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OGR/B-3 101.2
Revision 1

OFFICE OF GEOLOGIC REPOSITORIES

QUALITY ASSURANCE PLAN

FOR

HIGH-LEVEL RADIOACTIVE WASTE REPOSITORIES

July
1986

U.S. Department of Energy
Office of Civilian Radioactive Waste Management

APPROVED _____
Director, Siting, Licensing and QA Division

APPROVED _____
Associate Director, Office of Geologic Repositories

AUTHORIZED

_____
Director, Office of Civilian Radioactive Waste Management

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SECTION 1

INTRODUCTION

1.1 GENERAL

The assurance of quality achievement is a continuing commitment of managers at all levels in the Office of Geologic Repositories (OGR) Program. Well defined quality assurance (QA) program requirements are to be established and effectively implemented by all participating organizations. Responsibility for QA is not limited to QA personnel at OGR headquarters or in the project offices. All OGR and project management, technical, and administrative personnel are to participate in QA program planning and implementation and shall comply with the requirements of this QA plan and the QA plans for their respective organizations. They will execute their responsibilities as defined in the QA plans and QA procedures.

1.2 PURPOSE

The purpose of this document is to set forth geologic repository program-wide QA requirements and define management's QA responsibilities for the Office of Geologic Repositories (OGR) and its projects.

1.3 APPLICABILITY

The QA requirements specified herein are applicable to headquarters, the project offices, and their contractors who are assigned responsibilities for performing and verifying activities affecting quality during site characterization, facility construction, repository operation, performance confirmation, decommissioning, permanent closure, and dismantling of surface facilities. The technical activities necessary for the development of the geologic repository system, as are described in system acquisition and management documents, such as the OGR and Project level systems-engineering management plans (SEMP), will be subject to the requirements of the QA program described in this QA Plan.

The QA program requirements will be applied, in a defined graded manner, to all items and activities that have regulatory and licensing significance, as well as to those which are important to the achievement of other OGR programmatic objectives. Supplement #8 to this QA Plan describes the three quality levels, with defined QA requirements for each level, for graded QA application. Each item or activity will be assigned to one of these quality levels and corresponding applicable QA requirements specified by program and project technical and QA personnel.

1.4 DEFINITIONS

The following definitions apply to terms unique to this document. Additional QA definitions are contained in the OCRWM Quality Assurance Management Policies and Requirements (QAMPR) document and in ANSI/ASME NQA-1-1983, Quality Assurance Program Requirements for Nuclear Facilities (hereinafter called NQA-1). These definitions also apply to the Supplemental QA Requirements identified in Section 5 of this document.

1.4.1 Contractor means any organization under contract to provide supplies, items, or services to the project office and includes prime contractors, integrating contractors, national laboratories, support contractors, architect/engineers, construction managers, government agencies, and other participating organizations.

1.4.2 Headquarters (HQ-OGR) means the Office of Geologic Repositories and its four divisions.

1.4.3 Project means the DOE project office and its contractors.

1.4.4 Project Office means the U.S. Department of Energy (DOE) project manager, his staff, and any matrix support.

SECTION 2

GOVERNING DOCUMENTS

2.1 GENERAL

The QA requirements defined in this document are in consonance with the DOE directives, OCRWM documents, NRC regulatory requirements and national consensus standards identified in this section. The relationship of the various documents is shown in Figure 2-1.

2.2 DEPARTMENT OF ENERGY (DOE)

2.2.1 DOE 5000.3, "Unusual Occurrence Reporting System" sets forth policy, responsibilities, criteria, and instructions for preparing, analyzing and disseminating unusual occurrence reports.

2.2.2 DOE 5700.6, "Quality Assurance" provides policy, sets forth principles, and designates responsibility for the implementation of DOE plans and actions necessary to assure quality achievement.

