DOE FACILITIES

Better Prioritization and Life Cycle Cost Analysis Would Improve Disposition Planning

What GAO Did This Study

Seventy years of nuclear weapons production and energy research by DOE and its predecessor agencies generated radioactive waste, resulting in thousands of contaminated facilities. Some facilities pose risks to workers near the facilities and to the environment. NNSA, a separately organized agency within DOE, now manages many of these contaminated facilities, and though many are no longer in use, others are still operational. Once NNSA considers these facilities to be nonoperational, they may be eligible for transfer to EM, whose mission includes disposing of contaminated facilities through decontamination and decommissioning. In 2007, EM updated its facility transfer process, but until EM accepts these facilities, NNSA is responsible for their maintenance.

The Senate Armed Services Committee Report accompanying the National Defense Authorization Act for Fiscal Year 2014 mandated GAO to assess the inventory of facilities that NNSA plans to transfer to EM for disposition. This report examines (1) how many facilities NNSA has identified for transfer to EM and their condition and (2) the extent to which EM considers risks of NNSA’s contaminated nonoperational facilities and the costs to maintain them when prioritizing its cleanup activities. GAO reviewed documents and interviewed officials from NNSA and EM and visited two NNSA sites that have some of the most contaminated facilities.

What GAO Found

The National Nuclear Security Administration (NNSA) has identified 83 facilities at six of its eight sites for transfer to the Department of Energy’s (DOE) Office of Environmental Management (EM) for disposition, and the condition of NNSA’s facilities awaiting transfer continues to degrade. NNSA plans to transfer all 83 facilities to EM over the next 25 years. Twenty-seven of them are still operational but are expected to become nonoperational in the next 25 years, and 56 are nonoperational now. In 2009, EM agreed to accept 14 NNSA facilities when it had funds available to begin decontamination and decommissioning. Six years later, none of these facilities have been transferred, and EM officials said they may not be able to accept these or other NNSA facilities until at least 2030 due to budget uncertainties and other priorities. Meanwhile, as NNSA maintains contaminated nonoperational facilities, the facilities’ condition continues to worsen, resulting in increased costs to maintain them, and NNSA documents show that some facilities will require significant additional maintenance to prevent the spread of contamination. For example, the Alpha-5 facility at NNSA’s Y-12 National Security Complex in Tennessee has degraded to the extent that site officials now detect contaminants, such as mercury, in areas where they were not detected 2 years earlier, and additional funds are needed to repair its failing roof.

EM does not consider the risks of NNSA’s nonoperational facilities when prioritizing its cleanup activities. Specifically, when developing its annual facility disposition plans, EM does not consider the human health or environmental risks of NNSA’s contaminated nonoperational facilities that meet its transfer requirements but have not yet been transferred. A 2006 DOE Deputy Secretary Program Decision Memorandum stated that EM is to incorporate DOE’s contaminated nonoperational facilities into its planning for decontamination and decommissioning, commensurate with the risk such activities pose. EM officials told GAO that they do not include facilities maintained by NNSA in their planning until they have available funding to begin cleanup work. However, without integrating NNSA’s inventory of nonoperational facilities into its process for prioritizing facilities for disposition, EM may be prioritizing cleanup for lower-risk facilities under its management ahead of facilities at NNSA that may present a higher risk of spreading contamination.

What GAO Recommends

GAO recommends, among other things, that EM integrate into one prioritized list all NNSA facilities that meet EM’s transfer requirements. EM neither agreed nor disagreed with the recommendation, stating it has formed a working group that may address GAO’s findings.

View GAO-15-272. For more information, contact David C. Trimble at (202) 512-3841 or trimbled@gao.gov.

Source: DOE | GAO-15-272