

Environmental Liabilities: Naval Reactors' Disposition Partnership on Track to Save Billions

GAO-26-108056

Q&A Report to Congressional Committees

May 7, 2026

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Why This Matters

The Naval Nuclear Propulsion Program has cradle-to-grave responsibility for all naval nuclear propulsion matters in the Department of Energy (DOE) and the Department of the Navy, from designing systems to managing and properly disposing of nuclear reactor components and spent nuclear fuel. DOE's Office of Naval Reactors (Naval Reactors) is responsible for cleaning up contamination caused by program operations at DOE-owned sites. Cleanup involves decontamination and decommissioning (D&D) of facilities and remediation of contaminated soil (see fig. 1).

Figure 1: Demolition of the Submarine First Generation Westinghouse (S1W) Nuclear Propulsion Prototype Facility at a DOE Office of Naval Reactors Site in Idaho



Source: Department of Energy (DOE). | GAO-26-108056

Federal accounting standards require federal agencies to estimate future cleanup and waste disposal costs and report those estimated costs as environmental liabilities in their annual financial statements. Efficiently managing facilities that no longer serve a mission need can reduce the federal government's environmental liability, which has been on GAO's High Risk List since 2017. Senate Report 118-188 includes a provision for GAO to evaluate Naval Reactors' plans for cleanup of legacy or excess contaminated facilities. This report focuses on Naval Reactors' cleanup at DOE-owned sites.

Key Takeaways

- For fiscal year 2025, Naval Reactors reported an estimated \$6.5 billion in environmental liabilities for cleanup of contaminated facilities and the environment at DOE-owned sites.
- In 2019, Naval Reactors partnered with DOE's Office of Environmental Management (EM) to conduct large-scale D&D on its behalf. Naval Reactors anticipates that EM can complete all planned work under the partnership decades faster and for approximately \$4.8 billion less than Naval Reactors' baseline estimate for this inventory of work.
- If all planned work is not completed under the partnership with EM, overall cost savings from the partnership will be less than Naval Reactors anticipates. Nevertheless, Naval Reactors officials emphasized that the agency has already benefitted from this partnership.

What are Naval Reactors' environmental liabilities at DOE-owned sites?

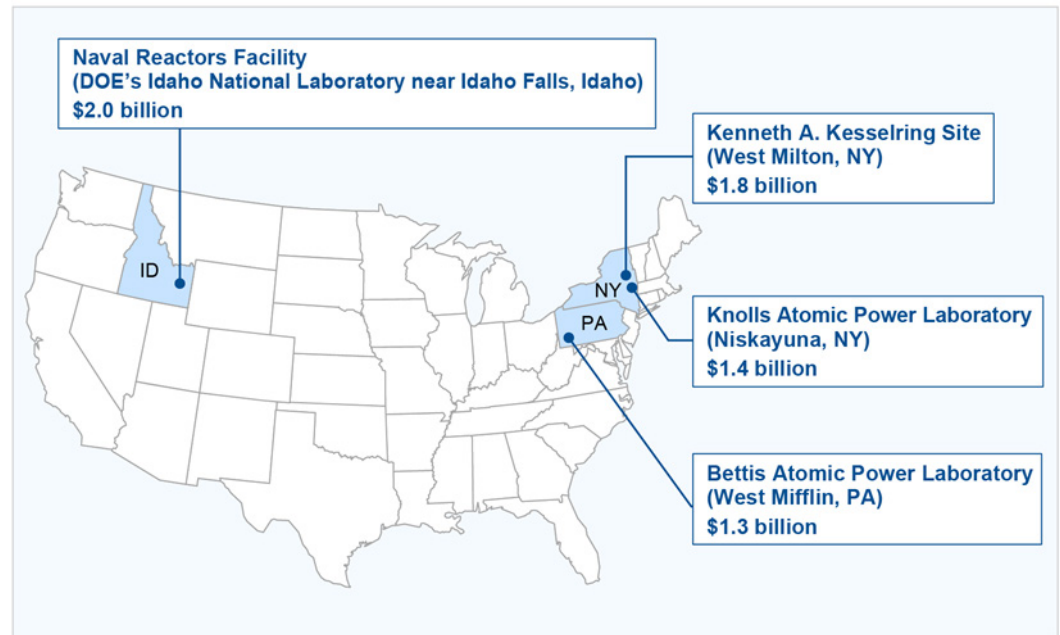
For fiscal year 2025, Naval Reactors reported an estimated \$6.5 billion in environmental liabilities for cleanup of contaminated facilities and the environment at DOE-owned sites.¹

