Additional Actions Needed to Increase the Security of U.S. Industrial Radiological Sources

What GAO Found

GAO found that challenges exist in reducing the security risks faced by licensees using high-risk industrial radiological sources. Specifically, licensees face challenges in (1) securing mobile and stationary sources and (2) protecting against an insider threat. Regarding mobile sources, their portability makes them susceptible to theft or loss, as the size of some of these sources is small enough for them to be easily concealed. The most common mobile source is contained in a device called a radiography camera. GAO identified four incidents from 2006 to 2012 where such cameras that use high-risk sources to test pipeline welds were stolen. These thefts occurred even though the Nuclear Regulatory Commission (NRC) has established increased security controls. Licensees also face challenges in determining which employees are suitable for trustworthiness and reliability (T&R) certification to have unescorted access to high-risk radiological sources. GAO found two cases where employees were granted unescorted access, even though each had extensive criminal histories, and one had been convicted for terrorist threats, which include a range of violent threats. In this case, NRC said that the person was convicted not of a threat against the United States, but of making violent verbal threats against two individuals. It is unclear whether these cases represent isolated incidents or a systemic weakness in the T&R process established by NRC. Without an assessment of the process, NRC may not have reasonable assurance that access decisions made by licensees can prevent threats to high-risk radiological sources, particularly by a determined insider.

Federal agencies responsible for securing radiological sources—including NRC, the National Nuclear Security Administration (NNSA), and the Department of Homeland Security (DHS)—have taken steps to improve the security of industrial radiological sources. For example, NRC is developing a best practices guide that is expected to provide licensees with practical information about how to secure their sources. Also, NNSA is developing new technology that would, if successful, improve tracking of radiological sources while in transit. However, GAO found that although the agencies have been meeting quarterly to discuss, among other things, radiological security, this mechanism did not always help them collaborate and draw on each agency’s expertise during research, development, and testing of a new technology for a mobile source tracking device. By not collaborating consistently, the agencies have missed opportunities to leverage resources and expertise in developing this new technology to track radiological sources. This technology could aid in the timely recovery of a lost or stolen radiological source and support the agencies’ common mission. As GAO has previously reported, when responsibilities cut across more than one federal agency—as they do for securing industrial radiological sources—it is important for agencies to work collaboratively to deliver results more efficiently and in a way that is consistent with the federal government’s multiple demands and limited resources.