

Highlights of GAO-04-278T, testimony before the Committee on Energy and Natural Resources, U.S. Senate

## Why GAO Did This Study

In 1988, radioactive contamination was found in the drinking water wells of residences located near the federal government's uranium enrichment plant in Paducah, Kentucky, which is still in operation. In response, the Department of Energy (DOE) began a cleanup program to identify and remove contamination in the groundwater, surface water, and soil located within and outside the plant. In 2000, GAO reported that DOE faced significant challenges in cleaning up the site and that it was doubtful that the cleanup would be completed as scheduled by 2010, and within the \$1.3 billion cost projection.

GAO was asked to testify on (1) how much DOE has spent on the Paducah cleanup and for what purposes, and the estimated total future costs for the site; (2) the status of DOE's cleanup effort; and (3) the challenges DOE faces in completing the cleanup.

This testimony is based on ongoing work, and GAO expects to issue a final report on this work in April 2004.

#### www.gao.gov/cgi-bin/getrpt?GAO-04-278T.

To view the full product, click on the link above.

For more information, contact Robin Nazzaro at (202) 512-3841 or NazzaroR@gao.gov.

## **NUCLEAR WASTE CLEANUP**

# Preliminary Observations on DOE's Cleanup of the Paducah Uranium Enrichment Plant

### What GAO Found

Since 1988, DOE has spent \$823 million, adjusted to fiscal year 2002 constant dollars, on the Paducah cleanup program. Of this total, DOE spent \$372 million (45 percent) for a host of operations activities, including general maintenance and security; \$298 million (36 percent) for actions to clean up contamination and waste; and almost \$153 million (19 percent) for studies to assess the extent of contamination and determine what cleanup actions were needed. DOE currently projects that the cleanup will take until 2019 and cost \$2 billion to complete—nine years and \$700 million more than its earlier projection. The \$2 billion, however, does not include the cost of other DOE activities required to close the site after the uranium enrichment plant ceases operations, including final decontamination and decommissioning of the plant and long-term environmental monitoring. DOE estimates these activities will bring the total cost to over \$13 billion through 2070.

DOE has made some progress in cleaning up contamination and waste at Paducah, but the majority of the work remains to be done. For example, while DOE has removed over 4,500 tons of scrap metal, over 50,000 tons of contaminated scrap metal remain. Similarly, while DOE's pilot test of a new technology for removing the hazardous chemical trichloroethylene (TCE) from groundwater at the site had promising results, the technology will not be fully implemented for over a year.

DOE's key challenge in completing the Paducah cleanup is achieving stakeholder agreement on the cleanup approach. For example, differences between DOE and the regulatory entities—the Commonwealth of Kentucky and the U.S. Environmental Protection Agency—over the cleanup scope and time frames resulted in an almost 2-year dispute, from June 2001 to April 2003, that disrupted progress. All three parties are working to develop an accelerated cleanup plan, but continued cooperation will be required in order to advance the cleanup.

Drum Mountain, 2,500 tons of crushed drums that once held depleted uranium, and the site after its removal in 2000.



Source: DOF