



Department of Energy

Office of Civilian Radioactive Waste Management
Yucca Mountain Site Characterization Office
P.O. Box 98608
Las Vegas, NV 89193-8608

JUN 28 1995

Wesley E. Barnes, Project Manager, YMSCO, NV
ATTN: John W. Estella, M&O, Las Vegas, NV

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF CORRECTIVE
ACTION REQUEST (CAR) YM-93-086 RESULTING FROM YUCCA MOUNTAIN
QUALITY ASSURANCE DIVISION'S (YMQAD) AUDIT YMP-93-15
(SCPB: N/A)

The YMQAD staff has verified the corrective action to CAR
YM-93-086 and determined the results to be satisfactory. As
a result, the CAR is considered closed.

If you have any questions, please contact either Robert B.
Constable at 794-7945 or Frank J. Kratzinger at 794-7163.

Richard E. Spence, Director
Yucca Mountain Quality Assurance Division

YMQAD:RBC-3765

Enclosure:
CAR YM-93-086

cc w/encl:

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D. G. Sult, YMQAD/QATSS, Las Vegas, NV

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WASHINGTON, D.C.**

8 CAR NO.: YM-93-086
DATE: 8/16/93
SHEET: 1 OF 2
QA

CORRECTIVE ACTION REQUEST

1 Controlling Document
QARD (DOE/RW-0214, Revision 4, ICN 4.1)

2 Related Report No.
YMP-93-15

3 Responsible Organization
YMPO

4 Discussed With
R. Barton/M. Blanchard

5 Requirement:

1) QARD (DOE/RW-0214, Revision 4, ICN 4.1, Section 4.0, Paragraph 4.0, states in part: "The provisions of NQA-1 Basic Requirement 4 and Supplement 4S-1 shall apply...."

NQA-1 Criterion 4, Supplement 4S-1, Section 4.0, Paragraph 2 states in part: "Procurement documents issued at all tiers shall include provisions for the following as deemed necessary by the Purchaser...Scope of Work, Technical Requirements, Quality Assurance Program Requirements, Rights of Access, Documentation Requirements and Nonconformance Reporting."

Paragraph 3, "Procurement Document Review" states in part: "A review of procurement documents and changes thereto shall be made to assure that documents transmitted to the prospective Supplier(s) include appropriate provisions to assure that items or services will meet the specified

6 Adverse Condition:

1) Contrary to requirements listed in 1 above, reviews to assure that procurement documents contain the appropriate provisions noted above and as outlined in QMP-04-03, "Technical Directives" are not being performed prior to issuance of work authorization.

In discussions with cognizant YMPO personnel, it was ascertained that work activities and the delineation of the work scope is given to participants through AP-5.36. As such, work is being implemented prior to review of procurement documents (i.e. TDs) to assure that the scope, technical requirements, and quality requirements are appropriately incorporated.

Examples include pending TDs: SNL-93-009, TRW-93-014, LANL-93-011, LLNL-93-012, and USGS-93-010 for which work is ongoing.

2) Contrary to the requirements listed in 2 above, YMPO did not utilize QMP-04-02 for the processing of interagency agreement (a procurement

9 Does a significant condition adverse to quality exist? Yes X No ___
If Yes, Circle One: A B C

10 Does a stop work condition exist? Yes ___ No X; if Yes - Attach copy of SWO
If Yes, Circle One: A B C D

11 Response Due Date:
20 Working Days from Issuance

12 Required Actions: Remedial Extent of Deficiency Preclude Recurrence Root Cause Determination

13 Recommended Actions:

1) Correct deficiencies noted in Block 6.

2) Investigate to determine the extent of the deficiencies.

3) Determine impact to on-going work activities.

7 Initiator
John S. Martin *[Signature]* Date 8/16/93

14 Issuance Approved by:
QADD *[Signature]* Date 8/23/93

15 Response Accepted
QAR *[Signature]* Date 12-20-93

16 Response Accepted
QADD *[Signature]* Date 12-27-93

17 Amended Response Accepted
QAR Date _____

18 Amended Response Accepted
QADD Date _____

19 Corrective Actions Verified
QAR *[Signature]* Date 6/23/95

20 Closure Approved by:
QADD *[Signature]* Date 6/28/95

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5 Requirements (continued)

requirements. Reviews shall be performed and documented prior to contract award."

In addition, Paragraph 4 states: "Procurement document changes shall be subject to the same controls as the ones utilized in preparation of the original documents."

- 2) QMP-04-02, Revision 0, ICN 1, Paragraph 1.1 states in part: "This procedure establishes the methods and responsibilities for preparing, reviewing, approving and controlling procurement documents...."

Paragraph 2.0 states in part: "Project Office procurements are limited to procuring services.... Procurements are conducted for the following types of activities:... Interagency agreement...."

