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# Highlights

Highlights of [GAO-06-164T](#), a testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

## Why GAO Did This Study

Plutonium is very hazardous to human health and the environment and requires extensive security because of its potential use in a nuclear weapon. The Department of Energy (DOE) stores about 50 metric tons of plutonium that is no longer needed by the United States for nuclear weapons. Some of this plutonium is in the form of contaminated metal, oxides, solutions, and residues remaining from the nuclear weapons production process. To improve security and reduce storage costs, DOE plans to establish enough storage capacity at its Savannah River Site (SRS) in the event it decides to consolidate its plutonium there until it can be permanently disposed of. GAO was asked to examine (1) the extent to which DOE can consolidate this plutonium at SRS and (2) SRS's capacity to monitor plutonium storage containers.

## What GAO Recommends

In its July 2005 report, GAO made two recommendations to ensure that DOE develops a comprehensive strategy for plutonium consolidation, storage, and disposition and that its cleanup plans are consistent with this strategy. DOE generally agreed with the recommendations and stated that its recently created Nuclear Materials Disposition and Consolidation Coordination Committee will develop a strategic plan for the consolidation and disposition of plutonium.

[www.gao.gov/cgi-bin/getrpt?GAO-06-164T](http://www.gao.gov/cgi-bin/getrpt?GAO-06-164T).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Gene Aloise at (202) 512-3841 or [aloisee@gao.gov](mailto:aloisee@gao.gov).

# SECURING U.S. NUCLEAR MATERIALS

## Poor Planning Has Complicated DOE's Plutonium Consolidation Efforts

### What GAO Found

As GAO reported in July 2005, DOE cannot yet consolidate its surplus plutonium at SRS for several reasons. First, DOE has not completed a plan to process the plutonium into a form for permanent disposition, as required by the National Defense Authorization Act for Fiscal Year 2002. Without such a plan, DOE cannot ship additional plutonium to SRS. Second, SRS cannot receive all of the plutonium from DOE's Hanford Site because it is not in a form SRS planned to store. Specifically, about 20 percent of Hanford's plutonium is in the form of 12-foot-long nuclear fuel rods, which Hanford had planned to ship intact to SRS as part of its efforts to cleanup and demolish its closed nuclear facilities. However, SRS's storage plan assumed Hanford would package all of its plutonium in DOE's standard storage containers. Until a permanent disposition plan is developed, more plutonium cannot be shipped to SRS and DOE will not achieve the cost savings and security improvements that consolidation could offer. In particular, continued storage at Hanford will cost approximately \$85 million more annually because of increasing security requirements and will threaten that site's achievement of the milestones in its accelerated cleanup plan.

In addition, DOE lacks the necessary capability to fully monitor the condition of the plutonium to ensure continued safe storage. The facility at SRS that DOE plans to use to store plutonium lacks adequate safety systems to conduct monitoring of storage containers. Without a monitoring capability, DOE faces increased risks of an accidental plutonium release that could harm workers, the public, and the environment. DOE had planned to construct a monitoring capability in another building at SRS that already had safety systems needed to work with plutonium. However, this building would not have had sufficient security to conduct all of the required monitoring activities. In addition, this building also has other serious safety problems. Faced with these challenges, DOE announced in April 2005 that it would have SRS's storage facility upgraded to conduct plutonium monitoring.

Proposed Consolidation and Permanent Disposition of DOE's Surplus Plutonium

