

**OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
U.S. DEPARTMENT OF ENERGY  
WASHINGTON, D.C.**

ORIGINATING ORGANIZATION

RW-3

DATE OF TRANSMITTAL

07/11/89

**SECTION A**

**DOCUMENT TRANSMITTAL**

TO: KENNEDY, JIM  
SECTION LEADER, QUALITY ASSURANCE SECTION  
REPOSITORY, LICENSING & QA PROJECT DIRECTORATE, NRC

WASHINGTON DC 20555-0000  
00277

DOCUMENT(S) TRANSMITTED:

Controlled Copy No. 00277, DOE/RW-0197, "Quality Assurance  
Administrative Procedures Manual", Table of Contents, Rev.4;  
and QAAP 3.5, Rev.0.

INSTRUCTIONS TO RECEIPT:

RESPONSE DUE DATE

08/22/89

- 1) Remove Table of Contents, Rev.3 and replace with Table of Contents, Rev.4.
- 2) Insert QAAP 3.5 behind the proper tab.
- 3) Mark removed copies as "Superseded" or destroy.
- 4) Acknowledge receipt of these documents and completion of above instructions by signing, dating, and returning this Transmittal on or before the indicated due date.

**SECTION B**

**ACKNOWLEDGMENT**

COMMENTS:

ACKNOWLEDGEMENT SIGNATURE:

DATE:

RETURN SIGNED TRANSMITTAL TO: US DEPARTMENT OF ENERGY, OCRWM RW-3  
1000 Independence Ave. SW  
Washington DC 20585 ATTN: Ms. Jennings

**SECTION C**

**DISTRIBUTION**

8907210129 890710  
PDR WASTE PDC  
WM-1

REV. 1/89



OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
QUALITY ASSURANCE ADMINISTRATIVE PROCEDURE

TITLE: PREPARATION OF TECHNICAL DOCUMENTS

Procedure No.:  
QAAP 3.5

Revision:  
0

Date:  
08/14/89

Page:  
1 of 8

Director, OCRWM

Date:  
7/10/89

Director, OQA

Date:  
7/10/89

1.0 PURPOSE

The purpose of this procedure is to establish requirements and a process for managing the preparation of technical documents for the Office of Civilian Radioactive Waste Management (OCRWM) Program.

2.0 SCOPE

This procedure shall be implemented for the preparation of technical documents, as specified in the OCRWM QA Controls Matrix, developed in accordance with QAAP 2.3, "Establishing Quality Assurance Controls," for the associated OCRWM work.

3.0 REFERENCES AND DEFINITIONS

3.1 REFERENCES

- 3.1.1 "Quality Assurance Requirements for the Civilian Radioactive Waste Management Program," (QAR) DOE/RW-0214. (HQO.890109.0002)
- 3.1.2 "Quality Assurance Program Description for the Civilian Radioactive Waste Management Program," (QAPD) DOE/RW-0215. (HQO.890109.0003)
- 3.1.3 QAAP 3.1, "Technical Document Review." (HQO.890109.0015)

3.2 DEFINITIONS

- 3.2.1 The definitions of standard terms may be found in the Glossary contained in reference 3.1.1.
- 3.2.2 Technical Document - A document that specifies scientific or engineering requirements, presents scientific or engineering information or data, or describes scientific or engineering processes.



3.2.3 Technical Document Management Plan - A document used as an internal OCRWM planning and coordination tool. The plan includes a description of the technical document and information regarding the planned objective, purpose, scope, schedule, important technical aspects of the final product, and major milestones. It describes the technical tasks and activities or work that must be accomplished, the completion dates, and establishes responsibility for accomplishment. It should also stipulate sufficient information concerning the format, style and content of the documents, as well as the Quality Assurance Controls, timeliness, analysis methodology (including acceptability of computer codes), and sources of data utilized, that approval of the technical document management plan can be accomplished.

#### 4.0 RESPONSIBILITIES

##### 4.1 ASSOCIATE DIRECTORS

Associate Directors or designees have overall responsibility for:

4.1.1 Technical documents and technical document management plans originated within their primary areas of responsibility and for initiating the development of those technical documents.

