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**SANDIA NATIONAL LABORATORIES
CIVILIAN RADIOACTIVE WASTE MANAGEMENT
QUALITY ASSURANCE IMPLEMENTING PROCEDURE (QAIP)**

QAIP 1-2

ORGANIZATION AND QUALITY ASSURANCE PROGRAM

Revision 16

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Author: Original signed by Jose A. Archuleta Date: 08/25/03 |

Concurrence: Original signed by James F. Graff Date 08/26/03 |
QA Reviewer

Approval: Original signed by Kathryn Knowles for S. Date: 08/27/03 |
Andrew Orrell
SNL CRWM Lab Lead

REVISION HISTORY

REVISION	REVISION DESCRIPTION
00	This is the initial issue of the procedure.
01	This revision incorporated style and format of QAIP 5-1, rev.01. Incorporate changes in position titles.
02	This revision changed titles and organization chart to reflect recent SNL organization changes.
03	This revision included changes to titles and organizations to reflect 6300 Center changes. Changes are shown by revision bars.
04	This revision included deleting Org 6304, incorporating ICN 01, change department 6318 to 6352.
05	This revision included adding changes to QARD requirements, adding reference section and removing reference to QAPD.
06	This revision included changes to organizational title changes and adding QARD requirements.
07	This revision included adding department 6314 to organization.
08	This revision included adding Burnup Credit in the scope of QAIP 1-2 where it applied.
09	This revision included deleting any reference to audits. This revision occurred because SNL no longer is responsible for performing QA audits. This function is now performed by OCRWM, Office of Quality Assurance.
10	This was a total revision. This revision was done to incorporate changes to the QARD, and incorporate QAIP 5-1, rev. 5.
11	This revision eliminated the Project Support (6752) and placed the functions previously in that department under the Laboratory Lead.
12	Full revision to address new management policy, respond to DR YM-96-D004, and address the OQA transition. This revision incorporates the QA dispute resolution process, which was formerly the subject of QAIP 1-4.
13	Removes reference to unused Individual Work Authorization (IWA) process, modifies description of OWAST work, and makes other minor corrections.
14	Revised to transition to Process Validation and Reengineering procedure changes.
15	Editorial changes to address BSC transition including minor editorial changes and organizational clarifications.
16	Editorial changes to reflect updated SNL Functional Organization (chart and descriptions) and new title of SNL Center 6800 "Environmental Security Technology Center;" to change reference from YMSCO to Office of Repository Development (ORD); and to better describe BSC QA role in QA implementation.

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1.0 PURPOSE AND SCOPE

This procedure describes the organization, requirements, interfaces, and responsibilities of the Sandia National Laboratories (SNL) Civilian Radioactive Waste Management (CRWM) effort under the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) program. This procedure applies to all SNL work activities in support of the SNL CRWM Program for the Yucca Mountain Project.

The organizational positions within SNL for which responsibilities are described include the SNL Lab Lead and Task Managers assigned responsibility for work activities in support of the CRWM effort at SNL. The applicable responsibilities of functional positions are described in SNL CRWM procedures. Project requirements applicable to delegation of work/responsibility and quality assurance are included.

A key element of the organizational QA requirements is the requirement for a structured system of implementing documents which translate requirements of the Quality Assurance Requirements and Description (QARD) document into work processes for SNL CRWM work subject to quality assurance program controls. This procedure is the first in the top down implementation document structure.

Implementing documents are prepared and approved under QAIP 5-1, "Quality Assurance Implementing Procedures," and QAIP 20-1, "Technical Procedures."

2.0 DEFINITIONS

The terms used in this procedure are consistent with the definitions provided in other SNL CRWM quality assurance documents.

M&O Quality Assurance Representative - The individual(s) assigned by the BSC QA Manager who is responsible for the quality assurance function.

SNL Lab Lead - The SNL Manager assigned overall management responsibility for work activities in support of the SNL CRWM Program.

Task Manager - An SNL Department Manager or staff member who has been charged by the SNL Lab Lead with responsibility for a major functional area in support of the SNL CRWM Program.

