corrective Action in Deficiency Reports). <p>b. For Procedure Interim Change (PIC): When the number of PICs outstanding exceed the maximum allowable number of five or the first PIC issued is two years old, return to Step 1 and revise the procedure, otherwise develop a draft PIC.</p> | | |

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| 5-10 | <p>Section 6.5, SE or QA Personnel</p> <p>Prepare Draft procedure or PIC using standard forms in Attachment 1 and format noted in Appendix A.</p> | | |
| 5-11 | <p>Section 6.6</p> <p>Distribute Draft procedure or PIC for review by the SQA/YMP and other organizations or technical disciplines affected by the procedure.</p> <p>EXCEPTION: For review of PICs, distribute Draft PIC for review by the SQA/YMP, the TPO, and other organizations or technical disciplines affected by the change.</p> | | |
| 5-12 | <p>Section 6.7, Reviewers</p> <p>Review procedure or PIC and comment in accordance with PP-06-06. If revision incorporates PIC(s), proceed to Step 8, otherwise, proceed to Step 11.</p> | | |

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| 5-13 | <p>Section 6.8, TPO or SQA/YMP</p> <p>Determine if revision to incorporate PIC(s) results in a change that is different from that described by the PIC(s). If YES, proceed to Step 9. If NO, proceed to Step 11.</p> | | |
| 5-14 | <p>Section 6.9</p> <p>Have the work performed evaluated to determine its acceptability.</p> | | |
| 5-15 | <p>Section 6.10, Evaluators</p> <p>Document the results of this review and any actions required in a memorandum or letter approved by the TPO or SQA/YMP.</p> | | |

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| 5-16 | Section 6.11, SE or QA Personnel Following completion of the review, prepare a new or revised original, if necessary, and circulate it for approval to the SQA/YMP and the TPO. | | |
| 5-17 | Section 6.14, SE or QA Personnel Enter procedure Effective Date on procedure Title Sheet. | | |
| 5-18 | Section 6.15, SEPE or SQA/YMP Document whether or not training is required in a memorandum to the Training Coordinator. | | |

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| 5-19 | Section 6.16, SE or QA Personnel Prepare a Table of Contents in accordance with Appendix A. | | |
| 5-20 | Section 6.17 Publish and distribute procedure in accordance with PP-06-01. | | |
| 5-21 | Section 6.18, Training Coordinator Conduct procedure training in accordance with PP-02-01 if training is required (see Step 15) | | |

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| 5-22 | <p>Section 6.25, Record Originator</p> <p>Process and handle records generated by this procedure, including QA records, in accordance with PP-17-01.</p> <p>SECTION 7.0, QUALITY ASSURANCE RECORDS</p> | | |
| 5-23 | <p>The following documents generated during the implementation of this procedure are lifetime QA records:</p> <ul style="list-style-type: none"> a. PPs and revisions b. QAPs and revisions c. PICs X d. Training memos e. Letter/memo stopping work f. Letter/memo evaluating work g. Approvals of editorial corrections | | |

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| 6-1 | <p>QARD, REVISION 0, SECTION 6.0, DOCUMENT CONTROL</p> <p>Verify that the following QARD requirements are incorporated into the RSN implementing procedures:</p> <p>Section 6.2.1</p> <p>Documents that specify technical requirements, quality requirements, or prescribe work shall be controlled in accordance with this section.</p> | | |
| 6-2 | <p>Section 6.2.2</p> <p>The responsibility for preparing and maintaining documents shall be assigned to the appropriate organization.</p> | | |

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| 6-3 | Section 6.2.3 Documents that specify technical requirements, quality requirements or prescribed work shall be reviewed for adequacy, correctness, and completeness prior to approval and issuance. | | |
| 6-4 | Section 6.2.4 The organizational position responsible for approving the document for release shall be identified. | | |

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| 6-5 | <p>Section 6.2.5</p> <p>The distribution and use of documents, including changes and editorial corrections to documents, shall be controlled.</p> <p>A. Documents used to perform work shall be distributed to, and used at, the work location.</p> <p>B. Effective dates shall be established for approved implementing documents.</p> <p>C. The disposition of obsolete or superseded documents shall be controlled.</p> <p>D. Lists shall be established to identify the current status of each document that is required to be controlled in accordance with this section.</p> | | |

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| 6-6 | <p>Section 6.2.6</p> <p>Changes to documents shall be reviewed for adequacy, correctness, and completeness, prior to approval and issuance.</p> <p>A. Changes shall be reviewed by the organizations or disciplines affected by the change.</p> <p>B. The quality assurance organization shall review changes if the quality assurance organization was involved in the review of the previous version.</p> <p>C. Changes shall be approved for release by the designated organizational position that is responsible for the document.</p> <p>D. Implementing documents shall define the method used to incorporate changes. The implementing document shall define the maximum number of changes permitted prior to requiring reissue of the entire controlled document.</p> <p>E. Implementing documents shall require that a history of changes to Quality Assurance Program documents, including the reasons for the changes, be documented and maintained.</p> | | |

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| 6-7 | <p>Section 6.2.7</p> <p>If an activity cannot be performed as listed in the implementing document, and the change process would cause unreasonable delays, then an expedited change may be made at the work location by responsible management.</p> <p>PP-06-01, REVISION 1, PIC 2, CONTROLLED DOCUMENT DISTRIBUTION</p> <p>Based on a representative sample of recent procedural revisions, verify implementation and effectiveness of the following RSN procedural requirements:</p> | | |
| 6-8 | <p>Section 6.1</p> <p>The Department Managers responsible for the documents require controlled distribution and the extent to which these documents are to be distributed.</p> | | |

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| 6-9 | <p>Section 6.2.1</p> <p>Design documents requiring distribution of construction shall be distributed in accordance with AP-1.5Q.</p> | | |
| 6-10 | <p>Section 6.2.2</p> <p>Systems Engineering shall establish and maintain a controlled distribution list based on information supplied by the cognizant department.</p> | | |
| 6-11 | <p>Section 6.3.1</p> <p>All distributions of controlled documents shall be via a Document Transmittal.</p> | | |
| 6-12 | <p>Section 6.3.2</p> <p>Documents that require verification distributed via this procedure shall be identified as to their status if the document has not been verified.</p> | | |

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| 6-13 | <p>Section 6.3.3</p> <p>Recipients of a controlled document are responsible for maintaining the document and for acknowledging receipt of the document by signing, dating, and returning the Document Transmittal to the Systems Engineering Department.</p> | | |
| 6-14 | <p>Section 6.3.3.1</p> <p>If the Document Transmittal is not returned within the prescribed time frame identified below, a follow-up notification (verbal or written) shall be made and documented.</p> <p>Design documents 15 days All other documents 30 days</p> | | |

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| 6-15 | <p>Section 6.3.3.2</p> <p>If no response to the follow-up notification is received within seven days, Systems Engineering will send a formal notification to the individual advising him/her that the document assigned has been decontrolled and that he/she will no longer be on controlled distribution for the subject document. This action shall be so noted on the Controlled Distribution List.</p> | | |
| 6-16 | <p>Section 6.4</p> <p>An up-to-date listing of controlled documents issued shall be maintained.</p> | | |

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| 6-17 | <p>PP-06-06, REVISION 0, REVIEW OF DOCUMENTS</p> <p>Based on a representative sample of recent procedural revisions, verify implementation and effectiveness of the following RSN procedural requirements:</p> <p>Section 6.3 - Coordinator</p> <p>Prepare the review package which consists of the RCR and continuation page, draft document(s) to be reviewed, and any background information, if not readily available to the reviewers.</p> | | |
| 6-18 | <p>Section 6.5 - Reviewers</p> <p>Review the document(s) using the criteria in Attachment 2 and any criteria established by the controlling procedure.</p> | | |
| 6-19 | <p>Section 6.8 - Document Developer</p> <p>Prepare responses to the major comments and resolve these with the reviewers.</p> | | |

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| 6-20 | <p>Section 6.9 - Document Developer</p> <p>Finalize responses in Block No. 13 and incorporate resolutions into document(s).</p> | | |
| 6-21 | <p>Section 6.12 - Coordinator</p> <p>All YMP Records generated by this procedure, including Quality Assurance Records, shall be handled in accordance with PP-17-01.</p> | | |
| 6-22 | <p>Section 7.0</p> <p>The Review Comment Records are lifetime Quality Assurance Records generated during the implementation of this procedure.</p> | | |
| 6-23 | <p>Verify effective corrective action for CAR YM-93-079.</p> | | |

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| 7-1 | <p>QARD, REVISION 0, SECTION 7.0, CONTROL OF PURCHASED ITEMS AND SERVICES</p> <p>Verify that the following QARD requirements are incorporated into the RSN implementing procedures:</p> <p>Section 7.2.1 - Procurement Planning</p> <p>Procurements shall be planned and documented to ensure a systematic approach to the procurement process. Procurement planning shall:</p> <p>A. Identify procurement methods and organizational responsibilities.</p> <p>B. Identify what is to be accomplished, who is to accomplish it, how it is to be accomplished, and when it is to be accomplished.</p> <p>C. Identify and document the sequence of actions and milestones needed to effectively complete the procurement.</p> | | |

