

GAO
Accountability • Integrity • Reliability

Highlights

Highlights of [GAO-04-604](#), a report to the Chairman, Committee on Energy and Natural Resources, U.S. Senate

Why GAO Did This Study

Low-level radioactive waste (LLRW) management concerns persist despite enactment of the LLRW Policy Act of 1980, as amended, which made states responsible for providing for disposal of most LLRW. It also enumerated guidance and oversight responsibilities for DOE and NRC. When GAO last reported on LLRW disposal, in 1999, the only existing facility accepting the more highly radioactive types of LLRW (known as class B and C waste) from most states was expected to be full within 10 years. In this context, GAO examined (1) changes in LLRW conditions since 1999, (2) recent annual LLRW disposal volumes and potential future volumes, (3) any current or anticipated shortfalls in disposal availability, and (4) potential effects of any such shortfall.

What GAO Recommends

The Congress may wish to consider directing NRC to report if LLRW disposal and storage conditions change enough to warrant congressional intervention. GAO also recommends that DOE halt dissemination of its on-line LLRW database as long as it has internal control weaknesses and other shortcomings. NRC disagreed that it was the most appropriate entity to prepare this report. DOE disagreed that it should halt dissemination of LLRW information despite known problems with its database. GAO remains firm in its suggestion to the Congress and in its agency recommendation.

www.gao.gov/cgi-bin/getrpt?GAO-04-604.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Robin Nazzaro, (202) 512-3851, Nazzaror@gao.gov.

LOW-LEVEL RADIOACTIVE WASTE

Disposal Availability Adequate in the Short Term, but Oversight Needed to Identify Any Future Shortfalls

What GAO Found

GAO identified several changes in LLRW disposal availability and federal agency oversight since its 1999 report that have had or might have significant impacts on LLRW management by the states. For example, while one disposal facility plans to close to most states and new options are evolving that may counteract this shortfall, federal guidance and oversight of LLRW management has virtually ended.

Annual LLRW disposal volumes increased 200 percent between 1999 and 2003, primarily due to LLRW shipped to commercial disposal by DOE. GAO identified this increase using data from the three commercial disposal facility operators because GAO determined that data from the national LLRW database, maintained by DOE to assist the LLRW community in managing LLRW, were unreliable. The uncertain timing and volume of future waste shipments from DOE and nuclear utilities make it difficult to forecast disposal needs for all classes of LLRW.

At current LLRW disposal volumes, disposal availability appears adequate until at least mid-2008 for class B and C wastes. There are no expected shortfalls in disposal availability for class A waste. If disposal conditions do not change, however, most states will not have a place to dispose of their class B and C wastes after 2008. Nevertheless, any disposal shortfall that might arise is unlikely to pose an immediate problem because generators can minimize, process, and safely store waste. While these approaches are costly, GAO did not detect other immediate widespread effects. NRC places no limit on stored waste and presently does not centrally track it. However, as LLRW storage volume and duration increase in the absence of reliable and cost-effective disposal options, so might the safety and security risks.

Lowering Radioactive Waste into a Concrete Barrier at a Commercial Disposal Facility



Source: US Ecology, Inc.