

Readiness Review Plan
for
Civilian Radioactive Waste Management System
Management and Operating Contractor

Quality Assurance Program

March 3, 1992

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1. INTRODUCTION AND OVERVIEW

This Review Plan has been prepared on behalf of the Chairperson, CRWMS M&O Readiness Review Board, in accordance with the criteria of QAP-2-6, Readiness Review. The Chairperson is acting under the authority of the General Manager, CRWMS M&O, to conduct this assessment of the readiness of the M&O Quality Assurance (QA) Program. This review is limited to quality affecting work (QAW) to be performed under the M&O QA program in accordance with tasking received from the Office of Civilian Radioactive Waste Management (OCRWM), Department of Energy (DOE). The M&O contract Statement of Work (SOW) defines a transition phase which covers a period of time of approximately 20 months from contract award to completion of phase-in of work from existing contractors. During the transition phase, the M&O is to organize, staff, develop/implement management control systems and a QA program, train personnel and complete the readiness process to begin technical work. The completion of the M&O management control system has been impacted by the OCRWM Management System Improvement Strategy (MSIS), in which the M&O has been a major participant. That strategy included a complete review of the hierarchy of management control documents and the relationship of Program and Project documents as well as the relationship of OCRWM and M&O documents. Closure on those issues was achieved on November 19, 1991, and will allow the M&O to complete its management control system. In order to proceed with the limited QAW directed by OCRWM for the M&O in FY92, which must be performed under the M&O QA program, the M&O proposed to the Director, M&O Management Division, OCRWM, on November 15, 1991, a three phased approach to allow the M&O to achieve readiness. Approval was received on November 22, 1991, to proceed with that approach. It consisted of a review of the M&O Nevada Site FY92 scope of work in December 1991, a review of the Monitored Retrievable Storage (MRS) design activities using M&O procedures in February 1992, and will conclude with this review of the readiness of the M&O to execute its full responsibilities, both in QA and management control, in April/May 1992. This review is limited to QA activities. The management control review will be conducted separately.

2. SCOPE

The scope of this review is to evaluate the readiness of the M&O contractor to execute its full responsibilities for the Design phase, including Procurement, of the M&O QA program as identified in the existing Scope of Work. Work scope is as assigned by OCRWM in accordance with DOE Order 5700.7b, Work Authorization System, and in support of the CRWM Program as outlined in the contract Statement of Work dated January 18, 1992. OCRWM approval will be facilitated by having observers with the Readiness Review Team and members on the Readiness Review Board.

This review will verify the readiness to perform the tasks which will be accomplished under the M&O QA program. These tasks are within the scope of the following NQA-1, Quality Assurance Requirements for Nuclear Facilities, and the OCRWM Quality Assurance Requirements Document (QARD) basic requirements:

- Requirement 1 - Organization
- Requirement 2 - Quality Assurance Program
- Requirement 3 - Design Control
- Requirement 4 - Procurement Document Control
- Requirement 5 - Instructions, Procedures and Drawings
- Requirement 6 - Document Control
- Requirement 7 - Control of Purchased Items & Services
- Requirement 16 - Corrective Action
- Requirement 17 - Quality Assurance Records
- Requirement 18 - Audits.
- Requirement 19 - Computer Software

The Attribute List for these areas will be based on the NQA-1 and the OCRWM QARD criteria.

2.1 TASK ASSIGNMENTS

The tasks assigned to the M&O are defined in accordance with the Program Work Breakdown Structure (WBS) (see Attachment I).

3. OBJECTIVES

The following objectives are established for this review:

- Verify readiness to accomplish the tasks to be performed under the M&O QA program considering the three readiness review criteria of the OCRWM QARD, paragraph 2.4:
 - Work activity prerequisites have been satisfied
 - Detailed technical and QA program administrative procedures appropriate for defined work are in place
 - Process for ensuring that personnel are suitably trained and qualified is in place.
- Hold points and open items identified from the Nevada Site and MRS Design Readiness Reviews will be reviewed for proper closure.

