

Disposal of Low-Level Radioactive Waste

Position Statement

Revised July 2008

The American Nuclear Society (ANS) believes that it is in the best interests of our country and society to develop and maintain adequate disposal capability for all classes of commercially produced Low Level Radioactive Waste (LLRW). Accordingly, the ANS recommends prompt actions to ensure that adequate and safe LLRW disposal capability continues to be maintained until such time as disposal is provided by the LLRW Policy Act and its amendments.

LLRW is waste produced from the use of radioactive materials in industrial, 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.

Safety, security, and cost issues arise when LLRW accumulates at thousands of sites licensed to possess radioactive material. Currently, there is limited disposal capability because no new facilities have been created following the compact system established by the LLRW Act of 1980. As of July 1, 2008, no disposal sites are available for the two higher classes of LLRW produced in 36 states, and only one site for the lower class of LLRW produced in these states⁽¹⁾. Actions need to be taken soon to provide for adequate LLRW disposal capability. Capability must include both access and capacity. The lack of disposal capability could stop or impede various research, medical and industrial activities and have a deleterious effect on public health and quality of life.

Accordingly, the ANS supports:

1. Prompt 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 that could be considered is to make current LLRW disposal sites managed by the DOE available for commercial LLRW. If and when additional disposal capability is needed, sufficient LLRW disposal capacity should be established on federal land to accommodate the needs of the nation. Specifically, until such time that adequate disposal capability is developed per the LLWPA, the ANS recommends:

Long-term: Congress should amend the Energy Policy Act (EPACT) of 2005 to provide that the Greater-than-Class C (GTCC) disposal facility (that the Department of Energy is mandated to develop for non-DOE (“commercial”) GTCC LLRW) also be available for disposal of non-DOE Class B and Class C wastes that have no other disposal option.

Near-term: The 2005 EPACT should be further amended to provide that until the GTCC disposal facility is completed, existing DOE disposal facilities be made available for disposal of non-DOE Class B and Class C LLRW. The 2005 EPACT must allow existing compacts with operating disposal facilities to continue to function within the framework established by the current LLRW Policy Act. That framework should continue to be available for compacts or states in the future.

2. Continued minimization of waste generation and assurance that LLRW is packaged, handled and temporarily stored in a safe manner.

3. Investigation of reclassification of some Class B and C wastes, and communicate changes in the classification scheme of 10 CFR Part 61.

⁽¹⁾ As of July 1, 2008, the Barnwell, South Carolina site is closed to waste 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, such as produced by biomedical research, or the two higher classes of LLRW. Other states will have access to a compact operated site.