

Development Program to Resolve Safety Questions,” of the draft Yucca Mountain Review Plan. The commenter stated that the research and development program was not intended to address the adequacy of site characterization or natural barriers, as the review plan currently states. The commenter argued that the adequacy of information on these two topics should be demonstrated in the license application as submitted and that it is not acceptable to use the research and development program to resolve safety questions to complete work that should have been done before the submittal of the license application.

Response. The applicable regulation, 10 CFR 63.21(c)(16), states that the license application shall contain “an identification of those structures, systems, and components of the geologic repository, both surface and subsurface, that require research and development to confirm the adequacy of design. For structures, systems, and components important to safety and for the engineered and natural barriers important to waste isolation, DOE shall provide a detailed description of the programs designed to resolve safety questions, including a schedule indicating when these questions would be resolved.”

The research and development program to resolve safety questions should be used appropriately to address questions as appropriate. The regulation recognizes that some research and development programs are confirmatory in nature while others resolve safety questions. The license application should contain sufficient information on site characterization and natural barriers to enable NRC staff to conduct a detailed review of the application.

The text of Section 4.3 of the draft Yucca Mountain Review Plan has been revised to narrow the scope of the research and development program to resolve safety questions.

7 Performance Confirmation

7.1 Performance Confirmation Program

Issue 1: Are the acceptance criteria for performance confirmation monitoring and testing too prescriptive?

Comment. Commenters stated that Section 4.4, “Performance Confirmation Program,” of the draft Yucca Mountain Review Plan is more prescriptive than 10 CFR part 63 regarding specific performance confirmation testing and monitoring citing specific examples including cases where the language used in Section 4.4 was not identical to language used in subpart F of 10 CFR

part 63. One commenter stated that Section 4.4, like 10 CFR part 60, is prescriptive with regard to requirements for particular barriers, and inconsistent with the risk-informed, performance-based approach in 10 CFR part 63. Commenters stated that DOE would determine the parameters, measurements, and observations that are appropriate for inclusion in the performance confirmation program based on their importance to confirming repository performance and to the uncertainties in that performance.

Response. DOE has the responsibility to determine the parameters, measurements, and observations to be included in a performance confirmation program. As stated in “Statement of Considerations” for final 10 CFR part 63 (66 FR 55745, November 2, 2001) “The Commission believes that it is DOE’s responsibility to specify the important geotechnical and design parameters to be evaluated through observation and measurement during construction and operation, subject to NRC approval through review and evaluation of the license application. DOE will provide this information in their performance confirmation plan included in the license application. If necessary, NRC staff will provide guidance to DOE in this area through pre-licensing interactions and/or the Yucca Mountain Review Plan.”

With respect to the examples of inconsistency with language in subpart F of 10 CFR part 63, the recommended changes were accepted, and Section 4.4 has been modified accordingly. However, the fact that a specific parameter or process is not mentioned in the regulation, does not necessarily mean that parameter or process should not be considered for inclusion in the performance confirmation program. Such decisions should be made using risk-informed, performance-based approach. In developing 10 CFR part 63, the Commission chose not to adopt an approach that would prescribe in detail the specifics and limits of a performance confirmation program to allow DOE the flexibility to develop a focused and effective performance confirmation program (66 FR 55745, November 2, 2001).

Section 4.4 of the draft Yucca Mountain Review Plan has been modified for consistency with 10 CFR part 63.

Issue 2: Are the acceptance criteria for procedures supporting the performance confirmation program too prescriptive?

Comment. Commenters stated that the draft Yucca Mountain Review Plan is more prescriptive than 10 CFR part 63 regarding procedures supporting the

performance confirmation program. A commenter stated that DOE should have the flexibility to determine the context in which procedures need to be developed and that such procedures may be developed after a license application for construction authorization is submitted. There were also a number of detailed comments specifically related to procedures supporting a performance confirmation plan.

Response. The Yucca Mountain Review Plan recognizes that DOE has the flexibility to devise the performance confirmation program consistent with regulations, including how to document its methods or procedures (whether directly in a performance confirmation plan or indirectly by reference to another document). Any procedures referenced would be subject to either NRC staff review or inspections.

Accordingly, Section 4.4 of the draft Yucca Mountain Review Plan has been revised to delete the word procedures and to be less prescriptive regarding this subject.

8 Administrative and Programmatic Areas

8.1 Record-Keeping Requirements

Issue: What are the requirements for keeping records of the repository and its operations?

Comment. A commenter asked about the plan for keeping records over the 10,000-year life span of a repository at Yucca Mountain and requested that records on private shippers of waste to a repository should include “* * * liability information, accident records, breached or leaking cask records, judgments, accusations, and penalty records.”

Response. There are a number of record keeping requirements which relate to the repository which address many of the items identified by the commenter. NRC regulations at 10 CFR part 63, subpart D, specify the requirements for maintaining records at a Yucca Mountain high-level waste repository, including those required by the conditions of the license or by rules, regulations, and orders of the Commission, pursuant to 10 CFR 63.71(b). Records of the receipt, handling, and disposition of radioactive waste at a geologic repository operations area must contain sufficient information to provide a history of the movement of the waste from the shipper through all phases of storage and disposal. The records must be placed in the archives and land-record systems of local, State, and Federal government agencies, and archives elsewhere in the world. The