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| 7-1 Cont' | <p>D. Provide for the integration of the following activities:</p> <ol style="list-style-type: none"> 1. Procurement document preparation, review, and change control. 2. Selection of procurement sources. 3. Proposal/bid evaluation and award. 4. Purchaser evaluation of supplier performance. 5. Purchaser verifications including any hold and witness point notifications. 6. Control of nonconformances. 7. Corrective action. 8. Acceptance of the item or service. 9. Identification of quality assurance records. <p>E. Be accomplished as early as possible, and no later than at the start of those procurement activities which are required to be controlled.</p> <p>F. Be performed relative to the level of importance, complexity, and quantity of the item or service being procured and the supplier's quality performance.</p> <p>G. Include the involvement of the quality assurance organization.</p> | | |

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| 7-2 | <p>Section 7.2.2</p> <p>A. Supplier selection shall be based on an evaluation, performed before the contract is awarded, of the supplier's capability to provide items or services in accordance with procurement document requirements.</p> <p>B. The organizational responsibilities for source evaluation and selection shall be identified and shall include the quality assurance organization.</p> <p>C. Measures for evaluating and selecting procurement sources shall include one or more of the following elements:</p> <ol style="list-style-type: none"> 1. Evaluation of the supplier's history. 2. Evaluation of supplier's current quality assurance records. 3. Evaluation of the supplier's technical and quality capability. <p>D. The results of procurement source evaluation and selection shall be documented.</p> | | |

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| 7-3 | <p>Section 7.2.3</p> <p>A. The proposal/bid evaluation process shall include a determination of the extent of conformance to the procurement document requirements.</p> <p>B. Before the contract is awarded, the purchaser shall resolve, or obtain commitments to resolve, unacceptable quality conditions identified during the proposal/bid evaluation.</p> <p>C. Supplier quality assurance programs shall be evaluated either before or after contract placement, and any deficiencies that would affect quality shall be corrected before starting work subject to QARD requirements.</p> <p>D. Supplier quality assurance programs shall be accepted by the purchaser before the supplier starts work subject to QARD requirements.</p> | | |

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| 7-4 | <p>Section 7.2.4</p> <p>A. The purchaser of items and services shall establish measures to interface with the supplier and to verify supplier's performance.</p> <p>B. The extent of purchaser verifications shall be a function of the relative importance, complexity, and quantity of items or services being procured, and the supplier's quality performance.</p> <p>C. Purchaser verifications shall be conducted as early as practical and shall not relieve the supplier of the responsibility for the verification of quality achievement.</p> | | |
| 7-5 | <p>Section 7.2.5</p> <p>A. Supplier generated documents shall be controlled, processed, and accepted in accordance with the requirements established in the procurement documents.</p> <p>B. Measures shall be implemented to ensure that the submittal of these documents is accomplished in accordance with the procurement document requirements.</p> | | |

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| 7-6 | <p>Section 7.2.6</p> <p>A. Methods for accepting supplier furnished items or services shall include one or more of the following, as appropriate to the items or services being procured:</p> <ol style="list-style-type: none"> 1. Evaluating the supplier certificate of conformance. 2. Performing one or a combination of source verification, receiving inspection, or post-installation test. 3. Technical verification of the product produced. 4. Surveillance or audit of the work. 5. Review of objective evidence for conformance to the procurement document requirements. <p>B. The supplier shall verify that furnished items or services comply with the purchaser's procurement requirements before offering the items or services for acceptance.</p> <p>C. The supplier shall provide the purchaser objective evidence that items or services conform to procurement documents.</p> | | |

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| 7-7 | <p>Section 7.2.12</p> <p>Where design specifies the use of commercial grade items, the following requirements are an acceptable alternative to other requirements of this section.</p> <p>A. The commercial grade item shall be identified in an approved design output document.</p> <p>B. Supplier evaluation and selection, when determined necessary by the purchaser based on the complexity and importance to safety, shall be in accordance with the requirements of the subsection entitled "Source and Evaluation Selection."</p> <p>C. Commercial grade items shall be identified in the procurement document by the manufacturer's published product description.</p> | | |

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| 7-7 Cont' | <p>D. After receipt of a commercial grade item, the purchaser shall ensure that:</p> <ol style="list-style-type: none"> 1. Damage was not sustained during shipment. 2. The item received was the item ordered. 3. Inspection or testing is accomplished, to the extent determined by the purchaser, to ensure conformance with the manufacturer's published requirements. 4. Documentation, as applicable to the item, was received and is acceptable. <p>QAP-7.1(Y), REVISION 2, PIC 1, SUPPLIER SELECTION</p> <p>Based on a representative sample of recent quality-affecting procurements, verify implementation and effectiveness of the following RSN procedural requirements:</p> | | |

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| 7-8 | <p>Section 6.1</p> <p>Prior to a supplier initiating quality-affecting work, QA Engineering shall evaluate the supplier's ability to provide items or services in accordance with the requirements of the procurement documents using one or more of the following methods:</p> <p>6.1.1 Evaluation of the supplier's history of providing an identical or similar product which performs satisfactorily in actual use.</p> <p>6.1.2 Evaluation of the supplier's current quality documents supported by documented qualitative and quantitative information which can be objectively evaluated.</p> <p>6.1.3 Evaluation of the supplier's technical and quality capability by a QA survey of the supplier's facilities and personnel and the implementation of its QA Program by means of supplier survey.</p> | | |

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| 7-9 | <p>Section 6.2 - Evaluation of Supplier History</p> <p>6.2.1 When the evaluation of the history of providing identical or similar items or services is used to evaluate a supplier, the following steps shall be taken:</p> <p>6.2.1.1 Determine which applicable items or services the supplier has provided.</p> <p>6.2.1.2 Determine whether or not the items or services have performed satisfactorily. This shall be documented using the Supplier Review Form LV-2029 (Attachment 2).</p> <p>6.2.2 Suppliers shall be approved on the basis of history only if the above evaluation indicates that the supplier currently has the capability to provide satisfactory services. This shall be documented on a Supplier Evaluation Summary Form LV-219 (Attachment 3).</p> <p>6.2.3 The responsible QAR shall notify the procurement organization, by letter or memo, as to the results of the supplier history evaluation.</p> | | |

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| 7-10 | <p>Section 6.3 - Evaluation of Documents</p> <p>6.3.1 Procurement documents shall specify, whether or not the supplier is required to have a Quality Assurance Program Plan (QAPP) and/or Procedures. If the supplier is required to submit a QAPP and/or Procedures to RSN for review and approval, the RSN QAR shall perform the review and document the results on Form LV-2026, Quality Assurance Manual Review Checklist (Attachment 4) to determine whether it meets the requirements specified in the procurement documents.</p> <p>6.3.4 When the above methods of document evaluations are used to evaluate a supplier, the comments section of Form LV-219 shall indicate what documents were reviewed or evaluations performed and the results of the review.</p> <p>6.3.5 The QAPP and/or Procedures shall be reviewed and approved prior to the supplier commencing quality-affecting work.</p> | | |

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| 7-11 | <p>Section 6.4 - Evaluation by Supplier Survey</p> <p>6.4.3 The QAR shall develop a Supplier Survey Checklist (See Form LV-415, Attachment 5) based on the requirements of the procurement documents.</p> <p>6.4.4 The survey team shall conduct the survey as follows:</p> <ul style="list-style-type: none"> a) Conduct a pre-survey meeting at the supplier's facility with the supplier's QAR and cognizant management personnel. b) Physically review the supplier's facility to verify its technical and quality capability to provide the item or service specified in the procurement documents. c) Complete the Supplier Survey Checklist. d) At the conclusion of the survey, the survey team leader/individual shall conduct an exit meeting with the supplier's QARs and management staff. | | |

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| 7-11 Cont' | <p>6.4.5 The results of the supplier survey evaluation shall be documented by the QAR on Form LV-219.</p> <p>6.4.6 A report of the Supplier Evaluation shall be issued to the responsible procurement organization within 10 working days of the QAR's return.</p> | | |

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| 7-12 | <p>Section 6.7</p> <p>The SQA is responsible for maintaining an ASL which identifies, as a minimum, the supplier, the item or service, the evaluation date and the re-evaluation date (not to exceed 1 year from the evaluation date).</p> | | |
| 7-13 | <p>Section 6.9</p> <p>QAR(s) shall perform an annual review of quality suppliers. The QAR(s) shall review the initial and subsequent POs and documentation available from the supplier to determine whether or not a triennial audit is required; the supplier's performance is acceptable; the supplier's qualification status should be changed; and/or the supplier should be audited.</p> <p>The results of this review shall be documented on Form LV-2029, Supplier Review.</p> | | |

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| 7-14 | <p>Section 7.0</p> <p>The following documents are generated by this procedure and are lifetime QA records.</p> <ul style="list-style-type: none"> a. Supplier Survey Checklist, Form LV-415 b. Supplier Evaluation Summary, Form LV-219 c. Quality Assurance Manual Review Checklist, Form LV-2026 d. Letters or memos indicating reviews of QA Programs and Procedures. e. ASL f. Supplier Review Form, LV-2029 | | |
| 7-15 | <p>Verify effective corrective action for CAR YM-93-078.</p> | | |