6 Adverse Condition (continued)

document) No. DE-AI08-92NV11223, U.S. Bureau of Reclamation.

13 Recommended Action(s) (continued)

- 4) Correct the deficiencies identified during the investigation.
- 5) Determine the root cause of the condition and take measures to preclude recurrence.

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Verification of Corrective Action

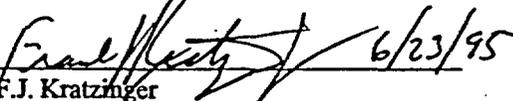
1. Reviewed Technical Direction (TD) Letters for the following TDs:

TD	Letter	Date
SNL-93-009	RSED:JMB - 4732	8/31/93
TRW-93-014	RSED:JMB - 4725	9/28/93
LANL-93-011	RSED:JMB - 4753	8/18/93
LLNL-93-012	RSED:JMB - 4726	8/25/93
USGS-93-010	RSED:JMB - 4749	8/25/93
SAIC-93-018	AMA:JGG - 4292	8/26/94
TRW-93-024	VOIDED	

2. A Requirements Traceability Network (RTN) Report dated 6/13/95 was reviewed and showed that the QARD requirements were now satisfied with procedures YAP-2.6Q, REV 0, ICN 2, YLP-4.1Q, REV 0, YAP-51.Q, REV 2, YAP 6.1Q, REV 0, and AP 7.4Q. QMP-04-02 was cancelled on 2/1/95.

3. Results of audit YM-ARP-95-13 conducted 6/19-23/95 of YMSCO Procurement indicated a satisfactory result.

This CAR is considered close.


F.J. Kratzinger 6/23/95

Status of CAR YM-93-086 Corrective Actions

Background

The CAR identified two adverse conditions that were associated with the procedures, QMP-04-02, "Yucca Mountain Project Office Procurement Actions" and QMP-04-03, "Technical Directives." These two issues were: (1) reviews to assure that procurement documents contain the appropriate provisions of NQA-1 Criterion 4 and as outlined in QMP-04-03 are not being performed prior to issuance of work authorization, and (2) contrary to the requirements of QMP-04-02, YMSCO did not utilize the procedure for the processing of an interagency agreement.

Issue 1 Status

The Procurement Working Group determined that the best way to resolve this issue was to replace the "technical directive" process contained in QMP-04-03 with a new process defined in the procedure, YAP-2.6Q, "Determination of Quality Affecting Work". This procedure has been issued (Revision 0, effective 10/17/94) and used to develop the technical direction for each of the YMP participants for FY 1995.

The procedure QMP-03-09, "Project Change Control Board Process" has been used to process the Change Request No. 95/096 that provided the technical direction to the YMP Contractors/Participants with the document YMP/CC-0025, "YMP Cost/Schedule Baseline Document for FY 1995", (Revision 0). Russ Dyer's signature on the change directive (dated January 19, 1995) represents the approval disposition of this change as CCB Chairman and as the Contracting Officer Representative for the YMP Contractors/Participants.

A new ICN to YAP-2.6Q was approved on 2/16/95 (ICN #2, effective on 2/23/95) that provides the procedural steps for processing any needed Cost/Schedule Change Requests against the FY 1995 Cost/Schedule Baseline. Since the provisions in the procedure QMP-04-03 are now incorporated in YAP-2.6Q, this procedure was submitted for a OCRWM QAP 6.2 cancellation review on February 16, 1995. It is planned to have the procedure QMP-04-03 cancelled by February 28, 1995.

Issue 2 Status

There was no corrective action required for this issue since the interagency agreement cited was for staff augmentation purposes and, as such, does not constitute a quality-affecting procurement. However, the Procurement Working Group recognized that the best way to preclude any similar issues in the future was to develop a new procedure (YLP-4.1Q-YMSCO, "Procurement Actions") that would replace QMP-04-02. This new procedure has been approved and issued for use (effective date 2/1/95).



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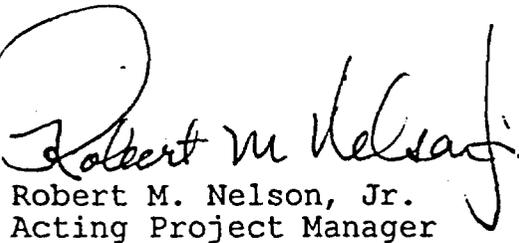
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DEC 13 1993

Richard E. Spence, Director, Yucca Mountain Quality Assurance
Division (RW-3.2) YMP, NV

RESPONSE TO CORRECTIVE ACTION REQUEST (CAR) YM-93-086 (SCP: N/A)

Enclosed is the Yucca Mountain Site Characterization
Project Office response to CAR YM-93-086. If you have any
questions or require additional information, please contact
Robert V. Barton at 794-7957.