Naval Reactors develops environmental liabilities estimates to support DOE's annual financial statement reporting requirement.² The environmental liabilities estimates include cleanup costs for assets that no longer serve a mission need and have been retired or are soon to be retired (inactive liabilities), as well as those that are still in use and supporting mission needs (active liabilities). Naval Reactors officials describe the agency's environmental liabilities estimates as conservative, representing the upper limit of expected costs to complete the work.

Figure 2 shows the distribution of Naval Reactors' fiscal year 2025 environmental liabilities at the four DOE-owned sites where the Naval Nuclear Propulsion Program operates:

1. Bettis Atomic Power Laboratory (Bettis) in Pennsylvania
2. Kenneth A. Kesselring Site (Kesselring) in New York
3. Knolls Atomic Power Laboratory (Knolls) in New York
4. Naval Reactors Facility (NRF) in Idaho

Figure 2: DOE Office of Naval Reactors' Fiscal Year 2025 Estimated Environmental Liabilities at DOE-Owned Sites Where the Naval Nuclear Propulsion Program Operates



Sources: Department of Energy (DOE) Office of Naval Reactors documentation; Map Resources (map). | GAO-26-108056

Accessible data for Figure 2: DOE Office of Naval Reactors' Fiscal Year 2025 Estimated Environmental Liabilities at DOE-Owned Sites Where the Naval Nuclear Propulsion Program Operates

- Bettis Atomic Power Laboratory
 - West Mifflin, Pennsylvania
 - \$1.3 billion
- Kenneth A. Kesselring Site
 - West Milton, New York
 - \$1.8 billion
- Knolls Atomic Power Laboratory
 - Niskayuna, New York
 - \$1.4 billion
- Naval Reactors Facility
 - Department of Energy's Idaho National Laboratory (near Idaho Falls, Idaho)
 - \$2.0 billion

Sources: Department of Energy (DOE) Office of Naval Reactors documentation; Map Resources (map). | GAO-26-108056

Note: Environmental liabilities estimates include costs for facility decontamination and decommissioning (D&D) and soil remediation. According to Naval Reactors headquarters officials, Naval Reactors' environmental liabilities estimates are conservative and represent the upper limit of expected costs to complete the work.

Most of Naval Reactors' environmental liabilities at the four DOE-owned sites are associated with D&D of buildings, land-based nuclear propulsion prototypes, and related structures. D&D often entails full demolition of a facility, which can make space for new facilities and equipment to support ongoing operations. Estimates for facility D&D projects generally include costs to remediate contaminated soil adjacent to the facility undergoing D&D. In addition to soils at and near legacy facilities, Naval Reactors has also identified contaminated soil in areas beyond the boundaries of what would be included in a D&D project, such as locations where hazardous substance spills occurred in the past, or at designated landfill areas. Naval Reactors accounts for these areas separately in its environmental liabilities estimates.³

How is Naval Reactors addressing its environmental liabilities at the four DOE-owned sites?

In May 2019, Naval Reactors entered into a memorandum of agreement with EM—DOE's environmental cleanup office—for EM to conduct large-scale D&D of Naval Reactors' inactive liabilities at the four DOE-owned sites described above.⁴ Within DOE, EM is responsible for cleaning up sites nationwide that have been contaminated by radioactive and hazardous materials resulting from decades of nuclear weapons production and nuclear energy research. EM generally relies on contractors to carry out its cleanup mission, which is the largest in the federal government, estimated to cost more than half a trillion dollars and take decades to complete. A stated goal of Naval Reactors' partnership with EM is to leverage EM's extensive D&D and environmental remediation experience to efficiently and cost-effectively address Naval Reactors' inactive liabilities.

Under the terms of the partnership, Naval Reactors is responsible for funding all D&D work and maintains ownership of its environmental liabilities. Naval Reactors generally completes necessary tasks to prepare a project site for large-scale D&D operations, such as removing classified materials, rerouting or disconnecting utilities, and installing security fencing and barricades. When EM's D&D contractor is ready to begin work, Naval Reactors formally transfers operational control of the D&D project site to EM (see fig. 3).

