



Report to the Committee on
Transportation and Infrastructure, House
of Representatives

July 2026

ENVIRONMENTAL LIABILITIES

Coast Guard Should
Give Congress More
Information on
Millions of Dollars in
Potential Costs

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GAO-26-108173

July 2026

A report to the Committee on Transportation and Infrastructure, House of Representatives

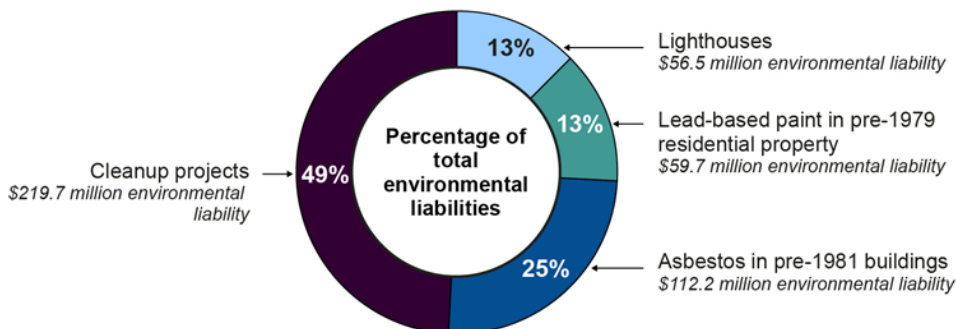
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What GAO Found

As of September 2025, the Coast Guard reported about \$448 million in environmental liabilities related to its shore infrastructure. This includes about \$228 million for structures, like housing, presumed to be contaminated with asbestos-containing material or lead-based paint based on their age. It also includes about \$220 million in cleanup projects at sites with a known or suspected release of contaminants.

Several factors create uncertainty that could potentially lead to hundreds of millions of dollars of additional cleanup costs that the Coast Guard has not communicated to Congress. For example, the Coast Guard has identified properties which may be contaminated with “forever chemicals” (per- and polyfluoroalkyl substances [PFAS]), which could increase its fiscal exposure by hundreds of millions of dollars more than it reports. Providing additional context on the potential or likely fiscal exposure associated with contaminants the Coast Guard has identified would give Congress better insight into the total potential fiscal exposure.

Coast Guard’s Reported \$448 Million Environmental Liability for Shore Infrastructure, Fiscal Year 2025



Source: GAO analysis of U.S. Coast Guard information. | GAO-26-108173

Note: The Coast Guard reviews its environmental liability data each quarter to ensure properties are not counted in more than one category.

The Coast Guard has not fully incorporated risk-informed decision-making in its management of the environmental liabilities program. For example, the Coast Guard has not developed performance measures or evaluated outcomes for the program as GAO’s framework for risk-informed decision-making recommends. According to GAO’s framework, agencies should develop an analysis plan and evaluate outcomes based on clearly defined objectives and performance measures, among other things.

The Coast Guard has not fully met these risk-informed steps, largely because it has not developed a long-term strategy to define the objectives of its environmental liabilities program. Developing a strategy could help the Coast Guard make risk-informed decisions about the long-term management of its growing portfolio of environmental liabilities and achieve financial benefits—for example, by using analysis to strategically sequence cleanup projects.

Why GAO Did This Study

The Coast Guard has a \$28 billion inventory of shore infrastructure assets, such as boat stations and lighthouses. Many of these assets have environmental contamination due to past practices. Federal agencies are required to estimate and report their anticipated cleanup costs—also known as environmental liabilities—related to environmental contamination.

GAO was asked to review the Coast Guard’s environmental liabilities for its shore infrastructure assets. This report examines, among other things, (1) the Coast Guard’s environmental liabilities for shore infrastructure in recent years, including factors contributing to uncertainty in those liability estimates, and (2) the extent to which the Coast Guard uses risk-informed decision-making to manage its environmental liabilities program.

GAO analyzed Coast Guard policies, guidance, and data related to the Coast Guard’s environmental liabilities for shore infrastructure and compared these with GAO’s [risk-informed decision-making framework](#) for managing environmental hazards. GAO also interviewed agency officials to identify and describe factors related to uncertainty in its estimates.

What GAO Recommends

GAO is recommending that the Coast Guard (1) expand the information provided to Congress regarding its fiscal exposure to environmental liabilities and (2) develop a long-term strategy for managing its environmental liabilities program.

The Department of Homeland Security agreed with the recommendations.

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Abbreviations

AFFF	aqueous film forming foam
CDC	Centers for Disease Control and Prevention
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DHS	Department of Homeland Security
EPA	Environmental Protection Agency
LORAN	long-range navigation
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyls
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PMR	program management review
RACER	Remedial Action Cost Engineering Requirements

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July 14, 2026

The Honorable Sam Graves
Chair
The Honorable Rick Larsen
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

The Coast Guard has a vast, \$28 billion inventory of shore infrastructure assets, such as boat and air stations, housing, and lighthouses. These assets can be significantly contaminated due to various factors, including the age of structures, historical usage, operations conducted, and mission support activities. For example, in addition to contaminants such as asbestos and lead in pre-1980s buildings, the Coast Guard has detected synthetic chemicals called per- and polyfluoroalkyl substances (PFAS) at dozens of shore facilities.¹ These “forever chemicals” can persist in water and soil for decades and have been linked to cancer and other human health problems.

Federal accounting standards require federal agencies responsible for cleaning up environmental contamination to estimate future cleanup and waste disposal costs and to report such costs in their annual financial statements. Agencies refer to these estimated future costs as environmental liabilities.² The federal government’s environmental liabilities have been growing for the past 30 years and represent one of the largest types of federal financial liability. In 2017, GAO identified the federal government’s environmental liabilities as a high-risk issue, in part because of this continued growth.³ From fiscal years 2016 through 2023,

¹Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic chemicals that have been linked to harmful health effects. For decades, PFAS have been used in a wide range of products including stain-resistant furniture, waterproof clothing, nonstick cookware, and certain firefighting foams like aqueous film-forming foam (AFFF). PFAS are resistant to degradation and can accumulate in humans, animals, and plants.

²Federal Accounting Standards Advisory Board, *FASAB Handbook of Federal Accounting Standards and Other Pronouncements, as Amended* (Washington, D.C.: June 30, 2025). Under these standards, and throughout our report, an environmental liability is defined as a probable, measurable, and reasonably estimable future outflow or expenditure of resources that exist for environmental cleanup costs resulting from past transactions or events.

³GAO, *High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others*, [GAO-17-317](#) (Washington, D.C.: Feb. 15, 2017).

the federal government's estimated environmental liabilities increased from \$447 billion to \$645 billion. In roughly the same period, the Coast Guard has reported that its environmental liabilities have grown from about \$358 million to about \$448 million as of September 2025. This amount will likely continue to increase over time, which highlights the importance of avoiding delays in cleaning up contamination. Additionally, prolonged exposure to environmental contamination increases risks to service members' health, making it all the more important for the Coast Guard to take action and prevent any delays.

You asked us to review issues related to the Coast Guard's environmental liabilities program.⁴ This report describes (1) the Coast Guard's environmental liabilities for shore infrastructure in recent years, including factors contributing to uncertainty in those liability estimates; (2) the extent to which the Coast Guard uses risk-informed decision-making to manage its environmental liabilities program; and (3) challenges the Coast Guard faces when managing its environmental liabilities program.

To describe the Coast Guard's environmental liabilities for shore infrastructure, we reviewed the Coast Guard's policies and guidance related to the management of environmental liabilities and financial documents, including budget justifications for fiscal years 2021 through 2027. We analyzed the Coast Guard's annual environmental liability reports for fiscal years 2016 through 2025 to identify trends and summarize the cost estimates, expenditures, and future plans related to various environmental liabilities, including project-level data for individual cleanup projects.⁵ To assess the reliability of the data, we checked for errors and omissions and interviewed agency officials. We found the data sufficiently reliable to describe what the Coast Guard reports for its environmental liabilities. We also interviewed Coast Guard officials to better understand how uncertainties could affect the cost estimates and the nature of the impact from those uncertainties.

⁴Throughout our report, we use the term environmental liabilities program to refer to the Coast Guard's collective processes and activities for identifying, assessing, and managing the contamination associated with its environmental liabilities.

⁵Throughout our report, we use the term cleanup projects to refer to sites where the Coast Guard has identified the release or potential release of a contaminant and developed a site-specific estimated project cost to address the contamination. The Coast Guard refers to these estimated project costs as environmental liability estimates—a term which we also use in our report—and includes such costs as environmental liabilities in its financial reporting.

To describe the extent to which the Coast Guard uses risk-informed decision-making to manage its environmental liabilities program, we reviewed the Coast Guard's policies and guidance for its environmental liabilities program and compared them with the phases and steps of GAO's framework for risk-informed decision-making.⁶ For each step, we analyzed Coast Guard documentation to determine whether the Coast Guard met, partially met, or did not meet the step. We used the following scale to evaluate the extent to which the Coast Guard met risk-informed decision-making steps in managing environmental hazards.

- **Met:** Coast Guard provided evidence that addressed the entire step.
- **Partially met:** Coast Guard provided evidence that addressed some parts of the step.
- **Not met:** Coast Guard did not provide evidence that addressed the step.

We reviewed the Coast Guard's planning documentation, such as guidance memos setting annual priorities related to its management of the environmental liabilities program. We analyzed Coast Guard data on expenditures for its environmental liabilities program for fiscal years 2022 through 2025, as well as project-level data on individual cleanup projects, including their cost and risk scores.

We analyzed Coast Guard data on the number and type of its planned shore infrastructure property disposals and compared the data to the Coast Guard's reported environmental liabilities and related documentation to determine the extent to which the Coast Guard has assessed environmental contamination by developing cleanup project cost estimates at properties it plans to dispose of. To assess the reliability of these data, we reviewed relevant documentation and interviewed Coast Guard officials and determined the data were sufficiently reliable for the purpose of identifying whether the Coast Guard had developed cleanup project cost estimates for planned property disposals.

In addition, we interviewed Coast Guard headquarters officials to understand the Coast Guard's policies and procedures for managing the environmental liabilities program and property disposals. We interviewed Coast Guard officials at each of the agency's six Civil Engineering Units to better understand how Coast Guard staff prioritize their environmental

⁶GAO, *Environmental Hazards: A Framework for Risk-Informed Decision-Making*, [GAO-24-107595](#) (Washington, D.C.: Sept. 23, 2024).

work and put the agency's policies and procedures into practice. In addition, we visited a Coast Guard facility, the Traverse City Air Station in Traverse City, MI, to directly observe a cleanup project site and discuss cleanup project efforts with the responsible officials. We selected the Traverse City Air Station because it was the site of an active cleanup project, due to the accidental release of a hazardous chemical fire-fighting foam in 2015.

To describe challenges to the Coast Guard managing its environmental liabilities program, we interviewed Coast Guard headquarters officials and field-based officials. To obtain a range of input from Coast Guard stakeholders, we interviewed officials in the Office of Civil Engineering, Shore Infrastructure Logistics Center, Office of Shore Sustainment, and the Office of Environmental Management. In addition, we interviewed field-based officials in all six of the Coast Guard's Civil Engineering Units to obtain their perspective on challenges they faced. During each interview, we asked officials to describe any challenges related to environmental liabilities, then we identified the top challenges most frequently cited across interviews.

We conducted this performance audit from March 2025 to July 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.

Background

Federal Environmental Liabilities, Accounting Standards, and Fiscal Exposure

Federal agencies are required to report on their annual financial statements certain cost estimates for addressing contamination. These estimates are known as environmental liabilities. According to federal accounting standards, costs for cleanup work must be included in environmental liability estimates when they are both probable and reasonably estimable.⁷ The Coast Guard reports its environmental

