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MANAGEMENT Procedures Manual  
USGS - Yucca Mountain Project  
CHAPTER 5  
SECTION 3  
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INSTRUCTIONS, PROCEDURES, PLANS AND DRAWINGS

DEVELOPMENT AND MAINTENANCE OF QUALITY MANAGEMENT PROCEDURES

1. PURPOSE. This procedure defines the requirements and responsibilities for initiation, preparation, review, approval, and change control of Quality Management Procedures (QMPs) for the Yucca Mountain Project (YMP) USGS Management Procedures Manual (MPM).
2. SCOPE OF COMPLIANCE. This procedure applies to all USGS personnel working on the YMP in the development and maintenance of USGS QMPs. It does not apply to the preparation of Administrative Management Procedures, NWM-USGS Technical Procedures (see QMP-5.01), Department of Energy (DOE) Yucca Mountain Project Office's (YMPO's) YMP Administrative Procedures (see YMP AP-1.1Q, Administrative Procedure Preparation), nor USGS subcontractor Quality Management Procedures.
3. DEFINITIONS.
  - 3.1 Quality Management Procedure (QMP): A USGS document that specifies the methods to be used on the Project to implement the requirements of the YMP-USGS QA Program Plan, QAPP-01, or other Project-related quality assurance document. Each QMP details the methods or actions needed to undertake a QA program activity for the YMP in accordance with YMP quality assurance requirements.
4. RESPONSIBILITIES.
  - 4.1 The Chief, Branch of YMP, the Chief, Office of Regional Geology, the Assistant Chief Hydrologist for Program Coordination and Technical Support, and the USGS Assistant Director for Engineering Geology, are responsible for review and approval of all QMPs, and approving their revision, or rescissions. This responsibility includes identification and resolution of conflicts with other USGS policies and procedures.
  - 4.2 The Quality Assurance (QA) Manager is responsible for initial concurrence determination of QMP changes; coordinating the QMP preparation, review and approval process; reviewing, approving, and issuing all QMPs; and submittal of QMPs and associated records to the USGS Local Records Center.
5. PROCEDURE.
  - 5.1 Initiation of Quality Management Procedures.  
Any YMP personnel may propose the preparation, revision or rescission of Quality Management Procedures. Training in QMP-5.03 shall provide the minimum qualifications for personnel developing QMPs. Proposed QMPs or revisions to existing QMPs shall be submitted to the QA Office for review and approval. If the QA Manager does not concur, he will return

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the QMP to the initiator with an explanation. Approved QMPs will be submitted to the other approval authorities for review and approval.

## 5.2 Format and Content.

5.2.1 Each QMP shall contain a unique identifying number. (See QMP-6.01). Assignment of numbers for new QMPs may be obtained from the QA Office or its delegate. All drafts of QMPs shall be identified by the date and "DRAFT".

5.2.2 The organization and content for all QMPs is as described for nine specific headings. Numbered headings as shown below that are not applicable to a particular QMP shall read "None" or "Not applicable" and should not be deleted. Subparagraphs for each heading may be used.

1. PURPOSE states the objectives of the QMP.
2. SCOPE OF COMPLIANCE lists groups, individuals, activities, or subactivities to which the procedure applies. Limits of applicability and exceptions are clearly defined.
3. DEFINITIONS contains definitions for all terms which are not self-explanatory. The definitions in the QMP shall be consistent with the definitions in the glossary to the YMP-USGS QA Program Plan (QAPP-01, Appendix A).
4. RESPONSIBILITIES defines areas of responsibility for individuals by title.
5. PROCEDURE explains how a function is completed using a sequential listing of steps. A flow diagram may be used to display complicated procedures. QMPs shall contain controls over activities affecting quality that are consistent with the importance of the activities. All or parts of other manuals or publications may be incorporated in a QMP by reference; however, such a reference must be accessible to all YMP-USGS users.
6. RECORDS MANAGEMENT contains two paragraphs. Paragraph 6.1 Controlled Documents lists all controlled documents generated by the QMP that shall be controlled in accordance with QMP-6.01. Paragraph 6.2. Records Center Documents lists all quality assurance records generated during implementation of the QMP. These records shall be submitted to the Records Center in accordance with QMP-17.01.
7. RELATED DOCUMENTS contains two paragraphs. Paragraph 7.1 Superseded Documents specifies any documents superseded by that QMP. Paragraph 7.2 References Cited lists all references mentioned in the QMP.
8. ATTACHMENTS lists the titles of all attachments. The attachments may contain flow diagrams, examples, blank forms, or any other pertinent information.

9. APPROVALS AND EFFECTIVE DATE contains all necessary approval signatures and dates and the effective date of the QMP. The effective date may be any date subsequent to full approval that allows for personnel training as necessary and controlled distribution.

5.3 Review, Approval and Issuance.

5.3.1 The QA Office, or its delegate, shall perform a documented review of the draft QMP to evaluate 1) compliance with QMP-5.03, 2) compliance with the requirements of the QAPP, and 3) interfaces with other documents including potential conflicts with other QMPs. This QA review shall be performed by an individual other than the originator. The suggested format for documenting the QA review is shown in Attachment 1. The QA Manager's approval signature on a QMP denotes that the QA review has been satisfactory.