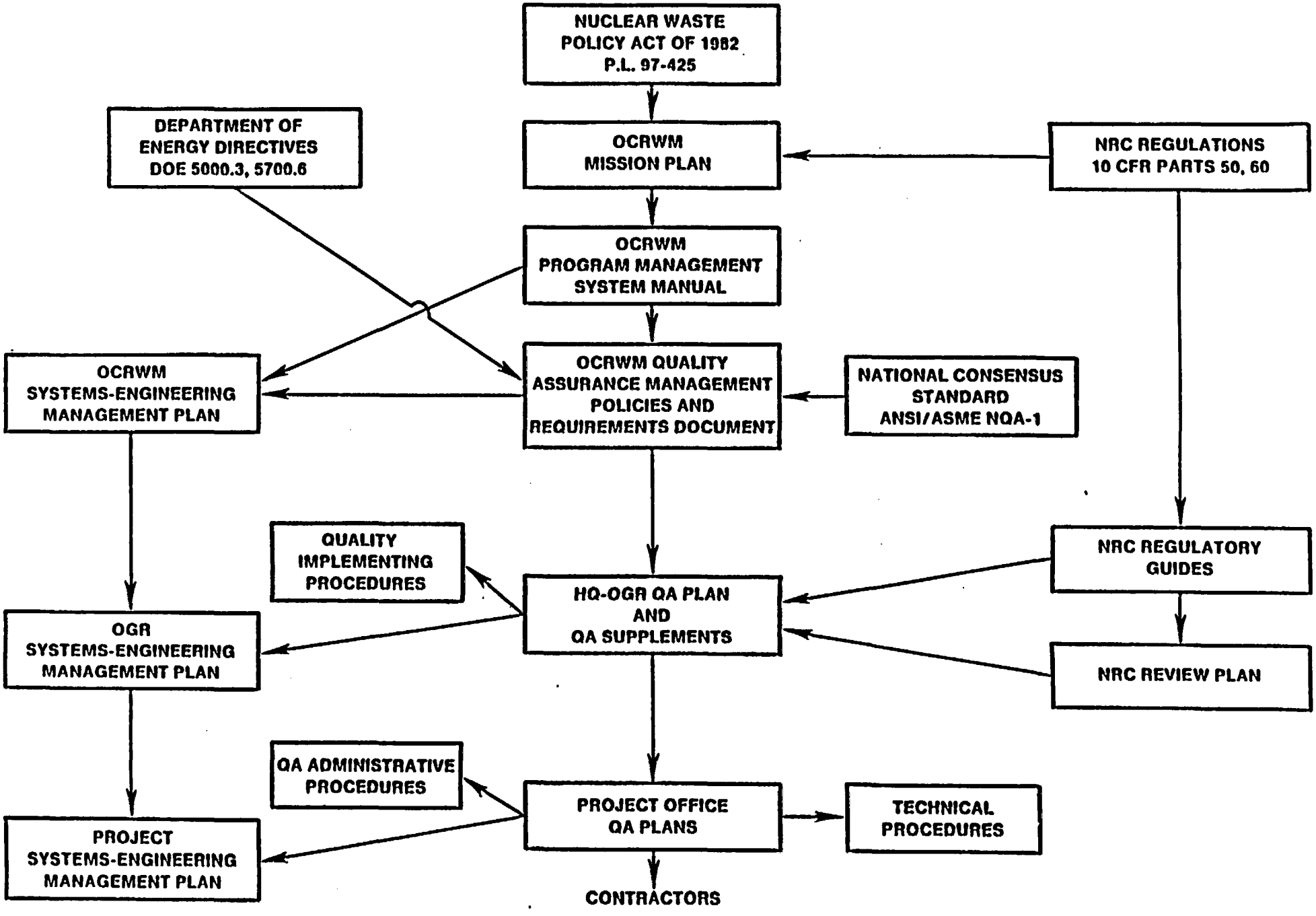

Figure 2-1. Governing Documents.

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2.3 OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT (OCRWM)

2.3.1 DOE/RW-0005, Mission Plan for the Civilian Radioactive Waste Management Program, provides an informational basis sufficient to permit informed decisions to be made in carrying out the repository program and the research, development, and demonstration programs required under the Nuclear Waste Policy Act.

2.3.2 DOE/RW-0043, Program Management System Manual, provides program management policies, responsibilities and procedures for integrating the various elements and projects into a cohesive, cost-effective program.

2.3.3 DOE/RW-0032, OCRWM Quality Assurance Management Policies and Requirements, sets forth overall, integrated QA management policies and requirements for the entire OCRWM program.

2.4 NUCLEAR REGULATORY COMMISSION (NRC)

2.4.1 Appendix B, 10 CFR Part 50, "Quality Assurance Criteria for Nuclear Power Plants," establishes general QA criteria for safety-related structures, systems, and components of nuclear power plants and fuel reprocessing plants.

2.4.2 10 CFR Part 60, "Disposal of High Level Radioactive Wastes in Geologic Repositories," Subpart G establishes requirements for siting, designing, licensing, constructing, operating, and closing of geologic repositories for high-level radioactive wastes and invokes the general QA criteria of Appendix B of 10 CFR Part 50.

2.4.3 NRC Review Plan: Quality Assurance Programs for Site Characterization of High Level Waste Repositories (June, 1984), defines the criteria and methods by which the OGR QA program will be reviewed by the NRC staff during the prelicensing phase.

2.5 NATIONAL CONSENSUS STANDARD

ANSI/ASME NQA-1, 1983, "Quality Assurance Program Requirements for Nuclear Facilities," contains basic and supplementary requirements and nonmandatory guidance for establishing and implementing QA programs for nuclear facilities.

SECTION 3

ORGANIZATION

3.1 GENERAL

The relationship and interfaces of the Office of Civilian Radioactive Waste Management (OCRWM) with the Offices of Policy and Outreach (OPO), Geologic Repositories (OGR), Resource Management (ORM), and Storage and Transportation Systems (OSTS) is shown in Figure 3-1. QA management function responsibilities and authorities for OGR have been assigned by the Director, OCRWM to the Associate Director, OGR.

3.2 OFFICE OF GEOLOGIC REPOSITORIES (OGR)

Figure 3-2 shows the OGR organizational structure and assigned technical areas of responsibility for each Division and Branch. Each unit will be responsible for quality achievement and assurance of quality within their areas of responsibility. Specific QA responsibilities and authorities of HQ-OGR staff are defined below and in the Quality Implementing Procedures (QIP's).

