

## DISCUSSION OF SIGNIFICANT STAKEHOLDER COMMENTS AND STAFF PATH FORWARD ON RESTRICTED USE AND INSTITUTIONAL CONTROLS

### SUMMARY OF DRAFT GUIDANCE

In NUREG-1757, Draft Supplement 1, "Consolidated NMSS Decommissioning Guidance: Updates to Implement the License Termination Rule Analysis," the U.S. Nuclear Regulatory Commission (NRC) staff proposed revisions to the following sections of NUREG-1757, Vol. 1, Rev. 1: (1) Section 17.7, "Restricted Use and Alternate Criteria"; (2) Section 17.8, "Obtaining Public Advice on Institutional Controls"; and (3) Appendix M, "Overview of the Restricted Use and Alternate Criteria Provisions of 10 CFR Part 20, Subpart E." The revisions incorporate the Commission-approved options related to restricted use and institutional controls and include guidance on the risk-informed graded approach for institutional controls. The revised guidance includes descriptions of the two new "last resort" options for institutional controls, with NRC long-term oversight: (1) a possession-only license for long-term control (LTC); and (2) a legal agreement and restrictive covenant (LA/RC). In addition, the staff provided further guidance on advice from affected parties, a total system approach for sustaining protection, and risk-informed long-term monitoring.

### SUMMARY OF STAKEHOLDER COMMENTS ON DRAFT GUIDANCE

Three States, one licensee, two public interest groups, one solid waste industry association, and one private citizen provided comments on restricted use and institutional controls. A broad range of stakeholder comments was received, including comments on perceived inconsistencies between the License Termination Rule (LTR), in 10 CFR Part 20, Subpart E, and NRC's regulations for low-level waste disposal and uranium mill tailings, as well as concerns about the existing restricted use provisions of the LTR. Most of the comments on the draft guidance addressed the LTC license option, and a few addressed the LA/RC option and advice from affected parties. No comments were received on the risk-informed graded approach, total system for sustaining protection, or long-term monitoring. The more significant comments are discussed below, along with staff plans to address comments and to finalize the guidance. Minor comments are not discussed.

### KEY COMMENTS ON DRAFT GUIDANCE FOR LTC LICENSE

#### Support for and Opposition to LTC License

One commenter agreed with the concept of an LTC license and indicated that when properly implemented, an LTC license can provide greater assurance that the necessary land use and other controls will remain effective at sites that are released for restricted use. The commenter preferred use of the LTC license over the LA/RC. Another commenter supported the use of an LTC license as a strong institutional control. A third commenter did not support the concept of the LTC license. This commenter viewed the LTC license as long-term storage, not permanent disposal, since it would not meet the criteria that the NRC has established for disposal facilities. The commenter believed that the LTC approach is inconsistent with other NRC regulations for low-level radioactive waste and uranium mill tailings, which favor disposal in a limited number of facilities, to reduce proliferation of small waste disposal sites. The staff infers that the

commenter also believed that permanent disposal would provide better protection of public health safety and the environment than would the use of an LTC license.

**Staff considerations:** The staff acknowledges comments supporting and opposing use of LTC licenses. The staff plans to change the guidance to clarify that, for the LTC option to be used, the licensee must meet the eligibility requirements for restricted use in 10 CFR 20.1403. The LTC license will be used only as a last resort to providing institutional controls for restricted use, when licensees have not been able to establish other types of institutional controls.

#### Proliferation of Restricted Use Sites and Future Legacy Sites

Some commenters expressed concerns that the LTC license would lead to proliferation of restricted use sites.

**Staff considerations:** The staff plans to revise the guidance to emphasize that the LTC license is a last resort for restricted use sites, of which only a few are expected, and that NRC's ongoing rulemaking to prevent future legacy sites will also help reduce the number of future restricted use sites.