Figure 3: DOE Office of Naval Reactors Decontamination and Decommissioning Project Site in Idaho Under Operational Control of DOE's Office of Environmental Management



Source: Department of Energy (DOE). | GAO-26-108056

EM is primarily executing Naval Reactors' D&D work under two contracts—one covering work at NRF and the other covering work at Bettis, Kesselring, and Knolls. Naval Reactors officials said that they expect EM will address nearly all of Naval Reactors' inactive liabilities under these two contracts.

- **NRF.** Naval Reactors plans to have EM complete three major D&D projects under the contract that covers work at NRF, all of which entail D&D of nuclear propulsion prototypes and associated facilities. Demolition of the first nuclear propulsion prototype and associated facilities is complete. The remainder of the planned work is scheduled for completion by 2031 when the part of the EM contract covering NRF is set to expire, according to Naval Reactors documents and officials.
- **Bettis, Kesselring, and Knolls.** Naval Reactors plans to have EM complete 16 major D&D projects under the contract that covers work at Bettis, Kesselring, and Knolls—five at Bettis, four at Kesselring, and seven at Knolls. EM has mobilized its management and project planning personnel, and D&D

work is expected to begin in October 2026 at Bettis. According to Naval Reactors documents and officials, all planned work is scheduled for completion by 2035 when the part of the EM contract covering Bettis, Kesselring, and Knolls is set to expire.

What cost savings and schedule efficiencies does Naval Reactors anticipate the partnership with EM will produce?

Naval Reactors anticipates that EM could complete all planned work under the partnership decades faster and at a substantially lower cost than Naval Reactors could accomplish on its own.

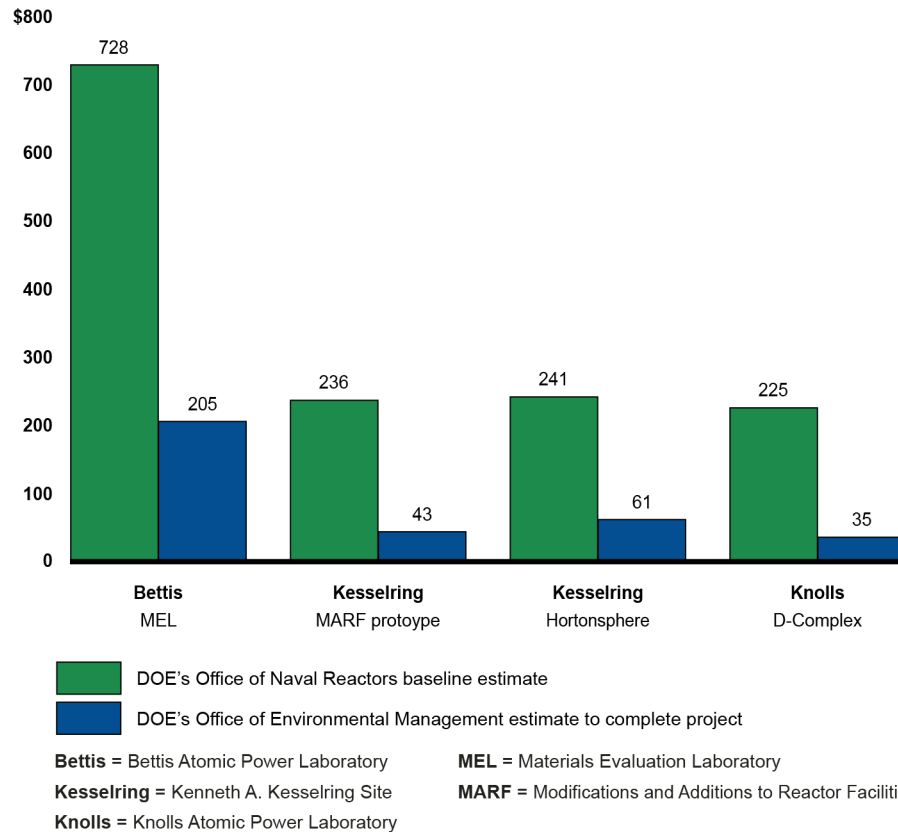
Specifically, Naval Reactors officials said that the agency's estimated environmental liabilities for the inventory of work planned under the EM partnership would be \$5.8 billion in 2025 dollars. Naval Reactors officials said they arrived at this figure by adjusting the agency's 2018 environmental liabilities estimate for inflation. In comparison, by January 2026, Naval Reactors had received estimates from EM for this same inventory of projects that indicated EM could complete the work at a cost of approximately \$1 billion, representing potentially \$4.8 billion in cost savings under the EM partnership if all planned work is completed.