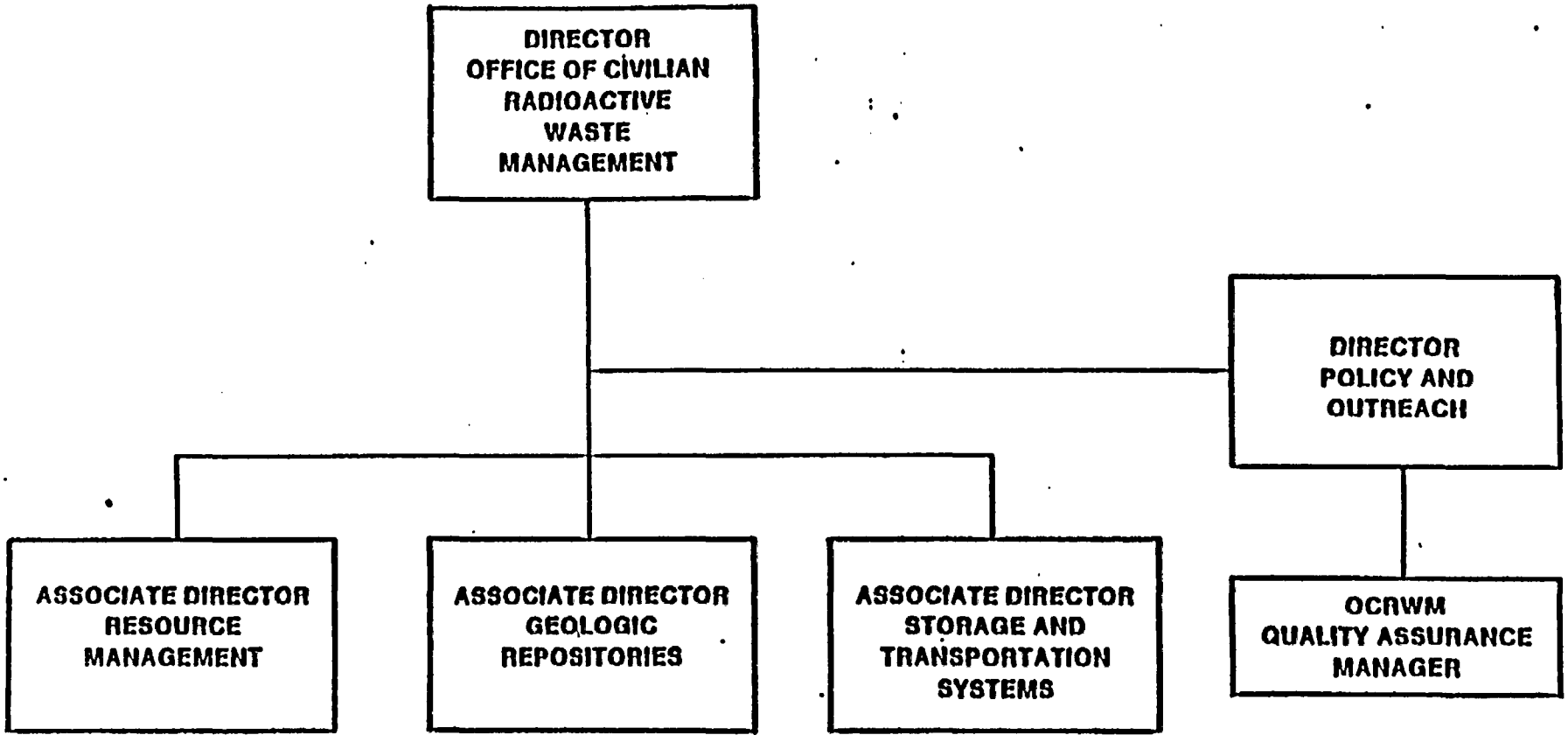

Figure 3-1. Office of Civilian Radioactive Waste Management.