4. REFERENCE DOCUMENTS

The following references will provide the basis for this review:

- **Contract Statement of Work, dated January 18,1991.**
- **Letter, John W. Bartlett, Director, OCRWM, to Roland L. Robertson, General Manager, M&O, dated September 30, 1991.**
- **Letter, Roland L. Robertson, General Manager, M&O, to Trudy Wood, Director, M&O Management Division, OCRWM, dated November 15, 1991.**
- **CRWMS M&O Ramp-up Plan, dated June 12,1991.**
- **ASME, NQA-1-1989 Edition, Quality Assurance Program Requirements for Nuclear Facilities.**
- **Quality Assurance Requirements Document for the Civilian Radioactive Waste Management Program, (QARD), DOE/RW-0214, Revision 4.**
- **CRWMS M&O Quality Assurance Program Description (QAPD), Revision 2.**
- **CRWMS M&O Quality Administrative Procedure, QAP-2-6, Readiness Review, Revision 0.**
- **DOE Order 4700.1, Project Management System.**
- **DOE Order 5700.B, Work Authorization System.**
- **M&O Quality Administrative Procedures and Implementing Line Procedures**
- **M&O Readiness Review Reports for M&O Nevada Site and MRS Design.**

5. READINESS REVIEW GUIDELINES

The M&O General Manager directed this review on February 18, 1992, and provided the guidelines for conducting this review (see Attachment II). The review has been scheduled for April 8-10, 1992. As noted in his direction, the Readiness Reviews for M&O Nevada Site and MRS Design shall be considered in this Readiness Review. It is important for the review team to understand that this is a review of the entire M&O scope of work. The review will verify the readiness to perform those tasks.

6. READINESS REVIEW ASSUMPTIONS

The primary assumptions for this review are based on those management control alternatives proposed by the M&O and accepted by OCRWM in the absence of Program documents described in the Contract Statement of Work that were the subject of the task force on the hierarchy of documents. The following are the applicable baseline documents for this review:

- **M&O QA Program**
 - **Current OCRWM QARD**
 - **M&O QAPD**
 - **QAP-2-3, Grading**
 - **Software Quality Assurance Plan (QAPD Section 19)**
 - **QAPs/ILPs required by the scope of work**
- **M&O Management Plan**
- **M&O Systems Engineering Management Plan (SEMP)**
- **M&O Configuration Management Plan (CMP).**

7. READINESS REVIEW SCHEDULE, PARTICIPANTS AND PROCESS

7.1 SCHEDULE

The Readiness Review is structured around the following significant milestones:

- **Develop Draft Readiness Review Plan - February 17, 1992**
- **Readiness Review Board Review Draft Plan - February 18, 1992**
- **Readiness Review Board Approve Plan - March 3, 1992**
- **Develop Attributes Lists and Conduct Review - March 4 - April 10, 1992**
 - **M&O Formal Review - April 8-10, 1992**
- **Develop Readiness Review Report - April 10-22, 1992**
- **Readiness Review Board Approve Report - April 22, 1992**
- **General Manager approve Report - April 24, 1992.**

7.2 PARTICIPANTS

The key participants in the Review are the Readiness Review Board and the Readiness Review Team.

7.2.1 To provide an independent review of the determinations of the Readiness Review Team, the M&O General Manager has appointed a Review Board with membership external to the M&O that provides experience in large scale program management as well as nuclear quality assurance. The Board membership is as follows:

- Nat Trembath - Chairperson
- Steve Lukasik
- Paul Schwegler
- Lionel Skidmore
- Jim Wells
- Ram Murthy - DOE Member
- DOE Member
- NRC Observer.

As former and current senior executives at Group and Sector levels within TRW, the first four members bring an extensive management background in program management with particular emphasis on the systems engineering approach in support of government projects. Jim Wells has managed quality assurance programs in support of NRC projects; has extensive experience in a variety of roles within the nuclear industry; and is a member of the ASME Main Committee on Nuclear Quality Assurance. The M&O Board Members received orientation on the CRWMS program and received training on the OCRWM QARD and the M&O QAPD, and have been provided a copy of QAP-2-6, Readiness Review, for reading. This training has been documented in accordance with QAP-2-1, Indoctrination and Training. The DOE members have been provided a copy of the M&O QAPD and QAP-2-6 for reading.

7.2.2 The General Manager has appointed the Assistant General Manager, Operations, Ray Godman, as the Readiness Review Team Leader, who has, in turn, appointed the following Readiness Review Team with responsibilities appropriate for the scope of this review:

- Tom Faries - Team Secretary
- Dan Jennings - Records Management, Document Control
- Bob Morgan - Quality Assurance Program
- Bob Sandifer - Design Controls
- Pete West - Software
- Ron Ruth - Procurement
- DOE Observers
- NRC Observer.