Naval Reactors officials explained that the agency considers its 2018 environmental liabilities estimate to be the baseline against which to evaluate overall cost savings from its partnership with EM, as it was the last estimate prepared prior to partnering with EM. These officials noted that the 2018 environmental liabilities estimate is not directly indicative of the costs associated with Naval Reactors performing the work, but serves as a general reference point developed in accordance with DOE orders and guidelines.

Additionally, Naval Reactors officials said that, based on D&D funding levels prior to 2018, it would take the agency more than 100 years to complete this work on its own, whereas EM plans to complete it by 2035. Figure 4 below illustrates potential cost savings for select D&D projects that Naval Reactors plans to have EM complete under the partnership.

Figure 4: Potential Cost Savings for Select Decontamination and Decommissioning Projects Under the DOE Office of Naval Reactors and DOE Office of Environmental Management Partnership

Dollars (in millions)



Source: Department of Energy (DOE) Office of Naval Reactors information. | GAO-26-108056

Accessible data for Figure 4: Potential Cost Savings for Select Decontamination and Decommissioning Projects Under the DOE Office of Naval Reactors and DOE Office of Environmental Management Partnership

DOE Site	Building Name	DOE's Office of Naval Reactors baseline estimate Dollars (in millions)	DOE's Office of Environmental Management estimate to complete project Dollars (in millions)
Bettis	MEL	\$728	\$205
Kesselring	MARF prototype	\$236	\$43
Kesselring	Hortonsphere	\$241	\$61
Knolls	D-Complex	\$225	\$35

Legend:

Bettis = Bettis Atomic Power Laboratory
Kesselring = Kenneth A. Kesselring Site
Knolls = Knolls Atomic Power Laboratory
MEL = Materials Evaluation Laboratory
MARF = Modifications and Additions to Reactor Facilities

Source: Department of Energy (DOE) Office of Naval Reactors information. | GAO-26-108056

Note: DOE's Office of Naval Reactors (Naval Reactors) baseline estimates are the agency's 2018 environmental liabilities estimates adjusted for inflation to 2025 dollars. Naval Reactors considers its 2018 environmental liabilities estimate to be the baseline against which to evaluate overall cost savings from its partnership with DOE's Office of Environmental Management (EM). Naval Reactors officials noted that the 2018 environmental liabilities estimate is not directly indicative of the costs associated with Naval Reactors performing the work, but serves as a general reference point developed in accordance with DOE orders and guidelines. According to Naval Reactors headquarters officials, Naval Reactors' environmental liabilities estimates are conservative and represent the upper limit of expected costs to complete the work. EM provided its project estimates to Naval Reactors, which Naval Reactors reported to GAO in 2025 dollars. Project estimates include costs for facility decontamination and decommissioning (D&D) and soil remediation happening as part of the facility D&D project, but do not include project management costs because those costs are not calculated at the project level.

While it is too soon to know the extent to which these anticipated cost savings will fully materialize, results for work EM has conducted to date at NRF have been positive and indicate the partnership is on track to save billions. EM completed the Submarine First Generation Westinghouse (S1W) nuclear propulsion prototype D&D project at a cost of approximately \$117 million, whereas Naval Reactors' 2025 inflation-adjusted environmental liabilities estimate for this project was \$870 million—representing around \$753 million in cost savings to the agency, or a reduction of 87 percent from the baseline estimate. EM estimates it can complete the remaining two D&D projects at NRF for approximately \$255 million, whereas Naval Reactors' 2025 inflation-adjusted environmental liabilities estimates for those projects totaled approximately \$2.3 billion.

What factors have contributed to cost savings and schedule efficiencies under Naval Reactors' partnership with EM?

Naval Reactors officials cited EM's (1) contracting network and methods, (2) use of a graded approach to implementing protective controls during D&D, and (3) innovative and strategic approaches to executing D&D as factors contributing to cost savings and schedule efficiencies under the partnership with EM.