3.0 ORGANIZATIONAL STRUCTURE

3.1 Administrative Organization:

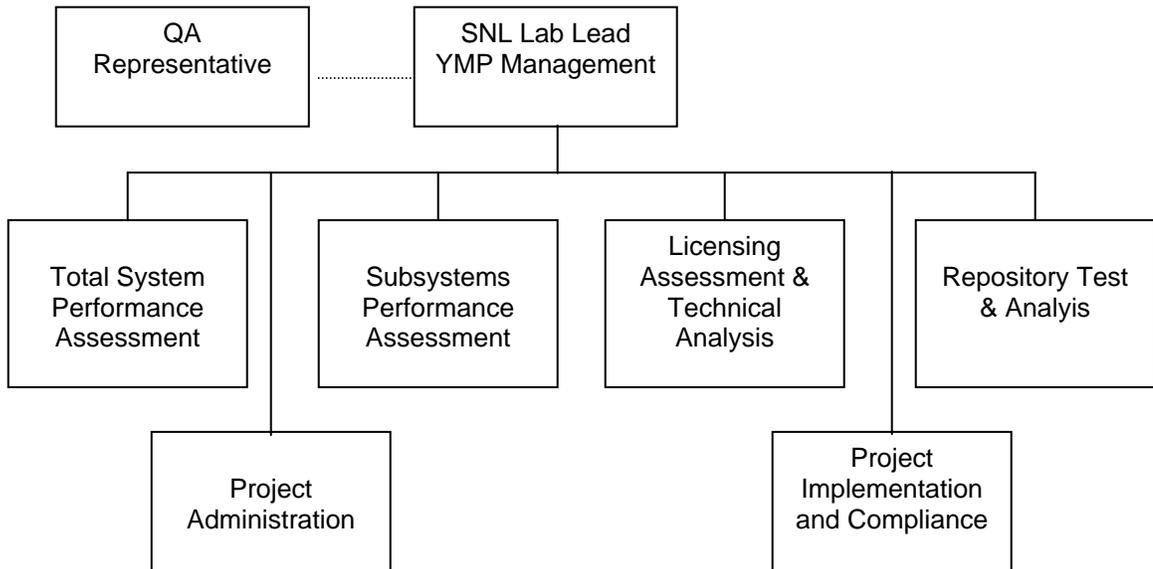
The SNL administrative management structure has four levels: President, Division Vice President, Center Director, and Department Manager. Project Management responsibility for SNL CRWM activities is assigned to the SNL Lab Lead (Department Manager level). The SNL Lab Lead has a direct reporting relationship to the Center Director for the Nuclear Waste Management Programs Center. The Center Director in turn reports to the Energy, Information and Infrastructure Surety Division Vice President, who reports to the President of Sandia Corporation.

3.2 Functional Organization:

CRWM Functions

The SNL Lab Lead has the role of management and integration of OCRWM activities at Sandia and is therefore responsible for establishing, implementing, and ensuring compliance with the requirements of the QARD through the Bechtel SAIC Company, LLC (BSC) Quality Assurance Program.

Functionally, SNL CRWM activities are organized into four matrix areas, each under the responsibility of a Manager assigned by the SNL Lab Lead.



Managers of the matrix organizations may delegate responsibilities and authorities for attaining quality objectives and adhering to the SNL CRWM Quality Assurance Program to other individuals or organizations, but responsibility for achieving project objectives is retained by the Task Managers and ultimately the SNL Lab Lead. Matrix area Managers have responsibility for: managing the activity within their scope of responsibility; planning; assigning personnel; assigning training; responding in a timely manner to quality assurance deficiencies; monitoring cost and schedule performance; providing required status reports; ensuring the submittal of project records; ensuring compliance with Environment, Safety, and Health (ES&H), and ensuring compliance with other BSC requirements.

The functional areas and the responsibilities are as follows:

Performance Assessment: Managers are responsible for directing activities associated with repository post-closure performance assessment. Responsibilities include developing and applying methods for calculating radionuclide releases to the environment. Activities in this functional area are: site performance assessment, total system performance assessment, process (or subsystems) models supporting total systems performance assessment abstraction, regulatory interface, and scenario development. The Total Systems Performance Assessment matrix group provides overall technical leadership to the Subsystems Performance Assessment group. By comparison, the Subsystems Performance Assessment group provides technical support and input to the Total Systems Performance Assessment Manager and staff. The Performance Assessment Managers are responsible for facilitating SNL interactions with DOE/ORD, with particular emphasis on performance assessment and regulatory activities.

