

Highlights of GAO-20-63, a report to the Committee on Armed Services, U.S. Senate

Why GAO Did This Study

Cleaning up DOE's former uranium enrichment sites will cost billions of dollars and span decades. These sites, near Oak Ridge, Tennessee; Paducah, Kentucky; and Portsmouth, Ohio, are contaminated with radioactive and hazardous materials. EM is responsible for their cleanup.

This report examines (1) the extent to which EM has managed cleanup of the GDPs compared with relevant program management leading practices and the status of the cleanup effort; (2) what EM has spent on cleanup at the GDPs, and the extent to which EM's cost estimates for completing GDP cleanup are reliable; and (3) the extent to which the D&D Fund is sufficient to cover EM's estimated cleanup costs of the GDPs and challenges, if any, that could affect the sufficiency of the fund. GAO reviewed relevant legislation and DOE reports to Congress on GDP cleanup; compared program management to relevant leading practices; assessed EM expenditure and cost estimation documents; and interviewed EM and state regulatory officials at the three GDPs.

What GAO Recommends

GAO is making five recommendations, including that DOE (1) manage the cleanup of the three GDPs as an integrated program and follow program management leading practices, (2) ensure cost estimates fully incorporate cost estimating best practices, and (3) report regularly on the status of the D&D Fund and cleanup efforts at the three GDPs. DOE agreed with four of them and partially agreed with one. GAO believes all of the recommendations should be implemented at all three sites.

View GAO-20-63. For more information, contact David C. Trimble at (202) 512-3841 or trimbled@gao.gov.

NUCLEAR CLEANUP

Actions Needed to Improve Cleanup Efforts at DOE's Three Former Gaseous Diffusion Plants

What GAO Found

Since 2007, the Department of Energy (DOE) has stated in reports to Congress that it intends to manage its three former gaseous diffusion plants (GDP) in an integrated manner. Also, a Decontamination and Decommissioning (D&D) Fund was established by law to pay for the cleanup costs of the GDP sites, so that DOE's Office of Environmental Management (EM) must coordinate and make trade-offs in its use of resources among the three GDPs. However, EM has managed the cleanup of the three GDPs as three individual sites. In addition, EM is not following relevant leading practices GAO reviewed for managing the cleanup as a program (having a program management plan; a reliable integrated master schedule; and a reliable, integrated, comprehensive life-cycle cost estimate. By managing the three GDPs as an integrated program and following these program management leading practices, EM would have more reasonable assurance that it is taking every opportunity to increase the efficiency and effectiveness of its management activities.

EM has reported spending a total of about \$15.5 billion on GDP cleanup as of fiscal year 2018. However, EM's cost estimates for completing cleanup at the three sites are not reliable. GAO assessed EM's cost estimates for the GDPs individually by comparing them with best practices for developing high-quality, reliable cost estimates. EM's cost estimates for completing cleanup of the GDPs do not fully or substantially meet all of the characteristics of a reliable cost estimate Until EM ensures that its site-specific cost estimates fully incorporate best practices for cost estimation, EM, DOE, regulators, and Congress will not have the information needed to understand the level of resources required to achieve cleanup of the three GDPs.

Under EM's current cost estimates, remaining GDP cleanup costs exceed the balance of the D&D Fund by at least \$25 billion and EM faces challenges that could affect cleanup progress and the sufficiency of the fund. For example, DOE's reporting to Congress on the sufficiency of the D&D Fund is based on old financial data, incomplete information, and unclear scope. These limitations reduce the quality of the information Congress receives for making decisions about the sufficiency of the fund and allocating resources to the fund. For example, DOE reported to Congress on the status of the D&D fund and GDP cleanup in May 2019. The report was based on financial data as of September 2016 and on cost estimates prepared in 2013 for one GDP and in 2014 for the other two. Given that DOE estimates the fund will be exhausted in 2020, there is urgency for DOE to communicate current information on the fund on a timely basis to Congress. By regularly reporting on the status of the D&D Fund and cleanup efforts at the three GDPs with current information that contains details on challenges in reaching agreement with regulators and a clear scope of work, DOE will be able to provide better information for congressional decision-making on the sufficiency of the fund.