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| 10-1 | <p>PP-10-01, REV. 1, "FIELD DRILLING ENGINEER SUPPORT ACTIVITIES," PIC-1</p> <p>PARA 6.1</p> <p>Verify that the Field Drilling Engineer (FDE) monitors and reports field activities in accordance with the work program and.....as defined by the job package.</p> | | |
| 10-2 | <p>PARA. 6.2.2</p> <p>Verify that the FDE reports and initiates any nonconformances to program plans using a nonconformance report in accordance with YAP-15.1Q.</p> | | |

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| 10-3 | PARA. 6.2.5 Verify that the FDE ensures that the RSN subcontractor's equipment is in compliance with established QA procedures for calibration and that this is documented on the YMP Instrument Calibration Checklist Form LV-2061, Attachment 2. | | |
| 10-4 | PARA. 6.5 Verify that the FDE maintains the depth control records. | | |

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| 10-5 | <p>Para. 6.5.2</p> <p>Verify that the reference point for all depth measurements has been established at ground level (GL) and that the elevation of GL has been established by surveying.</p> | | |
| 10-6 | <p>PARA. 6.5.7.1</p> <p>Verify that each drilled interval has a starting depth determined by subtracting the stick up measurement from the total string length.</p> | | |
| 10-7 | <p>PARA. 6.5.7.1</p> <p>Verify that the starting depth is measured and calculated prior to the start of drilling and that the measurements and calculations are recorded on the YMP Drilling Depth Record (DDR), Form LV-2049, Attachment 4.</p> | | |

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| 10-8 | <p>PARA. 6.5.7.3</p> <p>Verify that during drilling, the following drilling parameters are recorded on the DDR:</p> <ol style="list-style-type: none"> 1. Starting time and date of drilling 2. Ending time and date of drilling 3. Depth interval drilled 4. Average rate of penetration (ROP), weight on bit (WOB), and revolutions per minute (RPM) 5. Notes on variations in drilling parameters 6. Notes on any fill or core stubs encountered | | |

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| 10-9 | <p>PARA 6.5.7.6</p> <p>Verify that when drilling is completed, the FDE marks the final DDR with the words "Drilling Completed."</p> | | |
| 10-10 | <p>PARA 6.5.8.1</p> <p>Verify that each core run begins with the ending depth of the previous core run.</p> | | |
| 10-11 | <p>PARA 6.5.8.2</p> <p>Verify that the YMP Core Run Record (CRR) Form LV-2053, Attachment 5 is filled out for each coring attempt and contains coring and depth information and that the FDE has provided the hole number, the WBS number, and core run number.</p> | | |

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| 10-12 | <p>PARA 6.5.8.3</p> <p>Verify that following information was entered on the CRR:</p> <ol style="list-style-type: none">1. Starting time and date of coring2. Ending time and date of coring3. WOB, RPM, torque, and air pressure4. Depth and time breakdown by foot.5. Notes on any variations in drilling parameters6. Notes on any fill or core stubs | | |

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| 10-13 | PARA. 6.5.8.5 Verify that the drilling contractor's designated representative signs the CRR to indicate the validity of the drilling parameters entered on the form. | | |
| 10-14 | PARA 6.5.8.6 Verify that the FDE signs the CRR for the depth measurements. | | |
| 10-15 | PARA 6.5.8.7 Verify that the Sample Management Facility (SMF) representative has signed the CRR to indicate that the core has been received. | | |

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| 10-16 | <p>PARA 6.5.8.9</p> <p>Verify that after the core is retrieved to the surface, the inner core barrel laid down on the work platform, and the head and shoe loosened, custody of the core is transferred to to the SMF personnel.</p> | | |
| 10-17 | <p>PARA 6.5.8.9.1</p> <p>Verify that responsibility for moving the core from the work platform to the SMF logging trailer is assumed by the SMF personnel.</p> | | |
| 10-18 | <p>PARA 6.5.8.9.2</p> <p>Verify that a copy of the CRR is given to the SMF to accompany the core as a construction aid and as a record to determine the depth of the cored interval.</p> | | |

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| 10-19 | <p>PARA 6.5.9.1</p> <p>Verify that each ream down interval begins with the ending depth of the previous ream down interval.</p> | | |
| 10-20 | <p>PARA 6.5.9.2</p> <p>Verify that a YMP Ream Down Record (RDR), Form LV-2050, Attachment 7 is filled out for each reamed interval and that it contains both reaming and depth information.</p> | | |
| 10-21 | <p>PARA 6.5.9.2.1</p> <p>Verify that the FDE has provided the hole number, the WBS number and the ream down number for the RDR Form.</p> | | |

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| 10-22 | <p>PARA 6.5.9.2.2</p> <p>Verify that during reaming, the driller monitors and records the following drilling parameters on the RDR:</p> <ol style="list-style-type: none"> 1. Starting time and date of ream down 2. Ending time and date of ream down 3. Starting and ending depth of the ream down interval 4. Average RPM, WOB, and air pressure 5. Notes on any variations in drilling parameters 6. Notes on any fill or core stubs encountered | | |

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| 10-23 | <p>PARA 6.7.3</p> <p>Verify that the FDE remains on location during all hours of operations until replaced by the next FDE or as approved by the Chief of Field Exploration Drilling (FED) or his designated representative.</p> | | |
| 10-24 | <p>PARA 6.7.9</p> <p>Verify that the FDE monitors and records, on either the YMP Daily Drilling Report, Form LV 2067, Attachment 9 or the YMP Daily Operations Report, Form LV 2055, Attachment 10 for the drilling parameters.</p> | | |

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| 10-25 | PARA 6.10.2 Verify that the FDE witnesses and reports geophysical logging and wireline surveys according to PP-10-02. | | |
| 10-26 | PARA 6.12.1.1 Verify that the FDE ensures that the contractor prepares DOE/YMPO required reports, such as the IADC type Daily Drilling Report. | | |

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| 10-27 | <p>PP-10-02, REV. 1, "FIELD LOGGING OPERATIONS"</p> <p>PARA 6.1.1</p> <p>Verify that the FDE has written the logs to be run into the drilling program for the particular hole after consultation with the Logging Engineer (LE)</p> | | |
| 10-28 | <p>PARA 6.1.3</p> <p>Verify that the Logging Engineer has discussed with the User Designated Contact for Logging (UDCL) and documented any special requirements or procedures that are to be followed during the logging operation by the Logging Subcontractor and has documented these requirements on an RVC form.</p> | | |

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| 10-29 | <p>PARA 6.1.4</p> <p>Verify that the Drilling Field Manager or his designee has notified the Logging Subcontractor and Logging Engineer of the logs to be run, the location of the hole to be logged, and the time to be on location with a Logging Call Out Record (Attachment 1), by sending a copy of the Logging Call Out Record.</p> | | |
| 10-30 | <p>PARA 6.1.5</p> <p>Verify that the Logging Engineer has informed the Logging Subcontractor of any special requirements specified by the User Designated Contact for Logging (UDCL).</p> | | |

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| 10-31 | <p>PARA 6.3.1</p> <p>Verify that the Logging Engineer has checked the OM procedures to ensure that:</p> <ol style="list-style-type: none"> 1. they are the proper revisions 2. they are being followed 3. the responsible agency has approved them. <p>PP-10-03, REV. 0, "CONSTRUCTION MANAGEMENT REPORTING"</p> | | |
| 10-32 | <p>PARA 6.1</p> <p>Verify that matrixed organization field work is authorized by a Work Initiation in accordance with PP-01-02.</p> | | |
| 10-33 | <p>PARA 6.2.2</p> <p>Verify that the Field Engineers Staff (FES) has collected the required documentation to report to Yucca Mountain Site Characterization Project Site Office (YMSO), the progress and activity on the project,</p> | | |

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| 10-34 | <p>PARA 6.3.1</p> <p>Verify that the assigned FES has provided the management reporting of the work at an interval sufficient to provide a continuous record of the progress of the work.</p> | | |
| 10-35 | <p>PARA 6.3.2</p> <p>Verify that the assigned FES maintains a file of all pertinent documentation and that the as-built process is initiated in accordance with PP-03-22.</p> | | |

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| 10-36 | PARA 6.3.3 Verify that the FES is aware of Hold and Witness Points and has advised the Quality Control (QC) of impending dates to inspect the item or activity. | | |
| 10-37 | PARA 6.3.5 Verify that the FES maintains the RSN Log of field changes as specified in PP-03-23. | | |

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| 10-38 | <p>QAP-10.1(Y), REV. 4, "FIELD VERIFICATION," PICs 1 AND 2</p> <p>PARA 6.2.1</p> <p>Verify that Quality Control Representatives (QCRs) who accept quality affecting activities are qualified in accordance with QAP-2.6(Y).</p> | | |
| 10-39 | <p>PARA 6.2.1</p> <p>Verify that Technical Specialists utilized to assist in verification activities are qualified IAW PP-02-02.</p> | | |

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| 10-40 | <p>PARA 6.2.2</p> <p>Verify that an Open Item Tracking Log is being maintained in accordance with QAP-10.4(Y).</p> | | |
| 10-41 | <p>PARA 6.2.3</p> <p>Verify that QCR acceptance of document submittals is documented on Inspection Checklists, on the Field Verification Plan (FVP), or on the Verification Activity Report.</p> | | |
| 10-42 | <p>PARA 6.2.4.1</p> <p>Verify that the QCR has monitored the construction and was available for witness point verifications unless waived by the Supervisor, Quality Control (SQC).</p> | | |