##### 4.2 ASSOCIATE DIRECTOR FOR FACILITIES AND SITING DEVELOPMENT (FSD)

In addition to the responsibilities identified in 4.1, the Associate Director for FSD, or designee, is responsible for:

4.2.1 Preparing and maintaining this QAAP.

##### 4.3 DIRECTOR, OFFICE OF QUALITY ASSURANCE (OQA)

The Director, OQA, or designee is responsible for:

4.3.1 Reviewing, concurring, and approving the technical document management plans that identify hold points for QA surveillances, if the surveillances are planned to include participation of OQA personnel.

##### 4.4 DIVISION DIRECTORS

Division Directors or designees are responsible for:

4.4.1 Approval of technical document management plans prepared within their primary area of responsibility.



#### 4.5 BRANCH CHIEFS

Branch Chiefs or designees are responsible for:

4.5.1 Developing technical documents; and

4.5.2 Directing preparation of technical document management plans.

#### 5.0 GENERAL

5.1 The wide diversity of technical documents developed by OCRWM makes it difficult to provide a single detailed procedure governing preparation. Each technical document tends to have a unique purpose and developmental approach. Consequently, for each technical document subject to this QAAP, a technical document management plan will be prepared detailing an approach specific to that document or set of documents. The technical document management plan shall incorporate the requirements set forth in Section 6.0 and Attachment I. The technical document shall follow the technical document management plan.

5.2 If the document to be generated will be used in the design process, the Technical Approach section of the technical document management plan shall include the required controls listed in Attachment II.

#### 6.0 PROCEDURE

##### 6.1 MANAGEMENT PLAN DEVELOPMENT

6.1.1 Upon identifying the need for a technical document or when requested by higher-level management, the responsible Branch Chief shall direct the preparation of technical document management plans. The plans shall include:

- a) Objective and scope of the management plan;
- b) Description of the final products to be produced by execution of the management plan;
- c) Responsibilities for the development of the technical document; and
- d) Schedule for preparing, reviewing, and issuing the technical document.

6.1.2 Technical document management plans that identify hold points for QA surveillances are to be submitted to the Director, OQA, for review, concurrence, and approval.



6.1.3 The final technical document management plan containing the information outlined in Attachment I shall be approved by the cognizant Division Director.

6.1.4 Revision to the technical document management plan shall meet the same requirements as the technical document management plan and require the same reviews, concurrences, and approvals.

6.2 DOCUMENT DEVELOPMENT

6.2.1 The technical document shall be prepared in accordance with the approved technical document management plan.

6.2.2 Revisions to the technical document shall be prepared in accordance with the technical document management plan or approved revision thereto.

6.3 TECHNICAL REVIEW

6.3.1 Prior to initial technical review, interaction with affected branches, project offices, or other external offices is suggested. Such interaction can facilitate development of the technical approach and document structure, identify and resolve potential issues, and avoid potential conflicts.

6.3.2 When specified in the approved technical document management plan and when the preparer and responsible Branch Chief agree that development of the document is sufficiently advanced to satisfy the objectives stated in the technical document management plan, the technical document shall be reviewed, and comments documented and resolved, in accordance with reference QAAP 3.1, "Technical Document Review."

7.0 RECORDS

7.1 Documents resulting from implementation of this procedure are maintained in accordance with requirements specified in QAAP 17.1, "QA Records Management." At a minimum, the technical document management plans and technical documents resulting from implementation of this procedure are considered QA records.

8.0 ATTACHMENTS

- 8.1 Attachment I - Technical Document Management Plan Content
- 8.2 Attachment II - Technical Document Design Process Controls
- 8.3 Attachment III - QAAP 3.5 Flowchart



**ATTACHMENT I**

**TECHNICAL DOCUMENT MANAGEMENT PLAN CONTENT**

**OBJECTIVE**

Briefly describe the technical document to be produced by execution of this technical document management plan.

**SCOPE**

Describe the range of activities, affected organizations, and the time frame for execution of the plan. Also discuss limitations of this technical document management plan, especially in terms of the depth of planning. Identify areas of the technical document management plan that will be revised when more specific information is available.

**REFERENCES**

List references cited in the technical document management plan.

Use, as references, existing documents, data bases, procedures, systems, descriptions, specifications, and standards, when possible. Only include citations needed for clarity.

