

YMP-054-R0 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE
7/12/91 DOCUMENT APPROVAL SHEET

Title

PROCEDURE FOR THE SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

NO. AP-6.4Q ²⁷⁴²
[X] Q
[] Non Q

APPROVAL

PROJECT MANAGER: Original Signed by C. P. Gertz 7/13/89
Signature Date

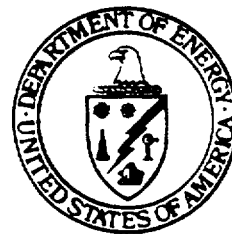
DIRECTOR OF QUALITY ASSURANCE: E. L. Wilmot 7/13/89
Signature Date

N/A : N/A N/A
(OTHER, AS REQUIRED) Signature Date

REVISION 0 EFFECTIVE DATE: 7/28/89

REVISIONS

	INITIAL AND DATE			
	REVISION 1	REVISION 2	REVISION 3	REVISION 4
PROJECT MANAGER: <u>Maxwell Blumford</u> ²⁻¹³⁻⁹²				
DIRECTOR, QA: <u>[Signature]</u> ^{2/13/92}				
Director RSED: <u>[Signature]</u>				
(OTHER, AS REQUIRED) <u>[Signature]</u> ^{2/13/92}				
EFFECTIVE DATE: <u>3/11/92</u>				



Page 1 of 13

TRAINING REQUIRED ☐ YES ☒ N/A

NUMBER OF DAYS REQUIRED FOR TRAINING N/A

COMMENTS: CHANGE PROCEDURE TO PLAYSRIPT FORMAT. NO CHANGE
TO CONTENT

[Signature] FOR
TRAINING OFFICER/TRAINING MANAGER

2-14-92
DATE

QMP-06-04

9204170240 920410
PDR WASTE PDR
WM-11

ENCLOSURE 12

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 2 of 13

1.0 PURPOSE AND SCOPE

1.1 PURPOSE

This procedure describes the Yucca Mountain Site Characterization Project Office (YMP0) requirements and responsibilities for the allocation of Yucca Mountain Site Characterization Project (YMP) geologic specimens. This procedure fulfills the requirements of Section 8 (Identification and Control of items, Samples and Data) and Section 13 (Handling, Shipping and Storage) of the Quality Assurance Requirements Document, DOE/RW-0214, as applicable to the operations and activities in the Drilling Support and Sample Management (DS&SM) Department.

1.2 SCOPE

Geologic specimens provide the basis for developing much of the site characterization data relative to the suitability of Yucca Mountain as a mined geologic repository for high-level radioactive waste. Guidance is given for the control, identification and handling of samples and specimens.

2.0 APPLICABILITY

This procedure applies to all geologic specimens that have been collected or are planned to be collected in support of site characterization and that will be processed by DS&SM Geologic specimens covered in this Administrative Procedure (AP) primarily include those obtained from boreholes and the Exploratory Studies Facility (ESF). Surface outcrop and trench sample shall, if allocation to Principal Investigators (PIs) other than the collector is necessary, be covered by this AP.

3.0 DEFINITIONS

NOTE: Terms in this procedure are used as defined in the Project Glossary. The following additional definitions are adopted for the purposes of this procedure.

3.1 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

The YMP was established by the U.S. Department of Energy (DOE), Nevada Operations Office (NV) to carry out planned and systematic actions to provide sufficient information to expand the public's confidence in the suitability of a mined geologic repository that potentially may be located at Yucca Mountain, Nevada. The allocation and disposition of geologic samples must meet the requirements of 10 CFR Part 60; and the QARD.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 3 of 13

3.2 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE

The YMPO is assigned by DOE/NV to administer and coordinate the management and technical direction of the activities of YMP Participating Organizations and Nevada Test Site (NTS) Support Contractors.

3.3 SAMPLE OVERVIEW COMMITTEE

The Sample Overview Committee (SOC) is a Project-level organization composed of (1) one voting member from each Participating Organization involved in the use of specimens for site investigations in support of site characterization and (2) nonvoting, advisory members from the Technical and Management Support Services (T&MSS) contractor DS&SM, the YMPO Quality Assurance (QA), and the Nevada Site Management and Operating contractor (M&O). The SOC is responsible for ensuring that all YMP Participating Organizations and outside organizations are provided with appropriate geologic specimens related to site characterization activities and that representative samples, if required by the YMPO, are retained for archiving. The SOC reviews specimen requests from various YMP Participating Organizations and outside organizations and, based on present and future YMP needs, makes recommendations on specimen allocations.