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| 10-43 | PARA 6.2.4.2 Verify that the SQC has documented the waiver of Witness Points and that these are maintained as part of the FVP files. | | |
| 10-44 | PARA 6.2.5.1 Verify that the QCRs were present for verification of Hold Points and that when required by a traveler, the QCR signed ,dated ,entered the required information on the traveler. | | |
| 10-45 | PARA 6.2.6 Verify that inspections/verifications were performed at the points specified by the FVP. | | |

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| 10-46 | PARA 6.2.7 Verify that nonconforming items are documented and Nonconformance Reports (NCRs) are issued in accordance with YAP-15.1Q. | | |
| 10-47 | PARA 6.3.1 Verify that for closed FVPs, all required verifications listed in Block 7 of the FVP have been completed | | |

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| 10-48 | <p>PARA 6.3.1</p> <p>Verify that the QCR compiles the FVP package and that it contains the following as applicable:</p> <ol style="list-style-type: none">1. The FVP2. Copies of completed NCRs and Deficiency Reports (DRs) associated with the FVP3. The Open Item Tracking Log for the FVP.4. Copies of completed Inspection Checklists or Verification Activity Reports.5. Copies of any Witness/Hold point waivers | | |

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| 10-49 | <p>PARA 6.3.2</p> <p>Verify that the QCR has reviewed the technical documents (specifications, drawings, procedures, etc.) and all changes to these and has verified that:</p> <ol style="list-style-type: none">1. All required operations have been completed.2. All applicable NCRs, DRs, and action items have been satisfactorily dispositioned and closed.3. All required verifications have been completed.4. All Witness and Hold points have been completed or waiver documentation is available.. | | |

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| 10-50 | <p>QAP-10.2(Y), REV. 1, "QUALITY CONTROL VERIFICATION OF AS-BUILT DRAWINGS AND SPECIFICATIONS"</p> <p>PARA 6.2</p> <p>Verify that Quality Control maintains a log of all as-built documents verified and the status of that verification and that the log includes the following information, as a minimum, the as-built document number and revision, the date reviewed, and an indication of whether or not, the document was accepted.</p> | | |
| 10-51 | <p>PARA 6.3.1</p> <p>Verify that the responsible QCR performed the verification of the as-built document using the appropriate checklist.</p> | | |

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| 10-52 | <p>QAP-10.3(Y), REV. 1, "INSPECTION," PICS 1 AND 2</p> <p>PARA 6.1.2</p> <p>Verify that the Quality Assurance Representative has prepared the Inspection Checklist in accordance with the following:</p> <ol style="list-style-type: none"> 1. Obtained a sequential IC number and recorded the appropriate information in IC Log. 2. Reviewed technical and procurement documents to determine the attributes to be inspected. | | |
| 10-53 | <p>PARA 6.2.2.1</p> <p>Verify that the SQC maintains control number logs which identify as a minimum, the control number, the number of the IC used in the inspection, the responsible QCR, and the date(s).</p> | | |

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| 10-54 | PARA 6.2.2.2 Verify that prior to conducting the inspection, the QCR has obtained and listed the latest revisions of the technical documents in the appropriate blocks of the IC. | | |
| 10-55 | PARA 6.2.2.3 Verify that the inspection was conducted IAW the instructions provided in Block 4 of the IC and the acceptability of each step was indicated where required. | | |
| 10-56 | PARA 6.2.2.4 Verify that NCRs or DRs were issued as appropriate where an item is nonconforming or where activity was not performed in accordance with procedure requirements. | | |

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| 10-57 | QAP-10.4, REV. 1, "OPEN ITEM TRACKING," PIC-1 PARA 6.1 Verify that upon receipt of a Source or Field Verification Plan the QCR has entered the plan number in Block 1 of the Open Item Tracking Log (Log) and that the Log is maintained with the Source or Field Verification plan. | | |
| 10-58 | PARA 6.2 Verify that open items have been entered into the Open Item Log. | | |
| 10-59 | PARA 6.3 Verify that the Open Item resolution is entered in the Log. | | |

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| 10-60 | QAP-2.6(Y), REV. 1, "TRAINING, QUALIFICATION AND CERTIFICATION OF QC INSPECTION PERSONNEL" PARA 6.2 Verify that the CA/QC Inspection Level III has evaluated the Certification Checklist for each individual QC Inspector and that this evaluation is documented on the Record of Certification. | | |
| 10-61 | PARA 6.5.1 Verify that QC Inspection personnel have had their relevant experience and education verified in accordance with PP-02-02. | | |

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| 10-62 | PARA 6.5.1 Verify that QC Inspection personnel have been trained in accordance with QAP-2.2(Y) and PP-02-01. | | |
| 10-63 | PARA 6.6.1 Verify that the CA/QC Level III has prepared ,administered, and evaluated written examinations | | |

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| 10-64 | PARA 6.6.5 Verify that all Inspection and Test personnel have received an eye examination. | | |
| 10-65 | PARA 6.8.3 Verify that the CA/QC Level III has completed a Record of Certification for each QC Inspector certified and for each discipline in which the inspector is qualified. | | |

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| 10-66 | <p>PARA 6.9.1</p> <p>Verify that all QC Level I, II, and III have been evaluated initially and annually thereafter and that the results of the evaluation is documented on the Record of Certification.</p> | | |
| 10-67 | <p>Re-verification of CAR YM-93-028</p> <p>Verify that the FVP is reviewed and revised as needed whenever the applicable drawings and/or specifications are revised.</p> | | |
| 10-68 | <p>Re-verification of CAR YM-93-029</p> <p>Verify that Inspection Records (including QC Monitoring Report) include the characteristics inspected and objective evidence of the results; and that the Inspection Records identify the inspection criteria utilized or reference document.</p> | | |

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| 11-1 | <p>PP-11-01, Revision 1 - General Testing Procedure for the Materials Testing Laboratory Support</p> <p>Section 6.2.1</p> <p>Has there been any work requested by other participants and contractors in accordance with AP-5.39Q?</p> | | |
| 11-2 | <p>Section 6.2.2</p> <p>Verify that industry standards governing sample collection are listed on the WI form.</p> | | |

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| 11-3 | <p>Section 6.2.3</p> <p>Verify that a work request has been has been completed by work requester or MTL personnel for work to be completed.</p> | | |
| 11-4 | <p>Section 6.3.1</p> <ol style="list-style-type: none"> 1. Verify that MTL personnel maintain a log of all samples received. 2. Verify that each sample has been assigned a unique MTL sample number. 3. Verify that markings and labels indicate the presence of special environments or the need for controls if necessary. | | |

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| 11-5 | Section 6.3.2 Verify that samples are secured in a manner suitable to prevent unauthorized handling. | | |
| 11-6 | Section 6.3.3 Have samples been transferred to the SMF? AP-6.3Q is referenced as the procedure used to complete this transfer, however it deals with sample examination. Please clarify. | | |

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| 11-7 | Section 6.3.4 Verify that if special handling tools or equipment are used, they are tested and inspected at specified intervals. | | |
| 11-8 | Section 6.4.1 1. Verify that industrial standard test methods are utilized for testing. 2. Verify that if no method exists a procedure is written which addresses all elements listed in the procedure. | | |

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| 11-9 | <p>Section 6.4.7</p> <p>Verify that the test records and final test report identify the following:</p> <ol style="list-style-type: none">1. Item tested and MTL sample number2. Test procedure, including number and revision used and source (Follow-up on CAR YM-93-081)3. Date of test4. Tester and/or data recorder | | |

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| 11-9 Cont' | 5. Equipment number and most recent calibrated date of M&TE used 6. Observations 7. Test results and, if appropriate, the acceptability or unacceptability of the test results 8. Person evaluating test results 9. Action taken with deviations noted 10. Final test report contains the signature and date of supervisor reviewing and approving report. | | |

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| 11-10 | <p>Section 6.4.8.1</p> <p>Verify, if appropriate, that test results have been evaluated to specified acceptance criteria.</p> <p>PP-02-08, Revision 1 - Training, Qualifications, and Certification of Materials Testing Laboratory Personnel</p> | | |
| 11-11 | <p>Section 6.3.1</p> <ol style="list-style-type: none"> 1. Verify that for each MTL person, education and training is documented on the Record of Education and Training (Attachment 2). 2. Verify that for each MTL person, experience is documented on the Qualifying Experience form (Attachment 3). | | |

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| 11-12 | Section 6.6.1 Verify that for each MTL person a Certification Checklist has been completed and signed and dated by the examiner. | | |
| 11-13 | Section 6.8 Verify that a Record of Certification has been completed for each candidate and signed and dated by the Examiner and candidate. | | |

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| 11-14 | Section 6.9.1 Verify that for Level I, II, and III personnel an annual evaluation is documented on the Record of Certification. | | |
| 11-15 | Section 6.9.2 Verify that certified employees are recertified at least once every three years. | | |

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| 11-16 | Section 6.9.4 Verify that an annual update is made for each candidate in each certified area. | | |
| 11-17 | Section 6.10.5 Verify that for decertified personnel a Letter of Revocation (Attachment 7) has been issued at time of decertification. | | |

