NUCLEAR AND WORKER SAFETY
Limited Information Exists on Costs and Reasons for Work Stoppages at DOE’s Hanford Site

Why GAO Did This Study
The Department of Energy’s (DOE) Hanford Site in Washington State stores 56 million gallons of untreated radioactive and hazardous wastes resulting from decades of nuclear weapons production. DOE is constructing facilities at the site to treat these wastes before permanent disposal. As part of meeting health, safety, and other standards, work at the site has sometimes been suspended to address safety or construction quality issues. This report discusses (1) work stoppages from January 2000 through December 2008 and what is known about them, (2) the types of costs associated with work stoppages and who paid for them, and (3) whether more effective regulation or oversight could have prevented the work stoppages.

What GAO Found
DOE officials reported that from January 2000 through December 2008, activities to manage hazardous wastes stored in underground tanks and to construct a waste treatment facility have been suspended at least 31 times to address safety concerns or construction quality issues. Federal regulations governing contracts do not require contractors to formally report work stoppages and the reasons for them, and DOE does not routinely collect information on them. As a result, supporting documentation on work stoppages was limited. DOE reported that work stoppages varied widely in duration, with some incidents lasting a few hours, and others lasting 2 years or more. Officials reported that about half the work stoppages resulted from concerns about worker or nuclear safety and included proactive safety “pauses,” which typically were brief and taken to address an unsafe condition that could potentially harm workers. The remainder of the work stoppages occurred to address concerns about construction quality at the waste treatment plant.

Under the terms of the cost-reimbursement contracts for managing the tanks and constructing the waste treatment plant, DOE generally pays all costs associated with temporary work stoppages and does not require the contractor to separately track these costs, although DOE and the contractors do track some costs under certain circumstances. For example, the costs for cleaning up, investigating, and implementing corrective actions were collected for a July 2007 hazardous waste spill at one of the tank farms; these costs totaled over $8 million. The contractors, too, can face financial consequences, such as reduction in earned fee or fines and penalties assessed by DOE or outside regulators. For example, DOE may withhold payment of a performance award, called a fee, from contractors for failure to meet specified performance objectives or to comply with applicable environmental, safety, and health requirements.

For the majority of DOE’s reported work stoppages, supporting documentation was not available to evaluate whether better oversight or regulation could have prevented them. For 2 of 31 work stoppages where some information was available—specifically, accident investigations or prior GAO work—inadequate oversight contributed to the work stoppages. For example, the accident investigation report for the tank farm spill found that oversight and design reviews by DOE’s Office of River Protection failed to identify deficiencies in the tanks’ pump system design, which did not meet nuclear technical safety requirements. Similarly, in 2006, GAO found that DOE’s failure to effectively implement nuclear safety requirements contributed substantially to schedule delays and cost growth at Hanford’s waste treatment plant. With regard to regulations, however, officials from DOE, the Defense Nuclear Facilities Safety Board, and DOE’s Office of Inspector General said they did not believe that insufficient regulation was a factor in these events.

What GAO Recommends
GAO is recommending that the Secretary of Energy (1) establish criteria for when DOE should direct contractors to track and report reasons for and costs of work stoppages and (2) specify the types of costs to be tracked. In commenting on a draft of the report, DOE generally agreed with GAO’s recommendations but plans to implement them only within Environmental Management.

View GAO-09-451 or key components. For more information, contact Gene Aloise at (202) 512-3841 or aloise@gao.gov.