



# Disposal of Low-Level Radioactive Waste

## Position Statement

Revised February 2009

The American Nuclear Society (ANS) recommends prompt actions to ensure that adequate low-level radioactive waste (LLRW) disposal capability continues to be maintained until a path for disposal is provided by the Low-Level Radioactive Waste Policy Act (LLRWPA) of 1980 (Public Law 96-573) and the Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPA Amendments) or by other means. LLRW is waste produced from the use of radioactive materials in industrial activities, academic research and medical activities, nuclear power generation, and site decontamination. It does not include spent nuclear fuel or any other material considered to be high-level radioactive waste.

Escalation of costs results from the need to maintain safe and secure storage when LLRW accumulates at the many sites licensed to possess radioactive material. Currently, disposal capability is limited (more for some LLRWs than others) because no new facilities have been licensed to dispose of Class A, B, and C LLRW,<sup>a</sup> in accordance with the compact system established by the LLRWPA of 1980. As of July 1, 2008, no disposal sites have been available for the Class B and C LLRW produced in 36 states, and only one site is available for Class A LLRW produced in these states,<sup>b</sup> although there is a site under licensing review in Texas. Biological LLRW produced in these states also has no clear disposal path. Actions need to be taken soon to provide for adequate LLRW disposal capability. Capability must include both access and capacity. Provisions are available under Public Law 96-573 and 10 CFR 61 (Ref. 1) for emergency access to disposal capacity, but the lack of permanent disposal capability could stop or impede various research, medical, and industrial activities.

Accordingly, the ANS supports the following:

1. Prompt State and Federal government actions to resolve issues regarding state and federal responsibility and control over LLRW disposal, including transportation to disposal sites and facilitating development of such sites. One interim approach may be to make some current U.S. Department of Energy (DOE)-managed LLRW disposal sites available for commercial (i.e., non-DOE) LLRW. Until adequate disposal capability is developed (according to the LLRWPA of 1980 and the LLRWPA Amendments or otherwise), the ANS supports the following:

- *Long-term:* The Greater-than-Class C (GTCC) disposal facility that the DOE is mandated to provide for non-DOE (“commercial”) GTCC and DOE “GTCC-like” LLRW should also be made available for disposal of other non-DOE LLRWs that have no other disposal option.
- *Near-term:* Until the GTCC disposal facility is provided, some existing DOE disposal facilities should be made available for disposal of non-DOE Class B and C LLRW. Existing compacts with operating disposal facilities should be allowed



to continue to function within the framework established by the LLRWPA of 1980 and the LLRWPA Amendments or otherwise. That framework should continue to be available for compacts or states in the future.

2. Continued minimization of LLRW generation and assurance that LLRW is packaged, handled, and temporarily stored in a safe manner.
3. Federal government actions to investigate reclassification of some Class B and C LLRWs and to communicate changes in the classification scheme of 10 CFR 61 (Ref. 1).

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<sup>a</sup>See companion document: “Disposal of Low-Level Radioactive Waste: Background Information,” American Nuclear Society (Feb. 2009).

<sup>b</sup>The Barnwell, South Carolina, site was closed July 1, 2008, to LLRW generated outside the Atlantic Compact. EnergySolutions's Clive, Utah, disposal site is now the only site available to LLRW generators in 36 states. This site is not licensed for biological waste, sealed sources, or Class B and C LLRW. States in the Northwest and Rocky Mountain Compact regions have access to a compact-operated site (Richland, Washington).

## Reference

1. Title 10, “Energy,” Part 61, “Licensing Requirements for Land Disposal of Radioactive Waste,” *Code of Federal Regulations*.

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Position Statements are the considered opinions and judgments of the Society in matters related to nuclear science and technology. They are intended to provide an objective basis for weighing the facts in reaching decisions on important national issues.

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