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| 11-18 | <p>Section 6.11.2</p> <p>Verify that the qualification of test personnel is certified in writing and includes the following:</p> <ol style="list-style-type: none"> 1. Employers name 2. Identification of person being certified 3. Activities certified to perform 4. Education, experience, indoctrination and training 5. Test results (where applicable) 6. Results of capability demonstration 7. Level of certification 8. Discipline of certification 9. Results of periodic evaluation 10. Results of visual acuity and physical examination 11. Signature of Examiner 12. Dates of certification and certification expiration | | |

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| 11-19 | CAR YM-93-076 Verify that the Manager, RSN/YMP Field Operations, continues to monitor MTL personnel training with the use of a log and checklist. | | |
| 11-20 | CAR YM-93-080 Verify that when YMP participants request test work of RSN, that AP-5.39Q is implemented and completion of work is documented in Part III of the Technical Field Work Request Form. | | |

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|----------|---|--|-----------|
| 12-1 | <p>PP-12-01, Revision 1 - Control of Measuring and Test Equipment</p> <p>Section 6.4.2</p> <ol style="list-style-type: none"> 1. Verify that a Calibration History Log is maintained by the equipment custodian. (Follow-up on CAR YM-93-082) 2. What is the status of the Calibration History Log with regards to retention as a record? | | |
| 12-2 | <p>Section 6.4.3.1</p> <p>Provide examples of calibration standards that are equal to or greater than accuracy of equipment being calibrated.</p> | | |

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| 12-3 | <p>Section 6.4.6.2</p> <p>Provide a list of outside services that provide calibration services which are procured in accordance with PP-04-01.</p> | | |
| 12-4 | <p>Section 6.4.6.3</p> <p>Verify that calibration certification identifies the information listed in this section. (refer to matrix)</p> | | |

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| 12-5 | Section 6.4.7.3 Verify that prior to removing measuring and test equipment from service it is recalibrated if it has been used since last calibration. | | |
| 12-6 | Section 6.5.1.2 Verify that the Usage Log is maintained by the equipment custodian and provides required information. (Refer to Attachment 4) | | |

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| 12-7 | <p>Section 6.5.1.2</p> <ol style="list-style-type: none"> 1. Provide examples of test and inspection reports which have used M&TE. 2. Verify that test and inspection reports reference the control number and most recent calibration date of the M&TE. | | |
| 12-8 | <p>Section 6.5.2.4</p> <ol style="list-style-type: none"> 1. Provide examples of unsatisfactory results that required issuance of an NCR in accordance with QAP-15.1(Y). 2. Verify that inspection/test reports indicate "Retest" and appropriately reference the initial inspection/test report(s). | | |

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| 14-1 | <p>AP-5.48Q, REVISION 0, MANAGEMENT OF FIELD ACTIVITIES USING TRAVELERS</p> <p>Para. (Step) 4</p> <p>Verify that the assigned actions (as defined by the Traveler Form) have been completed and that administrative, technical and QA requirements have been completed.</p> | | |
| 14-2 | <p>Para. (Step) 4</p> <p>Verify that Part 2 of the Traveler Form has been signed to indicate that assigned actions are complete and that records have been prepared documenting these actions.</p> | | |
| 14-3 | <p>QAP-10.1(Y), REVISION 4, FIELD VERIFICATION</p> <p>Para. 6.3.3</p> <p>Verify that the Quality Control Representative (QCR) has initialed and dated each step in Block 7A of the Field Verification Plan (FVP) to indicate that the step has been verified as satisfactory.</p> | | |

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| 15-1 | <p>YMP-15.1Q, REVISION 0</p> <p>Section 5.1.1, a), b)</p> <p>Verify that when a nonconforming item or sample is identified, a Nonconformance Report (NCR) is initiated, as required. (See Exhibit YAP-15.1Q, Nonconformance Report.)</p> | | |
| 15-2 | <p>Section 5.0</p> <p>Verify that Exhibit YAP-15.1Q.1, Nonconformance Report, is completed, signed, and dated, as required by this procedure.</p> | | |

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| 15-3 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.1.1, c), d), e), f)</p> <p>Verify the following:</p> <p>c) The cognizant supervisor of the Affected Organization is notified of the nonconformance.</p> <p>d) A Hold Tag, Exhibit YAP-15.1Q.2, is applied to the item or sample to preclude use.</p> <p>e) The item or sample is segregated, when practical, in a clearly identified hold area until dispositioned,</p> <p style="padding-left: 40px;">or</p> <p>f) Other means are used to readily identify the nonconforming item to prevent use.</p> | | |

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| 15-4 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.1.2</p> <p>Verify that an NCR Log and Tracking System (system supplied by the YMPO) is used to track YMP related NCRs.</p> | | |
| 15-5 | <p>Sections 5.1.4</p> <p>Verify that upon receipt of an NCR that has been invalidated, or upon notification of validation, the NCR Coordinator updates the NCR Log, retains a copy of the invalidated NCR and transmits a copy of the invalidated NCR to the NCR originator.</p> | | |

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| 15-6 | <p>YAP-15.1Q, REVISION 0 DISPOSITIONING</p> <p>Section 5.2.2</p> <p>Verify that the Dispositioner specifies the appropriate action in Block 4 of the NCR by marking the appropriate box. (Items - Rework, Repair, Use-As-Is, or Reject/Scrap; Samples - Use-As-Is, Limited Use, Discard.)</p> | | |
| 15-7 | <p>Section 6.1 (Disposition Factors)</p> <p>Verify that disposition factor requirements delineated in Sections 6.1.1 through 6.1.7 have been complied with when dispositioning items or samples. (Include Conditional Release.)</p> | | |

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| 15-8 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.2.1</p> <p>Verify that the Dispositioner from the Specifying Organization has demonstrated competence in the specific area he/she is to evaluate.</p> | | |
| 15-9 | <p>Section 5.2.3</p> <p>Verify that Specifying Organization QA personnel performing review of the disposition have demonstrated competence in the specific area they are evaluating.</p> | | |

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| 15-10 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.2.3, d), e), f), g)</p> <p>Verify that the Specifying Organization QA</p> <ul style="list-style-type: none"> - performs a review for reportability in accordance with Attachment 9.4, and documents the review in Block 6, - reports reportable nonconformances to the Director, YMOAD, - initiates further corrective action, if applicable, in accordance with Section 16.0 requirements, and - forwards the NCR to the organization responsible for performance of the disposition and sends a copy to the NCR Coordinator. | | |

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| 15-11 | <p>YAP-15.1Q, Rev. 0 IMPLEMENTING DISPOSITION</p> <p>Section 5.3.1, d), e)</p> <p>Verify that the Performing Organization signifies completion of the disposition by signing and dating Block 7 of the NCR and forwarding the NCR to the Performing Organization QA.</p> | | |
| 15-12 | <p>Section 5.3.2, a), b), c)</p> <p>Verify that the Performing or Specifying Organization QA</p> <p>a) verifies that all actions required by the disposition have been completed,</p> <p>b) ensures removal of Hold Tags, and signs and dates Block 7 of the NCR when resolved,</p> <p>c) transmits a copy of the NCR to the NCR Coordinator; transmits the original to the Specifying Organization.</p> | | |

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| 15-13 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.3.3</p> <p>Verify that the NCR Coordinator</p> <p>a) updates the NCR working file with a copy of the NCR,</p> <p>b) updates the NCR Log as to the status of the NCR.</p> | | |
| 15-14 | <p>Section 5.3.4</p> <p>Verify that the Specifying Organization QA signs and dates the NCR, Block 8, Final Review, indicating acceptance of the review and transmits the completed NCR to the NCR Coordinator.</p> | | |

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| 15-15 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.3.5</p> <p>Verify that the NCR Coordinator updates the NCR Log and that if the NCR crosses organizational boundaries, forwards a copy to YMQAD for trending.</p> | | |
| 15-16 | <p>Section 5.3.5</p> <p>Verify that the NCR Coordinator transmits the original NCR to the Local Records Center/Document and Records Center in accordance with appropriate implementing documents.</p> | | |

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| 15-17 | <p>YAP-15.1Q, Rev. 0</p> <p>Section 5.4.1</p> <p>Verify that if a revision to an NCR is required, a revision number is placed inside a delta adjacent to the revision on all pages. Further, verify that all other processes are completed as originally designated.</p> | | |
| 15-18 | <p>Section 7.0</p> <p>Verify that NCRs are maintained as QA records in accordance with AP-1.18Q.</p> | | |

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| 16-1 | <p>QAP-16.1(Y), REVISION 1, DEFICIENCY REPORTING</p> <p>Section 6.1.1.1</p> <p>Verify that if a deficiency is hardware-oriented and meets the criteria of a nonconformance, a Nonconformance Report is initiated in accordance with YAP-15.1Q. (Deficiencies pertaining to software are not considered hardware oriented.)</p> | | |
| 16-2 | <p>Section 6.1.1.4</p> <p>Verify that RSN/YMP QA maintains a Deficiency Report (DR) Log, Attachment 2, showing the status of DRs.</p> | | |

