

Revision History

On the title page, the long-term surveillance plan (LTSP) indicates this version (0.0) as the “initial issue.” While it is the current issue for this revision, when finalized, the revision history should list the original LTSP as the 1998 version. Therefore, this revision should be “1.0”, and the changes summarized in the “description of change.”

The revision history is important because when NRC “accepts” a site LTSP and concurs with Department of Energy (DOE’s) remedial strategy, the general license becomes effective. The general license for the Slick Rock site became effective in 1998 because NRC accepted the 1998 LTSP. To maintain continuity with the general license, the LTSP should reflect the revision history.

Appendix B and C

The documents included as Appendix B and C do not need to be included in the LTSP. It is sufficient to incorporate those documents by reference (see 10 CFR 40.27(b)). It is suggested that NRC’s Agencywide Documents Access and Management System (ADAMS) Accession number is included in the references for those documents:

[ML20151T568](#) for NRC’s August 31, 1998, letter for Acceptance of the LTSP

[ML012140228](#) for DOE’s June 29, 2001, letter requesting NRC’s concurrence to terminate water level monitoring and decommission the standpipes

[ML020440335](#) for NRC’s February 13, 2002, letter for concurrence to terminate water level monitoring and decommission the standpipes

Section 1.1 Purpose

First Paragraph: Both sentences in this paragraph state the same thing and seem redundant. In addition, a general license is not “held” by NRC.

Second Paragraph: Why is the second paragraph included? (NRC provides assistance to states ...) This is a Title I disposal site and states are involved through Section 108 of Uranium Mill Tailings Radiation Control Act and not Section 274 of the Atomic Energy Act.

Third Paragraph: It is suggested that this paragraph be revised to provide a clearer summary of the purpose for this revision, i.e., the revision is largely administratively updating the language in the LTSP to reflect past approved changes including:

- Site name change
- Elimination of text regarding monitoring standpipes
- Include inspection of the recently installed aerial survey markers
- Updating the coordinates of the on-site features
- Removing the corrective actions section
- etc.

Section 2.1 Site History

The LTSP reports approximately 814,000 cubic yards of tailings and other contaminated materials were relocated to the Slick Rock disposal site. The 1998 LTSP ([ML20013J672](#))

reports 805,300 cubic yards of material were placed in the disposal cell. Please explain the difference in volume of material. (Also see below)

Section 2.2.2 Legal Description

The deed in Appendix D does not seem to coincide with the text or applicable.

Section 2.2.4 Disposal Cell Description

The LTSP reports that the disposal cell contains 1.11 million dry tons (approximately 800,000 cubic yards) of contaminated materials with a total activity of 149 curies of radium-226 (referencing the final Completion Report (CR) (ML20141D463)). The final CR reports 1,109,265 tons of dry material with a final volume of 778,104 cubic yards and a total radioactivity of 146 curies Ra-226. The 1989 LTSP reported 1,140,00 dry tons (of tailings) and the amount of radioactivity of 175 curies of radium-226 (and as noted above 805,300 cubic yards). Based on photographs, the granite marker lists the disposal cell as containing 1,112,260 dry tons of tailings and 149 curies Ra-226. Please provide an explanation for the apparent discrepancies and a statement that the information in the revised LTSP is correct.

The LTSP reports the cell was excavated 7 to 20 feet below ground surface so the bottom of contaminated materials would be placed below a permeable sandstone layer. LTSP Figure 4 suggests an excavation to 50 feet at least on one end. The 1998 LTSP reports that the disposal cell is constructed partially below grade. The 1995 RAP reports that the disposal cell will be partially below grade with the excavation to approximately 30 feet at the shallow end to approximately 45 to 50 feet at the deep end. Please explain the discrepancies and a statement that the information in the revised LTSP is correct.

Table 2 Permanent Site Surveillance Feature Location Coordinates

The coordinates referenced to an established datum is a great improvement. However, the relative distances between northing or easting for several features appear to disagree with the coordinates in the 1998 LTSP. Please verify that the reported coordinates are accurate.

Sections 3.4 – 3.6

The discussion on reporting requirements is confusing with respect to application of 10 CFR Part 40 Appendix A Criterion 12 or 10 CFR 40.60. In Section 3.5.1 *Criteria for Follow-Up Inspections*, the LTSP states NRC will be notified based on “whichever applies” without defining any criteria. In Section 3.6.2 *Emergency Measures*, the LTSP references 10 CFR Part 40 Appendix A Criterion 12, but that criterion does not specify any emergency measures. In Section 3.6.6 *Reporting Maintenance and Emergency Measures*, the LTSP references only 10 CFR 40.60 for “any Priority 1 or Priority 2 [emergency] event.” Although included in several prior LTSPs, requirements in 10 CFR 40.60 are not a requisite for a general license under 10 CFR 40.27. On the other hand, as discussed below, an early notification to NRC is desirable for an emergency situation and should be considered.

The LTSP correctly states that results of the annual inspection will be reported within 90 days of the final Title I site inspection for that calendar year. The LTSP incorrectly states in Section 3.5.3 *Follow-Up Inspection Reports* that “[s]eparate preliminary reports will not be issued unless DOE determines that it is advisable to notify NRC.” Then the LTSP states that “[i]f

... required, DOE will submit the preliminary report of the follow-up inspection to NRC within the 60-day period required by 10 CFR 40 Appendix A Criterion 12.”

Criterion 12 was modified when 10 CFR 40.27 was added to the regulations to give DOE flexibility in its annual reporting requirement. However, the language in Criterion 12 is clear about reporting a specific site inspection sooner (within 60 days of the inspection) if unusual damage or disruption is discovered during the routine inspection. While the terms “unusual damage” and “disruption” are not defined in NRC regulations, DOE should have some discretion on whether the need for a 60-day interim report is necessary. However, as written, DOE is the sole arbiter of whether an interim report is needed and only after a follow-up inspection.

NRC recognizes that this language is similar to that in the 1998 LTSP. However, a much-more-in-depth explanation was included in the corrective actions section of the 1998 LTSP, which has been removed with this revision. To ensure proper notification of unusual damage or disruption, NRC suggests the LTSP includes notification to NRC by telephone or email of a decision regarding any follow-up investigation or lack of a 60-day interim report. These types of notifications are currently being performed on an informal basis. Such practices should be incorporated in a formal plan.

Removing the Corrective Action Section from the 1998 LTSP

Requirements in 10 CFR 40.27 do not include information about corrective actions. NRC concurs with removing this section from the LTSP because: (1) corrective actions are generally associated with groundwater and no groundwater monitoring is conducted at this site; and (2), any corrective actions involving the tailings impoundment is described in Section 3.6 *Routine Site Maintenance and Emergency Measures*.