Licensing Assessment and Technical Analysis: Manager has responsibility for technical analysis of products supporting the CRWM License Application effort. These analyses include review of process (subsystems) model assumptions, approaches and results, total systems performance assessment model assumptions, inputs and results, development and review of documentation assessing key technical issues, and responding to DOE/ORD requests for performance assessment analyses that fall outside the scope of the License Application.

Repository Test and Analysis: The SNL YMP Repository Test and Analysis Department works with other BSC groups (including BSC contractors and other national laboratories) to manage, design, implement, interpret, and document scientific tests and experiments relevant to the performance of the proposed Yucca Mountain repository. These tests provide data to support and confirm subsystem and system-level analyses of pre- and postclosure of the proposed repository.

Project Administration: Task Manager is responsible for project control (e.g., planning, scheduling, budget tracking and analysis, cost control, and status reporting), procurement coordination, property management, and related administrative support activities.

Project Implementation and Compliance: Task Manager has responsibility for support activities including records management, training, document control, technical reports publication, technical data processing, and QA implementation.

Other Functions:

Facilities Support

Computational systems support and other support activities, such as facilities, motor vehicle support, and ES&H assistance for Albuquerque personnel are matrixed from the appropriate Sandia Organization. On-site support for Las Vegas personnel is provided through the CRWMS BSC.

Quality Assurance

The Director of OQA is responsible for OCRWM quality assurance functions. The responsibilities and reporting hierarchy of the OCRWM OQA are identified in the OCRWM organization procedure.

Wherever the term QA Manager, QA staff, QA reviewer or similar term is used in SNL implementing documents, it shall be deemed to mean BSC QA.

4.0 QUALITY ASSURANCE IMPLEMENTATION

4.1 General

The OCRWM Quality Assurance program provides for both the achievement of quality and the verification of that achievement. Personnel authorized to work on CRWM activities have total responsibility for achieving and maintaining quality, which shall be verified by persons or organizations not directly responsible for performing the work.

The Quality Assurance function is provided by the Office of Quality Assurance and by the BSC Quality Assurance Department, which have the responsibility to verify the achievement of quality through the conduct of overview activities such as audits, surveillances, and reviews. The BSC QA Representative has access to work areas and the organizational freedom to: identify quality problems; verify implementation of solutions; and interpret QA Program requirements.

The SNL Lab Lead has delegated the work of establishing and implementing the BSC Quality Assurance Program to line management; however, the SNL Lab Lead retains responsibility for achieving CRWM quality objectives. This responsibility includes ensuring that QARD requirements are incorporated into implementing documents and performing reviews of QARD revisions to assess the need for changes to procedures as appropriate.

4.2 Implementing Documents

A structured series of implementing documents has been established to implement QARD requirements for SNL CRWM activities. The implementing documents prepared and issued by SNL include a series of Quality Assurance Implementing Procedures (QAIPs) and more activity-specific Technical Procedures (TPs).

Implementation of QARD requirements is through the BSC QA Program, which consists of several levels of implementing procedures. The QARD requirements are tracked in the QARD Matrix system described in QAIP 5-1. Personnel authorized to work on SNL CRWM activities that are determined to be subject to the BSC QA Program are required to comply with appropriate implementing documents.

4.3 Quality Assurance Dispute Resolution

Differences of opinion involving the interpretation and implementation of QA program requirements shall be brought to the attention of the appropriate management and, if not resolved, shall be elevated progressively to successively higher levels of management.

The SNL Lab Lead has the authority to resolve disputes between SNL personnel concerning quality assurance issues. If the dispute cannot be resolved within SNL, the SNL Lab Lead will bring the issue to the attention of the BSC QA Manager. If satisfactory resolution cannot be obtained at that level, the matter is then elevated to the BSC General Manager.

5.0 RECORDS

None.

6.0 REFERENCES

DOE/RW-0333P, "Quality Assurance Requirements and Description"
QAIP 5-1, "Quality Assurance Implementing Procedures"
QAIP 20-1, "Technical Procedures"