#### LTC License Should Not Provide a Means for Avoiding Requirements

One commenter suggested that NRC should not offer options for restricted use decommissioning to licensees who cannot meet the LTR requirements for restricted use. The LTC license should not provide a means for avoiding applicable license requirements.

**Staff considerations:** The existing draft guidance states that compliance with all the requirements of 10 CFR 20.1403 is required for restricted use sites, including sites for which the LTC license option is proposed. The staff plans to clarify the guidance to emphasize this point.

#### Approach for Maintaining Single Ownership of a Privately Owned Restricted Use Site

Draft Supplement 1 provided guidance on keeping an entire site (that contains both restricted and unrestricted use portions) together under single ownership and an LTC license, when the LTC license is the institutional control. The draft guidance explained that this approach is preferred only for a privately owned site needing long-term restrictions on use, where the restricted use portion has little or no resale value, but the unrestricted use portion has a valuable use that would maintain the value for the entire site. This approach was intended to allow reuse of the site while maintaining site ownership, and thus, enhance both reuse and long-term protection. The draft guidance noted this was a challenging issue and specifically requested stakeholder comment on this aspect of the guidance.

One commenter suggested that prohibiting the sale of unrestricted use property (maintaining single ownership of the entire site) should not be the preferred approach in the guidance and should only be provided as an option. The commenter indicated that this approach is an attempt to rewrite the LTR and is unnecessary if there is sufficient financial assurance to enable a third party to carry out the necessary control and maintenance. Another commenter agreed with the approach of maintaining single ownership.

**Staff considerations:** The staff plans to remove the preference for one approach and to restate the approach as an option to be considered on a case-by-case basis, given site-specific factors. Licensees should discuss with affected parties the options for sustaining ownership and reuse of the site, without causing undue burdens, and provide this information in the decommissioning plan.

#### Flexibility of LTC License for Future Changes

A commenter asked if there is flexibility for an LTC licensee to propose use of a different institutional control in the future, to replace the LTC license as the institutional control for restricted use. The commenter also questioned if there is flexibility for NRC to require an LTC licensee to remediate the site in the future if an inexpensive disposal option becomes available.

**Staff considerations:** The staff believes that there would be flexibility for an LTC licensee to propose a restricted release with a different and acceptable institutional control. As the draft guidance indicates, additional cleanup of a site under the LTC license would not be required, unless new information were to indicate a significant threat to public health and safety, per the finality statement in 10 CFR 20.1401(c). However, an LTC licensee would have the flexibility to propose remediation to unrestricted release levels, if a new inexpensive disposal option were to become available. The staff plans to make changes to the guidance to clarify these flexibilities.

#### KEY COMMENTS ON DRAFT GUIDANCE FOR LA/RC

##### LA/RC Justification

Commenters questioned the conditions for when the LA/RC could be an acceptable institutional control option vs. the LTC license. Specifically, commenters noted that there was no need for the licensee or owner to demonstrate that the LA/RC would be a significant benefit to the licensee or owner and to affected parties. Commenters suggested that, instead, the licensee should demonstrate that the LA/RC option is justified and provides the same level of protection for the public and the environment as the LTC license option.

**Staff considerations:** The staff agrees that the condition to demonstrate the benefit of the LA/RC to the licensee or owner and to affected parties is unnecessary. The staff plans to revise the guidance to reflect that a LA/RC may be an acceptable institutional control option, instead of an LTC, if there are no monitoring nor maintenance activities that would require a site owner to have special expertise or knowledge to carry them out. For a site to use either option, the LTR criteria for restricted use must be met, including that the institutional control must be legally enforceable (for the LA/RC, enforceable in the jurisdiction where the site is located).

##### Use of Environmental Covenants

Some commenters focused on State involvement in LA/RC. Commenters suggested that the guidance mention that States have effective environmental covenant mechanisms available, which can be more effective than the NRC LA/RC.