Robert M. Nelson, Jr.
Acting Project Manager

YMP:RVB-1176

Enclosure:
Response to CAR YM-93-086

cc w/encl:

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R. V. Barton, YMP, NV
R. B. Constable, YMQAD (RW-3.2) YMP, NV
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Response to Part 1

REMEDIAL ACTION

Technical Directives for the work activities identified in CAR YM-93-086 have been approved and issued. The specific Technical Directives and their issue dates are as follows:

SNL-93-009	8/31/93
TRW-93-014	9/28/93
LANL-93-011	8/18/93
LLNL-93-012	8/25/93
USGS-93-010	8/25/93

INVESTIGATIVE ACTION

Investigative action revealed that there were two additional instances where work is ongoing without approved Technical Directives issued for Fiscal Year 1993. These are both related to records management activities. The specific Technical Directives are:

SAIC-93-018
TRW-93-024

These Technical Directives will be approved and issued by January 30, 1994. Responsibility for implementation of this action is assigned to John Gandi.

ROOT CAUSE DETERMINATION

The root cause of this deficiency is failure to process the technical directives in a timely manner due to the large number of technical directives that were required to be issued and ambiguity regarding responsibilities for implementation of QMP-04-03. In order to streamline the technical directive process and improve its effectiveness for future applications, a working group was formed consisting of appropriate line organization personnel as well as quality assurance representatives. The working group began their efforts on August 27, 1993, and met regularly to evaluate the deficient condition cited in CAR YM-93-086. As a result of the working group activities, it was determined that the procurement QA requirements of Sections 4 and 7 of the OCRWM QARD are actually implemented via a variety of Yucca Mountain Project Office methods. These methods are documented in various quality-related procedures, nonquality-related procedures, and Project Office management plans. A matrix and backup information (attached) was created by the working group to demonstrate the relationship between the

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applicable procurement QA requirements and the various Project Office documents. Accordingly, it can be demonstrated that the applicable procurement QA requirements are being met by the Project Office therefore there is no adverse impact on ongoing or completed work activities.

CORRECTIVE ACTION TO PRECLUDE RECURRENCE

Discussions have been initiated with the Yucca Mountain Quality Assurance Division Director to determine whether it is appropriate to redesignate certain "non-Q" documents that may presently implement procurement QA requirements as "Q" documents. This option is presently being evaluated to minimize redundancy between QMP-04-03 and other Project Office methods utilized to control work. Upon completion of this evaluation, any necessary procedure revisions will be effected to clarify the methods by which procurement QA requirements are satisfied. In the interim, verbatim compliance with QMP-04-03 will be accomplished for any technical directives that are issued. This action will be complete by January 30, 1994. Responsibility for completion is assigned to R. V. Barton.

Response Approved:


Responsible Manager

Date:

12/10/93

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Response to Part 2

REMEDIAL ACTION

Non required. The interagency agreement cited in CAR YM-93-086 was for staff augmentation purposes and, as such, does not constitute a quality-affecting procurement. Accordingly, QMP-04-02 was not applicable to this procurement action. The Quality Assurance organization was involved in the review of documentation associated with the initiation of this interagency agreement and provided the appropriate concurrence signatures.

INVESTIGATIVE ACTION

Investigative action has confirmed that there have been no procurements for quality affecting services since the effective date of QMP-04-02 which was October 19, 1990.

ROOT CAUSE DETERMINATION

During the time frame of the audit there was a misunderstanding with respect to the Contracting Officer's role in implementing QA requirements relative to procurement activities, specifically those responsibilities assigned to the Project and Operations Control Division (POCK). This misunderstanding has been reconciled. This was due to the transition of Contracting Officer's which was in progress at the time of the audit.

CORRECTIVE ACTION TO PRECLUDE RECURRENCE

Corrective action to preclude recurrence is not required since there have not been any quality affecting procurements per QMP-04-02.

Response Approved:


Responsible Manager

Date:

12/10/93

QARD REQUIREMENTS	TRW	RSN	SAIC	REECo	LANL	LLNL	SNL	USGS
4.2.1.A, Scope of Work	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36	P&S Accounts, AP 5.36
4.2.1.B, Technical Requirements								
4.2.1.B.1, Technical Requirements	⁽¹⁾ PMP Part 10.1, Fig. 1-4	⁽¹⁾ PMP Part 10.1, Fig. 1-4	N/A	N/A	N/A	N/A	N/A	N/A
4.2.1.B.2, Physical Products	N/A	N/A	N/A	⁽²⁾ AP 5.21Q	N/A	N/A	N/A	N/A
4.2.1.B.3 Physical Products	N/A	N/A	N/A	AP 5.21Q (Job Pkg.)	N/A	N/A	N/A	N/A
4.2.1.C.1, Quality Assurance Program Requirements	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1	PMP 14.0 QARD 4.2.1.C.1
4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2	PMP 14.0 QARD 4.2.1.C.2
4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3	QARD 4.2.1.C.3
4.2.1.D	FAR	FAR	FAR	FAR	FAR	FAR	FAR	FAR
4.2.1.E	AP 5.20	AP 5.20	AP 5.20	AP 5.20	AP 5.20	AP 5.20	AP 5.20	AP 5.20

⁽¹⁾PMP Part 10.1, Figures 1-4, Requirements Documents

⁽²⁾AP5.21Q (Job Package, specific documents)

NOTE: Revision level is included in AP 3.6Q.