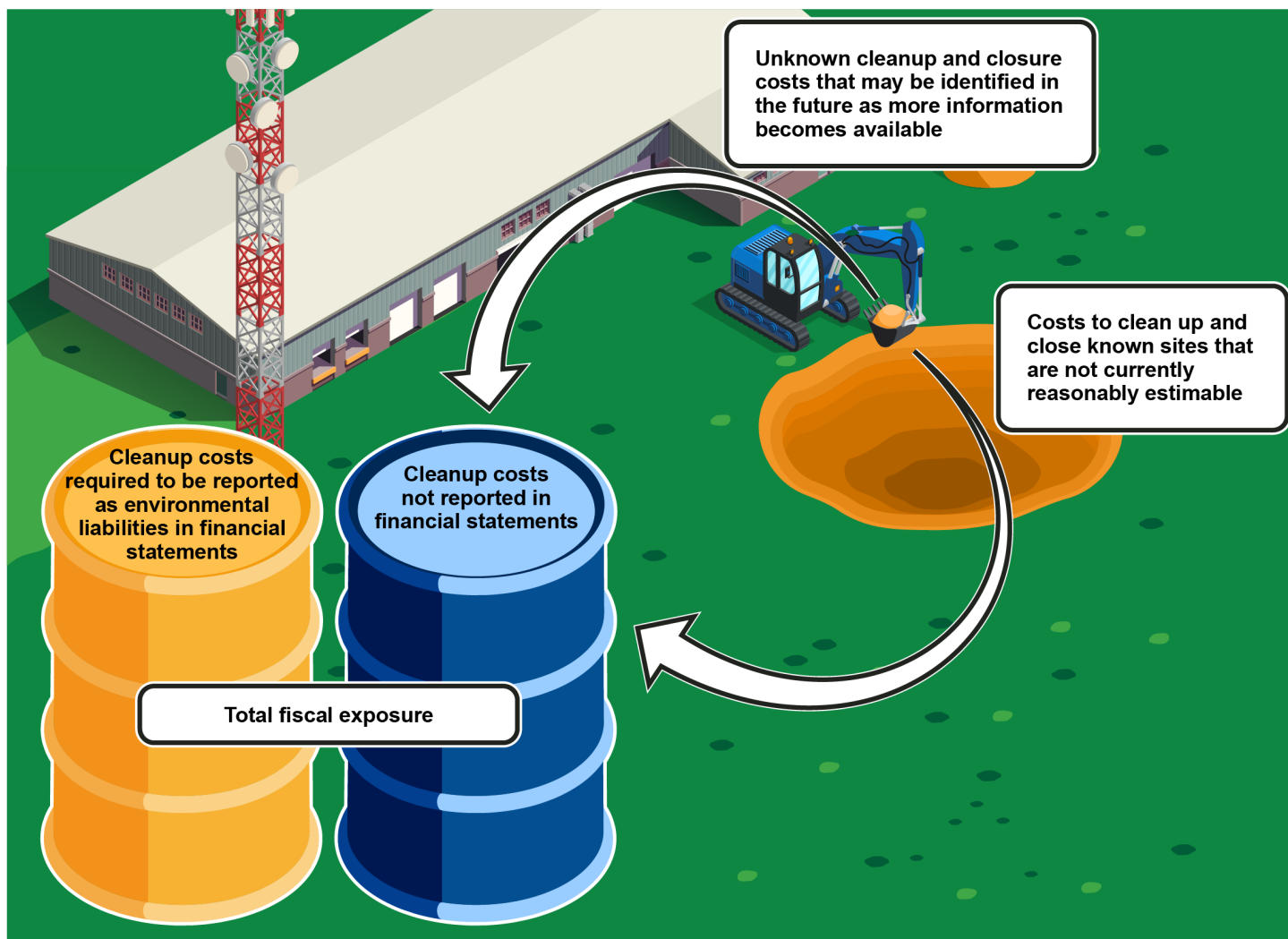
⁷"Probable" relates to whether a future outflow of resources will be required—specifically, that it is more likely than not that the agency will incur a future outflow of resources. In determining whether an agency's environmental cleanup responsibilities meet the probable criterion, the agency must establish its legal liability or financial responsibility for the project and determine that it is more likely than not that it will have to conduct the cleanup. "Reasonably estimable" refers to the ability to reliably quantify in monetary terms the outflow of resources that will be required.

liabilities to the Department of Homeland Security (DHS) on a quarterly basis, and DHS reports its environmental liabilities in its annual agency financial report. The Coast Guard is to adjust its environmental liability cost estimates for inflation and account for completed and in-progress cleanup work every year. Additionally, it is to update the details and estimated cost of each cleanup project approximately every 3 years—part of a triennial update—to account for new information, according to agency officials and Coast Guard procedures.

While the federal accounting standards require federal agencies to disclose certain environmental liabilities in their financial statements, reported environmental liabilities do not comprise the total amount that the federal government may have to pay to address environmental contamination, known as its fiscal exposure. As shown in figure 1, other components, when combined with the reported liabilities in financial statements, account for the total federal fiscal exposure. These other components can include (1) costs related to clean up and closure of known sites that are not currently reasonably estimable and (2) unknown cleanup and closure costs that may be identified in the future as more information becomes available. Prior GAO work has shown that the environmental liabilities reported in an agency's financial statement might not include costs where the nature and extent of contamination or the remedy for the contamination are not yet known.⁸

⁸For example, if there is no completed study or comparable site or condition, remediation costs for a site would not be considered reasonably estimable at that time, but the agency would recognize the anticipated cost of conducting a future study, if required, plus any other identifiable costs. GAO, *Abandoned Hardrock Mines: Land Management Agencies Should Improve Reporting of Total Cleanup Costs*, [GAO-23-105408](#) (Washington, D.C.: Jan. 13, 2023); *Environmental Liabilities: NASA's Reported Financial Liabilities Have Grown, and Several Factors Contribute to Future Uncertainties*, [GAO-21-205](#) (Washington, D.C.: Jan. 15, 2021).

Figure 1: Elements of Fiscal Exposure Related to Environmental Liabilities



Source: GAO; Macrovector.stock.adobe.com. | GAO-26-108173

Legal Framework for Coast Guard's Environmental Cleanup Process

The Coast Guard's cleanup activities are generally conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), as well

as other relevant statutes and regulations.⁹ CERCLA authorizes the President to respond to actual or threatened releases to the environment of (1) hazardous substances and (2) pollutants or contaminants that may pose an imminent and substantial danger to public health or the environment.¹⁰ In the late 1980s, the President delegated CERCLA's response authorities to the Environmental Protection Agency (EPA) and other federal agencies. Under CERCLA, federal agencies—such as the Coast Guard—are responsible for cleaning up releases from facilities and vessels under their jurisdiction, custody, or control.¹¹

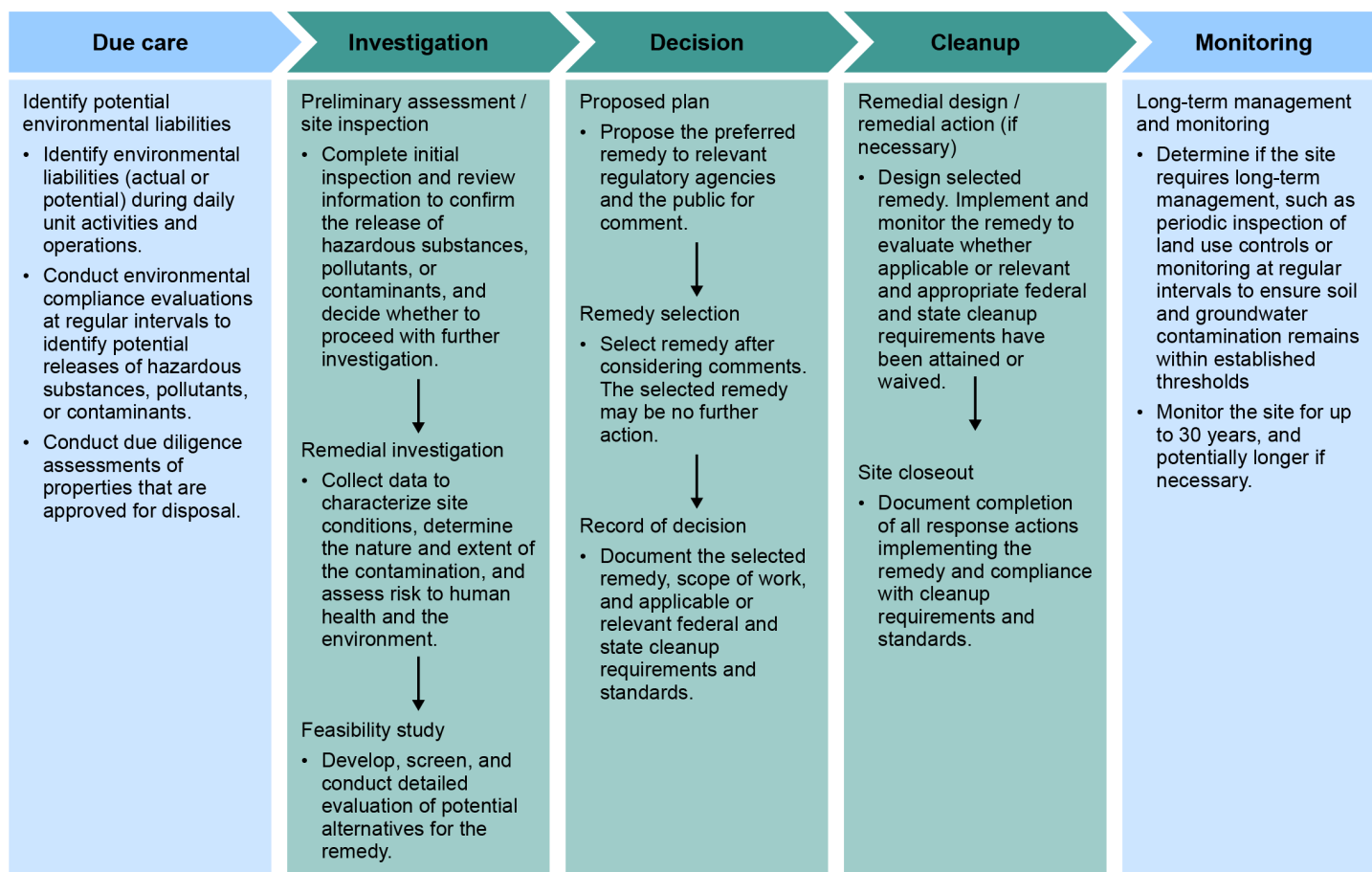
CERCLA and its implementing regulations include a series of actions that agencies take to identify and address environmental contamination. Some CERCLA remedial actions may require long-term monitoring to ensure continued protection of human health and the environment, which the Coast Guard includes in its monitoring process for closed sites. In addition, the Coast Guard can engage in removal actions, which are generally shorter-term or emergency actions to address immediate threats to human health or the environment under certain circumstances. For cleanup projects that it carries out under CERCLA, the Coast Guard generally follows the process outlined in figure 2 and assigns one of three categories—investigation, remediation, or monitoring—to each of its cleanup projects.

⁹Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675). Other federal laws may be relevant to the Coast Guard's investigation and cleanup activities, including the Resource Conservation and Recovery Act of 1976. Pub. L. No. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6987).

¹⁰42 U.S.C. § 9604(a).

¹¹Specifically, Executive Order 12,580, as amended, delegates the authority of the President under CERCLA section 104 to federal agencies to, among other things, take remedial actions for releases or threatened releases of any hazardous substances, pollutants, or contaminants from any facility or vessel under the federal agency's jurisdiction, custody, or control. Exec. Order No. 12,580, § 2(e)(1), 52 Fed. Reg. 2923, 2924 (Jan. 29, 1987).

Figure 2: General Process for Environmental Cleanup at U.S. Coast Guard Sites



- Removal actions can be used at any phase to address an immediate threat to human health or the environment under certain conditions.
- Remedial actions follow the remedial design stages and involve the actual construction or implementation of the permanent remedy.

Legend

- Coast Guard–specific activities
- Coast Guard activities generally based on CERCLA

Source: GAO analysis of U.S. Coast Guard information. | GAO-26-108173

Note: For the purposes of this report, we have grouped the typical stages of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) cleanup process into the high-level stages of investigation, decision, and cleanup, as generally set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) at 40 C.F.R. Part 300. See Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675). The Coast Guard generally employs these steps during its environmental cleanup process. Other federal laws may be relevant to the Coast Guard's investigation and cleanup activities, including the Resource Conservation and Recovery Act of 1976. Pub. L. No. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6987).

Environmental Liabilities and Property Disposal

Like other federal agencies, the Coast Guard routinely identifies and disposes of excess property.¹² According to Coast Guard policy, assessing contamination is a key part of its disposal process for shore infrastructure. Specifically, when the Coast Guard selects a property for disposal, it initiates a due care process to investigate the potential existence of environmental contamination and, if present, evaluate its extent, as shown in figure 2. The Coast Guard generally follows the process in figure 2 to remediate identified environmental contamination prior to the disposal of the property. The Coast Guard may dispose of excess shore infrastructure by selling it for fair market value.¹³ In 2025, for example, the Coast Guard sold an excess shore infrastructure property for \$1,175,000 in Jonesport, ME, after completing an investigation for lead contamination and concluding there was no significant risk of harm to human health or the environment. When the Coast Guard identifies contamination at a property it wants to dispose of, it develops an environmental liability estimate to describe the potential cost and cleanup project methods.

Coast Guard Reports \$448 Million in Environmental Liabilities, but Multiple Factors Create Uncertain Fiscal Exposure

¹²The U.S. government routinely identifies and disposes of excess federal property, such as unused or underutilized buildings. Throughout our report, we refer to this process as disposal. The General Services Administration often manages the property disposal process on behalf of other agencies. We have reported on several aspects of federal property management and disposal. For example, see *Federal Real Property: GSA Should Create Goals to Ensure New Approach Saves Money and Accelerates Disposal of Unneeded Property*, [GAO-26-107760](#) (Washington, D.C.: Apr. 9, 2026).

¹³See 14 U.S.C. § 2945(a).

Coast Guard Reports \$448 Million in Environmental Liabilities

Asbestos

Asbestos is a group of naturally occurring mineral fibers that are resistant to heat and corrosion. Prior to 1981, asbestos was commonly used in building materials such as insulation, floor tiles, plaster, ceiling tiles, and pipe wrapping. If asbestos becomes friable (i.e., able to be crumbled by hand pressure) tiny fibers can be released into the air.

According to the Centers for Disease Control and Prevention (CDC), those who breathe asbestos fibers can develop serious or fatal diseases, such as lung cancer or mesothelioma, which might not develop until decades after an individual is exposed. From 1999 through 2020, almost 55,000 mesothelioma deaths were reported in the United States, according to analysis of CDC data. The field pictured below, at the Coast Guard's Traverse City Air Station in Michigan, is strewn with friable asbestos from a building demolition that occurred before the Coast Guard owned the property. The Coast Guard installed signs warning people not to use the field.