Contracting network and methods

Naval Reactors officials attribute most of the anticipated cost savings under the partnership to EM's network of experienced D&D contractors and large portfolio of D&D work. For example, EM has a D&D workforce conducting site-wide cleanup at DOE's Idaho National Laboratory where NRF is collocated. EM was able to add Naval Reactors' three NRF D&D projects to the existing cleanup contract and leverage the workforce already in place. Additionally, under its Nationwide Deactivation, Decommissioning, and Removal initiative, EM established a contractor network to conduct D&D nationwide on behalf of multiple DOE entities, including Naval Reactors.⁵ Naval Reactors officials said that the contracting strategy EM employs under the nationwide D&D program creates competition and incentivizes contractor performance. For example, EM may include multiple D&D projects in a single contract and award some of these projects as follow-on work based on contractor performance under the initial scope of work.

Graded approach to implementing protective controls

DOE regulations, orders, and guidance generally call on EM to use a graded approach to implementing requirements—such as those aimed at ensuring appropriate protective controls to limit exposure to workers and the public and minimize contamination to the environment—while conducting various activities, including D&D.⁶ A graded approach allows for tailoring protective controls based on the specific D&D activity being performed and the nature and location of contamination in all or part of a facility, which is established prior to starting D&D. By contrast, rather than using a graded approach, Naval Reactors officials said that, when the agency conducted D&D in the past, it applied a stricter approach that could require remediation of specific sources of radioactivity within a facility prior to demolition. Naval Reactors officials told us that this approach is appropriate for operations and maintenance activities for facilities with an ongoing mission, but was inefficient and costly for facilities planned for D&D. According to Naval Reactors officials, EM's graded approach to implementing protective controls that are optimized for demolition has enabled EM to conduct D&D at a lower cost, resulting in cost savings for Naval Reactors under the partnership.

Innovative and strategic approaches to executing D&D

EM has also employed innovative and strategic approaches to D&D work conducted at NRF that have produced cost savings and schedule efficiencies for Naval Reactors under the partnership. For example:

- EM's D&D contractor at NRF is using sponge-blasting technology to remove paint containing a hazardous chemical from metal D&D debris, which allows the metal to be recycled rather than disposed of as hazardous material.⁷ EM announced in September 2025 that it had recycled more than 2,100 tons of non-contaminated metal debris from D&D projects at NRF, resulting in nearly \$2 million in savings from avoided disposal costs.
- EM's D&D contractor at NRF restored an inoperable 125-ton overhead bridge crane to support removal of large steel components across the multiple D&D projects at NRF rather than renting a crane for this work. According to Naval Reactors officials, long-term rental of a similar high-capacity crane is very expensive, and restoring and recertifying the existing crane could result in tens to hundreds of millions of dollars in unexpected cost savings across the portfolio of NRF work.
- EM's D&D contractor at NRF developed a strategy to preserve the facility housing the Submarine Fifth Generation General Electric (S5G) nuclear propulsion prototype so that it could be repurposed as a warehouse for Naval Reactors' continued use rather than demolished as part of the larger prototype D&D project. The D&D contractor identified a way to use cutting-edge technology to dismantle the prototype into pieces small enough to be removed from the facility without having to demolish the existing structure (see fig. 5). According to officials, building a warehouse similar to the facility that is being salvaged would have cost more than the entire D&D project, and therefore represents cost savings to the agency by way of avoided construction costs.

Figure 5: DOE Office of Naval Reactors Decontamination and Decommissioning Plan for a Facility in Idaho That Houses a Nuclear Propulsion Prototype, Before (Photo) and After (Artist Rendering)



Source: Department of Energy's (DOE) Office of Naval Reactors documentation. | GAO-26-108056

Note: The photo on the right is an artist's rendering of the interior of Building NRF-633A after removing the Submarine Fifth Generation General Electric (S5G) nuclear propulsion prototype, backfilling the basin, and constructing a floor so that the facility can be used as a warehouse.

What challenges does Naval Reactors face to completing work under the EM partnership?

As of January 2026, all three projects at NRF are on track to be completed, as planned, by 2031 under EM's current contract covering work at NRF. At Bettis, Kesselring, and Knolls, however, Naval Reactors faces challenges with an aggressive D&D schedule that may impact its ability to complete some projects planned for completion by 2035 under the contract covering those sites.