QARD REQUIREMENTS	TRW	RSN	SAIC	REECo	LANL	LLNL	SNL	USGS
4.2.1.F.1	P&S Accounts AP 5.36							
4.2.1.F.2	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3	YMP 93-08 Appendix A, A.2.1 Appendix B, D.3
4.2.1.G	N/A	N/A	N/A	AP 5.27Q Section 5.1.1,5.2.1	N/A	N/A	N/A	N/A
4.2.1.H	N/A	N/A	N/A	YMP/91-31	N/A	N/A	N/A	N/A
4.2.2 A-F, Procurement Document Review and Approval	N/A							
4.2.3 A-B, Procurement Document Change	N/A							
7.2.1 A-G, Procurement Planning	N/A							
7.2.2 A-D, Source Evaluation and Selection	N/A							
7.2.3 A-D, Proposal/Bid Evaluation	N/A							

⁽¹⁾PMP Part 10.1, Figure 1-4, Requirements Documents

⁽²⁾AP5.21Q (Job Package, specific documents)

NOTE: Revision level is included in AP 3.6Q.

QARD REQUIREMENTS	TRW	RSN	SAIC	REECo	LANL	LLNL	SNL	USGS
7.2.4, Supplier Performance Evaluation								
7.2.4.A.1	N/A							
7.2.4.A.2	AP 5.36 Section 5.0 Step 23							
7.2.4.A.3	QAP 6.2, Section 6.1.5							
7.2.4.A.4	QMP-04-02 Purpose							
7.2.4.A.5	PMP Section 10.2.1							
7.2.4.A.6	QAAP 18.2 & 18.3							
7.2.4.B	N/A							
7.2.4.C	N/A							
7.2.5 A-B, Control of Supplier Generated Documents	QAP 6.2	QAP 6.2	QAP 6.2	YAP 6.1Q	QAP 6.2	QAP 6.2	QAP 6.2	QAP 6.2
7.2.6 A-C, Acceptance of Items	N/A	N/A	N/A	YAP 6.1Q	N/A	N/A	N/A	N/A

⁽¹⁾ PMP Part 10.1, Figure 1-4, Requirements Documents

⁽²⁾ AP5.21Q (Job Package, specific documents)

NOTE: Revision level is included in AP 3.6Q.

QARD REQUIREMENTS	TRW	RSN	SAIC	REEC _o	LANL	LLNL	SNL	USGS
7.2.7 A-F, Certificate of Conformance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7.2.8 A-C, Source Verification	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7.2.9 A-E, Receiving Inspection	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7.2.10, Post-Installation Testing	N/A	N/A	N/A	YAP 6.1Q	N/A	N/A	N/A	N/A
7.2.11, Control of Supplier Nonconformance	N/A	N/A	N/A	AP 5.27Q Section 5.2	N/A	N/A	N/A	N/A
7.2.12 A-D, Commercial Grade Items	PMP	PMP	N/A	PMP	N/A	N/A	N/A	N/A

⁽¹⁾ PMP Part 10.1, Figure 1-4, Requirements Documents

⁽²⁾ AP5.21Q (Job Package, specific documents)

NOTE: Revision level is included in AP 3.6Q.

QARD REQUIREMENT 4.2.1.A *

A statement of the scope of work to be performed by the supplier.

IMPOSED BY: AP-5.36, Project Planning, Budgeting, Scheduling and Work Authorization System

1.1 PURPOSE

This procedure defines the requirements, establishes the functional responsibility and provides procedural guidelines for authorizing, planning, scheduling, and budgeting all Yucca Mountain (Project) level work. This procedure also describes how the Project Office uses the Planning and Control System (PACS) for integrated planning, budgeting, scheduling, and initial work authorization for work performed by Project participants.

STEP 7

Project Participants - Detail plan and budget the lowest level of the assigned PWBS work to prepare P&S and Summary Accounts Scope of Work statements, identify PWBS deliverables, and budget objectives.

STEP 9

Project Participants - Prepare Summary Account Budget by element of cost establish BCWS and identify performance measurement objectives.

* Applies to all participants.

QARD REQUIREMENT 4.2.1.B.1*

Design bases shall be identified or referenced.