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| 16-3 | <p>QAP-16.1(Y), Rev. 1</p> <p>Section 6.2.1.5</p> <p>Verify that after Blocks 1, 2, and 7 are completed, a memo or letter is forwarded to the appropriate level of management of the responsible organization for action. Verify that Corrective Action Requests (CARs) applicable to RSN subcontractors are transmitted to the subcontractor via the RSN Purchasing Department.</p> | | |
| 16-4 | <p>Section 6.2.2.1</p> <p>Verify that the completed DR is returned to QA for corrective action via memo or letter on or before the response due date identified in Block 7.</p> | | |

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| 16-5 | <p>QAP-16.1(Y), Rev. 1</p> <p>Section 6.2.2.2</p> <p>Verify that requests for extensions of the response due date are justified to QA, in writing, prior to the due date or effective date. Verify that the evaluation of the request is documented and either returned to the responsible organization if unacceptable or accepted in writing. (See CAR YM-93-083)</p> | | |
| 16-6 | <p>Section 6.2.4.2</p> <p>Verify that corrective actions are completed by the effective dates specified or that a request for appropriate action is forwarded to the responsible organization.</p> | | |

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| 16-7 | QAP-16.1(Y), REVISION 1 Section 6.2.5.2 Verify that the responsible organization is notified by letter or memo when a DR is officially issued and closed. | | |
| 16-8 | Section 7.0 Verify that Deficiency Reports and all supporting material are maintained as lifetime records in accordance with PP-17-01. | | |

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| 16-9 | <p>QAP-16.2(Y), REVISION 1, CORRECTIVE ACTION</p> <p>Section 6.1</p> <p>Verify that RSN QARs identify and initiate Corrective Action for significant conditions adverse to quality when the following conditions exist:</p> <ul style="list-style-type: none"> - breakdown of the QA Program, - persistent failure to correct deficiencies in response to NCRs or DRs, - prior action is ineffective for prevention of recurrence, - single deficiencies that affect the integrity of design and/or safety requirements, - a significant condition adverse to quality identified by a trend analysis (unless previously identified by DOE or RSN). | | |

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| 16-10 | <p>QAP-16.3(Y), Rev. 1</p> <p>Section 6.2</p> <p>Verify that documents used to conduct the Trend Analysis (CARs, DRs, Software Discrepancy Reports (SDRs), Management Assessment (MA) findings, and NCRs) are classified by responsible organization, QA criteria, deficiency type, and when appropriate, hardware type as indicated on Attachment 2, Trend Codes</p> | | |
| 16-11 | <p>Section 6.3</p> <p>Verify that trends are determined on the basis of the following conditions:</p> <ul style="list-style-type: none"> - excessive number of deficiencies (repetitive) relative to number of verifications performed for a particular organization, criteria, deficiency type and/or hardware type, and - significant increase in the number or significance of deficiencies per verification as compared to previous trend period(s). | | |

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| 16-12 | <p>QAP-16.3(Y), Rev. 1</p> <p>Section 6.4</p> <p>Verify that the Trend Reports identify the following:</p> <ul style="list-style-type: none"> - identification of the verification activities, - identification of the deficiencies and the assigned trend codes, - charts and/or graphs to display the data, - statement describing trend (followed up in accordance with QAP-16.2(Y), Corrective Action, if not previously reported to DOE), (RSN is reporter only for other participants.) - time period covered and date of report, and - author of report | | |

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| 16-13 | <p>QAP-16.3(Y), REVISION 1</p> <p>Section 6.4</p> <p>Verify that the Trend Report is approved by the SQA/YMP and distributed to the DOE Director, QA, and appropriate management.</p> | | |
| 16-14 | <p>Section 7.0</p> <p>Verify that the Trend analysis report as described in Section 6.4 above is maintained as a lifetime QA records in accordance with PP-17-01.</p> | | |

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| 17-1 | <p>AP-1.18Q, REVISION 1, ICN 1</p> <p>Para. 5.3</p> <p>Verify that the TPO ensures that any YMP records (individual record, record package segment, records package, or a document to become a final technical or scientific report) that may be contained in working files of Russ Hillsinger, were submitted to the RSN Records Source Coordinator (RSC) when he left the YMP.</p> | | |
| 17-2 | <p>Para. 5.4</p> <p>Verify that the TPO provides the RSN RSC with a list of personnel authorized to have access to privileged records and update as necessary.</p> | | |
| 17-3 | <p>Paras. 5.5.a and 5.6</p> <p>Verify that sources prepare the individual records in accordance with Appendix A, Pages 13-15, once the records have been identified.</p> | | |

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| 17-4 | <p>Para. 5.5.b</p> <p>Verify that record sources provide the following to the RSN RSC if they have records package segments:</p> <ul style="list-style-type: none"> A. A record package title B. A records package identifier C. A Record Source name and organization D. A quality-affecting designation (QA: QA or QA: N/A) E. Configuration item identifier, as applicable | | |
| 17-5 | <p>Paras. 5.5.c and 5.6</p> <p>Verify that record sources prepare records package in accordance with Appendix A, Pages 13-15.</p> | | |
| 17-6 | <p>Para. 5.5.d</p> <p>Verify that record sources prepare the Final Scientific and Technical Reports in accordance with Appendix A, Page 15.</p> | | |

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| 17-7 | Para. 5.7 Verify that record sources protect documents that may become records or records packages in accordance with Appendix B, Page 18. | | |
| 17-8 | Para. 5.8 Verify that record sources submit the records or records packages to the RSN RSC in accordance with Appendix D. | | |
| 17-9 | Verify that records generated as or converted to magnetic tapes meet the requirements of Appendix A, Criteria for Electronic Records. | | |

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| 17-10 | PP-17-01, REVISION 3, PIC 1 Verify that QA records requiring temporary storage are maintained in a container or facility with fire rating of 1-hour or are stored in dual location. | | |
| 17-11 | PP-17-07, REVISION 1 Para. 6.5.1 Verify that logging tape and floppy disk labels contain: <ul style="list-style-type: none"> - Logging Subcontractor company name - Well name - Log type - Run number - Run date - Tape number - Depths recorded - Logging Subcontractor's engineer's name - Raw or edited designation - Record density - Tape format (BIT or SDUMP) - File names | | |

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| 17-12 | Para. 6.5.1 Verify that a separate label on the tape contains: - Read-check or copy verification - Initials of Logging Subcontractor's engineer who verified the tape | | |
| 17-13 | Para. 6.5.2 Verify that "master" or "copy" are affixed to label. | | |
| 17-14 | Para. 6.9 Verify how the Logging Engineer determines the validity and completeness of the logging tape by interpreting the output of the RSN diagnostic tape program. | | |

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|----------|--|--|---------|
| 17-15 | Para. 6.11 Verify that logging prints are processed in accordance with 6.4 through 6.7. | | |
| 17-16 | Para. 6.15 Verify that the Logging Data Computer Operator maintains an inventory of: - Logging tapes in storage - Logging video tapes in storage - Logging floppy disks in storage including data format and location. | | |

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| 17-17 | <p>Para. 7.0</p> <p>Verify which lifetime QA records are generated.</p> <ul style="list-style-type: none"> - Two final prints - Log Quality Report - Record of Data Transfer - Record of Verbal Communication - Raw logging tapes (2) - Logging video tapes (2) | | |

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| 17-18 | <p>AP-5.2Q, Revision 4</p> <p>Para. 5.2</p> <p>Verify that for technical information sent to YMSCP Technical data Base, the following has occurred:</p> <p>A. Data sets are compiled into a format and scope that was coordinated with the YMP TDB Administrator</p> <p>B. YMP-023, Technical Data Information Form (TDIF) has been completed</p> <p>C. TDIF information is entered into the Automated Technical Data Tracking system (ATDT) and quality control checks have been performed</p> <p>D. A Data Transmittal Package has been prepared in accordance with AP-5.1Q</p> <p>E. The Data Transmittal Package was submitted to the LRC</p> | | |

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| 17-19 | <p>Para. 5.5 b)</p> <p>Verify that written requests for technical data from the Technical Data Base contain:</p> <ul style="list-style-type: none"> - Requester's name - Organization - Address - Telephone number - Scope of the information requested - A Description of the intended use of the data - Declaration as to whether or not the data will be used for quality-affecting activities - format requirements | | |

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| 17-20 | <p>AP-6.22Q, REVISION 0</p> <p>Section 5.4</p> <p>Verify that at the final inspection point, the assigned actions are completed as defined by the A/E's inspection plan or the job package.</p> | | |
| 17-21 | <p>Section 5.7</p> <p>Verify that a final inspection of completed work or complete inspection/verification process is performed in accordance with applicable procedures.</p> | | |
| 17-22 | <p>Section 5.7</p> <p>Verify that deficiencies or nonconformances are documented and dispositioned in accordance with AP-5.27Q, Control of Nonconforming Items.</p> | | |

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| 17-23 | <p>Section 5.9</p> <p>Verify that copies of approved documents (e.g., As-built Drawings, Work Completion Report) and any necessary supporting records are submitted to the DRC using the records package tracking number in accordance with AP-1.18Q within 60 calendar days (unless extended in writing by the SM) of the last scheduled acceptance.</p> | | |
| 17-24 | <p>AP-5.1Q</p> <p>Verify that technical data is submitted to the Central Records Facility (CRF) with a TDIF within 45 days of the end of the quarter in which the data were placed in the PDA. (CAR YM-93-077)</p> | | |