**DEFINITIONS**

Always use definitions provided in the Glossary of DOE/RW-0214, "Quality Assurance Requirements for the Civilian Radioactive Waste Management Program." These should not be repeated in the management plan.

Provide definitions of words or phrases that have special meaning or connotations that may be unfamiliar to the reader.

**BACKGROUND**

Provide background information that will put the plan and its end products into perspective. Highlight the affected organizational elements involved in the management plan.

**DESCRIPTION OF THE TECHNICAL DOCUMENTS**

Describe technical documents expected to result from execution of the plan. Provide qualitative and quantitative specifications including an annotated general table of contents specifying major components of the document. If final product or specifications are not available, provide criteria and minimum requirements by which acceptability will be judged.



ATTACHMENT I (Cont'd)

TECHNICAL APPROACH

Describe the general technical approach taken in development of the technical documents. As a minimum, the technical approach shall:

- a) Identify the major tasks or activities that will be the subjects of individual reports;
- b) Specify the general format, style and content guides for reports subject to each management plan;
- c) Specify the Quality Assurance Controls of the analyses and computer codes to be used in production of the document;
- d) Where possible, specify the general methodology to be used in analyses;
- e) Identify any hold points or prerequisites that must be met. Criteria for hold points or prerequisites shall be specified in the OCRWM QA Controls Matrix, developed in accordance with QAAP 2.3, "Establishing Quality Assurance Controls;"
- f) Identify personnel and/or organizations responsible for each major task and the qualifications required of document preparers;
- g) Identify procedures for interaction with affected parties;
- h) State when the initial technical review will be conducted; and
- i) Identify document approval and control procedures.

Provide guidance on developing bases for conclusions, or whether any conclusions or policy matters should be discussed in the report. Particularly, indicate whether the report should discuss the following policy matter: do the data and analyses indicate that regulatory requirements will or will not be met.

QUALITY ASSURANCE

Refer to QAAP 2.3, "Establishing Quality Assurance Controls."

MILESTONES

List the major milestones that must be accomplished. Indicate scheduled completion dates and acceptance criteria to be used to measure satisfactory completion.



**ATTACHMENT II**

**TECHNICAL DOCUMENT  
DESIGN PROCESS CONTROLS**

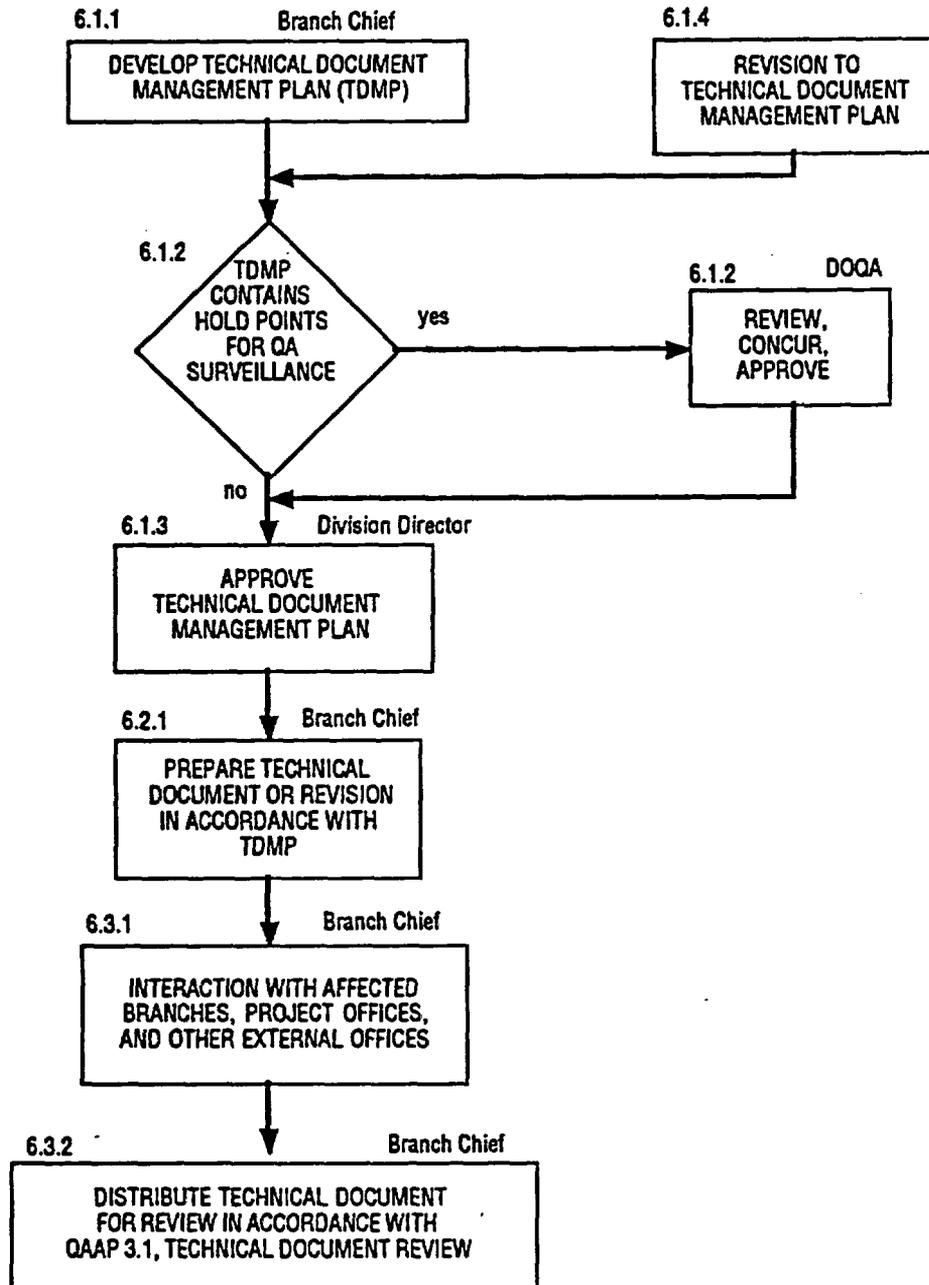
When preparing a technical document that will be used in the design process, the step-by-step process used to prepare the technical document needs to be addressed, including:

