GAO Highlights

Highlights of GAO-22-105057, a report to congressional committees

Why GAO Did This Study

DOE suspended operations at WIPP after two accidents in 2014 and resumed on a limited scale in 2017. In response to the accidents, DOE has a construction project to improve WIPP's underground ventilation and allow full disposal operations to resume. However, DOE has encountered cost increases and schedule delays with the ventilation project.

The conference report accompanying the National Defense Authorization Act for Fiscal Year 2021 included a provision for GAO to report on the operational status and a construction project at WIPP. This report examines (1) the extent to which DOE identified and addressed root causes for the ventilation system project's cost increases and schedule delays, and (2) DOE's plans to ensure WIPP can meet anticipated disposal needs, and what risks DOE may face.

GAO reviewed documents related to root causes and changes in project cost and schedule estimates, and interviewed DOE and contractor officials.

What GAO Recommends

GAO is making four recommendations, including that DOE require a corrective action plan and a process to determine whether root causes have been sufficiently addressed, as well as update the WIPP risk register. DOE agreed with all four recommendations.

View GAO-22-105057. For more information, contact Nathan Anderson at (202) 512-3841 or andersonn@gao.gov.

WASTE ISOLATION PILOT PLANT

Construction Challenges Highlight the Need for DOE to Address Root Causes

What GAO Found

The Waste Isolation Pilot Plant (WIPP), near Carlsbad, New Mexico, is the nation's only facility for disposal of certain defense-related nuclear waste. The Department of Energy (DOE) identified two root causes for cost increases and schedule delays in its project to install a new ventilation system at WIPP (see figure). The facility is currently operating at a reduced capacity because of ventilation issues in the underground waste disposal areas. The root causes DOE identified were (1) its contractor's inexperience managing construction projects and (2) an inability to incentivize staff to work in Carlsbad. DOE also identified more specific problems with this ventilation project, and has taken corrective actions to address them. While some of these corrective actions may also help to address the root causes, the extent to which these actions will do so is unclear because DOE is not required to develop a corrective action plan for addressing the root causes and does not have a process to determine whether root causes have been sufficiently addressed. Without such a plan and process, DOE cannot ensure that root causes it identifies for cost increases and schedule delays in the WIPP ventilation project or other projects will not persist or recur.

The Department of Energy's (DOE) Ventilation System Project at the Waste Isolation Pilot Plant in New Mexico



Source: Department of Energy. | GAO-22-105057

DOE's construction project to improve the ventilation system is part of its plans to ensure that WIPP can meet DOE's anticipated needs for waste disposal. However, the department faces construction and regulatory risks that might delay its plans. For example, DOE may not be able to finish construction and start operating the ventilation system on time. In addition, DOE may not receive needed approvals from the state regulator and the Environmental Protection Agency if, for example, the department does not provide requested information on time. Department officials told GAO that DOE has not updated recently its WIPP risk register, which helps track risks and plan mitigation measures. Department guidance states that it should periodically evaluate and include emerging risks and mitigation strategies in the risk register because this information is used to update the schedule. Without these updates, DOE may not have an achievable WIPP schedule, which could in turn create shipping delays and cost increases for the sites that are generating the waste.