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Highlights

Highlights of [GAO-06-313](#), a report to the Chairman, Subcommittee on the Federal Workforce and Agency Organization, Committee on Government Reform, House of Representatives

Why GAO Did This Study

The Department of Energy (DOE) is working to obtain a license from the Nuclear Regulatory Commission (NRC) to construct a nuclear waste repository at Yucca Mountain in Nevada. The project, which began in the 1980s, has been beset by delays. In a 2004 report, GAO raised concerns that persistent quality assurance problems could further delay the project. Then, in 2005, DOE announced the discovery of employee e-mails suggesting quality assurance problems, including possible falsification of records. Quality assurance, which establishes requirements for work to be performed under controlled conditions that ensure quality, is critical to making sure the project meets standards for protecting public health and the environment.

GAO was asked to examine (1) the history of the project's quality assurance problems, (2) DOE's tracking of these problems and efforts to address them since GAO's 2004 report, and (3) challenges facing DOE as it continues to address quality assurance issues within the project.

What GAO Recommends

GAO recommends five actions DOE can take to improve the project's management tools and identify and address quality assurance and other problems.

In oral comments, DOE agreed with GAO's recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-06-313.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Jim Wells at (202) 512-3841 or wellsj@gao.gov.

YUCCA MOUNTAIN

Quality Assurance at DOE's Planned Nuclear Waste Repository Needs Increased Management Attention

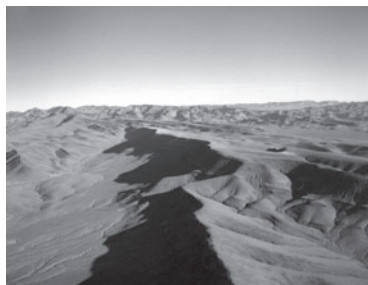
What GAO Found

DOE has had a long history of quality assurance problems at the Yucca Mountain project. In the 1980s and 1990s, DOE had problems assuring NRC that it had developed adequate plans and procedures related to quality assurance. More recently, as it prepares to submit a license application for the repository to NRC, DOE has been relying on costly and time-consuming rework to resolve lingering quality assurance problems uncovered during audits and after-the-fact evaluations.

DOE announced, in 2004, that it was making a commitment to continuous quality assurance improvement and that its efforts would be tracked by performance indicators that would enable it to assess progress and direct management attention as needed. However, GAO found that the project's performance indicators and other key management tools were not effective for this purpose. For example, the management tools did not target existing areas of concern and did not track progress in addressing them. The tools also had weaknesses in detecting and highlighting significant problems for management attention.

DOE continues to face quality assurance and other challenges. First, DOE is engaged in extensive efforts to restore confidence in scientific documents because of the quality assurance problems suggested in the discovered e-mails between project employees, and it has about 14 million more project e-mails to review. Second, DOE faces quality assurance challenges in resolving design control problems associated with its requirements management process—the process for ensuring that high-level plans and regulatory requirements are incorporated into specific engineering details. Problems with the process led to the December 2005 suspension of certain project work. Third, DOE continues to be challenged to manage a complex program and organization. Significant personnel and project changes initiated in October 2005 create the potential for confusion over roles and responsibilities—a situation DOE found to contribute to quality assurance problems during an earlier transition.

View of Yucca Mountain and the Exploratory Tunnel for the Repository



Source: DOE.