Source: GAO analysis of CDC and U.S. Coast Guard information. GAO photo. | GAO-26-108173

As of September 2025, the Coast Guard reported about \$448 million in environmental liabilities related to its shore infrastructure. Approximately half of that reported environmental liability—about \$228 million—is for structures where the Coast Guard assumes that a contaminant is present due to the structure's age or type. For example, as of September 2025, the Coast Guard assumed that 2,858 buildings built before 1981 were made with material containing asbestos—a designated hazardous substance under CERCLA regulations.¹⁴ As shown in figure 3, the Coast Guard reported its environmental liability for asbestos in these buildings constructed prior to 1981 at \$112.2 million. The Coast Guard also assumes that structures built before 1979 contain lead-based paint, and that lighthouses have lead in the surrounding soil due to past exterior maintenance practices. In such cases, the Coast Guard anticipates that future cleanup activities may be needed and applies a cost estimate formula based on the structure's square footage for its environmental liability cost estimate. The Coast Guard's reported environmental liabilities for asbestos, lead-based paint, and lighthouses remained steady over the last 10 years, as shown in figure 3.

¹⁴40 C.F.R. § 302.4.

The other half of the Coast Guard's reported environmental liabilities—about \$220 million—is composed of cleanup projects. These projects are at sites where the Coast Guard has identified the release or potential release of a contaminant and has developed a site-specific estimated project cost to address the contamination. The Coast Guard estimates the cost for these cleanup projects with a software program called RACER, and officials told us that they adjust the cost estimate based on knowledge of other cleanup projects and relevant factors (such as logistical costs).¹⁵

Lead-Based Paint

As lead-based paint deteriorates into flakes and dust, it becomes a health hazard to people, especially children. Lead exposure can damage a child's developing brain and nervous system and slow development and growth. Young children are at greater risk of exposure because they have frequent hand-to-mouth activity and often crawl on the floor. As of September 2025, the Coast Guard estimates over 1,000 of its structures and over 100 lighthouses have lead-based paint. Routine cleaning of the exterior of lighthouses and deterioration due to weather exposure has contributed to lead contaminated soil in multiple locations.

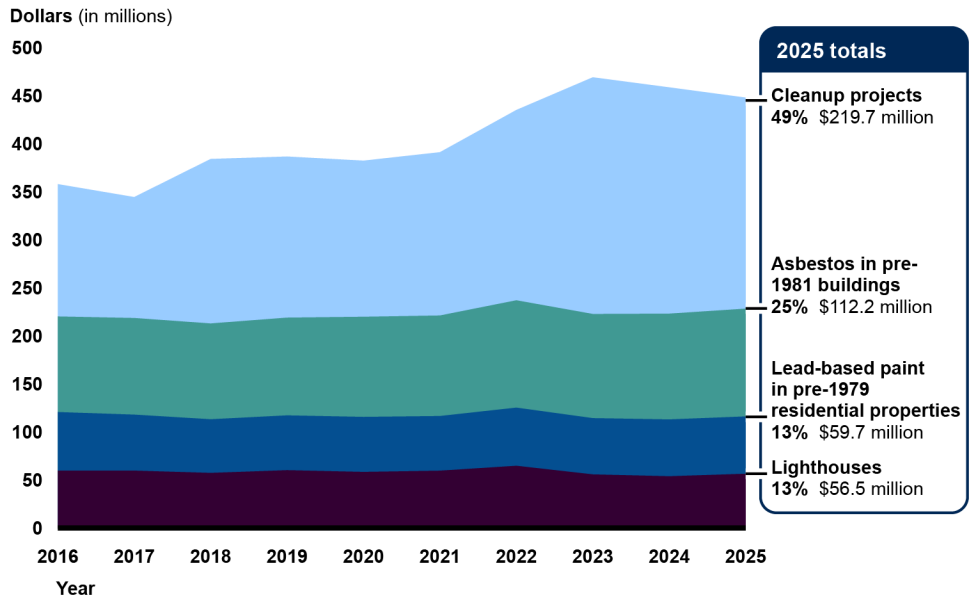
Source: GAO analysis of Centers for Disease Control and Prevention, and U.S. Coast Guard information. | GAO-26-108173

A majority of cleanup projects are related to contamination from metals such as lead, and many have multiple sources of contamination. For example, the Coast Guard estimates that it will need \$1.2 million to investigate and clean up soil contaminated by lead-based paint and petroleum at Wood Island Lighthouse in Biddeford, ME.¹⁶ For details on each of the Coast Guard's cleanup projects, see our [interactive graphic](#) and appendix I.

¹⁵The Remedial Action Cost Engineering Requirements (RACER) system is estimating software designed to provide cost estimations based on site-specific information and available technologies used in the industry. Coast Guard officials told us that RACER estimates may not include appropriate site-specific logistical costs, which they estimate and enter manually based on knowledge and lessons learned from prior environmental cleanup projects.

¹⁶Petroleum is not a designated hazardous substance subject to CERCLA. See 40 C.F.R. § 302.4. The Coast Guard uses other authorities to address contamination from petroleum.

Figure 3: U.S. Coast Guard's Reported Environmental Liability for Shore Infrastructure, Fiscal Years 2016–2025



Source: GAO analysis of U.S. Coast Guard information. | GAO-26-108173

Note: Approximately half of the Coast Guard's environmental liabilities for shore infrastructure are assumed cleanup costs for structures based on their age and type. The Coast Guard categorizes these environmental liabilities as asbestos, lead-based paint, and lighthouses (which are assumed to have lead in the surrounding soil). The other half of its reported environmental liabilities are sites where the Coast Guard has identified the release or potential release of a contaminant. These sites are referred to as cleanup projects. These estimates do not include all aspects of fiscal exposure, such as the potential liability from cleaning up per- and polyfluoroalkyl substances (PFAS).

The Coast Guard spent more than \$45 million in fiscal years 2022 through 2025 on cleanup projects, but its estimated environmental liability costs increased by \$57 million during the same period for reasons such as inflation, updated estimates, and newly identified cleanup projects. Inflation erased about half of the reduction from spending on cleanup efforts each year. For example, in fiscal year 2025 the Coast Guard spent \$10.4 million on cleanup projects, yet inflation from fiscal year 2024 to fiscal year 2025 increased the total estimated cost of cleanup projects by more than \$6 million. The Coast Guard periodically updates its cleanup project cost estimates, which tends to increase its overall environmental

liability.¹⁷ Initial data from the Coast Guard's most recent periodic update shows an estimated \$48.9 million increase in reported cost estimates and a net increase of eight cleanup projects from September 2025 to December 2025.

Multiple Uncertainties May Increase Coast Guard's Fiscal Exposure by Several Hundred Million Dollars

The Coast Guard's environmental liability estimates include multiple uncertainties that may increase the agency's fiscal exposure. These uncertainties fall into four categories: the class of emerging contaminants known as PFAS, limited estimable cost, inherent uncertainty, and uncertain property history.¹⁸ Figure 4 describes these four categories and the potential results. These uncertainties may increase or decrease the fiscal exposure for individual sites, but they indicate an overall increase in the Coast Guard's fiscal exposure, possibly by at least hundreds of millions of dollars.

¹⁷The Coast Guard's Environmental Liabilities Process Guide states that cleanup project estimates must be renewed periodically. During these updates, the Coast Guard identifies and quantifies the cleanup costs for new projects or updates the costs of projects where estimates can be improved based on new information. Coast Guard officials told us they typically do this full update and renewal every 3 years. In addition, at the beginning of each calendar year, the Coast Guard adjusts all its environmental liabilities for inflation, including cleanup project estimates. U.S. Coast Guard, *Environmental Liabilities Process Guide* (March 21, 2016).

¹⁸PFAS are a large group of synthetic chemicals that have a wide range of uses in consumer products, manufacturing, and fire safety. They also have caused environmental contamination of water and soil, and some have been linked to health problems in humans.

Figure 4: Categories of Factors That Contribute to Uncertainty in Estimating Environmental Liability Costs for Coast Guard Shore Infrastructure

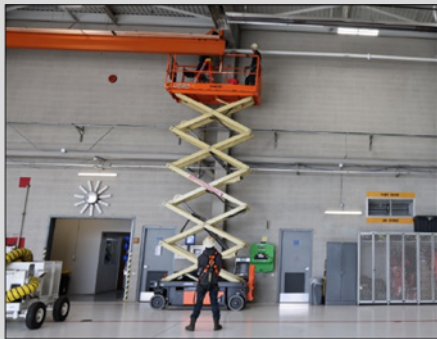
Categories	Description	Result
 Per- and Polyfluoroalkyl Substances (PFAS)	Recent PFAS-related regulations ^a may necessitate the addition of projects, changes to ongoing projects, or changes to the prioritization of projects. According to officials, potential future discovery of other emergent contaminants could have similar cost estimating impacts.	 May increase environmental liability cost estimates by hundreds of millions of dollars.
 Limited estimable cost	Cleanup projects may have too many unknowns to create a cost estimate for remediation. Of the Coast Guard's 223 backlogged cleanup projects, 51 represent a "cost to study only" cost estimate, and 11 have no cost estimate.	 Some projects may spend less than their estimate or have no additional costs, but many will.
 Inherent uncertainty	Even when all a cleanup project's needs are reasonably estimable, cost estimates can change depending on the chosen cleanup option or information revealed during cleanup. Over half of the projects are in the earliest stage of cleaning up, when cleanup plans may not yet be finalized.	 Final cost may be less than estimated but is usually higher.
 Uncertain property history	Records may be incomplete or unavailable, and the Coast Guard may discover releases of contamination through activities such as routine inspections or construction projects.	 An increase in total cost estimates due to additional projects and potential sunk costs in other projects that may be put on hold.

Source: GAO analysis of U.S. Coast Guard information; Icons-Studio/stock.adobe.com. | GAO-26-108173

^aPFAS refers to per- and polyfluoroalkyl substances. See PFAS National Primary Drinking Water Regulation, 89 Fed. Reg. 32,532 (Apr. 26, 2024); Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances, 89 Fed. Reg. 39,124 (May 8, 2024). But see Rescission of Regulatory Determinations and Removal of Related Provisions for Four PFAS Substances (PFHxS, PFNA, HFPO-DA (GenX), and the Mixture of These Three PFAS Plus PFBS), 91 Fed. Reg. 29,413 (May 20, 2026).

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS are a group of synthetic chemicals that have been linked to harmful health effects. For decades, PFAS have been used in a wide range of products including stain-resistant furniture, waterproof clothing, nonstick cookware, and certain firefighting foams like aqueous film forming foam (AFFF). PFAS are resistant to degradation and can accumulate in humans, animals, and plants. The Coast Guard identified airfields as its highest risk areas for PFAS contamination due to their storage and use of AFFF. The Coast Guard is transitioning to a water-based fire suppression system. In the photograph below, workers are replacing AFFF delivery pipes in the hangar at the Coast Guard's Traverse City Air Station in Michigan.



Source: GAO analysis of U.S. Coast Guard information. GAO photo. | GAO-26-108173

PFAS. Recent federal and state regulations regarding PFAS—a class of emerging contaminants—as well as on-going state compliance with those regulations, add to uncertainty in estimating environmental liability costs.¹⁹ For example, in 2024 the EPA designated two PFAS as hazardous substances under CERCLA and set maximum levels for several PFAS in drinking water.²⁰ These new regulations may impact the Coast Guard's cleanup efforts because the agency historically used a firefighting foam containing PFAS at airfields, and thus cleanup actions to address these contaminants may be necessary. DHS has established a requirement that its components use the CERCLA process to perform preliminary assessments and site inspections where there is suspected PFAS contamination.²¹ Then, the components are to determine follow-up actions based on the data collected.

If its average costs are similar to those estimated by the Department of Defense, cleaning up PFAS could cost the Coast Guard hundreds of millions of dollars for 34 sites. The Department of Defense estimated it would cost at least \$7 billion to investigate and remediate PFAS contamination at 580 installations—an average cost of \$12.2 million per

¹⁹See *PFAS National Primary Drinking Water Regulation*, 89 Fed. Reg. 32,532 (Apr. 26, 2024); 40 C.F.R. § 142.12(b) (generally requiring State requests for approval of program revisions to adopt new or revised EPA regulations be submitted to EPA not later than 2 years after promulgation of the new or revised EPA regulations). But see *Rescission of Regulatory Determinations and Removal of Related Provisions for Four PFAS Substances (PFHxS, PFNA, HFPO-DA (GenX), and the Mixture of These Three PFAS Plus PFBS)*, 91 Fed. Reg. 29,413 (May 20, 2026) (proposing rescission of parts of the April 2024 final rule).

²⁰*PFAS National Primary Drinking Water Regulation*, 89 Fed. Reg. 32,532 (Apr. 26, 2024); *Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances*, 89 Fed. Reg. 39,124 (May 8, 2024). EPA proposed the rescission of some, but not all, of the maximum drinking water contaminant levels for PFAS set in 2024. *Rescission of Regulatory Determinations and Removal of Related Provisions for Four PFAS Substances (PFHxS, PFNA, HFPO-DA (GenX), and the Mixture of These Three PFAS Plus PFBS)*, 91 Fed. Reg. 29,413 (May 20, 2026).