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| 18-1 | <p>QARD, SECTION 18.0, REVISION 0, AUDITS</p> <p>Para. 18.2.1.C</p> <p>Internal audits shall be scheduled to begin as early in the life of the work as practical and shall be scheduled to continue at intervals consistent with the schedule for accomplishing the work.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-2 | <p>Para. 18.2.1.D</p> <p>Regularly scheduled internal audits shall be supplemented by additional audits of specific subjects when necessary to provide an adequate assessment of compliance or effectiveness.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-3 | <p>Para. 18.2.4</p> <p>Audits shall include technical evaluations of the applicable procedure, instructions, activities and items.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-4 | <p>Para. 18.2.6.A</p> <p>An audit team shall be identified before beginning each audit. The audit shall include representatives from the QA organization and any applicable technical organizations.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-5 | <p>Para. 18.2.6.E</p> <p>In the case of internal audits, personnel having direct responsibility for performing the work being audited shall not be involved in the selection of the audit team.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-6 | <p>Para. 18.2.6.G</p> <p>Nonconformances identified during an audit shall be controlled by the audited organization according to the requirements of Section 15.0.</p> <p>Verify inclusion of this requirement in RSN implementing procedures.</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-7 | <p>QAP-18.1(Y), REVISION 1, AUDITS</p> <p>Para. 6.2</p> <p>The SQA/YMP shall develop audit schedules which identify internal and external audits planned for the fiscal year.</p> <p>Internal audits shall be performed annually or at least once during the life of the work, whichever is shorter.</p> <p>Verify compliance with these requirements.</p> | | |
| 18-8 | <p>Para. 6.2</p> <p>The audit schedule shall identify the following, as a minimum:</p> <ul style="list-style-type: none"> - Organizations to be audited - Audit number - Date of audit <p>Verify compliance with these requirements.</p> | | |

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| 18-9 | <p>Para. 6.2</p> <p>Supplier's QA programs will be evaluated for audit on at least an annual basis.</p> <p>Supplier audits for compliance shall be performed on a triennial basis when supplemented by annual evaluations.</p> <p>Verify compliance with these requirements.</p> | | |
| 18-10 | <p>Para. 6.2</p> <p>A determination may be made that external audits are not necessary for procuring items that are:</p> <ol style="list-style-type: none"> 1. Relatively simple and standard in design, manufacture, and test; or 2. Adaptable to standard or automated inspections or tests of the end product to verify quality characteristics after delivery. The rationale for not performing an external audit shall be documented and maintained as part of the QA record. <p>Verify compliance with these requirements.</p> | | |

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| 18-11 | <p>Para. 6.3</p> <p>Audit Log - An audit Log (Attachment 1) shall be maintained by QA. This log includes the audit number, audited activity, ATL, start date and close date.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-12 | <p>Para. 6.4.2</p> <p>Audit Plan - The ATL shall develop a plan for each audit. The SQA shall approve the audit plan. This plan identifies the audit scope; requirement for performing the audit; implementing documents, activities and items to be audited; audit personnel; organizations to be notified; applicable documents; schedule; and written checklists (Attachment 2 provides a typical plan format).</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-13 | <p>Para. 6.4.4</p> <p>Checklists for audits and readiness review shall as a minimum, include provisions for verifying the following activities:</p> <ul style="list-style-type: none">- Work activity prerequisites have been satisfied.- Detailed implementing documents and management controls are available and approved.- Personnel have been suitably trained and qualified. <p>Verify compliance with these requirements.</p> | | |

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| 18-14 | <p>Para. 6.12</p> <p>The Audit Report shall be issued under the signature of the Manager QA, YMP within 30 calendar days of the audit. The report shall include the following information, as appropriate:</p> <ul style="list-style-type: none"> a. Description of the audit scope. b. Identification of the audit team members. c. Identification of persons contacted during audit activities. d. Summary of audit results, including a statement of the adequacy and effectiveness of the technical and QA program elements that were audited. e. Description of each reported adverse deficiency, nonconformance and recommendations. f. The documents reviewed, persons interviewed and the specific results of the reviews and interviews, that is, a summary of the checklist contents. <p>Verify compliance with this requirement.</p> | | |

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| 18-15 | <p>Para. 6.12</p> <p>External audit reports shall be transmitted under the signature of the SQA/YMP to the supplier or subcontractor through the cognizant purchasing organization.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-16 | <p>Para. 6.16</p> <p>Audit File - QA shall maintain a file for each audit, which includes the following QA records, as applicable:</p> <ul style="list-style-type: none"> a. Audit Plan b. Audit Report c. Deficiency Reports d. Corrective Action Reports e. NCRs f. Records of Deficiency Report Completion g. Completed Audit Checklists h. Letter closing the audit i. Audit Guide for Technical Specialists (see QAP-2.3(Y)). <p>Verify compliance with these requirements.</p> | | |

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| 18-17 | <p>QAP-18.2(Y), REVISION 1, SURVEILLANCE</p> <p>Para. 6.1.1</p> <p>Surveillances shall be conducted by personnel who are knowledgeable in, and who have no direct responsibility for the activity or item being surveilled.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-18 | <p>Para. 6.1.3</p> <p>The SQA/YMP shall maintain a Surveillance Log, which shows the surveillance number, date of surveillance, individual(s) who performed the surveillance and status.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-19 | <p>Para. 6.2.1</p> <p>The SQA/YMP audits shall prepare and maintain a surveillance schedule which is based upon work schedules and the results of previous audits and surveillances.</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-20 | <p>Para. 6.4.1</p> <p>Personnel performing surveillances shall prepare a Surveillance Report which shall include the following as applicable:</p> <ul style="list-style-type: none"> a. Dates(s) of surveillance. b. Objective of surveillance (Description of the activity or item under surveillance). c. Personnel conducting surveillance. d. Personnel contacted during surveillance. e. Acceptance/rejection statement concerning item or activity surveilled. f. Identification of deficiencies, as appropriate. g. Recommendations, as appropriate. h. M&TE used during the surveillance. <p>Verify compliance with these requirements.</p> | | |

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| 18-21 | <p>Para. 6.4.2</p> <p>The SQA/YMP shall review and approve the Surveillance Report.</p> <p>Verify compliance with this requirement.</p> | | |
| 18-22 | <p>Para. 6.5</p> <p>The surveillance shall remain open until all deficiencies are resolved. Upon satisfactory resolution of deficiencies, the SQA/YMP shall notify the affected organization via letter or memorandum of the closure of the surveillance.</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-24 | <p>Para. 7.0</p> <p>The following documents generated during the implementation of this procedure are lifetime QA records which shall be submitted in accordance with PP-17-01.</p> <ul style="list-style-type: none">a. Surveillance Reportb. Planning Documentc. Deficiency Reportsd. Correspondence to resolve deficienciese. Closure letter or memorandum <p>Verify retention of these documents.</p> | | |

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| 18-25 | <p>QAP-2.3(Y), REVISION 1, QUALIFICATION OF AUDIT PERSONNEL</p> <p>Para. 6.1.2</p> <p>Technical Specialists - When assigned, Technical Specialists are required to read the Audit Guide for Technical Specialists (Attachment 1) and QAP-18.1(Y), Audits, latest revision, and sign and date the cover page. A lead auditor shall, after confirmation of the Technical Specialist's credentials (see PP-02-02) sign and date the cover page to indicate the individuals acceptable as an auditor. A completed copy of Attachment 1 shall be sent to the LV Records Management Center in accordance with PP-17-01 and to the individual's training file.</p> <p>Verify compliance with these requirements.</p> | | |

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| 18-26 | <p>Para. 6.1.4</p> <p>Qualified Auditors - In addition to meeting the requirements for Auditors-in-Training, as described above, an individual must:</p> <ul style="list-style-type: none"> a. Have participated in a minimum of two audits within RSN or outside audits documented by a previous employer. b. Have participated in an audit training program to provide generalized and specialized training, general training shall include the fundamentals, objectives, characteristics, organization, performance, and techniques of performing audits. Specialized training includes methods of examining, questioning, evaluating, documenting audit items and methods of closing out adverse audit findings (conditions adverse to quality) addressed by Deficiency Report or Corrective Action Report. <p>Verify compliance with these requirements.</p> | | |

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| 18-27 | <p>Para. 6.2.3</p> <p>Audit Participation - The prospective lead auditor shall have participated in a minimum of five QA audits or equivalent verifications (such as management assessments, pre-award surveys, or comprehensive surveillances, providing the parameters of the audit process are met) within a period of time not to exceed three years prior to the date of certification.</p> <p>Verify compliance with these requirements.</p> | | |
| 18-28 | <p>Para. 6.2.4</p> <p>The prospective lead auditor shall pass an examination that will evaluate his/her comprehension of and ability to apply the body of knowledge identified in Paragraph 6.2.2 above.</p> <p>Verify compliance with this requirement.</p> | | |

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| 18-29 | <p>Para. 6.3.1</p> <p>Based on an annual assessment, the SQA/YMP may extend the qualification, require retraining or require requalification.</p> <p>This assessment shall be documented on Forms LV-216 and LV-217, Audit Participation Record, shall also be completed and attached, or the SQA/YMP may attach a letter explaining the basis for extending the qualification.</p> <p>Verify compliance with these requirements.</p> | | |

