



Highlights of GAO-09-321, a report to congressional committees

March 2009

## NUCLEAR SECURITY

### Better Oversight Needed to Ensure That Security Improvements at Lawrence Livermore National Laboratory Are Fully Implemented and Sustained

#### Why GAO Did This Study

In April 2008, the Department of Energy's (DOE) security inspection at Lawrence Livermore National Laboratory (LLNL) found significant weaknesses, particularly in LLNL's protective force's ability to assure the protection of weapons-grade (special) nuclear material. LLNL is overseen by the National Nuclear Security Administration (NNSA), a separately organized agency within DOE, and managed by a contractor. NNSA is planning to remove most of the special nuclear material from LLNL. GAO was asked to (1) characterize security deficiencies identified in the 2008 inspection; (2) determine the factors that contributed to these deficiencies; (3) identify LLNL's corrective actions to address security deficiencies; and (4) assess LLNL's plan to permanently remove the riskiest special nuclear material from its site. To conduct this work, GAO visited LLNL, reviewed numerous documents and plans, and interviewed LLNL and NNSA security officials.

#### What GAO Recommends

GAO recommends that the Administrator of NNSA improve and sustain federal oversight of security at LLNL by (1) developing a detailed plan and budget for training NNSA's Livermore Site Office (LSO) security staff and (2) providing financial incentives to LLNL's contractor to sustain security improvements. NNSA generally agreed with the report's findings and recommendations.

To view the full product, including the scope and methodology, click on [GAO-09-321](#). For more information, contact Gene Aloise at (202) 512-3841 or [aloise@gao.gov](mailto:aloise@gao.gov).

#### What GAO Found

DOE's Office of Independent Oversight found numerous and wide-ranging security deficiencies with LLNL's safeguards and security program. DOE gave the laboratory the lowest possible rating in two security areas: protective force performance and classified matter protection and control. The Office of Independent Oversight also reported that LLNL's physical security systems, such as alarms and sensors, and its security program planning and assurance activities needed improvement.

Weaknesses in LLNL's self-assessment program and LSO's oversight contributed to security deficiencies at the laboratory. LLNL's security self-assessment program and LSO's annual security survey failed to identify numerous security deficiencies before DOE's Office of Independent Oversight conducted its inspection. According to one DOE official, both programs were "broken" and missed even the "low-hanging fruit" of compliance-oriented deficiencies. More specifically, LLNL's self-assessment program should have identified the magnitude of technical problems with a key weapon system used at the laboratory. Furthermore, LSO's September 2007 security survey gave LLNL 100-percent satisfactory ratings in its security performance—differing markedly from the security performance DOE observed during its inspection a short time later. To address these issues, LSO is implementing a new program to better train security officials to perform security assessments and recognize deficiencies; however, according to LSO officials, LSO does not have a specific budget to implement this new security training program.

LLNL has developed corrective action plans to address the 54 security deficiencies identified by the Office of Independent Oversight, and both NNSA and DOE will oversee the plans' implementation. As of December 2008, LLNL reported having completed 74 percent of the milestones included in corrective action plans to address physical security deficiencies. DOE plans to re-inspect LLNL in April 2009 and focus on the effectiveness of corrective actions. In the past, LLNL has not sustained corrective actions to address similar security deficiencies. For example, in 1999 DOE reported that LLNL's capability to conduct vulnerability assessments was deficient. By 2000, this problem had been corrected. In 2008, DOE again noted deficiencies in LLNL's vulnerability assessment capability. NNSA has the opportunity to use its new performance-based management and operating contract to hold LLNL's contractor financially accountable for ensuring that security improvements resulting from corrective actions are sustained.

The plan to remove most of LLNL's special nuclear material by the end of fiscal year 2012 faces challenges because the plan's schedule depends on a number of factors, some of which LLNL does not control, such as the willingness and ability of other NNSA and DOE sites to receive the material, the timeliness of the effort, adequate funding, and the availability of specialized transport trucks operated by NNSA's Office of Secure Transportation to transfer material to other DOE sites.