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NUCLEAR SECURITY

NRC and DHS Need to Take Additional Steps to Better Track and Detect Radioactive Materials

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Highlights

Highlights of GAO-08-598, a report to the Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

Concerns have grown that terrorists could use radioactive materials and sealed sources (materials sealed in a capsule) to build a "dirty bomb"— a device using conventional explosives to disperse radioactive material. In 2003, GAO found weaknesses in the Nuclear Regulatory Commission's (NRC) radioactive materials licensing process and made recommendations for improvement. For this report, GAO assesses (1) the progress NRC has made in implementing the 2003 recommendations, (2) other steps NRC has taken to improve its ability to track radioactive materials, (3) Customs and Border Protection's (CBP) ability to detect radioactive materials at land ports of entry, and (4) CBP's ability to verify that such materials are appropriately licensed prior to entering the United States. To perform this work, GAO assessed documents and interviewed NRC and CBP officials in headquarters and in several field locations.

What GAO Recommends

GAO recommends NRC take steps to ensure that the current target dates for launching new systems are not further postponed. GAO recommends CBP more effectively communicate guidance on when officers must verify the legitimacy of radioactive materials and take steps to ensure that this guidance is being followed. NRC neither agreed nor disagreed with GAO's findings and recommendations but described its efforts to implement GAO's 2003 recommendations and its plans to implement GAO's 2008 recommendations. CBP agreed with GAO's recommendations.

To view the full product, including the scope and methodology, click on GAO-08-598. For more information, contact Gene Aloise at (202) 512-3841 or aloisee@gao.gov.

What GAO Found

NRC has implemented three of the six recommendations in GAO's 2003 report on the security of radioactive sources. It has worked with the 35 states to which it ceded primary authority to regulate radioactive materials and sources and others to (1) identify sealed sources of greatest concern, (2) enhance requirements to secure radioactive sources, and (3) ensure security requirements are implemented. In contrast, NRC has made limited progress toward implementing recommendations to (1) modify its process for issuing licenses to ensure that radioactive materials cannot be purchased by those with no legitimate need for them, (2) determine how to effectively mitigate the potential psychological effects of malicious use of such materials, and (3) examine whether certain radioactive sources should be subject to more stringent regulations. Beyond acting on GAO's recommendations, NRC has also taken four steps to improve its ability to monitor and track radioactive materials. First, NRC created an interim national database to monitor the licensed sealed sources containing materials that pose the greatest risk of being used in a dirty bomb. Second, NRC is developing a National Source Tracking System to replace the interim database and provide more comprehensive, frequently updated information on potentially dangerous sources. However, this system has been delayed by 18 months and is not expected to be fully operational until January 2009. Third, NRC is also developing a Web-based licensing system that will include more comprehensive information on all sources and materials that require NRC or state approval to possess. Finally, NRC is developing a license verification system that will draw information from the other new systems to enable officials and vendors to verify that those seeking to bring these radioactive materials into the country or purchase them are licensed to do so. However, these systems are more than 3 years behind schedule and may not include the licensing information, initially at least, on radioactive materials regulated by agreement states—which represent over 80 percent of all U.S. licenses for such materials. The delays in the deployment and full development of these systems are especially consequential because NRC has identified their deployment as key to improving the control and accountability of radioactive materials.

While CBP has a comprehensive system in place to detect radioactive materials entering the United States at land borders, some equipment that is used to protect CBP officers is in short supply. Specifically, vehicles, cargo, and people entering the United States at most ports of entry along the Canadian and Mexican borders are scanned for radioactive materials with radiation detection equipment capable of detecting very small amounts of radiation. However we found that personal radiation detectors are not available to all officers who need them. Moreover, while CBP has systems in place to verify the legitimacy of radioactive materials licenses, it has not effectively communicated to officers at the borders when they must contact officials to verify the license for a given sealed source. Consequently, some CPB officers are not following current guidance, and some potentially dangerous radioactive materials have entered the country without license verification.