²¹Department of Homeland Security, *Policy for Site Evaluation and Investigation of Per- and Polyfluoroalkyl Substances at Current and Former Operating Facilities*, Policy Directive 025-04 (Washington, D.C.: Aug. 9, 2021).

site. GAO found that this estimate is likely to be low.²² In 2025 the Coast Guard finalized its preliminary assessments of facilities it identified as high risk for PFAS releases. According to an executive summary report that the Coast Guard published on PFAS-related preliminary assessments, 34 sites need the Coast Guard to take further action.²³ Coast Guard and Department of Defense sites likely vary in size and complexity, which could lead to differences in cost estimates. However, this indicates that the Coast Guard has the potential for hundreds of millions more in estimated liability for these PFAS sites. The Coast Guard is monitoring the Department of Defense's actions regarding PFAS as a roadmap for possible future Coast Guard PFAS remediation.

As of July 2025, the Coast Guard was conducting site inspections at 30 facilities and remedial investigations at three facilities for PFAS. Once these activities are complete, Coast Guard officials said they will be better positioned to estimate the projected cleanup costs for PFAS contamination. Coast Guard officials told us that while the current technology for cleaning up PFAS is limited, it is evolving quickly and may lead to some more efficient options in the future. Coast Guard officials said they do not know how long it might take to fully remediate PFAS contamination at its shore infrastructure facilities.

Limited estimable cost. For approximately one-quarter of its cleanup projects, the Coast Guard has estimated only the cost to study the contaminated site, not to remediate it.²⁴ Coast Guard officials said that, as with its nationwide PFAS investigation, the estimated cleanup cost—the cost to fully remediate—for these sites cannot be reasonably estimated until the Coast Guard completes the studies.²⁵ The Coast Guard refers to

²²GAO, *Persistent Chemicals: DOD Needs to Provide Congress More Information on Costs Associated with Addressing PFAS*, [GAO-25-107401](#) (Washington, D.C.: Feb. 24, 2025).

²³Department of Homeland Security, United States Coast Guard, *Executive Summary Report: U.S. Coast Guard Nationwide Per- and Polyfluoroalkyl Substances Preliminary Assessments* (Norfolk, VA: May 2025).

²⁴Federal accounting standards permit agencies to report partially estimated costs as environmental liabilities if the full cost to remediate cannot yet be reasonably estimated. The Coast Guard refers to these types of environmental liabilities as “cost to study” cleanup projects.

²⁵Not all partially estimated projects result in additional costs. After investigation, the Coast Guard may determine there is no contamination or no further action is needed. For example, at one potential cleanup project site, a pipe suspected of being part of a leaking underground storage tank was discovered to be an electrical conduit, resulting in no further action.

these cleanup projects with limited estimable costs as “cost to study”. While projects vary widely in their cleanup costs, if the average estimated cleanup cost is comparable to what the “cost to study” cleanup projects will be, then the Coast Guard could have tens of millions more in remediation costs for these 51 projects.²⁶ Our [interactive graphic](#) shows details and locations for the Coast Guard’s “cost to study” cleanup projects.

Inherent uncertainty. The estimated costs of remediating environmental liabilities tend to increase as the project matures, according to prior GAO work and interviews with agency officials.²⁷ Of the Coast Guard’s projects with a fully estimable cleanup cost, over half are in the investigation phase, when cleanup plans may not yet be finalized. As of September 2025, the Coast Guard has 37 cleanup projects that have cost more than the service’s initial estimate, for a total of \$16.7 million in unanticipated spending from fiscal year 2022 to fiscal year 2025. As Coast Guard personnel work on a cleanup project, they may identify additional contaminants or larger spread of contamination, or they may encounter other obstacles. For example, the Coast Guard originally estimated \$439,000 in remediation costs for an historic lighthouse in Plymouth, MA, but during the cleanup project, personnel uncovered more contaminated soil and buried historical artifacts that required an additional \$1.3 million in cleanup costs.

²⁶We calculated this additional fiscal exposure by averaging the estimation for projects that were fully estimated, multiplying by 51 (the number of projects with a “cost to study” estimation that are not included in the Coast Guard’s nationwide PFAS effort as of September 2025), and subtracting the total amount of the partial estimates.

²⁷[GAO-25-107401](#). We have also previously found that in general, cost estimates tend to increase over time. See GAO, *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs*, [GAO-20-195G](#) (Washington, D.C.: Mar. 12, 2020).

Lighthouses

The Coast Guard operates 181 lighthouses, according to its most recent annual shore infrastructure report. Past practices of sandblasting or using solvent to remove lead-based paint from exterior surfaces of lighthouses may have caused the release of lead to the surrounding soil. The Coast Guard's lighthouse on Yerba Buena Island near San Francisco, CA, pictured below with the Admiral's house, needs an estimated \$917,000 related to soil cleanup as of 2025.



Source: Defense Visual Information Distribution System. | GAO-26-108173

Uncertain property history. The Coast Guard owns property where records of historical activity may be incomplete or unavailable. As a result, Coast Guard officials said they commonly discover additional contamination during cleanup projects or new construction projects. These discoveries can lead to additional cleanup costs. For example, during a construction project in 2025, the construction crew identified a leaking fuel line at a base in Alameda, CA, that the service will need to remediate in a future cleanup project, according to Coast Guard officials. Some of the Coast Guard's shore infrastructure facilities, such as Base Kodiak in Alaska, are located at former U.S. military sites where hazardous materials were improperly stored or disposed.²⁸ These types of discoveries not only add to the costs of existing cleanup projects or create new cleanup projects, but they also often cause reprioritization of existing cleanup efforts, according to officials. The Coast Guard owns and operates hundreds of assets—such as aviation fueling facilities and marine fuel storage facilities—where hazardous materials are stored.²⁹

Coast Guard Has Not Communicated Its Fiscal Exposure to Congress

The Coast Guard has reported environmental liabilities to Congress but does not include full information on its fiscal exposure, including the nature and magnitude of uncertainties in its estimation. For example, the Coast Guard's budget justifications accompanying the President's budget for fiscal years 2021 through 2027 do not include contextual information on uncertainties, such as those described above, that might affect its

²⁸In 2022, we reported on the extent of environmental liabilities at former military sites. Specifically, we found that the Department of Defense is responsible for cleaning up contamination at approximately 1,700 former military sites, at an estimated cost of approximately \$10.2 billion. See GAO, *Environmental Liabilities: Improvements Needed to Measure Progress of Cleanup of Formerly Used Defense Sites*, [GAO-22-104744](#) (Washington, D.C.: June 16, 2022).

²⁹Such materials may not always be hazardous substances pursuant to CERCLA. The Coast Guard may use other authorities to address contamination where applicable.

fiscal exposure.³⁰ This fiscal exposure is likely hundreds of millions higher than its reported environmental liability. Specifically, while the budget justifications list the cleanup projects with remaining estimated costs as directed, they do not indicate which cleanup project costs only cover the cost to study.

Moreover, the Coast Guard reports outdated estimates to Congress, which obscures the total number and cost of cleanup projects for which the Coast Guard is responsible. For example, the cleanup project costs in the budget justifications do not fully reflect the environmental liabilities program's future spending plans. We identified an additional \$17 million in anticipated cleanup project costs that were not included in its cost estimates in the fiscal year 2027 budget justification.³¹ Further, the Coast Guard did not use its inflation-adjusted cleanup project costs in its budget justifications from fiscal years 2024 through 2027—systematically understating known costs by millions of dollars every year. Coast Guard officials said that the service will begin reporting inflation-adjusted cleanup project costs in future budget justifications.

We have reported on the need for agencies to improve recognition of their fiscal exposures and provide Congress and the public with a more comprehensive picture of the federal government's future financial obligations.³² For example, in our 2025 High Risk report, we reiterated that agencies could do more to understand, monitor, and report on their environmental cleanup costs.³³ Further, as stated in our 2022 High Risk report, a key practice to successfully address high-risk areas includes that agencies ensure their capacity to communicate accurate, useful, and

³⁰The Senate Report accompanying the Department of Homeland Security Appropriations Act, 2016, directed the Coast Guard to include in its annual budget justification a listing of the activities projected to be funded by Coast Guard's funding request and an updated backlog report for Environmental Compliance and Restoration projects with an explanation of how the amount of funding requested will impact this documented backlog. S. Rep. No. 114-68, at 78 (2016) (accompanying Pub. L. No. 114-113, div. F, 129 Stat. 2242, 2493).

³¹For example, according to its September 2025 environmental liability report, the Coast Guard plans to spend \$3 million on a project to remediate lead-contaminated soil at the small arms firing range at Station Cape Disappointment. This spending plan is not reflected in the agency's fiscal year 2027 Congressional Budget Justification.

³²[GAO-23-105408](#); [GAO-21-205](#); GAO, *Fiscal Exposures: Improving the Budgetary Focus on Long-Term Costs and Uncertainties*, [GAO-03-213](#) (Washington, D.C.: Jan. 24, 2003).

³³GAO, *High-Risk Series: Heightened Attention Could Save Billions More and Improve Government Efficiency and Effectiveness*, [GAO-25-107743](#) (Washington, D.C.: Feb. 25, 2025).

Coast Guard Has Not Fully Met Steps in the Risk-Informed Decision-Making Process for Managing Environmental Liabilities

timely information.³⁴ For the Coast Guard, which faces challenges in completing environmental work with limited resources, this includes adding details to its budget materials or other supplementary information about the uncertainties in its estimation of environmental liabilities. Communicating accurate information also involves adding details about how these liabilities affect the government's fiscal exposure and ensuring budget materials use the most up-to-date information.³⁵ Coast Guard officials said the annual budget justification is not the best method for providing such information. There are other methods, however, that the Coast Guard could use, such as supplementary budget materials or annual shore infrastructure reports.

Transparency through reporting in budget materials is an essential element for providing Congress with a comprehensive picture of federal fiscal exposures for environmental contamination and cleanup. Equipping stakeholders with better information on fiscal exposure, as the Coast Guard learns more about the cleanup costs involved, will better equip decision-makers—including Coast Guard leadership and Congress—to make important, risk-informed decisions, such as the level of resources needed to address emerging contaminants like PFAS.

The Coast Guard has not fully met all steps in GAO's risk-informed decision-making framework when managing the environmental liabilities program. GAO's risk-informed decision-making framework for managing environmental liabilities helps agencies prioritize activities while balancing factors like cost with environmental and health risks, analyzing trade-offs, and strategically engaging with key stakeholders. Figure 5 shows the essential elements of this risk-informed decision-making process, consisting of 16 steps across four phases.³⁶ The design phase lays the groundwork for risk-informed decision-making throughout subsequent phases—for example, by requiring decision-making inputs such as objectives, performance measures, and constraints to be clearly defined. Agencies that apply this framework should tailor the depth and extent of

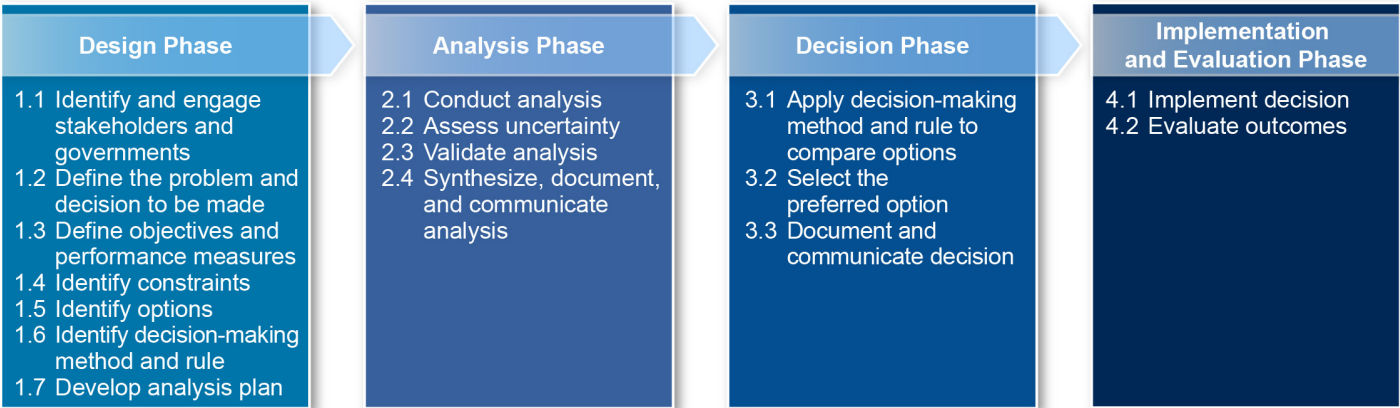
³⁴GAO, *High-Risk Series: Key Practices to Successfully Address High-Risk Areas and Remove Them from the List*, [GAO-22-105184](#) (Washington, D.C.: Mar. 3, 2022).

³⁵We recommended that the Coast Guard include more detailed information in its congressional budget requests. See GAO, *Coast Guard Shore Infrastructure: Applying Leading Practices Could Help Better Manage Project Backlogs of At Least \$2.6 Billion*, [GAO-19-82](#) (Washington, D.C.: Feb. 21, 2019). As of May 2026, the Coast Guard had not implemented this recommendation.

³⁶[GAO-24-107595](#).

the phases and steps to the nature and significance of the decision being made.

Figure 5: Phases and Steps of GAO’s Risk-Informed Decision-Making Framework for Environmental Hazards



Source: GAO. | GAO-26-108173

The Coast Guard has partially met or not met 12 of the framework’s 16 steps, as shown in table 1. For example, the Coast Guard did not meet the step of defining objectives and performance measures. Objectives and performance measures are important because they provide a basis for consistently and transparently comparing options during the decision phase and can be used in the final phase of the framework—the implementation and evaluation phase—to assess the performance of an agency’s implemented decision. For example, although Coast Guard policy calls for identifying, investigating, and cleaning up contamination from hazardous substances, the Coast Guard has not established any objectives or performance measures for measuring and assessing its implementation of that policy.³⁷

³⁷U.S. Coast Guard, *Environmental Compliance Program*, COMDTINST 5090.15 (Washington, D.C.: Mar. 2026).

