

Highlights of GAO-14-449, a report to the Subcommittee on Energy and Water Development, Committee on Appropriations, U.S. Senate

Why GAO Did This Study

NNSA is responsible for the nation's nuclear weapons programs. As part of this mission, it oversees dismantlement of retired nuclear weapons and disposition of their components. Dismantlement occurs at NNSA's Pantex Plant, and disassembly of CSAs from dismantled weapons occurs at the Y-12 site. GAO was asked to assess NNSA's weapons dismantlement and component disposition efforts.

This report examines, among other things, (1) how NNSA measures progress toward its fiscal year 2022 dismantlement performance goal, as well as any challenges it might face in achieving the goal; (2) the schedule for and any challenges in dismantling weapons to be retired as a result of the New START treaty; (3) physical capacity available at Pantex to meet or accelerate planned dismantlement workload; and (4) any challenges in disassembling and disposing of weapon components. GAO analyzed NNSA's future dismantlement schedule, observed weapons dismantlement and component disposition activities at Pantex and Y-12, and interviewed NNSA officials. This report summarizes the findings of GAO's classified report on nuclear weapons dismantlement.

What GAO Recommends

GAO recommends that NNSA (1) clarify the dismantlement performance goal and (2) consider extending the goal to avoid a dismantlement workload gap. NNSA generally agreed with these recommendations.

View GAO-14-449. For more information, contact David C. Trimble at (202) 512-3841 or trimbled@gao.gov.

April 2014

NUCLEAR WEAPONS

Actions Needed by NNSA to Clarify Dismantlement Performance Goal

What GAO Found

How the National Nuclear Security Administration (NNSA) measures progress toward its performance goal of dismantling all weapons retired prior to fiscal year 2009 by the end of fiscal year 2022 is unclear for two reasons. First, NNSA does not track the actual date that dismantled weapons were retired and may be counting some dismantled weapons retired after fiscal year 2009 as equivalent to weapons retired prior to fiscal year 2009. Second, NNSA will not dismantle some weapons retired prior to fiscal year 2009 but will reinstate them to the stockpile to save on rebuilding other weapons and count the reinstated weapons as equivalent dismantlements. Having clear goals and measures is a key element of program management. Because the dismantlement performance goal does not make these practices clear, NNSA risks providing misleading information about progress related to its goal.

NNSA has a schedule for future weapon dismantlements but has not scheduled for dismantlement any weapons to be removed from the stockpile resulting from implementation of the 2010 New Strategic Arms Reduction Treaty (New START). These weapons are not expected to be retired until the late 2020s or early 2030s. The deferred retirement of these weapons could result in a significant dismantlement workload gap during the mid-2020s. Such a gap could result in the loss of certified dismantlement personnel because dismantlement technicians at Pantex lose their certifications if they have not worked on a weapon type in the past year. By extending the fiscal year 2022 dismantlement performance goal, NNSA could allow the current dismantlement workload to be leveled and extended through the mid-2020s to sustain its dismantlement workforce.

The physical capacity at the Pantex Plant in Texas should be sufficient to meet NNSA's planned dismantlement workload and other stockpile commitments through fiscal year 2022. According to NNSA officials and Pantex site contractors, the site's ability to significantly accelerate its dismantlement rates and complete planned workload earlier than fiscal year 2022 could be costly, and it is unclear whether the site would have sufficient capacity to do so.

GAO identified policy and technical challenges complicating NNSA's disassembly and disposition of nuclear and nonnuclear components from dismantled nuclear weapons. For instance, the Y-12 National Security Complex in Tennessee disassembles canned subassemblies (CSA)—a major nuclear component that can contain highly enriched uranium (HEU), which is uranium enriched in the isotope uranium-235 to 20 percent or greater. NNSA is retaining many CSAs, leaving far fewer of them for disassembly, and creating challenges for Y-12's ability to plan its disassembly workload. However, NNSA bases its retention decisions on national security considerations and not Y-12 workload. Moreover, NNSA's ability to effectively manage a contingency inventory of millions of nonnuclear components at Pantex is complicated by decisions to retain many components for potential reuse in weapons, including old parts for weapons no longer in the stockpile, and by limitations in Pantex's previous component inventory management system. GAO is not making a recommendation on these matters because of efforts already under way at Pantex to address the need to retain older parts and to upgrade its component inventory management system.