NUCLEAR NONPROLIFERATION

Progress Made in Improving Security at Russian Nuclear Sites, but the Long-term Sustainability of U.S.-Funded Security Upgrades Is Uncertain

What GAO Did This Study

Safeguarding nuclear warheads and materials that can be used to make nuclear weapons is a primary national security concern of the United States. Since 1993, the Departments of Energy (DOE) and Defense (DOD) have worked to improve security at sites housing weapons-usable nuclear material and warheads in Russia and other countries. In 1995, DOE established the Materials Protection, Control, and Accounting (MPC&A) program to implement these efforts. GAO examined the (1) progress DOE has made in improving security at nuclear material sites in Russia and other countries, (2) progress DOE and DOD have made in improving security at Russian nuclear warhead sites, and (3) efforts DOE and DOD have undertaken to ensure the continued effective use of U.S.-funded security upgrades.

To address these objectives, among other things, GAO analyzed agency documents, conducted interviews with key program officials, and visited four Russian nuclear sites.

What GAO Found

Through fiscal year 2006, DOE and DOD spent over $2.2 billion to provide security upgrades and other assistance at sites in Russia and other countries that house weapons-usable nuclear materials and warheads. With regard to securing nuclear material, DOE reports to have “secured” 175 buildings and plans to improve security at 35 additional buildings by the end of 2008. However, DOE's reported total of buildings “secured” does not recognize that additional upgrades remain to be completed at some buildings because DOE considers a building “secured” after it has received only limited MPC&A upgrades, even when additional comprehensive upgrades are planned. Further, DOE and Russia have developed a Joint Action Plan that includes 20 sites and details the remaining work to be accomplished by 2008. However, the plan does not include two sites containing many buildings with vast amounts of nuclear material where Russia has denied DOE access.

DOE and DOD report to have improved security at 62 Russian warhead sites and plan to help secure 35 additional sites by the end of 2008. The departments have improved their coordination mechanisms since our 2003 report, in which GAO reported that the agencies had inconsistent policies for installing site security upgrades at Russian warhead sites. Additionally, DOE and DOD are using similar approaches to manage large security upgrade contracts at warhead sites. DOD has used earned value management (EVM), which at early stages can identify cost and schedule shortfalls. DOE has not used EVM on its fixed-price contracts, but, during the course of GAO's review, augmented its contract oversight to increase reporting frequency, which DOE officials consider a comparable alternative to EVM.

DOE has developed broad guidelines to direct its efforts to help ensure that Russia will be able to sustain (operate and maintain) U.S.-funded security systems at its nuclear material and warhead sites after U.S. assistance ends and is working with Russia to develop a joint sustainability plan. However, DOE lacks a management information system to track the progress made toward its goal of providing Russia with a sustainable MPC&A system by 2013. DOE and DOD’s abilities to ensure the sustainability of U.S.-funded security upgrades may be hampered by access difficulties, funding concerns, and other issues. Finally, DOE and DOD plan to provide Russia with assistance to sustain security upgrades at nuclear warhead sites but have not reached agreement with Russia on access procedures for sustainability visits to 44 sites. As a result, the agencies may be unable to determine if U.S.-funded security upgrades are being properly sustained.

What GAO Recommends

GAO recommends that DOE (1) revise the metrics it uses to track progress in securing buildings with weapons-usable nuclear material and (2) develop a management information system to track DOE’s progress in providing Russia with a sustainable MPC&A system by 2013.

DOE agreed with GAO’s findings and recommendations. DOD did not provide written comments.


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.

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<thead>
<tr>
<th>Category</th>
<th>Progress</th>
<th>Spending</th>
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<tbody>
<tr>
<td>Nuclear material (DOE)</td>
<td>DOE has helped improve security at 175 of 210 buildings with nuclear material in Russia and other countries.</td>
<td>$1.3 billion</td>
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<tr>
<td>Nuclear warheads (DOE and DOD)</td>
<td>DOE and DOD have completed work at 62 of 97 planned sites and provided assistance to improve warhead transportation security.</td>
<td>$920 million</td>
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Sources: GAO analysis of DOE and DOD data.