

records are to identify the location of the geologic repository operations area, including the underground facility, boreholes, shafts ramps, and the boundaries of the site, and the nature and hazards of the waste.

DOE must also meet the 10 CFR 63.72 requirement to maintain records of construction in a manner that ensures their usability for future generations. These construction records must include surveys; a description of materials encountered; geologic maps and cross sections; locations and amount of seepage; details of equipment, methods, progress, and sequence of work; construction problems; anomalous conditions encountered; instrument locations, readings, and analyses; location and description of structural support systems; location and description of dewatering systems; details, methods of emplacement, and locations of seals used; and facility design records.

DOE must also maintain the records required by 10 CFR part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste," Subpart D, Sections 72.72, 72.74, 72.76, and 72.78. These additional records include material balance, inventory, and records requirements for stored material; reports of accidental criticality or loss of special nuclear material; material status reports; and nuclear material transfer reports.

DOE would also have to comply with U.S. Department of Transportation requirements for shipment of high-level radioactive waste and with NRC regulations at 10 CFR part 71, "Packaging and Transportation of Radioactive Material."

No changes were made to the Yucca Mountain Review Plan in response to this comment.

8.2 Land Ownership and Use

Issue 1: Does the land that might be used for a high-level waste repository at Yucca Mountain belong to Native American Tribes?

Comment. A commenter asked whether, for the purpose of controlling access to a repository at Yucca Mountain, the government was sure that the land does not belong to Native American Tribes. Another commenter asked where the Yucca Mountain Review Plan addressed the requirements for DOE to prove ownership and title to the land. A third commenter contended that the Ruby Valley Treaty of 1863 is being violated because land around the Yucca Mountain site belongs to the Western Shoshone Nation.

Response. NRC regulations at 10 CFR 63.121 require that the geologic repository operations area must be located in and on lands that are either acquired lands under the jurisdiction and control of DOE, or lands permanently withdrawn and reserved for its use. The land must also be free from significant encumbrances such as mining rights, right-of-ways, or rights of entry. DOE must satisfy these regulations in order to be granted a license for a high-level waste repository at Yucca Mountain. In its review of the license application, NRC staff would determine whether DOE has provided information that demonstrates compliance with these requirements. This review is addressed in Section 4.5.8, "Controls to Restrict Access and Regulate Land Uses," of the draft Yucca Mountain Review Plan (Review Method 1 and Acceptance Criterion 1). In addition, the Commission addressed tribal claims regarding Yucca Mountain in the Statement of Considerations for 10 CFR part 63 (66 FR 55766, November 2, 2001):

The NRC is aware that the Western Shoshone National Council disputes the claim of the United States to have legal title to land that includes the Yucca Mountain site. However, there are Federal court decisions which have addressed these land claim issues and which are binding on both DOE and NRC. Section 63.121 requires that, before NRC licensing of a waste repository at the Yucca Mountain site, DOE must establish that the geologic repository operations area and the site are located in and on land that is either acquired land under the jurisdiction and control of DOE, or lands permanently withdrawn and reserved for DOE's use.

No changes have been made to the Yucca Mountain Review Plan as a result of this comment.

Issue 2: What uses may be made of a geologic repository operations area other than disposal of radioactive waste?

Comment. One commenter was concerned that there might be plans to use a geologic repository operations area for purposes other than disposal of radioactive wastes and stated that building a monitored retrievable storage facility at Yucca Mountain is specifically prohibited by the Nuclear Waste Policy Act.

Response. Section 4.5.9, "Uses of Geologic Repository Operations Area for Purposes Other than Disposal of Radioactive Wastes," of the draft Yucca Mountain Review Plan would be used to evaluate compliance with the 10 CFR 63.21(c)(22)(vii) requirement that a license application must contain "Plans for uses of the geologic repository operations area at the Yucca Mountain site for purposes other than disposal of

radioactive wastes, with an analysis of the effects, if any, that such uses may have on the operation of the structures, systems, and components important to safety and the engineered and natural barriers important to waste isolation."

The regulations require DOE to identify uses that are unrelated to waste disposal. Section 141 of the Nuclear Waste Policy Act prohibits the construction of a monitored retrievable storage facility at Yucca Mountain.

NRC staff will evaluate any such proposed uses if included in a license application for a high-level waste repository at Yucca Mountain, and determine whether such uses are contrary to the Nuclear Waste Policy Act.

No changes were made to the Yucca Mountain Review Plan as a result of this comment.

8.3 Expert Elicitation

Issue: What is the appropriate scope for the use of expert elicitation?

Comment. A commenter expressed concerns about the use of expert elicitation in a license application for a high-level radioactive waste repository at Yucca Mountain. The commenter stated that because DOE has had 20 years to obtain data to evaluate the suitability of the Yucca Mountain site, DOE use of expert elicitation should be limited and should not be a substitute for information obtainable during site characterization. The commenter also stated that NRC staff should not allow DOE to substitute expert opinion for data that it was afraid to collect.

Response. It is not acceptable to use expert elicitation as a substitute for information that could have been reasonably obtained during site characterization or to avoid collection of relevant data. The regulations at 10 CFR 63.21(c)(19) requires "an explanation of how expert elicitation was used."

Section 4.5.4, "Expert Elicitation," of the draft Yucca Mountain Review Plan uses NUREG-1563, "Branch Technical Position on the Use of Expert Elicitation in the High-Level Radioactive Waste Program" (NRC, 1996). The NUREG-1563 states, in part:

In matters important to the demonstration of compliance, the use of formal expert elicitation should be considered whenever one or more of the following conditions exist:

- (a) Empirical data are not reasonably obtainable, or the analyses are not practical to perform;
- (b) Uncertainties are large and significant to a demonstration of compliance;
- (c) More than one conceptual model can explain, and be consistent with, the available data; or