Upon partnering with EM in 2019, Naval Reactors and EM established a target timeline for EM to complete all work at all four DOE-owned Naval Reactors sites

by 2050, and Naval Reactors developed short- and long-term D&D sequencing and funding plans to meet this goal. However, according to Naval Reactors officials, a 2050 target would require EM to demobilize and remobilize its D&D workforce, which would result in inefficiencies and increased costs to Naval Reactors. For these reasons, Naval Reactors and EM established a new goal to complete all planned work by 2035.

The accelerated D&D schedule presents funding challenges to completing some work at Bettis, Kesselring, and Knolls. In October 2024, EM submitted documentation to Naval Reactors indicating annual funding levels required for its D&D contractor to complete all planned work across the three sites by 2035. While Naval Reactors was able to meet EM's funding needs in the initial years of the contract, Naval Reactors planning documents indicate potential funding shortfalls for EM work of between \$64 million and \$82 million each year from 2031 through 2035, and officials said shortfalls could increase, subject to the annual budget prioritization process going forward. According to Naval Reactors planning documents, six of the 16 D&D projects planned for completion under the contract covering work at Bettis, Kesselring, and Knolls are scheduled to be completed in 2035, with most of the work for those projects scheduled to take place in the contract's later years when Naval Reactors' potential annual funding shortfalls for EM work could appear. Naval Reactors is still evaluating the funding implications under the accelerated D&D schedule, but officials told us that any future funding shortfalls will be addressed in annual budget development to maximize completion of the most significant liabilities within the existing 2035 goal.

Additionally, officials at Bettis, Kesselring, and Knolls identified logistical challenges with completing the necessary preparatory work to turn some projects over to EM in sufficient time to be completed by 2035. Naval Reactors headquarters officials said that, as of February 2026, the sites were still working to develop plans conducive to meeting the 2035 target date. In addition to the identified funding shortfalls for EM work, Naval Reactors has also identified potential funding shortfalls for conducting its own preparatory work in time for EM to address all of Naval Reactors' inactive liabilities at those sites by 2035.

Naval Reactors officials said the agency remains hopeful that EM will be able to complete all planned work at Bettis, Kesselring, and Knolls, but acknowledged that the 2035 timeline is aggressive and that uncertainty is growing that all projects will be finished, particularly those starting or scheduled for completion in the later years of the contract.

How is Naval Reactors addressing challenges to completing work under the EM partnership?

In June 2025, to address the potential risk of not completing all planned D&D work at Bettis, Kesselring, and Knolls by 2035 under the EM partnership, Naval Reactors updated its D&D sequencing plans so that the agency's highest-risk liability could be addressed in the earlier years of the contract covering Bettis, Kesselring, and Knolls.

Specifically, the new sequencing priorities focus on D&D and environmental remediation of the Materials Evaluation Laboratory at Bettis, where Naval Reactors has identified soil contamination that could pose a risk to nearby water sources if the contamination migrates. Naval Reactors officials said the agency is managing this risk by containing, collecting, and treating rainwater, which has been effective at preventing groundwater contamination, according to a 2024 environmental report.⁸ In addition to being the highest risk liability, the Materials Evaluation Laboratory is also the agency's costliest liability, which Naval Reactors officials said is also a priority under the EM partnership.

In contrast, while the Hortonsphere at Kesselring is also one of the agency's costliest liabilities planned for D&D, the facility's contamination risk to the public and the environment is low, making it a lower priority project, according to Naval Reactors officials. The Hortonsphere—a steel-plated spherical containment structure that is 225 feet in diameter—formerly housed two nuclear propulsion prototypes, but both prototypes have been removed and the structure is currently being used for storage (see fig. 6). Naval Reactors' current plans show the Hortonsphere D&D project being completed by the end of fiscal year 2035 before the part of EM's D&D contract covering Bettis, Kesselring, and Knolls is set to expire. However, Naval Reactors officials said the Hortonsphere is one project that may not get completed under the EM partnership, given the project's lower-priority status and comparatively higher D&D costs. Naval Reactors officials said this prioritization decision is consistent with the agency's goal of accomplishing the highest-value work under the EM partnership in the event of future funding shortfalls.

Figure 6: Hortonsphere Located at DOE Office of Naval Reactors' Kenneth A. Kesselring Site in New York



Source: Department of Energy (DOE) and Bruce G. Harvey. | GAO-26-108056

To what extent could Naval Reactors replicate cost and schedule efficiencies in D&D outside of the EM partnership?