Table 1: Extent That Coast Guard Met Risk-Informed Decision-Making Steps in Managing Environmental Hazards

Step	Met, partially met, or not met
Design phase	
Identify and engage stakeholders and governments	Met
Define the problem and decision to be made	Met
Define objectives and performance measures	Not met
Identify constraints	Met
Identify options	Partially met
Identify decision-making method and rule	Partially met
Develop analysis plan	Not met
Analysis phase	
Conduct analysis	Partially met
Assess uncertainty	Not met
Validate analysis	Not met
Synthesize, document, and communicate analysis	Not met
Decision phase	
Apply decision-making method and rule to compare options	Not met
Select the preferred option	Partially met
Document and communicate decision	Partially met
Implementation and Evaluation Phase	
Implement decision	Met
Evaluate outcomes	Not met

Met: Coast Guard provided evidence that addressed the entire step.

Partially met: Coast Guard provided evidence that addressed some parts of the step.

Not met: Coast Guard did not provide evidence that addressed the step.

Source: GAO analysis of U.S. Coast Guard information. | GAO-26-108173

Note: We developed this framework to help agencies prioritize activities while balancing factors like cost with environmental and health risks. GAO, Environmental Hazards: A Framework for Risk-Informed Decision-Making, [GAO-24-107595](#) (Washington, D.C.: Sept. 23, 2024).

Additionally, the framework recommends agencies develop an analysis plan that identifies the types of analysis needed to assess a range of options to see how well each option performs relative to the agency's objectives. Because the Coast Guard has not defined objectives and performance measures to assess against, the Coast Guard cannot develop such an analysis plan, nor can it fully meet all four steps in the framework's analysis phase.

Likewise, the Coast Guard cannot fully meet the steps in the framework's decision or evaluation phases, as each of these in turn depend on establishing program objectives as the basis of risk-informed decision-making. For example, the Coast Guard cannot meaningfully evaluate outcomes for its environmental liabilities program without first developing programmatic objectives that define what a successful outcome should be. According to GAO's framework, evaluating outcomes is an essential step for agencies like the Coast Guard that manage programs where they must consider trade-offs among risks to human health and the environment, costs, and other factors in the face of uncertainty and limited resources.³⁸ Evaluating outcomes involves assessing whether an agency's decisions are producing the intended results and meeting program goals. This includes tracking and monitoring the relative effectiveness of its various cleanup program activities to prioritize cleanup projects and determine the most efficient and effective actions to manage them.

Instead, Coast Guard officials use a program management review (PMR) process to set annual priorities based on criteria related to human health risks, regulatory compliance, and property disposals, among others.³⁹ The Coast Guard uses these criteria to prioritize certain cleanup projects for funding in a given fiscal year. For example, when prioritizing cleanup projects for fiscal year 2025, the Coast Guard primarily selected cleanup projects at sites that were approved for disposal. But several factors can complicate the Coast Guard's property disposal process, according to officials. First, the Coast Guard's priorities for property disposal often shift, according to officials, and Congress may ask the Coast Guard to initiate or halt a property disposal, causing the environmental liabilities program to re-prioritize ongoing cleanup projects.⁴⁰ Second, resource constraints within the Coast Guard—staffing and workload in particular—can slow down the disposal process. Third, some Coast Guard properties

³⁸[GAO-24-107595](#).

³⁹Officials said the program management review (PMR) process, which they implemented in 2023, is intended to strengthen program management and oversight by identifying trends and resource gaps, discussing risks, and developing future requirements to meet program needs. According to officials, the PMR process has resulted in several improvements, such as greater coordination among internal stakeholders and better ability to discuss resource constraints and cleanup project priorities, that enhance the Coast Guard's decision-making about how to manage the environmental liabilities program.

⁴⁰We have previously reported on congressional involvement in Coast Guard real property management. See GAO, *Coast Guard: Actions Needed to Close Stations Identified as Overlapping and Unnecessarily Duplicative*, [GAO-18-9](#) (Washington, D.C.: Oct. 26, 2017).

are challenging to assess due to their remote location, such as at Long Range Navigation (LORAN) stations.⁴¹ We discuss the challenges of staffing, workload, and accessing properties in remote locations in more detail later in our report.

As a result, it is difficult for the Coast Guard to efficiently develop cleanup project estimates for property disposals where the site may be contaminated. As of September 2025, the Coast Guard has developed cleanup project estimates for 41 of the 117 shore infrastructure properties (35 percent) on its long-term list of planned disposals.⁴² Assessing potential contamination and developing cleanup project cost estimates can be a lengthy process, according to agency officials.

⁴¹Prior to the introduction of GPS, long-range navigation (LORAN) was a navigation aid that used radio signals to help mariners and pilots navigate. As maritime and aviation modes transitioned to GPS technologies, the Coast Guard discontinued its use of LORAN but is still responsible for maintaining its network of decommissioned LORAN sites. As of December 2025, the Coast Guard has 41 LORAN stations on its long-term disposal list. We have reported on the federal government's transition from systems like LORAN to GPS; see GAO, *GPS Disruptions: DOT Could Improve Efforts to Identify Interference Incidents and Strengthen Resilience*, [GAO-23-105335](#) (Washington, D.C.: Dec. 15, 2022).

⁴²These 117 properties represent all shore infrastructure properties that the Coast Guard listed as approved for disposal as of November 2025. Data on cleanup project cost estimates for the 117 properties is current as of September 2025. In its list, the Coast Guard listed an additional 110 shore infrastructure properties as potential candidates for disposal that have not yet been approved, with anticipated future disposal dates ranging from 2032 to 2035.

Figure 6: Examples of Coast Guard Properties Approved for Disposal



Warwick Neck Lighthouse is almost ready for sale.



A derelict building at the Long Range Navigation (LORAN) station in Caribou, ME.

Source: General Services Administration (left photo); U.S. Coast Guard (right photo). | GAO-26-108173

The Coast Guard has not fully incorporated risk-informed decision-making, such as developing objectives and performance measures, because it does not have a comprehensive strategy for making risk-informed decisions on the long-term management of the environmental liabilities program.⁴³ The Coast Guard recognized the need for long-term strategic planning in its 2022 Mission Support Action Plan, which recommended the development of a 20-year strategic investment and disposal plan for shore infrastructure. However, as of May 2026, the Coast Guard has not developed such a strategic plan. Instead, the environmental liabilities program remains in a reactive mode, with shifting priorities and a lack of long-term planning, according to several officials responsible for managing cleanup projects.

Developing a comprehensive, risk-informed strategy for managing environmental liabilities that defines program objectives, requires program officials to evaluate outcomes and measure progress against goals, and clearly articulates multi-year disposal plans and priorities, would help the

⁴³The Coast Guard has policies and guidance that define and direct the responsibilities of its environmental workforce, but they do not require the establishment of a comprehensive strategy for the long-term management of the environmental liabilities program.

Coast Guard make optimal cleanup decisions and direct resources to the highest priorities. Moreover, the Coast Guard would be better prepared to meet the substantial challenges it faces, such as managing PFAS cleanup projects that will likely cost at least several hundred million dollars more than currently reported. For example, a strategy could provide consistent direction for long-term program priorities, such as disposing of underutilized infrastructure like certain historic light stations and decommissioned LORAN sites.

A long-term strategy could further help guide difficult resource allocation decisions over multiple years by incorporating key risk-informed elements, such as an evaluation of program effectiveness. Given the length of time involved in many environmental liability remediation projects, many of which were first identified in the 1990s, it is incumbent upon the Coast Guard to better manage risks through a long-term strategy. Doing so may reduce service members' exposure to contamination and lead to significant potential financial benefits by guiding more strategic sequencing of projects—for example, through an optimization analysis.⁴⁴

Finally, a strategy could help align the environmental liabilities program with other agency priorities, such as the development of new shore infrastructure facilities as called for in the Coast Guard's Force Design 2028 strategy. For example, the Coast Guard is planning several major new shore infrastructure projects in the Alaska region, including a \$30 million aircraft hangar and a \$50 million housing project. Although these projects will require extensive environmental planning, which officials have noted tends to divert resources away from cleanup projects, the Coast Guard may be able to use funds from Public Law 119-21—commonly known as the One Big Beautiful Act—to remediate existing environmental contamination at some of its planned infrastructure

⁴⁴Prior GAO work has found that optimization analysis, such as the strategic sequencing of activities, can save agencies money. See GAO, *Nuclear Waste: An Integrated Disposal Plan Could Help DOE Complete Its Cleanup Mission and Save Billions*, [GAO-25-107109](#) (Washington, D.C.: May 29, 2025).

projects.⁴⁵ Notwithstanding the improvements, without a comprehensive strategy to guide the agency's overall efforts and identify program objectives, the Coast Guard's current PMR process is unlikely to help the Coast Guard remediate contamination at the highest risk sites and effectively reduce or ultimately eliminate its growing portfolio of environmental liabilities over the long term.

Coast Guard Faces Challenges with Managing Environmental Liabilities

The Coast Guard faces challenges with staffing, workload, and remote sites that hinder its ability to manage its environmental liabilities related to shore infrastructure.

Challenges Related to Staffing and Workload

The Coast Guard faces staffing and workload challenges in its management of environmental liability cleanup projects. Officials at five of its six Civil Engineering Units, and officials at several program offices that help manage the environmental liabilities program, told us the issues of staffing and employee workload are among their biggest challenges.⁴⁶ As of May 2026, the Coast Guard's Environmental Compliance and Restoration program has 40 full-time staff, such as environmental engineers and scientists, who work on cleanup projects and restoration of contaminated facilities related to environmental liabilities.

In addition to managing cleanup projects, the Coast Guard's environmental staff have a range of responsibilities to support Coast Guard operations. Their workload supports (1) facility construction, maintenance, and repair; (2) the management, acquisition, and disposal of shore infrastructure; (3) compliance with applicable state, local, and

⁴⁵In July 2025, Congress passed legislation providing the Coast Guard with \$4.379 billion for design, planning, engineering, recapitalization, construction, rebuilding, improvement of, and program management for shore facilities. An act to provide for reconciliation pursuant to title II of H. Con. Res. 14, Pub. L. No. 119-21, tit. IV, § 40001, 139 Stat. 72, 127 (2025). Coast Guard policy permits the use of procurement, construction, and improvement funds (instead of environmental compliance and restoration funds) to investigate and remediate contamination, as long as the investigation and remediation work occurs within the footprint of the planned new building construction.

⁴⁶The Coast Guard has six Civil Engineering Units that oversee shore infrastructure and environmental issues, including environmental liabilities, across the U.S. They are responsible for executing cleanup projects related to environmental liabilities. The Civil Engineering Units are in Cleveland, OH; Honolulu, HI; Juneau, AK; Miami, FL; Oakland, CA; and Providence, RI.

federal environmental regulations; and (4) policy development, planning, programming, and budgeting for Coast Guard environmental management requirements.⁴⁷ For example, as the Coast Guard begins upgrading its homeports in Washington and Alaska to accommodate new Arctic Security Cutters, environmental staff will need to review construction plans and assess the applicability of relevant environmental regulations.⁴⁸

Several officials expressed concern with the environmental staff's ability to effectively manage cleanup projects among so many competing workload priorities. In May 2025, for example, a single staff member at the Juneau, AK Civil Engineering Unit served as the project manager for dozens of contaminated sites with active cleanup projects. According to officials, the staffing challenge makes it more difficult to work through the backlog of cleanup projects, since only the highest priority cleanup projects are typically selected for funding in any given year. Moreover, environmental staff must often shift to new, more pressing priorities. The Coast Guard is planning, for example, to expand its shore infrastructure footprint with reconciliation funds and conduct a large-scale, nationwide effort to assess and remediate PFAS contamination, according to officials.

Several officials said the Coast Guard will need additional engineering personnel and project managers to handle the increased workload that will accompany these large-scale, nationwide efforts. However, shifts in priorities can make it more difficult to effectively work through the existing backlog of cleanup projects. According to officials, the Coast Guard would need a dedicated team of interdisciplinary staff to effectively manage the cleanup efforts associated with property disposals.

⁴⁷We have previously reported on challenges associated with the Coast Guard's growing backlog of shore infrastructure maintenance projects. See GAO, *Coast Guard Shore Infrastructure: More Than \$7 Billion Reportedly Needed to Address Deteriorating Assets*, [GAO-25-107851](#) (Washington, D.C.: Feb. 25, 2025).

⁴⁸Such environmental regulations could include those issued pursuant to the National Environmental Policy Act of 1969, as amended. Pub. L. No. 91-190, 83 Stat. 852. According to its fiscal year 2027 budget justification, the Coast Guard is planning to spend \$306 million on homeports for its new Arctic Security Cutters.

Coast Guard Shore Infrastructure Backlogs

In addition to its backlog of cleanup projects, the Coast Guard has significant backlogs of other shore infrastructure projects.

As of June 2024, the Coast Guard had (1) a backlog of 309 recapitalization and new construction projects with an estimated total cost of \$6.1 billion; and (2) a backlog of 1,852 deferred depot-level maintenance projects with an estimated total cost of \$877 million.

In 2025, we reported that these backlogs, with a combined estimated cost of over \$7 billion, had more than doubled since 2019 ([GAO-25-107851](#)).