IMPOSED BY: Project Management Plan, YMP 88-2

PART 10.1

The Project uses a tier approach to documentation. The Program/Project Document Hierarchy, depicted in Figure 1-4, shows the documents that define the management and technical requirements for the Program, including the Yucca Mountain Project.

* Applies to TRW & RSN.

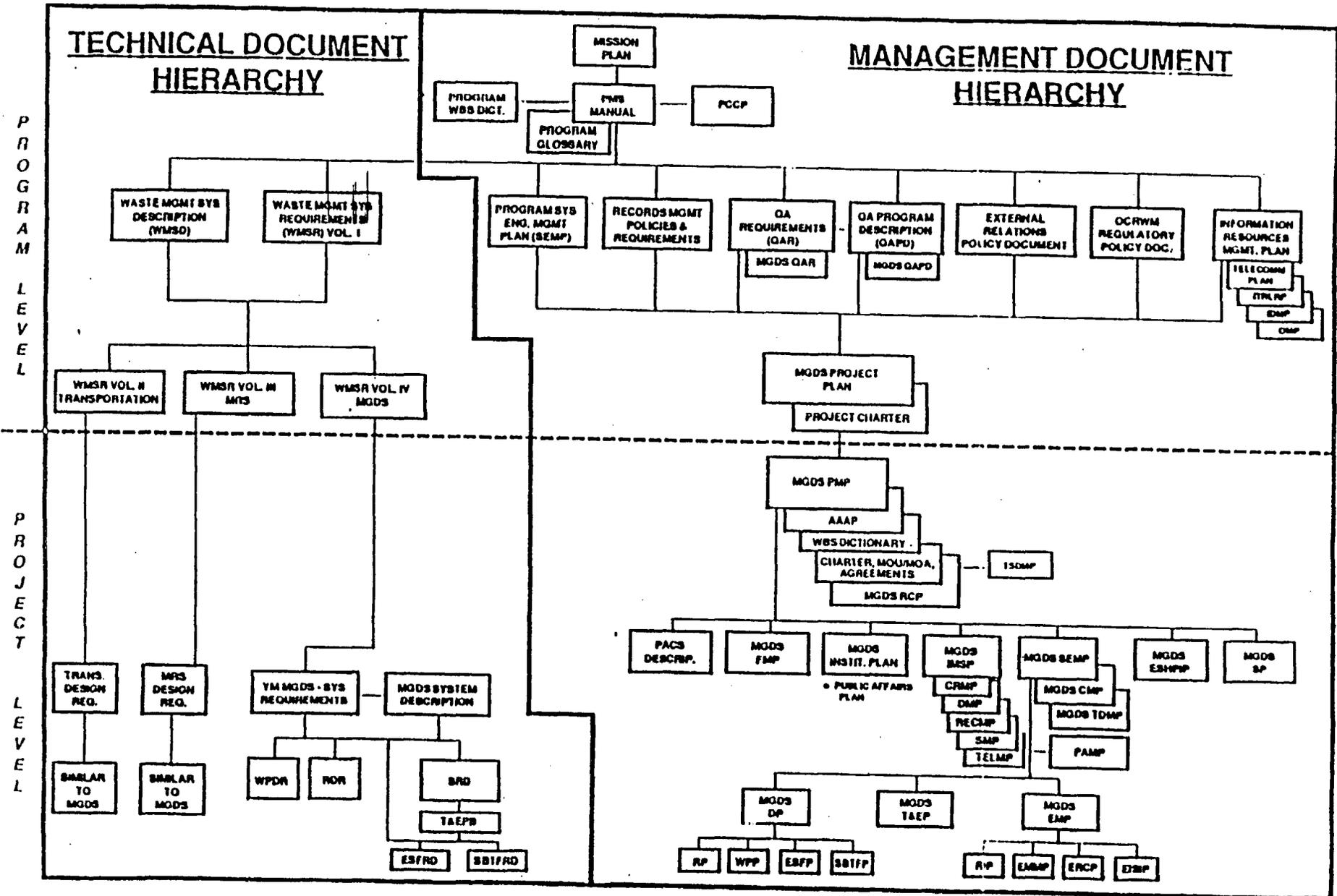


Figure 1-4. Program/Project Document Hierarchy (See Appendix A for list of acronyms).

QARD REQUIREMENT 4.2.1.B.2*

Specific documents (such as drawings, codes, standards, regulations, procedures, or instructions) 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.

IMPOSED BY: AP 5.21Q, Field Work Activation

1.1 PURPOSE

The purpose of this procedure is to provide a process to control the preparation, review, and approval of Job Packages to support Yucca Mountain Site Characterization Project (YMP) field work and to define a method for activating YMP field work.

2.0 APPLICABILITY

This procedure is applicable to the YMPO and YMP Participants (REECo) responsible for YMP field work performed at any location including the YMP land area unless exempted by the YMP Manager.