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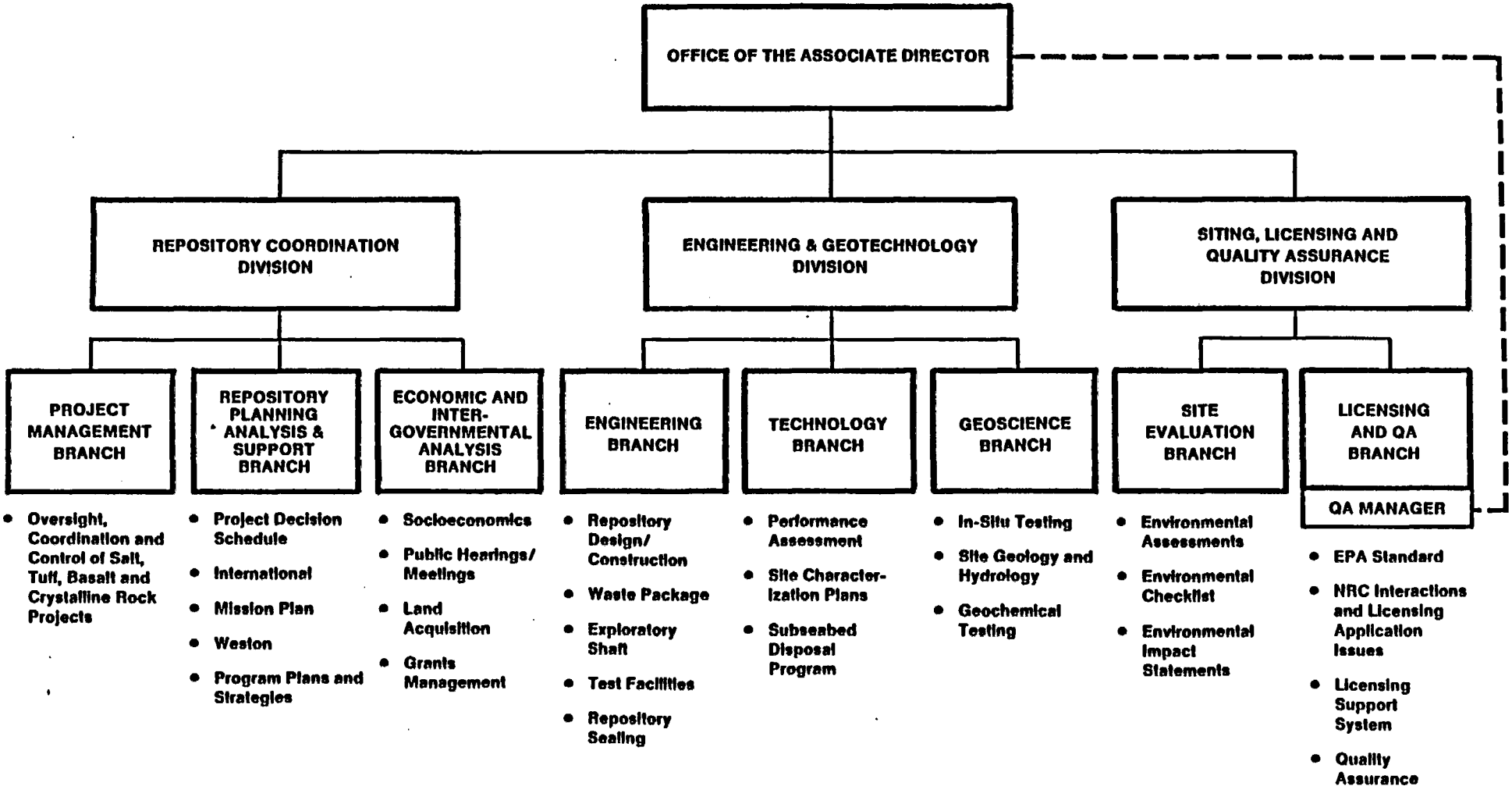

Figure 3-2. Office of Geologic Repositories.

3.2.1 OGR Associate Director

The QA responsibilities of the OGR Associate Director are as follows:

a. Provide overall QA policy guidance and direction to the HQ-OGR and projects, and translate this policy into specific QA management systems and controls to assure effective implementation of the OGR QA program by all projects;

b. Establish and provide management controls on program-specific QA requirements, plans and procedures that are consistent with the QA management policies and requirements of the QAMPR;

c. Approve the QA plans and procedures of project offices;

d. Approve the OGR QA Plan and HQ-OGR QA administrative procedures;

e. Authorize the QA indoctrination and training of HQ-OGR personnel performing quality-related activities for the repository program;

f. Provide for, and participate in, the continuing interactions with OCRWM Management, relevant Federal regulatory agencies (such as the NRC and EPA), affected States and Indian Tribes on QA matters specifically related to their respective areas of concern.

3.2.2 OGR Division Directors

Each division director has the following QA responsibilities:

a. Establish or approve the scope of QA activities and requirements for those activities under the division's cognizance;

b. Ensure that OGR personnel under the director's control, who perform or verify quality-related work, are qualified and have completed the required QA training for the assigned task;

c. Ensure the technical adequacy of items and activities and the effectiveness of management controls by appropriate overview methods;

d. Coordinate with the other involved OGR divisions the performance of HQ overview of QA activities by project offices and their major contractors;

e. Ensure that adequate funds are being provided for QA activities of the division;

f. Identify and report to the OGR Associate Director, and ensure the resolution of any quality-related problems or issues that potentially affect the division's activities.

3.2.3 Siting, Licensing and Quality Assurance (SLQA) Division Director

The QA responsibilities of the SLQA Division Director, in addition to those enumerated in Paragraph 3.2.2, include the following:

a. Review the OGR QA policy guidance, OGR QA plan and QA administrative procedures, and recomment approval actions to the Associate Director, OGR;

b. Recommend adequate funds to be provided in the OGR program budget and manpower guidance to effectively support the OGR QA program needs, activities and objectives;

3.2.4 OGR Branch Chiefs

Each branch chief has the following QA responsibilities:

a. Ensure that technical personnel of the branch comply with the technical and QA requirements applicable to the work performed;

b. Coordinate the overview of QA activities of the project offices and their major contractors that are within the branch's responsibility;

c. Report to the cognizant division director any significant quality problems or issues affecting the technical activities of the branch.

3.2.5 Licensing and QA (L&QA) Branch Chief

In addition to the responsibilities enumerated in Paragraph 3.2.4, the other QA responsibilities of the L&QA Branch Chief include the following:

a. Provide administrative support to the OGR QA Manager in the overview of QA activities at headquarters and in the assessment of effectiveness of QA program implementation by project offices and contractors;

b. Maintain lines of communication with the project offices, contractors and other organizations participating in the OGR repository project to assure timely communication of quality information, including the reporting and resolution of quality problems and issues.

3.2.6 OGR QA Manager

Within the SLQA Division, the lead responsibility for independent verification of quality is assigned to the OGR QA Manager.