Source: GAO analysis of U.S. Coast Guard information. | GAO-26-108173

As of May 2026, however, officials said the Coast Guard has one full-time staff member dedicated to managing the service's shore infrastructure disposal plans. Officials said it can be difficult to attract and retain qualified staff for the environmental liabilities program due to job competition from other federal agencies and the private sector. In its strategic workforce planning, the Coast Guard has acknowledged the challenge of staff retention in a competitive job market.⁴⁹ We have previously reported that federal agencies do not have sufficient workforce capacity to address their environmental liabilities and that the Coast Guard could do more to assess its own workforce needs in a number of areas, such as civil engineering.⁵⁰ Coast Guard officials told us they plan to mitigate their staffing and workload challenges by hiring additional contractors and finding new ways to work with federal partners, such as the Army Corps of Engineers.

Challenges with Remote Sites

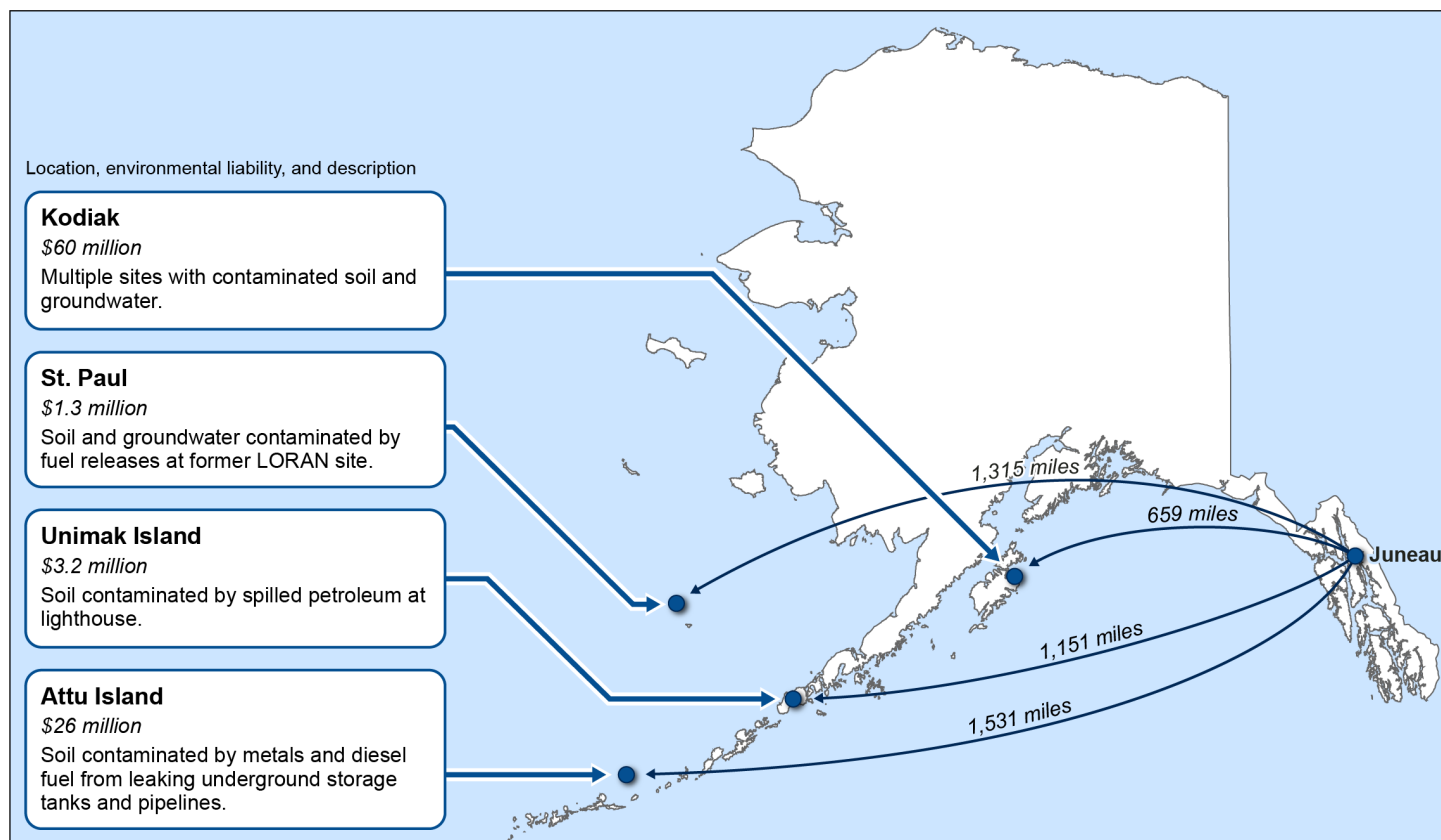
Managing cleanup projects at remote sites is a significant challenge, according to nearly all the Coast Guard officials we spoke with. Officials characterized remote sites as properties that are difficult to access, typically due to their location far from land or lack of connection to a transportation system such as a road network. Many of these sites are in Alaska and Hawaii—in some instances over 1,000 miles from the nearest Civil Engineering Unit—although several other Civil Engineering Units manage remote sites with environmental contamination.⁵¹

⁴⁹U.S. Coast Guard, *Ready Workforce 2030* (Washington, D.C.: Apr. 2022).

⁵⁰[GAO-25-107743](#); GAO, *Nuclear Waste Cleanup: Changes Needed to Address Current and Growing Shortages in Mission-Critical Positions*, [GAO-24-106479](#) (Washington, D.C.: July 18, 2024); *Coast Guard: Actions Needed to Evaluate the Effectiveness of Organizational Changes and Assess Workforce Needs*, [GAO-20-223](#) (Washington, D.C.: Feb. 26, 2020).

⁵¹We have previously reported on issues related to Coast Guard operations in remote areas. For example, see GAO, *Coast Guard: Efforts to Identify Arctic Requirements Are Ongoing, but More Communication About Agency Planning Efforts Would Be Beneficial*, [GAO-10-870](#) (Washington, D.C.: Sept. 15, 2010).

Figure 7: Distance to Remote Cleanup Project Sites from the U.S. Coast Guard Civil Engineering Unit in Juneau, Alaska



Source: GAO analysis of U.S. Coast Guard information; U.S. Census Bureau (map). | GAO-26-108173

Long distances such as these tend to increase project costs, as equipment must be brought in—and any contaminated materials removed—by air or sea. For example, one of the major cost factors is the increased cost of shipping contaminated soil by barge over long distances. In the Bering Sea, for example, the Coast Guard may need to remove more than 8,700 cubic yards of petroleum contaminated soil from St. Paul, AK—enough to fill more than two Olympic-sized swimming pools—and transport it over 3,000 miles by barge to Washington State for safe treatment and disposal. The Coast Guard estimated these activities will cost approximately \$10 million as of fiscal year 2025.

Remote sites also present logistical challenges. Some sites are uninhabited and lack basic infrastructure. There are no lodgings or dwellings at the Coast Guard’s former LORAN station on Kure Atoll, for

example, so the Coast Guard needs to bring additional resources for shelter and food preparation when traveling there. According to one official, mobilization costs to remote sites can account for up to 60 percent of an environmental cleanup project's cost in the Alaska region.

According to officials, one way the Coast Guard can potentially mitigate the challenge of working at remote sites is by finding logistical efficiencies. For example, the Civil Engineering Unit in Honolulu, HI, bundled projects at five remote sites in the Marshall Islands into a single contract to lessen the contractor's mobilization costs. Some of the remote sites are uninhabited, so the potential risk to human health is very low, which officials said may allow the Coast Guard to establish a less costly long-term monitoring plan instead of a more expensive remediation project.

As previously discussed, the Coast Guard could benefit from the development of a long-term strategy that includes optimization analysis. Optimization analysis could help identify efficiencies and more cost-effective ways to manage environmental liabilities at remote sites.

Conclusions

The Coast Guard's environmental liability has grown from \$358 million in fiscal year 2016 to \$448 million as of September 2025 and may increase significantly as the service attempts to better define and address the extent of its environmental contamination. But the Coast Guard's environmental liabilities as reported to Congress do not comprise the total amount that the federal government may have to pay to address environmental contamination, known as its fiscal exposure. In particular, PFAS contamination represents a significant source of uncertainty and fiscal exposure that is not fully estimated in the Coast Guard's current reporting. The Coast Guard is taking steps to assess its potential environmental liabilities related to PFAS and other contamination but has not fully communicated the associated risks and uncertainties to stakeholders and Congress, particularly in budget requests. Without this information, decision-makers will not have a complete picture of the Coast Guard's environmental liability and total fiscal exposure. Consequently, the funds available for the Coast Guard's annual environmental cleanup and remediation are likely to continue barely keeping pace with inflation.

Moreover, the Coast Guard's efforts to manage its environmental liabilities program have not fully incorporated risk-informed decision-making. Specifically, without a comprehensive strategy to manage environmental liabilities with clearly defined objectives and performance measures, the Coast Guard will have limited ability to make essential risk-

informed decisions over the long run. Such a strategy would allow the Coast Guard to systematically analyze its own efforts by evaluating outcomes against key objectives, such as limiting servicemembers' exposure to contamination. Importantly, an environmental liability strategy could also guide the Coast Guard through challenging resource allocation decisions as the service undertakes an historic investment in its aging shore infrastructure.

Additionally, the challenges the Coast Guard is currently experiencing are likely to worsen if unaddressed. For example, staffing and workload challenges may cause environmental staff to be stretched even more as the Coast Guard spends billions on new shore infrastructure without expanding key positions, such as environmental engineers. Nevertheless, the Coast Guard will not be positioned to address these challenges without a comprehensive, long-term strategy for managing its environmental liabilities.

Recommendations

The Commandant of the Coast Guard should expand the information provided to Congress regarding the Coast Guard's fiscal exposure for environmental cleanup activities, for example by identifying cleanup projects that are not reasonably estimable and the magnitude of uncertainties in its estimates in supplemental or other budget materials. (Recommendation 1)

The Commandant of the Coast Guard should develop a long-term strategy for managing the Coast Guard's environmental liabilities program that incorporates the elements of the risk-informed decision-making framework, such as having clearly defined program objectives by which to measure progress, evaluating outcomes, and analyzing ways to optimize its cleanup projects for potential cost savings. (Recommendation 2)

Agency Comments

We provided a draft of this report to the Secretary of the Department of Homeland Security for review and comment. In its comments, reproduced in Appendix II, DHS concurred with our recommendations. DHS and the Coast Guard also provided technical comments, which we incorporated as appropriate.

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

If you or your staff have any questions about this report, please contact me at MacLeodH@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix III.

//SIGNED//

Heather MacLeod
Director
Homeland Security and Justice

Appendix I: Selected Information on Coast Guard Cleanup Projects

Table 2 shows selected key information on the Coast Guard’s environmental cleanup projects.¹ The Coast Guard generally conducts its cleanup activities in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), as well as other relevant statutes and regulations.² However, the project phases outlined here have been identified by Coast Guard for the purposes of managing its environmental liabilities portfolio and do not necessarily reflect corresponding stages in the CERCLA process. Our [interactive map](#) shows the locations of these projects.

Table 2: Selected Information on Coast Guard Cleanup Projects, as of September 2025

Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Air Station Annette Island	Annette Island, AK	\$1,118,040	1989	Investigation	yes	Soil contamination from diesel-range organics and semi-volatile organic compounds; metals in surface water and groundwater
Air Station Brooklyn	Brooklyn, NY	\$75,020	2020	Investigation	yes	PFAS from fire suppression system
Air Station Clearwater	Clearwater, FL	\$127,050	1993	Long-term monitoring	no	Contamination from former burn pit
Air Station Detroit	Detroit, MI	\$661,265	2018	Remediation	no	PFAS contamination due to release of aqueous film-forming foam (AFFF)
Air Station Port Angeles	Port Angeles, WA	\$108,900	1998	Long-term monitoring	no	Contamination by underground storage tanks from petroleum hydrocarbons, aviation gas, and diesel fuel
Air Station Port Angeles	Port Angeles, WA	\$848,210	2013	Investigation	no	Lead from small arms firing range and lead-based paint

¹Table 2 includes all Coast Guard environmental cleanup projects with an estimated cost of more than \$0 as of September 2025.

²See Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended at 42 U.S.C. §§ 9601-9675). Other federal laws may be relevant to the Coast Guard’s investigation and cleanup activities, including the Resource Conservation and Recovery Act of 1976. Pub. L. No. 94-580, 90 Stat. 2795 (codified as amended at 42 U.S.C. §§ 6901-6987).