5.3.2 The YMP Branch Office shall review each QMP for impact on technical or administrative activities and possible conflict with existing USGS policies and procedures. Comment on each draft QMP shall be solicited from both the Geologic Division and the Nuclear Hydrology Program. The approval signature of the Chief, Branch of YMP, denotes that technical management review has been satisfactory.

5.3.3 The Chief, Office of Regional Geology, the Assistant Chief Hydrologist for Program Coordination and Technical Support, and the USGS Assistant Director for Engineering Geology shall review each QMP for policy considerations. Signatures of these approval authorities denote that upper-level management review has been satisfactory.

5.3.4 Upon full approval, the QA Office shall assign an effective date to the QMP and distribute the QMP to controlled distribution according to QMP-6.01.

5.3.5 Upon rejection by any of the approval authorities, the QMP shall be revised as required and resubmitted. The revised version shall undergo full review and approval.

5.4 Change Control.

5.4.1 QMPs in effect on the effective date of this procedure will remain in effect until they are revised or rescinded.

5.4.2 The QA Manager shall evaluate whether a change is minor or major (substantive). Major changes to QMPs shall be subject to the requirements of Paras. 5.1, 5.2, and 5.3.

5.4.3 Rescission of QMPs require a brief justification or explanation and written concurrence of all approval authorities.

6. RECORDS MANAGEMENT.

- 6.1 Controlled Documents: Quality Management Procedures shall be controlled in accordance with QMP-6.01.
- 6.2 Records Center Documents: QMPs and all transmittal memorandums and letters concerning proposed or approved QMPs, changes to or rescissions of, are QA records that shall be submitted to the USGS Records Center in accordance with QMP-17.01.

7. RELATED DOCUMENTS.

7.1 Superseded Documents: This QMP supersedes YMP-USGS-QMP-5.03, R2, Development and Maintenance of Quality Management Procedures.

7.2 References Cited:

- o YMP-USGS-QMP-5.01, Preparation of Technical Procedures
- o YMP AP-1.1Q, Administrative Procedure Preparation
- o YMP-USGS-QAPP-01, YMP-USGS Quality Assurance Program Plan
- o YMP-USGS Management Procedures Manual
- o YMP-USGS-QMP-6.01, Document Control
- o YMP-USGS-QMP-17.01, YMP-USGS Records Management

8. ATTACHMENTS.

Attachment 1: Quality Assurance Review Form for Quality Management Procedures

9. APPROVALS AND EFFECTIVE DATE.

EFFECTIVE DATE: 2/17/89

Jim Willmon 2-17-89  
YMP-USGS QA Manager (Date)

Joseph J. Reunstein for 02-17-89  
Assistant Chief (Date)  
Hydrologist for PC&TS

Larry R. Ham 2/17/89  
Chief, Branch of YMP (Date)

Michael W. Reynolds 17 February 1989  
Chief, Office of Regional (Date)  
Geology

Engene H. Raeborn 2/17/89  
Acting USGS Assistant (Date)  
Director for Engineering Geology

QUALITY ASSURANCE REVIEW FORM  
 FOR QUALITY MANAGEMENT PROCEDURES

Document reviewed: \_\_\_\_\_

Requirement	Sat.	Unsat.	Comments
A. Document meets definition of a QMP. (Reference QMP-5.03, Para 3.1)			
B. QMP is formatted correctly in accordance with QMP-5.03. (Para. 5.2.2.)			
C. Content of sections complies with guidance in QMP-5.03:  1. <u>PURPOSE</u> (Para. 5.2.2-1)			
2. <u>SCOPE OF COMPLIANCE</u> (Para. 5.2.2-2)			
3. <u>DEFINITIONS</u> (Para. 5.2.2-3)			
4. <u>RESPONSIBILITIES</u> (Para. 5.2.2-4)			
5. <u>PROCEDURE</u> includes controls over activities affecting quality consistent with the importance of the activities (Para. 5.2.2-5)			
6.1 <u>Controlled Documents</u> lists all controlled documents generated (Para. 5.2.2-6)			
6.2 <u>Records Center Documents</u> lists all QA records generated during implementation of the QMP (Para. 5.2.2-6)			

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QA REVIEW FORM FOR QMPs (continued)

Requirement	Sat.	Unsat.	Comments
7.1 <u>Superseded Documents</u> lists superseded documents (Para. 5.2.2-7)  7.2 <u>Reference Cited</u> lists references mentioned (Para. 5.2.2-7)  8. <u>ATTACHMENTS</u> lists all attachments (Para. 5.2.2-8)			
D. The QMP complies with following additional requirements of the USGS QAPP (optional):			
E. Any known conflicts or potential conflicts with other QA requirements have been resolved.			

The above QA compliance review has shown the QMP to be  
 ( ) Satisfactory, ( ) Unsatisfactory.

\_\_\_\_\_  
 Printed Name

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date