The qualifications and training of the M&O team members are documented in accordance with QAP-2-1, Indoctrination and Training, and QAP-2-2, Verification of Personnel Qualifications.

- 7.2.3** OCRWM has designated members on the Readiness Review Board and observers of the Readiness Review Team to facilitate authorization for the M&O to commence work at the completion of the review; however, the responsibility for the adequacy of the Board and Team to fulfill the objectives of the Review and the requirements of QAP-2-6 remains with the M&O.

7.3 PROCESS

The review will be conducted in accordance with the process defined in QAP-2-6, Readiness Review, and using the flow chart in Attachment III.

- 7.3.1** Upon approval of this plan by the Readiness Review Board, the Readiness Review team will develop the Attribute List using the assumptions of this plan, the scope of work as defined by the Work Authorization System, and criteria of the NQA-1 and the OCRWM QARD.

- 7.3.2** The Readiness Review Team Leader will approve the Attribute List.

- 7.3.3** Prior to the formal beginning of the Review, individual members of the Review Team will complete the review of documents and procedures in support of the objectives of the review.

- 7.3.4** The review will formally begin with an introduction by the Readiness Review Team Leader. This presentation will address the following:

- Readiness requirements
- M&O readiness strategy
- Assumptions of the review
- Roles and responsibilities of the review participants.

- 7.3.5** The M&O Quality Assurance Manager will then present the following information:

- M&O QA organization
- Implementation of the M&O QA Program for the M&O work scope
- Scope of work
- List of QAW activities to be performed under M&O QA program

- Qualification of personnel and determination of staffing requirements
- Process for identifying required procedures.

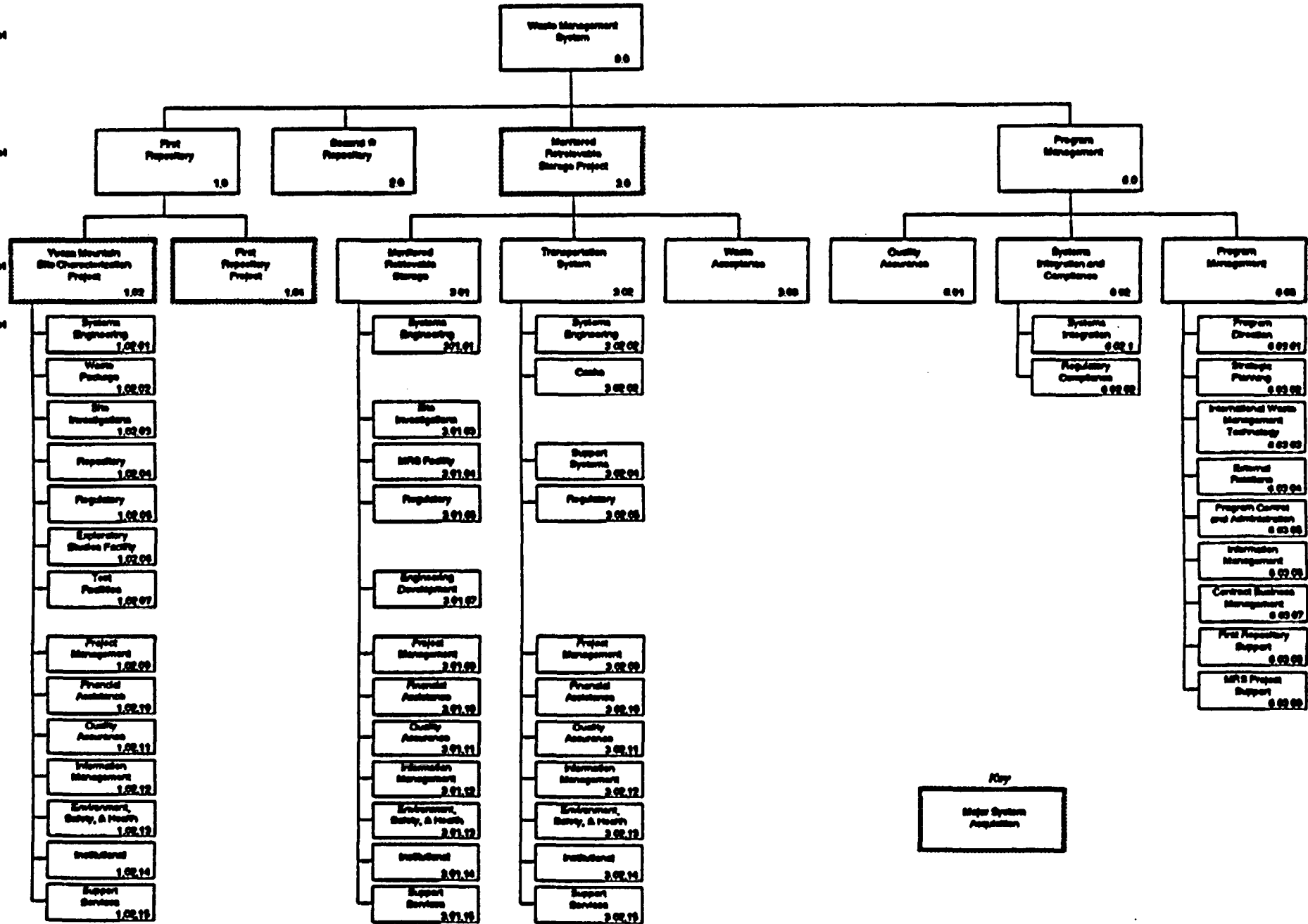
- 7.3.6** Upon the completion of the site presentation, the Review Team will conduct the Readiness Review and complete the Attribute Lists by referring to the presentation, referring to previously reviewed documents and records and by individual or group discussions with site personnel. The sample matrix in Attachment IV will be completed to identify the tasks to be performed under the M&O QA program and to verify the QA prerequisites for these tasks.
- 7.3.7** Observers shall only interact with members of the Readiness Review Team. Any questions, other than minor clarifications, shall be presented to a team member using the form in Attachment V. Documents, files and procedures may be reviewed in conjunction with a team member during the review; however copies will not be provided.
- 7.3.8** Upon completion of the Attribute List the Review Team will prepare a report and a summary presentation for delivery by the Readiness Review Team Leader to the Readiness Review Board on April 22, 1992. The report will include a review of any Open Item Reports generated during the review; actions required to close the Open Item Report and its impact on readiness. Any recommended hold points as a result of Open Item Reports will be clearly identified. The report to the Board will conclude with an overall recommendation for the Board's consideration regarding readiness to proceed with the defined scope of work.
- 7.3.9** The Readiness Review Board will accept the report as written or direct changes to incorporate the Board's determination of the adequacy of the Review and their recommendation to the General Manager regarding readiness. A summary of the Board's recommendations will be provided to the General Manager.
- 7.3.10** The General Manager will consider the report of the Readiness Review Board and announce his determination to OCRWM by April 24, 1992.

