GAO Highlights

Highlights of GAO-22-104662, a report to congressional addressees

Why GAO Did This Study

EM is responsible for the cleanup of hazardous and radioactive waste at sites and facilities that have been contaminated from decades of nuclear weapons production and nuclear energy research. EM divides its cleanup work into capital asset projects-those with defined start and end points-and operations activitiesrecurring facility or environmental operations. GAO has identified DOE project management as a high-risk area because the department's record regarding management and oversight has left DOE vulnerable to fraud, waste, abuse, and mismanagement. GAO's 2021 High-Risk Report identified numerous recommendations to EM to address this high-risk area. However, as of December 2020, 45 of these recommendations have not been implemented, including 19 that were made since GAO's 2019 High-Risk Report.

GAO initiated a review to examine EM's performance and progress in managing its nuclear cleanup projects. This report (1) describes EM's largest capital asset projects, (2) describes EM's largest operations activities at selected sites, and (3) provides summary observations across the largest projects and operations activities GAO reviewed.

To conduct its review, GAO developed a questionnaire and collected associated data; analyzed cost, schedule, project risk, and other data; reviewed project status reports, project peer reviews, and other documents; and interviewed EM headquarters and officials at the 11 sites of the selected capital asset projects and operations activities.

View GAO-22-104662. For more information, contact Nathan Anderson at (202) 512-3841 or andersonn@gao.gov.

ENVIRONMENTAL CLEANUP

Status of Major DOE Projects and Operations

What GAO Found

The Department of Energy's (DOE) Office of Environmental Management (EM) manages DOE's radioactive and hazardous waste cleanup program across 16 sites (see fig.), using both capital asset projects and operations activities.

- According to EM data, there were 23 active capital asset projects as of December 2020, 15 of which GAO selected for this review. The 15 capital asset projects are located at seven sites and had total project costs ranging from \$127 million to \$16.8 billion. These projects include a variety of cleanup activities, ranging from constructing the Waste Treatment Plant at the Hanford, WA, site to demolishing a contaminated building at Portsmouth, OH.
- According to EM officials, as of September 2021, the agency is managing 76 operations activities at the 16 active cleanup sites. GAO selected 11 EM operations activities—one at each of 11 sites—with estimated costs ranging from \$1 billion to \$180.5 billion. These operations activities cover a variety of mission activities, such as deactivating and decommissioning a nuclear facility and remediating soil and groundwater.



Department of Energy Office of Environmental Management Cleanup Sites

Sources: GAO analysis of Department of Energy information; Map Resources (map). | GAO-22-104662

Note: Hanford contains two sites-the Office of River Protection and the Richland Operations Office.

According to GAO's review of the 15 capital asset projects and 11 operations activities, GAO had five summary observations including the following:

- For the projects GAO selected, 13 of the 15 had progressed far enough to have established cost and schedule baselines. GAO found that nine of the 13 projects are expected to be completed within initial baseline estimates. However, the other four are expected to exceed estimates, including two projects at the Hanford Site.
- Officials for three of the projects cited staffing capacity as a contributing factor to cost and schedule overruns.
- EM had not always updated its cost and schedule estimates for operations activities. However, EM now requires that such estimates be updated annually; officials stated they are now working on these updates.