3.2.6.1 Qualifications

The OGR QA Manager shall have demonstrated capabilities and competence in the planning and overseeing the implementation and assessment of quality assurance programs. The QA Manager shall meet the following minimum qualification requirements:

a. Bachelor's degree, preferably in science, engineering or management, from an accredited educational institution; or completion of college level or specialized courses equivalent to that required for a bachelor's degree;

b. Eight (8) years technical experience in science, engineering, manufacturing, construction, industrial plant operation or maintenance; of which 2 years are in supervisory or management capacity, 4 years in nuclear work, and 2 years in quality assurance;

c. Completed training courses in QA or quality control administration or management, or is in possession of verifiable evidence of competency in QA specialties;

d. Good communication skills, both written and oral;

e. Good working knowledge and understanding of

(1) DOE/OCRWM/OGR overall program goals and QA policies and directives;

(2) QA requirements of Appendix B to 10 CFR Part 50 and the NQA-1.

3.2.6.2 Responsibilities

The OGR QA Manager has the following responsibilities:

a. Coordination

(i) Coordinating the development and distribution of the OGR QA plan, supplemental QA requirements and Quality Implementing Procedures (QIP). This coordination effort includes review of, and concurrence with, the OGR supplemental QA requirements and QIPs prior to approval.

(ii) Coordinating the QA programs of the project offices and providing interface with regulatory agencies.

b. Policy Guidance

Recommending HQ-OGR QA policy guidance to the OGR Associate Director, through the SLQA Division Director, and for subsequent transmittal to the projects for implementation.

c. Approvals

Reviewing project office QA plans and QA administrative procedures and recommending approval action to the OGR Associate Director, through

established channels. The review is to assure project office compliance with the governing documents and this OGR QA plan.

d. Verification

(i) Verifying effective implementation of OGR QA program by (a) performing QA audits of headquarters and the project offices, (b) participating in, and reviewing reports of, the project office QA audits of their contractors, and (c) participating in headquarters technical reviews, readiness reviews, technical and management assessments of project activities. (See also subsection 4.3 of this document).

(ii) Verifying that HQ-OGR and project office activities comply with the QA requirements of the governing documents and this OGR QA Plan.

e. Quality Problems/Corrective Actions

Identifying quality problems in the HQ-OGR and project office QA program implementation and taking or causing corrective actions to be taken. Appropriate actions will also be taken on quality problems and issues identified at lower tier organizations that have reached the HQ-OGR level.

f. Quality Program Reporting

Submitting to the OGR Associate Director, (a) quarterly reports on the status of the OGR QA program, and (b) annual reports on assessments as to the adequacy and effectiveness of the QA program implementation by participating organizations.

3.3 PROJECT OFFICES

The operations office, project office, and contractor management areas of responsibility are shown in Figure 3-3.

The manager of the operations office has line management responsibility and accountability for overall project implementation. Each operations office manager has established a project management organization and delegated appropriate authority to the project manager for the management and direction of the project.

The project manager has direct primary responsibility and accountability for the execution and implementation of the project in accordance with the project plan, project charter, and project management plan and is the point of contact for information flow to headquarters. In addition, the project