8. ATTACHMENTS

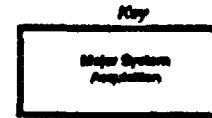
- 8.1** ATTACHMENT I - Program Work Breakdown Structure
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ATTACHMENT I
PROGRAM WORK BREAKDOWN STRUCTURE

Readiness Review



• Inactive Future Element



ATTACHMENT II
READINESS REVIEW IOC
(Dated February 18, 1992)

INTEROFFICE CORRESPONDENCE
TRW Environmental Safety Systems Inc.



Subject	Date	From
Readiness Review	February 18, 1992	R. Robertson
To	cc	Location/Phone
J. Brackett		TES1/8588
D. Foust		204-8564
R. Godman		
A. Greenberg		
R. White		
G. Vawter		

In accordance with the CRWMS M&O QAPD, dated June 14, 1991, and QAP 2-6, Readiness Review, dated November 18, 1991, I am directing a Readiness Review of the M&O Quality Assurance Program. The review will address all activities necessary to execute our Quality Affecting Work responsibilities and will complete the three phased review of the M&O QA Program. I have appointed Nat Trembath to serve as Chairperson of the Readiness Review Board and Ray Godman as the Review Team Leader. Enclosed is a list of the review participants.

This review will verify satisfaction of all M&O work activity prerequisites; verify appropriate procedures are in place; and verify personnel are trained and qualified. Readiness Reviews of the Nevada Site and the MRS Design, along with QA program audits are to be reviewed and evaluated as part of this review.