Naval Reactors officials told us that the agency cannot replicate many of the cost savings and schedule efficiencies that EM is able to achieve and emphasized that it will cost more and take longer for Naval Reactors to complete the D&D work planned under the partnership on its own. However, the exact impact this may have on Naval Reactors' overall environmental liabilities is unclear because it is too soon to know which, if any, Naval Reactors D&D projects will not be completed under the partnership with EM.

Several conditions have changed since 2018 when Naval Reactors last conducted large-scale D&D on its own. These new conditions could facilitate

more cost-effective and timely execution of D&D work than Naval Reactors has historically encountered. For example:

- **Regulatory environment.** In May 2025, DOE lifted a moratorium on recycling of metal from radiological areas within DOE facilities. The lifting of the metal moratorium could significantly reduce costs for Naval Reactors in its future D&D efforts. For example, officials said there is expected to be approximately 4,000 metric tons of steel debris from D&D of the Hortonsphere at Kesselring, which, if recyclable, could be valued at around \$3.5 million and result in additional cost savings from avoided disposal costs.
- **Approach to implementing protective controls for large-scale D&D.** In July 2019, Naval Reactors adopted a graded approach to implementing protective controls during D&D, which was formalized through issuance of a D&D-specific supplement to existing radiological controls manuals and was updated in November 2024.⁹ This new approach is designed to help the agency conduct large-scale D&D more efficiently and cost effectively. According to Naval Reactors officials, the protective controls established in this manual incorporate lessons learned from EM and closely align with EM's approach to D&D.
- **Management of D&D funding.** Prior to partnering with EM, Naval Reactors' D&D funding was often reallocated to other infrastructure projects, which was possible because D&D funding and infrastructure funding shared a control account. Since partnering with EM, Naval Reactors has implemented controls to prevent D&D funding from being used for other purposes. Maintaining such controls could help Naval Reactors complete D&D projects more quickly, thereby reducing overall execution costs.
- **Lessons learned from the EM partnership.** Naval Reactors officials said that the agency has learned a number of lessons since partnering with EM and intends to incorporate these lessons learned into its own efforts. For example, officials told us that Naval Reactors has learned how to use different contract types to more precisely estimate costs and lower contractor bids. Additionally, Naval Reactors officials said they plan to reuse or repurpose existing equipment, similar to the crane restoration at NRF, for future D&D projects.

Agency Comments

We provided a draft of this report to DOE and the Department of Defense for review and comment. Both Departments provided technical comments, which we incorporated, as appropriate.

How GAO Did This Study

To evaluate Naval Reactors' plans for cleanup of legacy or excess contaminated facilities and any challenges Naval Reactors faces in addressing its cleanup responsibilities, we assessed and compared relevant agency documentation related to Naval Reactors' environmental liabilities including guidance, memoranda of agreement, budget justification reports, cleanup cost estimates, and cleanup plans.

We conducted interviews with Naval Reactors headquarters officials responsible for developing and implementing the agency's D&D strategy across the four DOE-owned sites. We also conducted site visits to three of the four DOE-owned sites where the Naval Nuclear Propulsion Program operates: the Kenneth A. Kesselring Site and Knolls Atomic Power Laboratory in New York, and the Naval Reactors Facility in Idaho. At the site visits, we observed D&D operations underway and conducted interviews with relevant Naval Reactors headquarters and site officials to better understand contamination and cleanup efforts at those

locations. We did not visit the fourth site, Bettis Atomic Power Laboratory in Pennsylvania, because D&D was not yet underway at the time of our site visits.

We conducted this performance audit from January 2025 through May 2026 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

List of Committees

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We are sending copies of this report to the appropriate congressional committees, the Secretary of Energy, and the Secretary of Defense. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.

GAO Contact Information

For more information, contact: Nathan Anderson, Director, NRE,
AndersonN@gao.gov.

Media Relations: Sarah Kaczmarek, Managing Director, Media@gao.gov.

Congressional Relations: David A. Powner, Acting Managing Director,
CongRel@gao.gov.

Staff Acknowledgments: Janice Poling (Assistant Director), Breanna Trexler (Analyst in Charge), Natalie Block, and Archie Scoville made key contributions to this report. Also contributing to the report were Michael Bechetti, Claudia

Hadjigeorgiou, Matt McLaughlin, Katrina Pekar-Carpenter, Amber Sinclair, and Christopher Spain.