3.4 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PARTICIPATING ORGANIZATIONS

Participating Organizations consist of the YMPO, Los Alamos National Laboratory (LANL), Lawrence Livermore National Laboratory (LLNL), Sandia National Laboratories (SNL), the U.S. Geological Survey (USGS); T&MSS [Science Applications International Corporation (SAIC), Harza Engineering Company (Harza), and Westinghouse Electric Corporation (Westinghouse)]; NTS Support Contractors, and any other YMP contractor conducting hydrologic or geologic site investigations and designated by the Yucca Mountain Site Characterization Project Manager (PM) to be an SOC member.

3.5 TECHNICAL AND MANAGEMENT SUPPORT SERVICES CONTRACTOR

The T&MSS contractor (SAIC, Harza, and Westinghouse) provides technical operational management support to the YMPO, which includes the administrative and technical management of DS&SM.

3.6 DRILLING SUPPORT AND SAMPLE MANAGEMENT (DS&SM) DEPARTMENT

T&MSS DS&SM is the organization responsible for the collection, documentation, storage, and control of selected samples, remnants, and records. DS&SM includes the Drilling Support (DS) and the Sample Management Facility (SMF). DS&SM staff consists of management and operations personnel who ensure that DS&SM operations and documentation satisfy applicable regulatory and quality control requirements.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 4 of 13

3.7 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT SAMPLE MANAGEMENT FACILITY

The YMP SMF consists of two storage and handling buildings located in Area 25 of the NTS. These buildings are where geologic samples are received, handled, transferred, processed, archived, and allocated in accordance with YMP requirements. SMF personnel support the SOC by tracking and distributing specimens and documents and by generating sample status reports.

3.8 SAMPLES

A sample is part of a population whose properties are studied to gain information about the whole or group. Geologic, hydrologic, environmental or other types of examinations are conducted on samples or specimens derived from samples. Samples include core, cutting, fluids, and any other geologic samples collected at Yucca Mountain or related field sites.

3.9 ADMITTED SAMPLES

Admitted samples are samples that are in custody at the SMF.

3.10 SPECIMEN

A specimen is a subsection or portion that has been removed from the original sample. Further splits of specimens are subspecimens.

3.11 CORE

A core is a cylindrical section of rock, or fragment thereof, taken as a sample of the interval penetrated by a core bit and brought to the surface for examination and/or laboratory analysis.

3.12 CORE EXAMINATION MEETING

A Core Examination Meeting is periodically held at the SMF during which a group of PIs may examine large intervals of core in order to select specimens.

4.0 RESPONSIBILITIES

The following YMPO individuals or organizations are responsible for activities identified in Section 5.0 of this procedure:

4.1 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT MANAGER

The PM is responsible for designating Participating Organizations to be represented on the the SOC.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 5 of 13

4.2 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT OFFICE REGULATORY AND SITE EVALUATION DIVISION DIRECTOR

The Regulatory and Site Evaluation Division (RSED) Director is responsible for the technical management of site characterization activities, which includes the management of samples by DS&SM. The RSED Director is responsible for approving or disapproving recommendations for specimen requests by the SOC and for appointing the SOC Chairman from the RSED Site Investigation Branch.

4.3 SAMPLE OVERVIEW COMMITTEE CHAIRMAN

The SOC Chairman is responsible for calling and chairing meetings of the SOC, presenting specimen requests from Participating Organizations and non-member organizations to the SOC where appropriate, and presenting the recommendations of the SOC to the RSED Director.

4.4 CURATOR OF THE SAMPLE MANAGEMENT FACILITY

The Curator distributes samples and specimens as directed by the RSED Director and provides the SOC with periodic updated sample status reports. The Curator ensures that records generated by this procedure are submitted to the T&MSS Local Records Center (LRC) within 10 working days.