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| SI-1 | <p>SUPPLEMENT 1</p> <p>QAP-19.1(Y), REVISION 1</p> <p>Section 6.1</p> <p>Verify that a log is maintained by the QAR of RSN computer documents received by the QA Department.</p> | | |
| SI-2 | <p>PP-19-07, REVISION 0</p> <p>Section 6.1</p> <p>Verify that the Software Configuration Management Log (SCML) is filled out in accordance with Attachment 1. (Global positioning software)</p> | | |

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| SI-3 | Section 6.1.6.2 Verify that a Design Baseline Memorandum (DBM) was issued in accordance with PP-03-15. | | |
| SI-4 | Section 6.1.6.2 Verify that an Engineering Change Request (ECR) was issued in accordance with PP-03-17. | | |

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| SI-5 | Section 6.1.7 Verify that status reporting of qualified software is in accordance with PP-03-16. | | |
| SI-6 | Section 6.2 Verify that a Software Authorization Request (SAR) form (Attachment 2) and Software Requirements Specification (SRS) (Attachment 3) were generated and approved during the Classification and Authorization Phase for Scientific and Engineering Software. | | |

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| SI-7 | <p>Section 6.3</p> <p>Verify that during the Acquisition and Evaluation Phase, the following documents were generated and approved:</p> <ul style="list-style-type: none">- Computer Receipt Inspection Report (Attachment 4)- User Document Review Report (Attachment 5)- Test Document Review Report (Attachment 6)- Software Verification and Validation Plan (Attachment 7)- Software Validation Waiver (Attachment 8) | | |

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| SI-8 | Section 6.4.9.4 Verify that the SCML number has been inserted in all the documents which exist in the final certified software package (documents generated from the beginning of the software authorization process all the way to the certification process) and are in the Design Record Center (DCR). | | |
| SI-9 | Section 6.5.1.1 Verify that the using department maintains a log documenting the use of released software items. | | |

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| SI-10 | Section 6.5.1.1 Verify that the log is sufficient to allow independent repetition of the use of the software. | | |
| SI-11 | Section 6.4.2 Determine if there are any outstanding Software Discrepancy Reports. Verify that the software product has been placed on hold in accordance with Section 6.1.2. | | |

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|----------|--|--|-----------|
| SIV-1 | SUPPLEMENT IV PP-01-02, Revision 1 - Work Initiation Section 6.2.1 Verify that a WI Log (Attachment 2) is maintained to provide a history of each WI and revisions thereto. | | |
| SIV-2 | Section 6.2.2 Verify that Field Operations maintains a separate WI Control Log at the Area 25 Field Office. | | |

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| SIV-3 | Section 6.3.2 Verify that applicable codes, standards and regulations are contained in criteria documents or are identified with effective dates in item 15 on the WI. | | |
| SIV-4 | Section 6.3.3 Verify that WI's issued for surveys contain the appropriate accuracy requirements. | | |

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| SIV-5 | Section 6.4 What are the review criteria used by the Department Manager to review and approve the WI? | | |
| SIV-6 | Section 6.5.2 Verify that revisions to WIs are reviewed and approved in the same manner as the original WI. | | |

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| SIV-7 | <p>PP-01-03, REVISION 2</p> <p>Section 6.1.1</p> <p>Verify that all survey data (i.e. Survey Field Notes, Attachment 1, Cross Section Forms LV-2040, Attachment 2, and Slope Staking and Layout Sheet Forms LV-2082, Attachment 3) are reviewed, checked and distributed in accordance with PP-01-04.</p> | | |
| SIV-8 | <p>Section 6.1.2</p> <p>Verify that YMP Primary Control position accuracy is 1:100,000 and YMP Secondary Control position accuracy is 1:50,000 as noted in Standards and Specifications of Geodetic Control Networks.</p> | | |

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| SIV-9 | Section 6.1.3 Verify that the total Station Distance Meter (TSDM) instrument has an operational check prior to use. | | |
| SIV-10 | Section 6.2.1 Verify that the appropriate surveying instrument is positioned over or under an established control point, which has known values (i.e., state plan coordinates). | | |

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| SIV-11 | <p>Section 6.2.2</p> <p>Verify that an adjacent established control point (backsight) is sighted. Then the appropriate angle is turned and a distance is measured to the new control point (foresight). Finally, the new point shall be established as a permanent or semi-permanent monument.</p> | | |
| SIV-12 | <p>Section 6.4.1.1</p> <p>Verify that a level circuit is run from an established vertical control point to a new vertical control point, and closed back to the point of beginning or another established vertical control point.</p> | | |

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| SIV-13 | <p>Section 6.4.2</p> <p>Verify that the TSDM level circuit is run from an established bench mark to a new bench mark and closed back to the point of beginning or another established bench mark.</p> | | |
| SIV-14 | <p>Section 6.6</p> <p>Verify that the method of establishing tunnel alignment and grade control using a Class II laser is as follows:</p> <ol style="list-style-type: none"><li data-bbox="199 998 945 1128">1. The laser is attached to steel supports, rockbolts, or mounted on a tripod at a known height. When possible, laser may be set high enough to keep beam free of interruption by personnel or equipment.<li data-bbox="199 1169 945 1226">2. Two targets are positioned on the same grade line as the laser.<li data-bbox="199 1266 945 1469">3. Activate the laser and set the beam on both targets. The laser spot on the working face is at the same position on the laser. The known height and offset distance of the laser are given to the miners. The miners then locate the center of the drift and point rib, back and invert lines on the work face. | | |

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| SIV-15 | <p>Section 6.7</p> <p>Establish Centerline or Offset of Centerline for a Vertical Shaft.</p> <p>From an established horizontal control point, the centerline control of a vertical shaft can be established by using one of the following methods:</p> <p>METHODS:</p> <ol style="list-style-type: none">1. From an established control point, a plumb bob or an Optical Plummet is used to mark the centerline or offset to centerline for a vertical shaft.2. The centerline or offset is established by a theodolite filled with a right angle prism. Four vertical angles from cardinal directions are measured to the illuminated center control at the desired level of the shaft. | | |

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| SIV-16 | <p>Section 6.8</p> <p>Establishment of Subsurface Vertical Control of a Shaft.</p> <p>Verify that from an established vertical control point, subsurface elevations of a vertical shaft are established by using one of the following methods:</p> <p>METHODS:</p> <p>TSDM - Reflective prisms are placed on the requested point(s). The prisms are sighted from the TSDM and the vertical distance measured.</p> <p>CHAIN METHOD - The vertical distance is measured from a known vertical control point using a standard survey chain.</p> | | |

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| SIV-17 | <p>Section 6.9</p> <p>Establishment of Subsurface Horizontal Control.</p> <p>Verify that from an established horizontal control point, the subsurface horizontal control is established using the following method:</p> <p>The appropriate surveying instrument is positioned at an established control point. Another known control point is sighted with known horizontal angle or azimuth in the instrument. The appropriate angle is turned and a distance is measured to the requested point and marked. The instrument will occupy the new location. The initial control point or another known control point is backsighted and a check angle is turned. The check angle is compared to the filed computed angle. If an angular error exceeding the accuracy requirements is noted, the procedure is repeated until the accuracy requirements are met as requested.</p> | | |

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| SIV-18 | <p>Section 6.10</p> <p>Drift/Shaft Cross Section.</p> <p>Verify that a survey instrument occupies a known subsurface horizontal control point. A corresponding horizontal control point is sighted and cross section points are marked on line. A rod mounted vertical aluminum disk is placed over or under the station to be cross sectioned. The disk is held perpendicular to the line of sight. Measurements are taken along prescribed intervals from the center of the disk along inscribed degree markings to the wall of the drift or shaft.</p> | | |

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| SIV-19 | <p>Section 6.12</p> <p>Electronic Data Collection.</p> <p>Verify that the following is performed for TSDMs equipped with on-board data collection capabilities.</p> <p>A. Field data is recorded, by codes, on the TSDM recording module.</p> <p>B. All related information (weather, crew members, control used, collection file name, etc.) not on the TSDM recording module is recorded in the survey field notes.</p> <p>C. The TSDM recording module data is extracted into a Data Collection File (Attachment 5). The file is maintained in its original content.</p> <p>D. All errors in survey measurements are noted in the survey filed notes and a Revised Data Collection.</p> | | |

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| SIV-20 | <p>PP-01-04</p> <p>Verify that survey data (field notes), is recorded in self-duplicating type field books (K&E 82-0062 or equal, or</p> <p>when precise leveling runs are recorded on the Precise Leveling 3-Wire Forms per PP-01-03, or</p> <p>When electronic data collection is used in support of the survey field books, data is collected on the Total Station Distance Meter recording module and is published as a data collection file per PP-01-03, or</p> <p>when slope staking is recorded on the Slope Staking and Layout Sheet Form per PP-01-03.</p> | | |

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| SIV-21 | Verify that the SG Computer person reviews and checks the submitted survey data for mathematical correctness. If no errors or omissions are found, calculations and/or plots are finalized with a copy of the annotation tables filed. The computer person initials and dates the SG record copy of the survey data and calculations. | | |
| SIV-22 | A listing of primary control monuments will be maintained by the survey department. This listing will contain the name, coordinates, order of accuracy, and originator. | | |