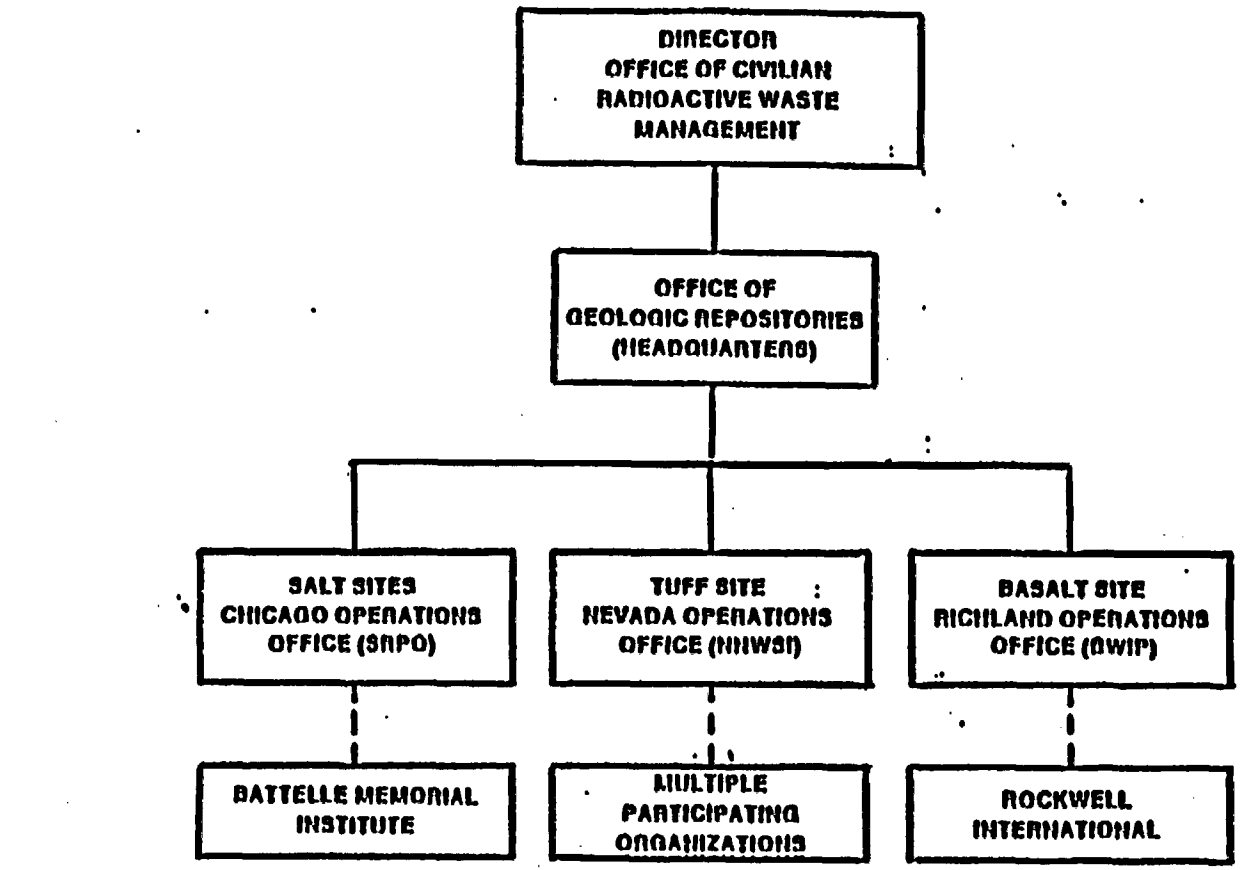

Figure 3-3. Field office and contractor management responsibility for OGR projects, Office of Civilian Radioactive Waste Management.

manager is responsible for establishing and implementing a project office QA program in accordance with the governing documents identified in Section 2 and this OGR QA Plan.

3.4 ORGANIZATIONAL INDEPENDENCE

Full time dedicated QA positions are to be established at headquarters, the project offices and their major contractors. These positions are:

a. To have responsibility and authority to verify the adequacy and effectiveness of QA plans, requirements, and QA program implementation by that organization and its subordinate organizations;

b. To have direct channels of communication with senior management positions at the same and higher organizational levels within the OCRWM program;

c. Not to be assigned duties that would prevent full attention to QA responsibilities or that would conflict with the reporting and resolution of QA issues and problems;

d. To be provided authority to elevate the resolution of disputes to progressively higher organizational levels through established channels; and

e. To have sufficient organizational freedom and authority to

(1) identify quality problems;

(2) initiate, recommend or provide solutions;

(3) verify implementation of solutions;

(4) stop, or cause to be stopped, unsatisfactory work, through established channels.

3.5 INTERACTIONS

3.5.1 Other DOE Organizations

Interactions with other DOE organizations involving OGR QA activities are to be coordinated through the OGR QA manager.

3.5.2 NRC and Other Agencies

Project offices are to advise the OGR QA manager in advance of intended meetings and other project specific interactions with the NRC or other regulatory agencies on matters concerning quality assurance. This advance notice is to include the NRC participation in audits conducted by the project

office or their contractors. Where interactions have OGR program-wide significance, these are to be arranged through, or coordinated with, the OGR QA manager.

SECTION 4

QUALITY ASSURANCE PROGRAM REQUIREMENTS

4.1 GENERAL

As specified in 10 CFR 60.152, DOE is to implement a QA program based on the criteria of Appendix B of 10 CFR 50. The NRC Review Plan describes how these criteria could be satisfied by the OGR QA program. Consistent with the QAMPR, HQ-OGR, its three project offices and their contractors are to use NQA-1 and NQA-1a-1983 as the principal way for complying with the 18 criteria of Appendix B of 10 CFR 50. Adoption of QA requirements in other subsequent addenda of, or revisions to, NQA-1 will be considered on a case-by-case basis by the Associate Director, OGR and based upon recommendations by the OGR QA Manager. NQA-1 and/or the authorized use of subsequent addenda or revisions shall be carefully scrutinized to assure its requirements do not conflict with the NRC Review Plan. QA requirements of addenda to, or revisions of, NQA-1 will be made applicable by revision to this QA Plan.

The manner in which the QA requirements of NQA-1, and authorized addenda or revisions thereto, are retained or delegated by the OGR is shown in Figure 4-1. While authority for compliance with QA requirements may be delegated, responsibility for compliance rests with the delegating organization.

Applicability of QA Requirements			
Requirement No.	TOPIC	HQ OGR	All Projects
1	Organization	X	X
2	Quality Assurance Program	X	X
3	Design Control (& Peer Review)	X	X
4	Procurement Document Control	X	X
5	Instructions, Procedures, and Drawings	X	X
6	Document Control	X	X
7	Control of Purchased Items & Services	X	X
8	Identification and Control of Items	D	X
9	Control of Processes	D	X
10	Inspection	D	X
11	Test Control	D	X
12	Control of Measuring and Test Equipment	D	X
13	Handling, Storage, and Shipping	D	X
14	Inspection, Test, and Operating Status	D	X
15	Control of Nonconforming Items	D	X
16	Corrective Action	X	X
17	Quality Assurance Records	X	X
18	Audits	X	X

D=These requirements do not apply to the HQ-OGR program because the activities are performed by the Project Office and/or contractor organizations. The authority for these requirements has been delegated to the Project Office for compliance or delegation to the appropriate contractor. Responsibility for the delegated requirements remains with the delegating organization.

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Figure 4-1. NQA-1 requirements.

4.2 APPLICABILITY

QA programs are to be established at headquarters, the project offices and their contractors to encompass the entire OGR program. The QA programs apply to all items and activities that are important to safety and waste isolation as defined in 10 CFR Part 60 as well as to items and activities important to the attainment of OCRWM programmatic objectives. The QA programs are to be implemented according to a defined graded QA approach that is described in QA Supplement #8.