**Staff considerations:** The Uniform Environmental Covenants Act (UECA) is a model law that was approved by the National Conference of Commissioners on Uniform State Laws in 2004

and for which active legislative introduction began in some States in 2005. It establishes requirements for a new valid real estate document (environmental covenant) to control future use of a brownfield when a site is sold. If adopted by a State, UECA includes provisions absent from most existing State statutes, which may help to overcome obstacles that lead to ineffectiveness of other land-use controls. The staff plans to revise the guidance on institutional controls to discuss the potential availability of environmental covenants in some States.

#### KEY COMMENT ON PROCESS: PREFERENCE FOR RULEMAKING

A commenter suggested that the LTC license option should be subject to rulemaking, rather than establishing this option through Commission policy and guidance. The commenter indicated that rulemaking is appropriate because this appears to be a significant change. Further, the LTC license would not be terminated in the usual sense, could require a National Environmental Policy Act (NEPA) review, should undergo more rigorous public scrutiny, and could lead to additional legacy sites.

**Staff considerations:** SECY-03-0069 (“Results of the License Termination Rule Analysis,” May 2, 2003) evaluated both rulemaking and guidance and recommended that guidance was appropriate for the few sites that might consider using the LTC license option. The Commission approved the staff’s recommendation to develop guidance. Consistent with NRC’s decommissioning process, a NEPA review would be done for a site that proposes an LTC license for restricted use. The staff plans to include the LTC license option in the final guidance and does not plan rulemaking for this option.

#### KEY COMMENTS ON THE LICENSE TERMINATION RULE

##### Perceived Inconsistencies with Other Regulations

A few commenters mentioned perceived inconsistencies between the NRC decommissioning guidance and NRC regulations for low-level waste disposal and uranium mill tailings disposal.

**Staff considerations:** The comments raise a broader issue concerning a consistent regulatory scheme for materials containing uranium and thorium, regardless of their source. This concern is beyond the scope of the decommissioning guidance effort, because the staff is not revising the regulations (only guidance supporting the regulations). However, the staff notes that although the regulations for low-level waste disposal, uranium mill tailings disposal, and license termination differ, due in part to their statutory origins, the regulations have generally similar features and provide similar protection of public health and safety and the environment.

##### Indefinite Duration of Institutional Controls

One commenter questioned the justification for NRC to allow institutional controls to be durable indefinitely, especially in light of the low-level waste facility regulations, which state that institutional controls cannot be relied on for more than 100 years.

**Staff considerations:** The LTR approach to analyses of institutional controls assumes two cases: institutional controls in place and institutional controls no longer in effect. Dose criteria must be met for both cases. The analysis of institutional controls no longer in effect assumes

loss of controls at any time. This approach mitigates issues with determining or justifying the duration of institutional controls. The purpose of the 10 CFR Part 61, 100-year institutional control requirement is to provide protection for the time period needed for Class A and B waste to decay to acceptable levels. The staff plans to revise the guidance to explain the approach for demonstrating compliance with the LTR requirements for institutional controls, compared to use of institutional controls for the low-level waste disposal regulations.

#### Consistent Analysis of Institutional Controls and Engineered Barriers

One commenter suggested that analyses assuming institutional controls are no longer in effect should also assume that engineered barriers are not in place.

**Staff considerations:** The Commission determined that under the LTR, engineered barriers are distinct and separate from institutional controls (“Decommissioning Criteria for the West Valley Demonstration Project (M-32) at the West Valley Site; Final Policy Statement,” 67 *Federal Register* 5003, February 1, 2002). Therefore, the analysis of institutional controls no longer in effect under the LTR would not assume that engineered barriers would also fail. Instead, degradation of engineered barriers without active monitoring and maintenance would need to be analyzed (because institutional controls would not be in place to ensure active monitoring and maintenance and to prevent an inadvertent intruder). The distinction between engineered barriers and institutional controls is described in Draft Supplement 1, and the staff does not plan to make changes to the guidance.