STEP 13; EXHIBIT 9.2;

Requires drawings, specifications, and procedures inclusion in Job Package.

* Applies to REECo only.

** AP 3.6Q

QARD REQUIREMENT 4.2.1.B.3*

Tests, inspections, or acceptance requirements that they purchaser will use to monitor and evaluate the performance of the supplier shall be specified.

IMPOSED BY: AP 5.21Q, Field Work Activation

Exhibit 9.2, Job Package Summary Form, Section 2

Verification Plans and Open Prerequisite Control

NOTE: Specifications include specific requirements for tests, inspections and acceptance.

* Applies to REECo only.

QARD REQUIREMENT 4.2.1.C.1*

A requirement for the supplier to have a documented quality assurance program that implements applicable QARD requirements prior to the initiation of work. The extent of the quality assurance program shall depend on the scope, nature, or complexity of the item or service being procured.

IMPOSED BY: Project Management Plan, YMP/88-2

SECTION 14.0

The QARD establishes the Quality Assurance Requirements for OCRWM, the Project Office, contractors, subcontractors, National Laboratories, and other government agencies performing activities affecting quality.

Each organization is required to develop a QA Program.

QARD

4.2.1.C.1

A requirement for the supplier to have a documented quality assurance program that implements applicable QARD requirements prior to the initiation of work. The extent of the quality assurance program shall depend on the scope, nature, or complexity of the item or service being procured.

* Applicable to all participants.

QARD REQUIREMENT 4.2.1.C.2*

A requirement for the supplier to incorporate the appropriate QARD requirements into any subtier supplier-issued procurement document.

IMPOSED BY: Project Management Plan, YMP/88-2

SECTION 14.0

The QARD establishes the Quality Assurance Requirements for OCRWM, the Project Office, contractors, subcontractors, National Laboratories, and other government agencies performing activities affecting quality.

Each organization is required to develop a QA Program.

QARD

4.2.1.C.1

A requirement for the supplier to incorporate the appropriate QARD requirements into any subtier-issued procurement document.

• **Applies to all participants.**

QARD REQUIREMENT 4.2.1.C.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. In these cases, procurement documents shall specify that the purchaser's implementing documents are applicable to the supplier and that the purchaser shall provide these applicable documents to them.

IMPOSED BY: QARD

4.2.1.C.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. In these cases, procurement documents shall specify that the purchaser's implementing documents are applicable to the supplier and that the purchaser shall provide these applicable documents to them.

* Applicable to all participants.

QARD REQUIREMENT 4.2.1.D*

Right of access to supplier facilities and records for inspection or audit by the purchaser, OCRWM, or other designee authorized by the purchaser.

IMPOSED BY: DOE Contract Clauses, 66, FAR 52.246-5, Inspection of Services-Cost-Reimbursement (APR 1984)

(c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all places and times during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.

* Applies to all participants.

QARD REQUIREMENT 4.2.1.E*

Provisions for establishing hold points beyond which work cannot proceed without purchaser authorization.

IMPOSED BY: AP 5.20, Document Hold Control

PURPOSE

This procedure defines the methods for identifying, maintaining, releasing, revising, or deleting Yucca Mountain Site Characterization Project (YMP) YMP-related or inter-Participant document HOLDS.

APPLICABILITY

This procedure applies to the YMP and YMP Participants.

AP-5.21Q Field Work Activation

Step 13; Exhibit 9.2;

Specifications establish hold points beyond which work cannot proceed without A/E authorization. A/E is designated DOE release agency.

• Applies to all participants.

QARD REQUIREMENT 4.2.1.F.1*

The document submittal schedule shall be identified.

IMPOSED BY: AP 5.36, Project Planning, Budgeting, Scheduling and Work Authorization System

STEP 8

Identify deliverables and incorporate Level-2 milestones.

*** Applies to all participants.**

QARD REQUIREMENT 4.2.1.F.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.

IMPOSED BY: YMP 93-08, Records Management Plan

Appendix A

A.2.1 IDENTIFICATION OF RECORDS

1. Records and record packages (both QA and non-QA to be generated, supplied, submitted, and maintained shall be specified and identified in all design specifications, procurement documents, task plans, study plans, test procedures, implementing procedures, instructions, or other YMP or Participant documents.

Appendix D

D.3 RECORD RETENTION

Records shall be retained in accordance with the YMP Records Disposition Schedule. Unless designated otherwise, records are considered lifetime and shall be microfilmed to meet the requirements of permanent storage. the silver-halide microfilm master stored by the IRM/OCRWM is the official program record.

* Applies to all participants.

QARD REQUIREMENT 4.2.1.G*

Purchaser requirements for the supplier to report nonconformances and the purchaser approval of the disposition of nonconformances.