4.5 SAMPLE OVERVIEW COMMITTEE

Members of the SOC are responsible for representing their organizations' specimen needs and requests, integrating current and future YMP specimen needs, recommending resolution of conflicting specimen requests, and recommending a course of action on all specimen requests to the RSED Director.

4.6 YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION DIRECTOR

The Yucca Mountain Quality Assurance Division (YMQAD) Director is responsible for appointing the QA representative to the SOC.

4.7 TECHNICAL AND MANAGEMENT SUPPORT SERVICES CONTRACTOR

The T&MSS contractor is responsible for appointing the T&MSS representative to the SOC.

4.8 TECHNICAL PROJECT OFFICERS

The Technical Project Officer (TPO) for each of the SOC member organizations is responsible for appointing a representative to the SOC.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 6 of 13

4.9 FIELD OPERATIONS MANAGER

The FO Manager of Sample Management for the YMPO is responsible for preparing sampling instructions based on approved Specimen Removal Requests (SRR) for each borehole.

5.0 PROCEDURE

NOTE: A flowchart of the following processes described in this procedure is attached as Figure 1.

<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
PI/Requestor	1.	Identify specimen need.
	NOTE:	Non-borehole specimens may be removed, without SOC authorization, only by the original collector. Submittal and processing activities are described in AP-6.3Q.
	2.	Prepare SRR including all necessary information.
Participant SOC Representative	NOTE:	If special handling is required the PI should attach a letter explaining the requirements to the SRR.
	3.	Submit SRR to SOC representative of his/her Participating Organization.
	NOTE:	If requestor is not from a Participating Organization the SRR is submitted to the SOC Chairman for processing.
Participant SOC Representative	4.	Review SRR for completeness.
	5.	Submit a copy to the SOC Chairman and the SMF Curator at least three weeks prior to the SOC meeting.
	NOTE:	SRRs submitted within the three week period will be disapproved for that upcoming SOC meeting unless specifically approved by the SOC Chairman.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 7 of 13

<u>RESPONSIBLE PARTY</u>	<u>STEPS</u>	<u>PROCEDURE</u>
SMF Curator	6.	Compile all SRRs and prepare a report for distribution to SOC members.
	7.	Distribute report to SOC Chairman and all SOC Representatives.
	NOTE:	Participant SOC Representative and/or PI should review report for conflicting specimen requests and attempt to resolve conflicts prior to the SOC meeting.
SOC	8.	Review and evaluate SRR at the SOC meeting. This includes any unresolved conflicting requests that remain.
	NOTE:	Requests may be presented by the SOC representative or PI at the discretion of the SOC representative. Requests are evaluated on the basis of other requests or allocations existing for a specimen location, the suitability of a specimen for the test or analysis, and the requirements of the PIs responsible for the programs of a given borehole.
	9.	Recommend to approve, disapprove, or table the specimens and indicate action to be taken by the DS&SM in the comment section of the SRR.
	NOTE:	Recommendation is by simple majority.
	a.	If approved, sign, and return to SMF Curator. Go to step 11.
	b.	If disapproved, sign SRR and return to the Participant SOC Representative.
	NOTE:	A disapproved request for specimens maybe revised and resubmitted by the requestor on a new SRR for consideration at the next SOC meeting.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 8 of 13

RESPONSIBLE PARTY

STEPS

PROCEDURE

- c. If tabled, request will be resolved at the next SOC meeting or prior to the borehole being drilled. Sign and return to SMF Curator. Go to step 6.

SMF Curator

10. Submit signed SRR to RSED Director for final approval or disapproval and signature.

RSED Director

11. Review SRR for approval or disapproval.

12. Recommend to approve or disapprove.

- a. If approved, RSED Director shall sign the SRR and return it to the SMF Curator. Go to step 14.

- b. If the SRR is disapproved, the RSED Director shall sign and return the SRR to the SOC along with reason for disapproval.

NOTE: Disapproved requests for specimens may be revised and resubmitted by the requestor on a new SRR for consideration at the next SOC meeting.