4.3 HEADQUARTERS

4.3.1 Headquarters QA Activities

The basic and supplementary requirements of NQA-1 which apply to the activities at headquarters are identified in Figure 4.1. Activities affecting quality will be performed by designated OGR personnel in accordance with applicable technical and administrative Quality Implementing Procedures (QIP) identified in Appendix A to this QA Plan.

Quality audits, including both technical and administrative system audits, are primary OGR management options for (i) determining procedural adequacy and compliance, (ii) identifying quality deficiencies, nonconformances and problems, and (iii) assessing effectiveness of QA program implementation.

Headquarters personnel performing activities affecting quality will be given appropriate indoctrination and training to assure that suitable proficiency is achieved and maintained.

4.3.2 Overview of Project QA Activities

The headquarters QA overview responsibilities are defined in DOE Order 5700.6 and the QAMPR. The method for complying with each responsibility are listed below:

a. Develop direction and guidance for the implementation of QA policy. Headquarters direction and guidance is contained in Section 5 of this QA plan. When the need for interpretive or modified direction is identified, headquarters will provide such direction through the issuance of QA supplements and/or revisions to this QA plan.

b. Define responsibilities and authority for QA activities. The definition of QA responsibilities and authorities for the OGR program is provided in Section 3 of this QA plan.

c. Establish the scope and requirements of QA activities. The scope and QA administrative requirements of the OGR program as set forth in this QA plan, will be reviewed for adequacy by the QA Manager. Approved changes will be incorporated into appropriate revisions to this QA plan as they occur. The QA requirements are to be amplified in the QA plans and procedures by the projects and contractors as appropriate for their assigned responsibilities.

d. Assure funding for QA.

The OGR division directors are primarily responsible for recommending and reviewing for QA adequacy of funds for their respective division activities. The OGR QA manager will overview the funding for QA activities, and identify insufficient resources to the Associate Director, OGR, through the SLQA Division Director, as a quality issue requiring management attention and/or action.

e. Review project documents

1. Review and approve project office QA plans and procedures

The project offices are to submit their QA plans and QA administrative procedures to the Associate Director, OGR for approval. The OGR QA Manager will review and document the HQ-OGR approval in accordance with Quality Implementing Procedure (QIP) 2.0. Pending receipt of HQ-OGR approval, the Project Office may issue draft QA plans and administrative procedures for interim use, provided that those to whom the documents are issued are so advised. Final project QA plans will include a signature block for approval by the Associate Director, OGR.

2. Technical reviews

HQ-OGR will perform technical reviews, as appropriate, of technical plans and project status and progress reports, including related scientific/technical reports, submitted by the project offices. These reviews will be performed in accordance with established procedures.

3. Readiness reviews

HQ-OGR will participate in project readiness reviews during site characterization, construction, testing or operation of the geologic repository. HQ-OGR will review the project readiness review plans and readiness review reports for completeness of required actions and documentation, and for conformance with QA program requirements.

f. Verify effective QA implementation

Verification that effective QA activities are being implemented by the project offices is accomplished by HQ as follows:

1. Review and approve project office QA plans and QA administrative procedures (QIP 2.0)

2. QA audits of project offices (QIP 18.0) and participate in project office audits of major contractors (QIP 18.1). Line Managers, supervisors, and technical personnel will participate in these audits as well as in technical assessments of project activities to be performed. The audits will be program compliance and product oriented. QA personnel in the audit team will assess conformance with QA program requirements and technical personnel will verify compliance with requirements of technical specifications, codes, regulations, drawings and instructions.

3. Review and analyze project office surveillance and audit reports of their major contractors; issue summary and trend reports (QIP 18.2).

4. Perform design reviews, technical and/or peer reviews of such activities as design of repository, exploratory shaft and waste package, licensing strategy, planned site characterization activities and engineering testing (QIP's 3.0, 3.1 and 3.2)

5. Perform technical assessments of specific technical activities to determine compliance with technical procedures and QA requirements and adequacy of technical reviews and verification performed by project personnel.

6. Perform surveillance of project activities. HQ-OGR personnel will be required, as part of selected planned field visits to the project offices, to perform surveillance of activities in progress covered in their mission. Results of surveillance performed will be reported to the cognizant project office and to headquarters.

g. <u>Identify QA-related issues and problems and take, or cause to be taken, effective correction action.</u>

Significant quality problems and unusual occurrences will be identified, tracked, corrected and corrective action verified (QIP's 16.0 and 16.1).

h. Verification that project QA programs meet QA requirements.

Verification that the project QA programs meet the requirements of the governing documents and the OGR QA Plan will be accomplished by HQ review and approval of project office QA plans and procedures (QIP 2.0) and by HQ QA audits of the project offices (QIP 18.0).

4.4 MANAGEMENT ASSESSMENT

Management assessments are to be conducted at least annually for determining (a) the effectiveness of the system of management controls that are established to achieve and assure quality, and (b) the adequacy of resources and personnel provided to the QA program. Management is to verify that the QA program is being effectively implemented and that personnel are trained to the QA requirements of the program. Copies of the report of Management assessments are to be provided to the Director of OCRWM and the OCRWM QA Manager.

Management assessments are to be performed by HQ-OGR, the project offices and their major contractors. Each organization is to develop its internal procedures for the planning, organizing, performing, and documenting the management assessment conducted, including the analysis and reporting of the results and the tracking of recommendations.