**Appendix I: Selected Information on Coast
Guard Cleanup Projects**

Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Air Station Sitka	Sitka, AK	\$106,480	2021	Investigation	yes	Potential PFAS contamination due to release of AFFF firefighting foam
Air Station Traverse City	Traverse City, MI	\$2,727,340	2021	Investigation	no	PFAS from fire suppression system
Akhiok	Akhiok, AK	\$137,940	2012	Investigation	no	Contamination from diesel fuel
Alligator Island	Alligator Island, AK	\$110,110	2014	Investigation	no	Potential contamination from improper battery disposal
Anguar LORAN Station	Angaur Island, Republic of Palau	\$245,630	2006	Investigation	yes	Potential soil and groundwater contamination from improper disposal practices
Attu Island LORAN Station	Attu Island, AK	\$26,008,950	1992	Investigation	no	Soil contaminated by metals and diesel-range organics from leaking underground storage tanks and pipelines
Aviation Support Facility Cordova	Cordova, AK	\$49,610	1995	Investigation	no	Soil contaminated by fuel spill
Base Alameda	Oakland, CA	\$175,450	2021	Investigation	yes	Potential contamination from metals and fuel
Base Cape Cod	Sandwich, MA	\$55,660	2022	Investigation	no	PFAS contamination due to release of AFFF firefighting foam
Base Elizabeth City (Building 75)	Elizabeth City, NC	\$629,321	1996	Long-term monitoring	no	Improper disposal of solvents
Base Elizabeth City (Building 77)	Elizabeth City, NC	\$633,798	1996	Long-term monitoring	no	Groundwater contaminated by leaked solvents
Base Elizabeth City (Building 79)	Elizabeth City, NC	\$490,050	1988	Long-term monitoring	no	Leaking underground storage tank
Base Elizabeth City (fuel farm)	Elizabeth City, NC	\$899,635	1991	Long-term monitoring	no	Fuel leakage from underground storage tank

**Appendix I: Selected Information on Coast
Guard Cleanup Projects**

Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Base Elizabeth City (burn area)	Elizabeth City, NC	\$702,526	1997	Long-term monitoring	no	Improper waste disposal at former burn area
Base Elizabeth City (former barracks)	Elizabeth City, NC	\$525,140	2000	Long-term monitoring	no	Leakage from above-ground storage tank
Base Elizabeth City (Building 87)	Elizabeth City, NC	\$767,624	2007	Long-term monitoring	no	Improper waste storage
Base Elizabeth City (JP-4 Pipeline)	Elizabeth City, NC	\$557,931	1988	Long-term monitoring	no	Pipeline release
Base Elizabeth City (North Beach disposal area)	Elizabeth City, NC	\$857,164	1998	Long-term monitoring	no	Improper waste disposal
Base Elizabeth City (seaplane pipeline)	Elizabeth City, NC	\$501,061	1996	Long-term monitoring	no	Improper waste disposal
Base Ketchikan	Ketchikan, AK	\$4,900,500	1988	Investigation	no	Marine sediment contaminated by use of metals at waterfront
Base Kodiak (laundry post-closure)	Kodiak, AK	\$19,971,655	1988	Investigation	no	Laundry facility solvent disposal.
Base Kodiak (RCRA)	Kodiak, AK	\$11,179,190	2017	Long-term monitoring	no	Various sources across the site including a former laundry, leaking underground storage tanks, and improperly stored hazardous waste.
Base Kodiak (barrel storage area 1)	Kodiak, AK	\$6,629,590	1987	Long-term monitoring	no	Improper barrel storage
Base Kodiak (Nyman fuel farm)	Kodiak, AK	\$4,648,820	1990	Remediation	no	Leaking aboveground and underground storage tanks
Base Kodiak (Coast Guard landfill)	Kodiak, AK	\$3,478,750	1987	Long-term monitoring	no	Former landfill
Base Kodiak (paint storage)	Kodiak, AK	\$2,958,450	1987	Long-term monitoring	no	Leak from fuel line
Base Kodiak (Navy landfill)	Kodiak, AK	\$2,176,790	1995	Long-term monitoring	no	Former landfill
Base Kodiak (small arms firing range)	Kodiak, AK	\$701,800	2007	Investigation	no	Soil contaminated by lead from firing range

**Appendix I: Selected Information on Coast
Guard Cleanup Projects**

Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Base Kodiak (Upper Government Hill)	Kodiak, AK	\$457,380	1993	Investigation	yes	Oil leak from underground storage tanks
Base Kodiak (marine sediment)	Kodiak, AK	\$406,560	1987	Investigation	yes	Releases of polycyclic aromatic hydrocarbons and polychlorinated biphenyls (PCB)
Base Kodiak (MOGAS)	Kodiak, AK	\$222,640	1987	Long-term monitoring	no	Leaking underground storage tanks
Base Kodiak (fire training pit)	Kodiak, AK	\$105,270	1987	Investigation	yes	Fuel and PFAS contamination from unlined burn pits used for firefighting training
Base Kodiak (former building 28)	Kodiak, AK	\$52,030	1999	Investigation	yes	Oil separator sump located inside Building 28 was found to contain sediment contaminated with fuels, lead, and PCBs.
Base Kodiak (old power plant)	Kodiak, AK	\$1,816,210	1990	Investigation	no	Fuel and PCB contamination from power plant operations
Base Kodiak (Lake Louise housing)	Kodiak, AK	\$35,090	1991	Investigation	yes	Leaking underground storage tanks
Base Kodiak (fire training pit)	Kodiak, AK	\$320,650	1997	Investigation	yes	AFFF used at fire training area resulting in PFAS contaminated soil and groundwater.
Base Kodiak (Buskin Lake)	Kodiak, AK	\$4,617,360	2016	Investigation	no	Soil contaminated by lead-based paint
Base Kodiak (Holiday Beach)	Kodiak, AK	\$229,900	2021	Investigation	yes	Potential contamination from lead-based paint and fuel leak
Base Milwaukee	Milwaukee, WI	\$1,662,540	1980	Investigation	no	Underground storage tank release
Base Tongue Point	Astoria, OR	\$232,320	2021	Investigation	yes	Potential soil contamination from sandblasting
Biorka Island LORAN Station	Biorka Island/Sitka, AK	\$240,790	1988	Investigation	no	Fuel leakage from tanks and pipelines

**Appendix I: Selected Information on Coast
Guard Cleanup Projects**

Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Boston Light Lighthouse	Hull, MA	\$627,990	2020	Investigation	no	Soil contaminated by lead-based paint and petroleum
Browns Point Lighthouse	Browns Point / Tacoma, WA	\$135,520	2004	Investigation	no	Soil contaminated by lead-based paint
Cape Blanco Lighthouse	Cape Blanco, OR	\$105,270	1993	Remediation	no	Soil contaminated by lead; cistern water contaminated by total petroleum hydrocarbons
Cape Decision Lighthouse	Kuiu Island / Sumner Straight, AK	\$59,290	2001	Long-term monitoring	no	Soil contaminated by lead-based paint
Cape Flattery Lighthouse	Cape Flattery, WA	\$882,090	1998	Investigation	no	Soil contaminated by total petroleum hydrocarbons
Cape Hinchinbrook Lighthouse	Hinchinbrook Island, Prince William Sound, AK	\$1,032,130	1994	Investigation	no	Soil contaminated by fuel-related constituents, PCBs, and lead impacts to soils from drum and battery dumping and waste oil storage
Cape Kumukahi Lighthouse	Island of Hawaii, HI	\$243,210	2009	Investigation	yes	Soil contaminated by lead-based paint
Cape Sarichef LORAN Station	Cape Sarichef, AK	\$1,187,010	1997	Investigation	no	Soil contaminated by total petroleum hydrocarbons from leaking underground storage tanks and lead
Cape Spencer Lighthouse	Cape Spencer / Cross Sound-Icy Strait, AK	\$634,040	1993	Investigation	yes	Soil contaminated by spilled petroleum hydrocarbons and lead-based paint
Cape St. Elias Lighthouse	Kayak Island, AK	\$1,276,550	1994	Investigation	no	Soil contaminated by petroleum hydrocarbons
Coast Guard Academy	New London, CT	\$13,310	1996	Long-Term monitoring	no	Improper debris and waste disposal
Coast Guard Yard (Site 9)	Baltimore, MD	\$87,120	1993	Long-Term monitoring	no	Improper storage and disposal of debris
Coast Guard Yard (Site 7)	Baltimore, MD	\$392,040	1993	Long-Term monitoring	no	Contamination from site's prior use as debris burn pit
Coast Guard Yard (burial pits)	Baltimore, MD	\$1,134,980	2014	Remediation	no	Improper disposal of demolition debris

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Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Cocos Island LORAN Station	Cocos Island, Guam	\$1,450,790		Long-Term monitoring	no	Soil contaminated by PCBs
Destruction Island Lighthouse	Jefferson County, WA	\$2,608,760	1996	Investigation	no	Soil contaminated by metals, total petroleum hydrocarbons, and lead-based paint
Diamond Head Lighthouse	Diamond Head, HI	\$226,270	2019	Remediation	no	Soil contaminated by lead-based paint
Dry Tortugas Lighthouse	Key West, FL	\$327,910	2004	Investigation	no	Soil contaminated by lead-based paint
East Brother Lighthouse	East Brother, CA	\$228,690	2003	Investigation	no	Soil contaminated by lead-based paint
Ebeye LORAN Station	Ebeye Island, Kwajalein Atoll, Republic of the Marshall Islands	\$100,430	2006	Investigation	yes	Potential soil and groundwater contamination from improper disposal practices
Egmont Key Lighthouse	Egmont Key Island/ Tampa Bay, FL	\$8,954	1995	Long-term monitoring	no	Groundwater contaminated by leaking underground fuel pipe
Eldred Rock Lighthouse	Lynn Canal / Haines, AK	\$938,960	1997	Investigation	no	Soil contaminated by lead-based paint
Fairway Island Lighthouse	Fairway Island, AK	\$1,103,520	2002	Investigation	no	Soil contaminated with lead and mercury
Farallon Island Lighthouse	Farallon Island, CA	\$3,333,550	2003	Investigation	no	Soil contaminated with metals and total petroleum hydrocarbons
Five Finger Island Lighthouse	Five Finger Islands / Frederick Sound, AK	\$60,500	2001	Long-term monitoring	no	Soil contaminated by lead-based paint
Governor's Island	Governors Island, NY	\$81,070	2010	Investigation	yes	Potential soil and groundwater contamination from unknown source
Hanapepe Point Lighthouse	Island of Kauai, HI	\$75,020	2003	Investigation	yes	Soil contaminated by lead-based paint
Kalaniana'ole Highway Quarters	Wailupe Honolulu, Oahu, HI	\$442,860	2021	Investigation	no	Lead-based paint
Kauhola Point Lighthouse	Island of Hawaii, HI	\$110,110	2004	Investigation	yes	Soil contaminated by lead-based paint

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Guard Cleanup Projects**

Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Kure LORAN Station	Kure Atoll, HI	\$643,720	1992	Long-term monitoring	no	Soil contaminated by PCBs from scrap metal disposal
Kwadak LORAN Station	Kwadak Island, Kwajalein Atoll, Republic of the Marshall Islands	\$98,010	2006	Investigation	yes	Potential soil and groundwater contamination from improper disposal practices
Lā'au Point Lighthouse	Island of Molokai, HI	\$75,020	2005	Investigation	yes	Soil contaminated by lead-based paint
Lighthouse Alcatraz	Alcatraz Island, CA	\$312,180	2004	Remediation	no	Soil contaminated by lead-based paint
Lighthouse Alki Point	Alki Point, WA	\$1,373,350	2004	Investigation	no	Soil contaminated by lead-based paint
Lime Kiln Lighthouse	San Juan Island, WA	\$102,850	2021	Investigation	yes	Potential soil contamination from lead-based paint
Lime Point Lighthouse	Lime Point, CA	\$221,430	2005	Investigation	no	Soil contaminated by lead-based paint and leaking transformers
Lincoln Island Lighthouse	Lincoln Island, AK	\$611,050	1993	Remediation	no	Soil contaminated by lead-based paint
Little Sand Island	Little Sand, AL	\$359,370	2003	Investigation	yes	Potential soil contamination from lead-based paint
Long Island Head Lighthouse	Boston, MA	\$607,420	2009	Investigation	no	Soil contaminated by lead-based paint
Long Point Lighthouse	Provincetown Harbor, MA	\$88,330	2008	Investigation	no	Soil contaminated by lead-based paint
Malone LORAN Station	Malone, FL	\$49,610	2007	Investigation	yes	Soil contaminated by lead and potential improper waste disposal
Marblehead Lighthouse	Marblehead, MA	\$137,940	2008	Investigation	no	Soil contaminated by lead-based paint
Marine Safety Office Valdez	Valdez, AK	\$405,350	2004	Investigation	no	Heating oil spill
Mary Island Lighthouse	Mary Island / Revillagigedo Channel, AK	\$623,150	1997	Investigation	no	Soil contaminated by lead-based paint and leaking underground storage tanks

**Appendix I: Selected Information on Coast
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Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Middletown LORAN Station	Middletown, CA	\$822,800	2000	Investigation	no	Soil contaminated by lead from small arms firing range, PFAS from firefighting, and potential groundwater contamination from leaking underground storage tanks
Millers Island	Garibaldi, OR	\$181,500	2013	Remediation	no	Potential contamination from improper battery disposal
Mount Diablo Radio Station	Concord, CA	\$588,060	2005	Remediation	no	Soil contaminated by lead-based paint
Nápó'opo'o Lighthouse	Island of Hawaii, HI	\$75,020	2005	Investigation	yes	Soil contaminated by lead-based paint
Nawiliwili Harbor Lighthouse	Brunswick, ME	\$64,130	2016	Investigation	yes	Potential contamination by lead-based paint and PCBs from transformers and
Nawiliwili Harbor Lighthouse	Island of Kauai, HI	\$243,210	2004	Investigation	yes	Soil contaminated by lead-based paint
Ned Point Lighthouse	Mattapoisett, MA	\$121,000	2009	Investigation	no	Soil contaminated by lead-based paint
New Dungeness Lighthouse	New Dungeness, WA	\$1,975,930	2003	Investigation	no	Contamination by lead-based paint and PCBs from transformers and
Ocean Cape LORAN Station	Yakutat, AK	\$859,100	2021	Investigation	yes	Unknown
Palaoa Point Lighthouse	Island of Lanai, HI	\$243,210	2005	Investigation	yes	Soil contaminated by lead-based paint
Passage Island Lighthouse	Keweenaw, MI	\$1,408,440	1997	Remediation	no	Soil contaminated by lead-based paint
Pauwela Point Lighthouse	Island of Maui, HI	\$75,020	2004	Investigation	no	Soil contaminated by lead-based paint
Perkins Island Lighthouse	Georgetown, ME	\$497,310	2009	Investigation	no	Soil contaminated by lead-based paint
Point Crowley	Kuiu Island, AK	\$136,730	2008	Investigation	no	Potential contamination from compressed gas cylinders
Point Diablo Lighthouse	Point Diablo, CA	\$105,270	2005	Investigation	no	Soil contaminated by lead-based paint