IMPOSED BY: AP 5.27Q, Control of Nonconforming Items

5.1 INITIATING NONCONFORMANCE REPORTS

5.1.1 When YMP personnel discover a nonconforming item, YMP Personnel:

- a) initiates an NCR describing the nonconformance.
- b) notifies the Specifying Organization, supervisor, or QA personnel of the nonconforming item.

5.2 DISPOSITIONING NONCONFORMANCE REPORTS

5.2.1 The specifying organization evaluates the nonconformance and specifies action required to correct the nonconformance in an approved disposition including action to change specifying documents, if required.

* Applies to REECo.

QARD REQUIREMENT 4.2.1.H*

Identification of any spare and replacement parts or assemblies and the appropriate technical and quality assurance data required for ordering.

IMPOSED BY: YMP/91-31, Maintainability Program Plan

2.0 SCOPE AND APPLICABILITY (see attached)

3.1 MAINTAINABILITY REQUIREMENTS

- Vendor recommended lists of spare parts

3.2 MAINTAINABILITY ACTIVITIES

3. Repair Level Analysis (RLA) - This activity applies mainly to the electronic systems. RLA is performed to distinguish between repairable and nonrepairable units and components. An adequate inventory of spares must be planned for the nonrepairable items. The most cost-effective repair level must then be selected for all repairable items. for example, certain repairs for some items can be performed onsite, while others must be returned to the source of manufacture for repair.

* Applies to REECo.

This plan will apply to all items engineered and designed for the YMP during the site characterization phase, including the responsibilities of all participants and all Work Breakdown Structure (WBS) elements. The MPP applies, for example, to the items in the list provided below and also to boreholes, computer systems, test equipment, and test facilities. The organization(s) responsible for providing the maintainability requirements and activities discussed in Section 3.0 is listed in parentheses:

ESF SITE (RSN)*

- Main Site(s)
- Auxiliary Site(s)
- Access Roads
- Site Drainage

SURFACE FACILITIES (RSN)

- Ventilation System
- Test Support Facilities
- Site Preparation for Surface Structures
- Parking Areas
- Storage Facilities
- Shop
- Warehouse
- Other Temporary Structures
- Communications/Data Buildings

RAMP ACCESS (RSN)

- Portal
- Ground Support Station
- Ramp Furnishings
- Sump

UNDERGROUND EXCAVATIONS (RSN)

- Operations Support Areas
- Test Areas
- Ground Support

UNDERGROUND TEST SUPPORT (RSN)

- Integrated Data System (IDS) Support
- Test Support
- Geologic Tests
- Geomechanic Tests
- Near-Field and Thermally Perturbed Tests
- Hydrologic and Transport Phenomena Tests

SURFACE UTILITIES (RSN)

- Power System
- Water System
- Sanitary System
- Communications System
- Surface Wastewater System
- Compressed Air System
- Solid Waste Disposal System (to be determined)

SHAFT ACCESS (RSN)

- Collar
- Lining
- Stations
- Sump
- Furnishings
- Hoist System

UNDERGROUND SUPPORT SYSTEMS (RSN)

- Power Distribution System
- Lighting System
- Ventilation Distribution System
- Water Distribution System
- Underground Wastewater Collection System
- Compressed Air Distribution System
- Muck and Material Handling Systems
- Fire Protection System
- Sanitary Facilities
- Monitoring and Warning System

ENVIRONMENTAL PROGRAM (T&MSS, EG&G, DRI)*

SURFACE TEST SUPPORT FACILITIES (REECO, RSN)*

- Roads
- Utilities

QARD REQUIREMENT 7.2.4.A.2*

Requiring the supplier to identify planning techniques and processes to be used in fulfilling procurement document requirements.

IMPOSED BY: AP 5.36, Project Planning, Budgeting, Scheduling and Work Authorization System

5.0 Step 23

Prepare planning guidance packages for DD/PCB approval. The package may include the following:

- a. Current assumptions and preplanning budget constraints.
- b. Level-1 Milestones and work priorities established in the LRP/IPS.
- c. Statements of Work.
- d. Direction to identify long lead items or major subcontract procurements, and information resource requirements.

* Applies to all participants.

QARD REQUIREMENT 7.2.4.A.3*

Reviewing supplier documents that are prepared or processed during work performed to fulfill procurement requirements.

IMPOSED BY: QAP 6.2, Document Review

6.1.5 DOCUMENTS SUBMITTED BY OTHER AFFECTED ORGANIZATIONS

When OCRWM review and acceptance of documents submitted by an affected organization is required by the QARD, the review is performed in accordance with this procedure. These documents should be completed and approved by the supplier prior to submittal for OCRWM review.

• Applies to all participants.

QARD REQUIREMENT 7.2.4.A.4*

Identifying and processing necessary change information.