Within HQ-OGR, the responsibility for the preparation of management assessment procedures is assigned to the SLQA Division Director.

4.5 QUALITY ASSURANCE INFORMATION DISSEMINATION

Lines of communication shall be established and maintained among HQ-OGR, the project offices and their contractors, and the OCRWM for reporting of QA program status, and dissemination of information regarding significant quality problems and issues, unusual occurrences and other matters of common interest. The OGR QA Manager shall ensure that effective communication channels are maintained through frequent interactions and meetings with the projects, as appropriate, such as in the Quality Assurance Coordinating Group (QACG) meetings, QA newsletters and bulletins.

4.6 SIGNIFICANT QUALITY PROBLEMS

Significant quality problems shall be identified, evaluated, reported, resolved and disseminated according to OGR QA Supplement #6.

SECTION 5

QUALITY ASSURANCE DIRECTION TO PROJECTS

5.1 GENERAL

This section contains specific direction to the projects in areas where interpretation or amplification of the QA program requirements, specified in the governing documents listed in Section 2 of this QA plan, is required.

5.2 SUPPLEMENTAL QA REQUIREMENTS

The Supplemental QA Requirements listed in Appendix B to this document are issued by HQ-OGR Headquarters as part of this QA plan. The supplemental QA requirements are to be complied with by Headquarters, the project offices, and their contractors for items or activities classified as Quality levels 1 or 2 as defined in QA Supplement # 8. (Note: Supplement # 8, Application of Graded QA, applies to all 3 quality levels).

Additional supplemental QA requirements will be developed and issued as the need for them is identified by Headquarters and the project offices. QA requirements for items and activities important to safety or waste isolation but which are not the direct responsibility of OGR (such as Defense and West Valley wastes) will also be addressed in supplemental QA requirements.

5.3 PROJECT QA PROGRAM

5.3.1 Content

Each project is to develop and implement a QA program in accordance with this section and the governing documents identified in Section 2. The QA program is to be documented in the project QA plan and QA administrative procedures. The project QA plan is to assure that all applicable criteria in Appendix A of the NRC Review Plan: Quality Assurance Programs for Site Characterization of High Level Waste Repositories are satisfied prior to submittal to the HQ for approval. In addition, the project QA Plan and/or applicable QA administrative procedures shall describe the following:

a. Process for the project office review and approval of the QA programs of their contractors.

b. Program being implemented for the indoctrination and training of project office personnel who perform activities affecting quality. Identify the areas that will require training, qualification and certification, and describe the method for accomplishing this.

c. Measures applied by the project office to assure that the design is defined and changes to the design bases are controlled. Describe the project office process for monitoring contractors' design controls and the extent of participation of the project office in design reviews.

d. Project office peer review process and the controls applied by the project office over peer reviews performed by the contractor.

e. Project office program for controlling internal documents as well as documents being transmitted to and from contractors and other project participants to assure controlled transmittal, receipt, internal distribution, and recall.

f. Methods used by the project office to monitor contractors' inspection, testing, calibration, and sample identification activities.

The projects are to submit a copy of the check list used to evaluate their QA Plan's compliance with the OGR QA Plan and the NRC Review Plan to HQ-OGR at the time their QA Plan is submitted.

5.3.2 Submittal Requirements

Each Project Office is to submit the following QA documents to HQ-OGR:

a. For approval

1. A controlled copy of the project office QA plan

2. A controlled copy of the project office QA administrative procedures

3. A controlled copy of project office QA requirements documents, if such documents are prepared.

b. For Information

1. A controlled copy of the QA manual or Plan and QA administrative Procedures for all major contractors.

2. Project office audit schedules and revisions.

3. Reports of internal audits and related correspondence.

4. Reports of QA audits and related correspondence of major contractors performed either by the project office or delegated to a prime, integrating, or support contractor.

5. Copies of significant quality problem reports and unusual occurrence reports.

APPENDIX A

. OGR quality implementing procedures (QIP's).

QIP No.	DESCRIPTION
2.0	Headquarters Review of Project QA Plans and Administrative Procedures
2.1	Indoctrination and Training
3.0	Design Reviews
3.1	Peer Reviews
3.2	Technical Reviews
4.0	Procurement Document Control
5.0	Preparation and Control of OGR Quality Implementing Procedures
6.0	Document Control
7.0	Control of Purchased Items and Services
16.0	Significant Problems Reporting and Corrective Action
16.1	Unusual Occurrence Reporting
17.0	Quality Records
18.0	External Audits
18.1	HQ Participation in Project QA Audits of Contractors
18.2	Review of Project Submitted Audit Reports
18.3	Auditor Training, Qualification, and Certification
18.4	Internal Audits

APPENDIX B

Supplemental quality assurance requirements.

Supplement Number	Title	Issue Date
1	Selection, Indoctrination and Training of Personnel	*
2	Overview of Quality Assurance Activities	*
3	Q-List Methodology	*
4	Quality Assurance Records	*
5	Document Requirements for Experiments and Research	*
6	Quality Problem Reporting	**
7	Peer Review	*
8	Application of Graded QA	*
9	Reliability of Data	*
10	Reserved for Waste Form Requirements	**
11	Oversight of QA Activities for Defense Wastes	**

*In Baseline Change Approval Cycle

**To Be Drafted

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