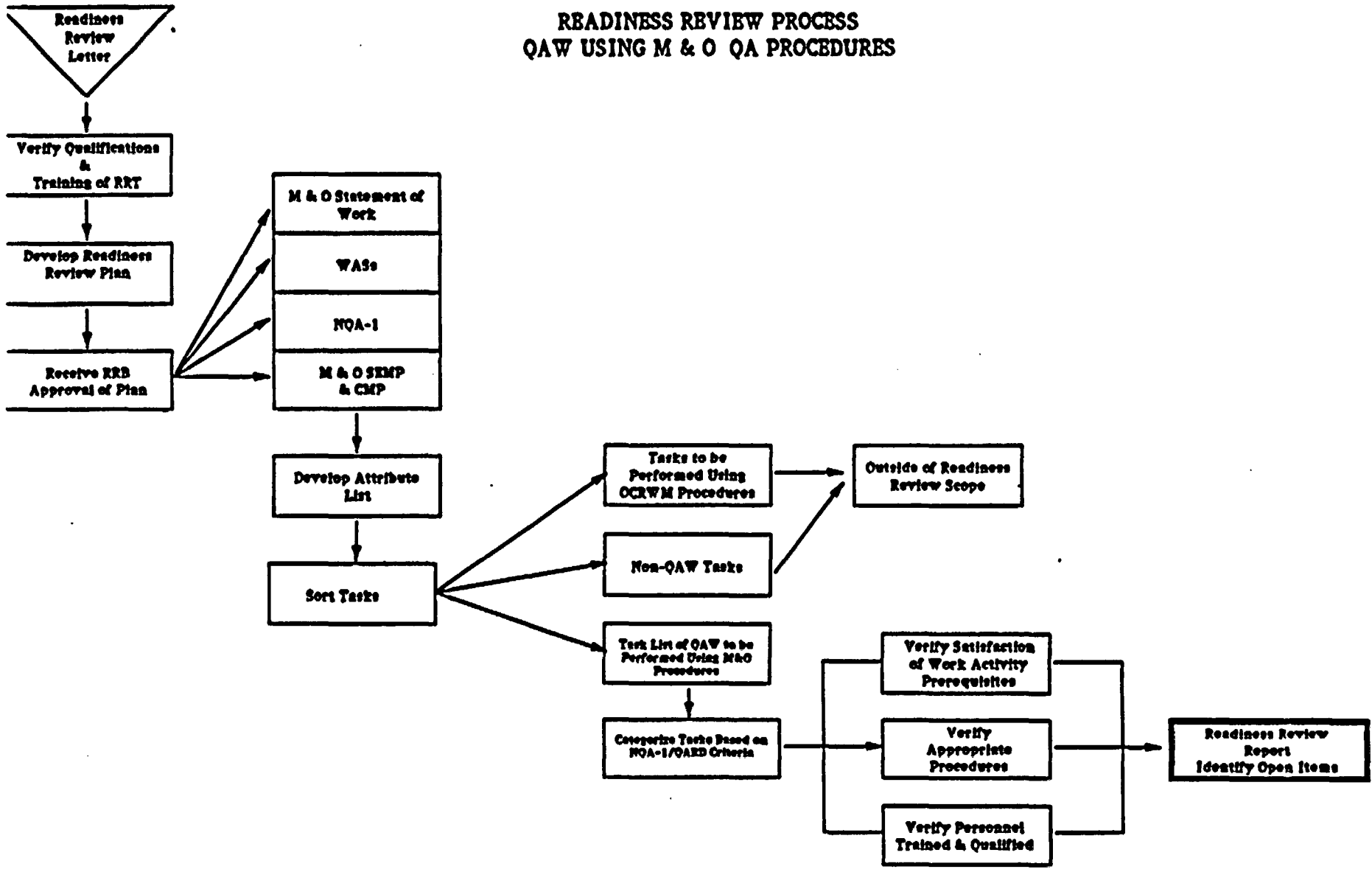
The Readiness Review Team Leader is responsible for determining the prerequisites for Readiness in accordance with QAP-2-6 and consistent with the defined scope of work.

Enclosures: Readiness Review Participants
Readiness Review Schedule

RLR:agc

ATTACHMENT III
READINESS REVIEW PROCESS FLOWCHART

READINESS REVIEW PROCESS QAW USING M & O QA PROCEDURES



**ATTACHMENT IV
TASK MATRIX**

**ATTACHMENT V
OBSERVER QUESTION FORM**

Readiness Review

Observer Question

Observer Name

Agency Represented

Question (Please be as specific as possible, citing reference if available)

Readiness Review Team Reply

Approved:

Readiness Review Team Leader