

# GAO Highlights

Highlights of [GAO-24-105975](#), a report to congressional requesters

## Why GAO Did This Study

EM has spent over \$215 billion since its creation in 1989 to clean up hazardous and radioactive waste at sites and facilities contaminated from nuclear weapons production and nuclear energy research. EM has acknowledged that it needs to strengthen program management to ensure that the completion of the remaining cleanup work is safe, efficient, and cost-effective.

GAO was asked to review EM's implementation of its 2020 Program Management Protocol. This report examines (1) how EM has implemented its Protocol and (2) the extent to which EM has incorporated program management leading practices as it implements the Protocol.

GAO reviewed documents and conducted semi-structured interviews with EM officials at cleanup sites and headquarters. GAO also evaluated EM processes against program management leading practices and additional supplemental criteria.

## What GAO Recommends

GAO is making seven recommendations to the Department of Energy, including developing an EM program-wide schedule that is comprehensive, includes interdependencies, and is based on realistic assumptions; and ensuring that EM conducts root cause analyses of cost and schedule overruns, implements corrective actions, and reports annually on the outcome of their implementation.

DOE concurred with the seven recommendations.

View [GAO-24-105975](#). For more information, contact Nathan Anderson at (202) 512-3841 or [AndersonN@gao.gov](mailto:AndersonN@gao.gov).

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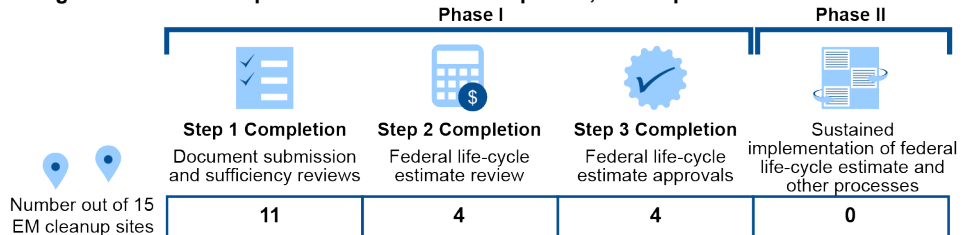
# NUCLEAR WASTE CLEANUP

## Closer Alignment with Leading Practices Needed to Improve Department of Energy Program Management

### What GAO Found

The Department of Energy's Office of Environmental Management (EM) developed its 2020 Program Management Protocol to update its cleanup policy to reflect leading practices for program management. EM has begun a two-phase review of the implementation of the Protocol at its 15 cleanup sites. Phase I focuses on review and approval of sites' strategic planning, risk management, and life-cycle cost and schedule estimates. Phase II reviews are meant to ensure implementation of the sites' life-cycle scope, cost, and schedule estimates and supporting systems, processes, and procedures is sustainable, and to evaluate the continued reliability of these estimates (see figure). EM's implementation of the Protocol is delayed—initially expected to be completed in fiscal year 2024, it is now likely to extend past August 2025.

**Office of Environmental Management's Progress in Completing Its Review of the Program Management Protocol Implementation at Its Cleanup Sites, as of April 2024**



Sources: GAO analysis of Department of Energy (DOE) Office of Environmental Management's (EM) information; and GAO (icons). | GAO-24-105975

EM has incorporated some program management leading practices in its implementation of the Protocol and has opportunities to further incorporate others. For example:

- EM is updating its site-specific life-cycle cost and schedule estimates to use as baselines to track progress and monitor site work by government officials. However, EM does not yet have a comprehensive, program-wide life-cycle schedule estimate—called an integrated master schedule—which is the focal point of program management. EM is planning to update its schedule at the level needed to manage the program, track key decision points and see interdependencies across sites. Until that happens, EM will not be able to integrate and optimize its work to be more efficient and use this schedule as a baseline to monitor progress toward cleanup goals.
- EM requires cleanup sites to conduct root cause analyses if sites exceed defined thresholds for cost and schedule overruns and secure EM leadership approval for revised estimates. However, EM does not clearly require that corrective action plans accompany the root cause analyses, that the corrective actions are tracked through their completion, or that the implementation of corrective action is independently reviewed. EM is also not required to report on the root causes and the status of implementing corrective actions to ensure corrective actions are implemented in a timely and adequate manner. These steps would create an important accountability and oversight mechanism for a program approaching \$900 billion in estimated life-cycle costs.