SMF Curator

13. Distribute a copy of the approved SRR to the requestor, and submit the original to the appropriate SMF or DS staff.

SMF Staff/DS Staff

14. Implement specimen removal/collection program.

15. Submit records to Administrative Personnel.

Administrative Personnel

16. Submit quality affecting records to LRC as required by the current procedure for records submittal.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 9 of 13

6.0 REFERENCES

NOTE: Refer to the latest revision of the documents listed below unless otherwise stated.

6.1 REQUIREMENTS DOCUMENTS

DOE/RW-0214, Quality Assurance Requirements Document (QARD)

10 CFR Part 60, Disposal of High-Level Radioactive Wastes in Geologic Repositories

6.2 INTERFACE DOCUMENTS

AP-6.3Q, Interaction of Participants and Outside Interests with Yucca Mountain Project Sample Management

7.0 FIGURES AND ATTACHMENTS

Figure 1, AP-6.4Q Flowchart

Attachment 1, SOC Specimen Removal Request

8.0 RECORDS

Records packages of documentation generated as a result of this procedure shall be assembled and then submitted to the appropriate LRC in accordance with requirements specified in approved procedures. QA records shall be those records so designated by the YMPO during the processes described in this procedure.

The SMF Curator shall ensure that the following QA record resulting from implementation of this procedure is turned over to the appropriate LRC at least every 10 business days:

SOC Specimen Removal Request.

