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.