- a. Criteria to be used in identifying applicable source documents and requirements (to ensure consistency during the decision process);
- b. The method for identifying, approving and documenting input sources and rationale for exclusion of specific input sources (or specific requirements in an included source);
- c. The method for ensuring the traceability and (if necessary) verifying the validity of information used as input to the document (i.e., a peer review or design review might be required for data or design documents to be used as input);
- d. Traceability from input sources through the process steps to the final product;
- e. Criteria to be used in translating source information into a form suitable for use in the technical document;
- f. The level of detail and structure of the technical document;
- g. The technical document review and approval process, e.g., provisions for "in-process" reviews and, for certain documents, peer reviews and design reviews of the final product); and
- h. The records identification and generation requirements (records should be sufficient to validate the process steps and methods used to prepare the technical document).



ATTACHMENT III

PREPARATION OF TECHNICAL DOCUMENTS



**QUALITY ASSURANCE ADMINISTRATIVE PROCEDURES**

**3.5**

The following number is for OCRWM records management purposes only and should not be used when ordering this publication.

Accession No.: HQO.890109.0019



OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
QUALITY ASSURANCE ADMINISTRATIVE PROCEDURE

TITLE: TABLE OF CONTENTS

Procedure No.: N/A	Revision: 4	Date: 07/10/89	Page: 1 of 1
-----------------------	----------------	-------------------	-----------------

<u>No.</u>	<u>Title</u>	<u>Rev.</u>	<u>Effective Date</u>
2.1	Indoctrination and Training	0	03/27/89
2.3	Establishing Quality Assurance Controls	0	06/19/89
2.5	Quality Assurance Program Document Review	0	03/27/89
2.6	Readiness Review	0	03/27/89
2.7	Management Assessment	0	06/19/89
3.1	Technical Document Review	0	03/27/89
3.2	Design Review	0	03/27/89
3.3	Peer Review	0	03/27/89
3.5	Preparation of Technical Documents	0	08/14/89
4.1	Procurement Document Review	0	07/10/89
5.1	Preparation of Quality Assurance Administrative Procedures	0	03/27/89
16.1	Corrective Action	0	03/27/89
16.2	Stop Work	0	07/17/89
18.1	Certification of Audit Personnel	0	03/27/89
18.2	Audit Program	0	03/27/89
18.3	Surveillance Program	0	03/27/89