IMPOSED BY: QMP 04-02, Yucca Mountain Project Office Procurement Actions

PURPOSE

This procedure establishes the methods and responsibilities for preparing, reviewing, approving, and controlling procurement documents and related changes for Yucca Mountain Project Office procurement actions, and for controlling the purchased services to assure conformance with specified requirements.

* Applies to all participants.

QARD REQUIREMENT 7.2.4.A.5*

Establishing the method to be used to document information exchanges between purchaser and supplier.

IMPOSED BY: YMP 88-2, Project Management Plan

SECTION 10.2

Project interface procedures shall be developed to describe the managerial, technical, and administrative interface processes and documents used to ensure that Project Office and Participant interfaces are accomplished in a standardized, timely, and accurate manner (i.e., project plans and procedures).

* Applies to all participants.

QARD REQUIREMENT 7.2.4.A.6*

Establishing the extent of source surveillance and inspection.

IMPOSED BY:

QAAP, 18.2, Audit Program

PURPOSE

This procedure establishes the responsibilities and methods for planning, conducting, and documenting quality assurance audits.

QAAP 18.3, Surveillance Program

PURPOSE

This procedure establishes the responsibilities and methods for planning, conducting, and documenting quality assurance surveillances.

* Applies to all participants.

QARD REQUIREMENT 7.2.5 A-B

A. The supplier generated documents shall be controlled, processed, and accepted in accordance with the requirements established in the procurement documents.

B. Measures shall be implemented to ensure that the submittal of these documents is accomplished in accordance with the procurement document requirements.

IMPOSED BY:

QAP 6.2, Document Review

PURPOSE

This procedure provides a process for the review of documents and resolution of review comments. This process represents the minimum process required and may be supplemented by Local Procedures.

6.1.5 DOCUMENTS SUBMITTED BY OTHER AFFECTED ORGANIZATIONS

When OCRWM review and acceptance of documents submitted by an affected organization is required by the QARD, the review is performed in accordance with this procedure. These documents should be completed and approved by the supplier prior to submittal for OCRWM review.

Applies to all participants except REECo.

YAP 6.1Q, Final Inspection and Acceptance of Configuration Items (Draft)

This procedure establishes requirements, assigns responsibilities, and provides a process for:

- a) the inspection, documentation, and acceptance of an Exploratory Studies Facility Configuration Item or portion of a configuration item; and
- b) the receipt, authentication, and transmittal to the Yucca Mountain Site Characterization Project Site Office Document and Records Center of a total records package compiled from input provided by all contractors and participants involved in a specific configuration item. This records package documents that the administrative, technical, and quality requirements for a configuration item are satisfied.

* Applies only to REECo.

QARD REQUIREMENT 7.2.6 A-C*

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:

1. Evaluating the supplier certificate of conformance. (etc)

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.

C. The supplier shall provide the purchaser objective evidence that items or services conform to procurement documents. The documentation shall be available at the purchaser's facility before the item is installed or before the service is accepted.

IMPOSED BY: YAP 6.1Q, Final Inspection and Acceptance of Configuration Items (Draft)

PURPOSE

This procedure establishes requirements, assigns responsibilities, and provides a process for:

- a) the inspection, documentation, and acceptance of an Exploratory Studies Facility Configuration Item or portion of a configuration item; and
- b) the receipt; authentication, and transmittal to the Yucca Mountain Site Characterization Project Site Office Document and Records Center of a total records package compiled from input provided by all contractors and participants involved in a specific configuration item. This records package documents that the administrative, technical, and quality requirements for a configuration item are satisfied.

* Applies only to REECo.

QARD REQUIREMENT 7.2.10*

When post-installation testing is used as a method of acceptance, then post-installation test requirements and acceptance documentation shall be mutually established by the purchaser and supplier.

IMPOSED BY: YAP 6.1Q, Final Inspection and Acceptance of Configuration Items (Draft)

THIS REQUIREMENT IS NOT ADDRESSED IN THE DRAFT, BUT WILL BE ADDED.

• Will apply to REECo.

QARD REQUIREMENT 7.2.11*

The purchaser and supplier shall establish and document the process for disposition of items that do not meet procurement document requirements.

IMPOSED BY: AP 5.27Q, Control of Nonconforming Items

5.2 DISPOSITIONING NONCONFORMANCE REPORTS

5.2.1 The Specifying Organization:

- a) evaluates the nonconformance and specifies action required to correct the nonconformance (see Subsection 6.1) in an approved disposition including action to change specifying documents, if required;

• Applies to REECo.

QARD REQUIREMENT 7.2.12*

Where design specifies the use of commercial grade items, the following requirements are an acceptable alternative to other requirements of this section.

IMPOSED BY: QARD

SECTION 7

Where design specifies the use of commercial grade items, the following requirements are an acceptable alternative to other requirements of this section.

• Applies to REEco, TRW, and RSN.