

NRC INSPECTION MANUAL

DWM/HLWB

INSPECTION PROCEDURE 78080

INSTRUCTIONS, PROCEDURES, AND DRAWINGS (PRE-LICENSING AND CONSTRUCTION)

PROGRAM APPLICABILITY: MC 2300

78080-01 INSPECTION OBJECTIVES

01.01 To determine if important activities are prescribed by, and accomplished in accordance with, documented instructions, procedures, or drawings, and test plans and procedures, as appropriate.

78080-02 INSPECTION REQUIREMENTS

02.01 Instructions, Procedures, and Drawings Availability. Determine if important activities are prescribed by documented instructions, procedures, and drawings.

02.02 Instructions, Procedures, and Drawings Content. Determine if instructions, procedures, and drawings include quantitative and qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

02.03 Instructions, Procedures, and Drawings Implementation. Determine if important activities are accomplished through implementation of instructions, procedures, and drawings.

02.04 Instructions, Procedures, and Drawings Changes. Determine if changes to instructions, procedures, and drawings are documented and verified in a timely manner by authorized personnel.

78080-03 INSPECTION GUIDANCE

This inspection procedure applies to the implementation of the U.S. Department of Energy's (DOE's) quality assurance (QA) program during the design and construction of a geologic repository at Yucca Mountain. The DOE QA program is described in the Quality Assurance Requirements and Description Manual, DOE/RW-0333P (QARD). This inspection procedure applies to structures, systems, and components (SSCs) important to safety, to design, characterization, and construction of barriers important to waste isolation, and to related activities described in the safety analysis report (SAR).

Selection of areas for evaluation during inspections shall be based on the risk significance of the SSCs, related activities, and past performance. The scope of inspections should also consider the cumulative effect of failures related to low-risk-significant SSCs regarding their potential effects on overall system performance and reliability.

03.01 Instructions, Procedures, and Drawings Availability. Select a sample of important activities. Verify that appropriate instructions, procedures, or drawings are available for conducting those activities and contain the following information, as appropriate:

- a. Responsibilities and interfaces of the organizations affected by the instructions, procedures, or drawings.
- b. Identification of associated items and activities.
- c. A detailed description of the work to be performed.
- d. Proper review and approval signatures.

03.02 Instructions, Procedures, and Drawings Content. Select a sample of procedures for important activities. Verify that instructions, procedures, and drawings for those activities contain quantitative (e.g., dimensions, tolerances, operating limits) and qualitative (e.g., workmanship samples, analyses) acceptance criteria for determining that important activities have been satisfactorily accomplished. Verify that the instructions, procedures, and drawings also contain, as appropriate, the following information:

- a. Technical and regulatory requirements.
- b. Prerequisites, limits, precautions, process parameters, and environmental conditions.
- c. Quality verification points and hold points.

03.03 Instructions, Procedures, and Drawings Implementation. Select a sample of important activities. Verify that the activities are accomplished through implementation of instructions, procedures, and drawings. Verify that methods are provided for demonstrating that the work was performed as required such as provisions for recording inspection and test results, checkoff lists, or signoff blocks.

03.04 Instructions, Procedures, and Drawings Changes. Verify that any changes to instructions, procedures, and drawings are documented and verified in a timely manner by authorized personnel.

78080-04 INSPECTION RESOURCES

An initial inspection of instructions, procedures, and drawings may be conducted approximately 1 year before submittal of an application. This inspection will consist of one inspector and one or more technical specialists on site for 2 weeks. Preparations for the inspection and documentation of the inspection will consist of 3 weeks. Implementation of the first inspection is 10 inspector-weeks.

After the construction authorization is issued and construction starts, at least semiannual inspections of the design control program will be conducted by one inspector, for a total of 4 inspector-weeks per year.

After the operating license is issued, at least an annual inspection will be conducted by one inspector for a total of 1 inspector-week per year.

78080-05 REFERENCES

NUREG XXXX, "Yucca Mountain Review Plan," Draft Revision 1.

10 CFR Part 63, "Disposal of High-Level Radioactive Wastes in a Proposed Geologic Repository at Yucca Mountain, Nevada."

U.S. Department of Energy's "Quality Assurance Requirements and Descriptions (QARD)," DOE/RW-0333P, latest revision accepted by NRC.

END