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Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Point Montara Lighthouse	Point Montara, CA	\$912,340	2005	Remediation	no	Soil contaminated by lead-based paint
Point Retreat Lighthouse	Admiralty Island, AK	\$61,710	1997	Long-term monitoring	no	Soil contaminated by lead-based paint and diesel-range organics
Point Vicente Lighthouse	Point Vicente, CA	\$1,196,690	2005	Investigation	no	Soil contaminated by lead-based paint
Point Wilson Lighthouse	Port Townsend, WA	\$1,167,650	1999	Investigation	no	Soil contaminated by lead-based paint
Portland Marine Safety Unit	Portland, OR	\$425,920	2021	Investigation	yes	Unknown
Poverty Island Lighthouse	Poverty Island, MI	\$1,334,630	1999	Investigation	no	Soil contaminated by lead-based paint
Pulo Anna LORAN Station	Pulo Anna Island, Republic of Palau	\$169,400	2006	Investigation	yes	Potential soil and groundwater contamination from improper disposal practices
Race Point Lighthouse	Provincetown, MA	\$60,500	2008	Investigation	no	Soil contaminated by lead-based paint and improper petroleum storage
Radar Station Point Higgins	Sitka, AK	\$3,956,700	1997	Investigation	no	Soil contaminated by petroleum hydrocarbons from spills from above ground storage tanks and lead-based paint
Robinson Point Lighthouse	Vashon, WA	\$924,440	1999	Investigation	no	Soil contaminated by total petroleum hydrocarbons, leaking underground storage tanks, and lead-based paint
Roguron LORAN Station	Roguron Island, Republic of the Marshall Islands	\$78,650	2006	Investigation	yes	Potential soil and groundwater contamination from improper disposal practices
Scotch Cap Lighthouse	Unimak Island, AK	\$3,262,160	1989	Investigation	no	Soil contaminated by spilled petroleum
Sector Field Office Cape Hatteras	Cape Hatteras, NC	\$124,630	1999	Investigation	no	Above-ground storage tank release
Sentinel Island Lighthouse	Sentinel Island / Lynn Canal, AK	\$315,810	1997	Long-term monitoring	no	Soil contaminated by lead-based paint and diesel-range organics

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Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Shoal Cove LORAN Station	Shoal Cove, AK	\$491,260	1997	Investigation	no	Soil contaminated by fuel leakage from underground storage tanks and lead from former small arms firing range at site
Sitkinak LORAN Station	Sitkinak Island, AK	\$1,677,060	2001	Long-term monitoring	no	Improper battery disposal
Sledge Island	Sledge Island, AK	\$210,540	1995	Investigation	no	Soil contaminated by diesel-range organics and residual range organics
Slip Point Lighthouse	Clallam, Bay, WA	\$972,840	2003	Investigation	no	Soil contaminated by lead-based paint
Smilax Mooring	Jacksonville, FL	\$77,440	2003	Investigation	yes	Potential contamination from lead-based paint and fuel storage
Split Rock Point Lighthouse	Essex, VT	\$153,670	2010	Investigation	no	Soil contaminated by lead-based paint
St. Paul LORAN Station	St. Paul Island, AK	\$1,287,440	1993	Investigation	no	Soil and groundwater contaminated by fuel releases
Station Alexandria Bay	Wellesley Island, NY	\$83,490	2020	Investigation	no	Contamination from leaking transformer
Station Beach Haven	Beach Haven, NJ	\$62,920	1990	Investigation	yes	Underground storage tank release
Station Cape Disappointment	Ilwaco, WA	\$231,110	2021	Investigation	yes	Leaking buried motor oil drums
Station Grand Haven	Grand Haven, MI	\$36,300	2001	Long-Term monitoring	no	Leaking diesel fuel from underground storage tanks
Station Jones Beach	Freeport, NY	\$37,510	2013	Investigation	yes	Potential soil contamination by petroleum leakage from oil-water separator system
Station Oak Island	Oak Island, NC	\$159,720	1992	Investigation	no	Leaking petroleum from underground storage tanks
Station Rochester	Rochester, NY	\$116,160	1991	Investigation	no	Contamination from underground storage tanks
Station Sault Ste Marie	Sault Ste Marie, MI	\$248,050	2008	Investigation	no	Hazardous waste released at site

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Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Station Sheboygan	Sheboygan, WI	\$53,240	2002	Investigation	no	Soil contaminated by lead-based paint
Training Center Cape May (auxiliary building)	Cape May, NJ	\$43,560	2002	Investigation	no	Soil contaminated by lead-based paint
Training Center Cape May (small arms firing range)	Cape May, NJ	\$2,157,430	1997	Investigation	no	Soil contaminated by lead from small arms firing range
Training Center Petaluma (Building 115)	Petaluma, CA	\$145,200	2016	Long-term monitoring	no	Potential leaking underground storage tank
Training Center Petaluma (skeet range)	Petaluma, CA	\$5,740,240	2004	Investigation	no	Soil contaminated by metals and polycyclic aromatic hydrocarbons from skeet shooting range
Training Center Petaluma (small arms firing range - investigation)	Petaluma, CA	\$337,590	2007	Investigation	no	Soil contaminated by lead from small arms firing range
Training Center Petaluma (small arms firing range)	Petaluma, CA	\$166,980	2007	Investigation	no	Soil contaminated by lead from small arms firing range
Tree Point Lighthouse	Revillagigedo Channel / Ketchikan, AK	\$1,906,960	1997	Investigation	no	Soil contaminated by lead-based paint, diesel-range organics, spilled from above-ground storage tanks, and metals from improper battery disposal
Ulithi LORAN Station	Ulithi Atoll, NMI	\$9,356,930	2011	Investigation	no	Soil and structure contaminated by lead-based paint and asbestos-containing materials
Umpqua River Lighthouse	Umpqua River / Winchester Bay, OR	\$330,330	2005	Investigation	no	Soil contaminated by lead-based paint
Upolu Point LORAN Station	Hawi, HI	\$605,000	2019	Investigation	yes	Potential contamination from lead, pesticides, and diesel-range organics
Valcour Bluff Lighthouse	Plattsburgh, NY	\$398,090	2010	Investigation	no	Soil contaminated by lead-based paint

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Cleanup project	Location	Environmental liability	Year identified	Project phase	Cost to study	Source of contamination
Wildwood LORAN Support Unit	Wildwood, NJ	\$491,260	2007	Investigation	no	Soil contaminated by release of semivolatile organic compounds
Wood End Lighthouse	Provincetown / Cape Cod, MA	\$94,380	2008	Investigation	no	Contaminated soil from lead-based paint and potential underground storage tank release
Wood Island Lighthouse	Biddeford, ME	\$1,493,140	2008	Investigation	no	Contaminated soil from lead-based paint and underground storage tank release
Yap LORAN Station	State of Yap, FSM	\$3,573,130	2004	Long-term monitoring	no	Soil contaminated by PCBs from landfill
Yerba Buena Island	Yerba Buena Island, San Francisco CA	\$882,090	2012	Investigation	no	Potential underground storage tank release

Source: GAO analysis of U.S. Coast Guard information. | GAO-26-108173

Notes: **Aqueous film forming foam (AFFF):** AFFF is an extinguishing agent used in firefighting that often contains PFAS and has been linked to health problems.

Asbestos: Asbestos is the name given to a group of naturally occurring mineral fibers that were commonly used in construction materials until they were linked to serious illness and fell out of widespread use in the United States beginning in the 1970s. Exposure to asbestos increases the risk of developing lung disease, including lung cancer and mesothelioma.

Diesel range organics: Diesel range organics are typically compounds found in diesel fuel. They can persist in soil for many years and have been linked to adverse neurological and respiratory health effects.

Lead-based paint: As lead-based paint deteriorates into flakes and dust it becomes a health hazard to people, especially children. Lead exposure can damage a child's developing brain and nervous system and slow development and growth.

Metals: Metals, such as lead, have varying degrees of toxic and carcinogenic properties that may produce adverse human health effects.

Polychlorinated biphenyls (PCB): PCBs are man-made compounds that have been used in transformers and other electrical equipment. PCBs can be released into the environment from hazardous waste sites, improper disposal of industrial waste and consumer products, and from leaking transformers. Both the EPA and the International Agency for Research on Cancer have determined that PCBs are carcinogenic to humans and can lead to cancer.

PFAS: PFAS are a large group of synthetic chemicals that are found in many consumer and industrial products. PFAS have caused environmental contamination; can remain in the water, soil, and air for decades or longer; and have been linked to health problems in humans. According to the EPA, exposure to certain PFAS—such as perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS)—may have adverse effects on human health, including effects on fetal development, the immune system, and the thyroid, and may cause liver damage and cancer.

Polycyclic aromatic hydrocarbons (PAH): These are a group of chemicals that are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. PAHs can attach to dust particles in the air and settle in lakes and rivers. Some PAHs may be carcinogenic, and studies have shown that individuals exposed by breathing or skin contact for long periods to mixtures that contain PAHs can develop cancer.

**Appendix I: Selected Information on Coast
Guard Cleanup Projects**

Volatile organic compounds: Volatile organic compounds include a wide variety of chemicals and may be emitted by thousands of products such as paint, disinfectants, adhesives, and building materials. The nature and extent of their effects on human health depends on many factors, such as level of exposure and length of time exposure.

Appendix II: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

BY ELECTRONIC SUBMISSION

June 24, 2026

Heather MacLeod
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U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548-0001

Re: Management Response to GAO-26-108173, "ENVIRONMENTAL
LIABILITIES: Coast Guard Should Give Congress More Information about Millions of
Dollars in Potential Costs"

Dear Ms. MacLeod,

Thank you for the opportunity to comment on this draft report. The U.S. Department of Homeland Security (DHS, or the Department) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

DHS leadership is pleased to note GAO's recognition that the U.S. Coast Guard met or partially met 9 of 16 steps of GAO's framework for risk-informed decision-making regarding managing environmental hazards, and that the current program management review process, implemented in 2023, is intended to strengthen program management and oversight by identifying trends and resource gaps, discussing risks, and developing future requirements to meet program needs. DHS remains committed to improving the effectiveness of the Coast Guard's Environmental Liability program by incorporating all risk-informed elements to evaluate program performance and guide decision-making.

The draft report contained two recommendations with which the Department concurs. Enclosed find our detailed response for each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for GAO's consideration, as appropriate.

**Appendix II: Comments from the Department
of Homeland Security**

Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

JEFFREY M BOBICH Digitally signed by JEFFREY M
BOBICH
Date: 2026.06.24 18:43:39 -04'00'

JEFFREY M. BOBICH
Director of Financial Management

Enclosure

**Enclosure: Management Response to Recommendations
Contained in GAO-26-108173**

GAO recommended that the Commandant of the Coast Guard:

Recommendation 1: Expand the information provided to Congress regarding the Coast Guard's fiscal exposure for environmental cleanup activities, for example by identifying cleanup projects that are not reasonably estimable and the magnitude of uncertainties in its estimates in supplemental or other budget materials.

Response: Concur. The Coast Guard's Office of Environmental Management and the Assistant Commandant for Resources will work with DHS headquarters personnel, as appropriate, to modify or develop a supplemental reporting framework to more clearly identify the magnitude of uncertainty and cleanup projects that are not reasonably estimable. Once appropriate updates are determined, currently anticipated to be complete by March 2027, the Coast Guard will implement these updates as part of the fiscal year 2029 Congressional Justification. Estimated Completion Date (ECD): December 31, 2027.

Recommendation 2: Develop a long-term strategy for managing the Coast Guard's environmental liabilities program that incorporates the elements of the risk-informed decision-making framework, such as having clearly defined program objectives by which to measure progress, evaluating outcomes, and analyzing ways to optimize its cleanup projects for potential cost savings.

Response: Concur. The Coast Guard Office of Environmental Management will implement long-term program objectives for environmental liabilities to measure progress, evaluate outcomes, and analyze ways to optimize cleanup projects for potential cost savings. As part of this process, the Coast Guard Office of Environmental Management will define long term program objectives by the end of June 2027, will establish a matrix to measure progress and evaluate outcomes by the end of December 2027, and will implement this strategy by the end of June 2028. ECD: June 30, 2028.

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact:

Heather MacLeod, MacLeodH@gao.gov

Staff

Acknowledgments:

In addition to the contact named above, GAO staff who made key contributions to this report include Andrew Curry (Assistant Director), Ben Nelson (Analyst in Charge), Jenn Alexander, Lauri Barnes, Michele Fejfar, Eric Hauswirth, Amanda Kolling, Rob Letzler, Azinwi Numfor, Mary Offutt-Reagin, Janice Poling, and Jack Wang.

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