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Endnotes

¹The Naval Nuclear Propulsion Program is an integrated program carried out by two organizational units—one in DOE and the other in the Department of the Navy. Under this structure, both departments hold environmental liabilities related to Naval Nuclear Propulsion Program operations. The Navy's portion of the program's environmental liabilities includes cleanup of nuclear-powered naval ships at naval shipyards and processing and storing naval nuclear spent fuel. DOE's portion of the program's environmental liabilities includes cleanup of facilities and the environment at four DOE-owned sites where the program operates. The estimated \$6.5 billion in environmental liabilities is specific to DOE's portion of the program's liabilities.

²Federal accounting standards require federal agencies to estimate future cleanup and waste disposal costs and to report such costs as environmental liabilities in their annual financial statements. Federal accounting standards define a liability as a probable future outflow or other sacrifice of resources as a result of past transactions or events. Costs for cleanup work must be included in environmental liabilities estimates when they are both probable (i.e., more likely than not) and reasonably estimable (i.e., the outflow of resources that will be required is reliably quantifiable in monetary terms). When reasonable estimates cannot be generated, environmental liability estimates do not include cost estimates for that work. See Federal Accounting Standards Advisory Board, *FASAB Handbook of Federal Accounting Standards and Other Pronouncements, as Amended* (Washington, D.C.: June 30, 2025). Since 2017, the federal government's environmental liability has been on GAO's High Risk List, which identifies federal programs and operations that are high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement, or are in need of transformation. GAO, *High-Risk Series: Heightened Attention Could Save Billions More and Improve Government Efficiency and Effectiveness*, [GAO-25-107743](#) (Washington, D.C.: Feb. 25, 2025).

³Naval Reactors' environmental liabilities estimates do not yet include costs for cleaning up emerging contaminants—such as per- and polyfluoroalkyl substances (PFAS)—in soil because, according to Naval Reactors officials, regulatory cleanup standards are changing. Federal accounting standards would also require Naval Reactors to estimate and report probable and reasonably estimable costs to remediate contaminated groundwater and surface water. According to Naval Reactors officials, the agency does not have reportable environmental liabilities related to contaminated water as of fiscal year 2025.

⁴Department of Energy, *Memorandum of Agreement Between the Office of Environmental Management and the Office of Naval Reactors for Deactivation and Decommissioning and Environmental Remediation of Naval Nuclear Laboratory Environmental Liabilities* (May 17, 2019). Naval Reactors' partnership with EM to address environmental liabilities applies only to Naval Reactors' inactive liabilities, as active liabilities are associated with assets in use by Naval Reactors. Active liabilities are reclassified as inactive when they no longer serve a mission need and are retired by the agency.

⁵EM's Nationwide Deactivation, Decommissioning, and Removal initiative created a contract mechanism that DOE can use nationwide to acquire D&D services on behalf of multiple DOE entities—including Naval Reactors—as well as some non-DOE entities. This effort established a pool of nine large and 14 small contractors that can be selected to execute the work of any given D&D task order.

⁶See, for example, 10 C.F.R. § 830.7. DOE regulations state that a graded approach “means the process of ensuring that the level of analysis, documentation, and actions used to comply with a requirement . . . are commensurate with: (1) The relative importance to safety, safeguards, and security; (2) The magnitude of any hazard involved; (3) The life cycle stage of a facility; (4) The programmatic mission of a facility; (5) The particular characteristics of a facility; (6) The relative importance of radiological and nonradiological hazards; and (7) Any other relevant factor.” 10 C.F.R. § 830.3.

⁷The hazardous chemicals were polychlorinated biphenyls—more commonly known as PCBs. PCBs are a group of man-made chemicals that are potentially carcinogenic to humans and may have negative effects on immune, reproductive, neurological, and endocrine health, among other issues.

⁸Naval Reactors conducts environmental sampling to ensure compliance with applicable regulations.

⁹The D&D-specific approach was issued by the Department of the Navy as a supplement to existing DOE and Navy Radiological Controls Manuals that govern Naval Nuclear Propulsion Program operations. Navy Department, *Radiological Controls Manual Decontamination and Decommissioning Supplement*, NAVSEA S9213-70-MMA-000/(N) (Revision 1) (Nov. 2024).