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 10 of 13

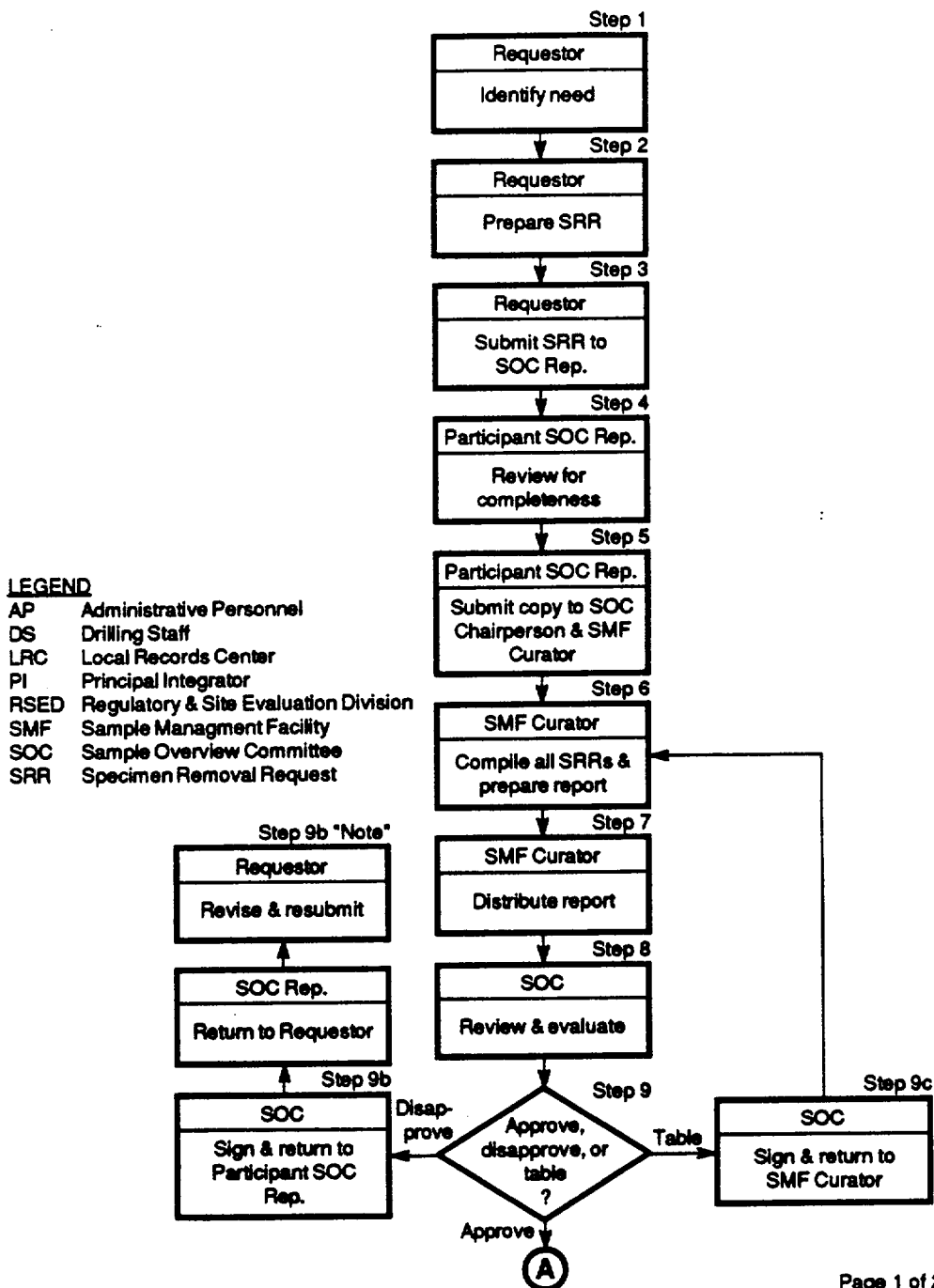


Figure 1 - AP-6.4Q Flowchart

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT PROCEDURE

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 11 of 13

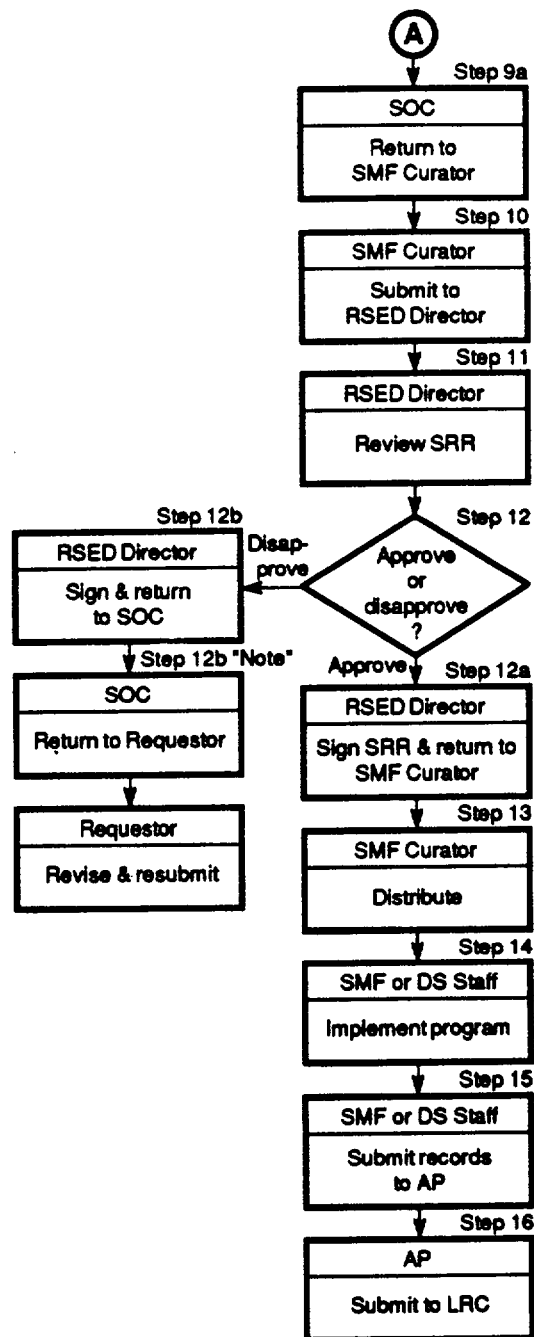


Figure 1 - AP-6.4Q Flowchart. (continued)

Page 12 of 13

YMP-055-R1 YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT
3/11/92
SAMPLE OVERVIEW COMMITTEE
SPECIMEN REMOVAL REQUEST

Approved (A), Disapproved (D), Tabled (T)

[illegible]

AP-6.4Q

Exhibit 1. SOC Specimen Removal Request

Procedure No.: AP-6.4Q PROCEDURE FOR THE
SUBMITTAL, REVIEW, & APPROVAL OF
REQUESTS FOR YMP GEOLOGIC SPECIMENS

Revision:
1

Page 13 of 13

[illegible]