



September 2020

COAST GUARD

Improved Analysis of Vessel Response Plan Use Could Help Mitigate Marine Pollution Risk

Accessible Version

GAO Highlights

Highlights of [GAO-20-554](#), a report to congressional committees

Why GAO Did This Study

Pursuant to the Oil Pollution Act of 1990, the Coast Guard issued regulations requiring tankers and other large vessels to develop VRPs that identify the resources that would respond to an oil spill, including a spill resulting from a fire or explosion. The Coast Guard reviews VRPs against certain regulatory requirements, such as time frames for response. In remote locations with limited response resources, those seeking VRP approvals may request to use APC for responses instead.

The Coast Guard Authorization Act of 2018 included a provision for GAO to review the VRP program. This report examines the Coast Guard's processes for assessing (1) VRPs against regulations and (2) requests for use of APC. GAO reviewed VRP regulations and guidance, analyzed VRP-related data, and interviewed Coast Guard personnel, and industry officials—selected based on geographic location and to obtain a variety of different perspectives. Information from these entities is nongeneralizable, but provides insight into VRP processes.

What GAO Recommends

GAO recommends that the Coast Guard (1) analyze incident data involving VRPs to identify potential improvements to its VRP review processes, and (2) adopt key program management practices in carrying out its VRP advisory group efforts. The Coast Guard concurred with both recommendations.

View [GAO-20-554](#). For more information, contact Nathan Anderson at (206) 287-4804 or andersonn@gao.gov.

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Coast Guard

Improved Analysis of Vessel Response Plan Use Could Help Mitigate Marine Pollution Risk

What GAO Found

The U.S. Coast Guard's (Coast Guard) processes for reviewing and approving vessel response plans (VRPs) assess whether they comply with regulatory requirements and have contracts in place for response resource providers, such as oil spill removal, and salvage and marine firefighting services. GAO and industry stakeholders identified risks in the Coast Guard's processes such as the

- relatively small number (71 of more than 3,000 VRPs) of verifications conducted of salvage and marine firefighting response capabilities;
- limited availability of reliable data on the location of oil spill and marine firefighting response capabilities; and
- limited availability of certain resource providers to respond to an incident.

For example, industry stakeholders stated that some subcontracts with salvage and marine firefighting resources provide that the subcontracted vessels are obligated to respond "as available," raising questions as to whether they are committed to respond to an incident. A senior Coast Guard attorney told GAO that such subcontracts are inconsistent with the VRP regulations. However, in its VRP reviews, the Coast Guard does not review subcontracts. Coast Guard officials stated that they are developing guidance for reviewing subcontracts and to clarify that equipment cannot be included on an "as available" basis. These officials also stated that they have the authority to do more to assess VRPs and in April 2018 began collecting incident data and reviewing whether VRPs were followed in each incident. However, this effort does not fully analyze these data to determine whether or how its review processes could be strengthened. By doing so, the Coast Guard could help mitigate identified risks in the processes and provide greater assurance of the efficacy of VRPs for ensuring oil spill or marine firefighting responses.

The Coast Guard's processes for reviewing requests to use alternative planning criteria (APC) is based on federal regulations and national guidelines, and also largely relies on the professional judgment of field personnel and local guidance and tools to determine whether requests meet regulatory requirements. However, Coast Guard and maritime industry officials cited several challenges, including a lack of clarity about how proposed APC measures designed to prevent incidents are to be evaluated, as well as the impact of its military personnel rotations on the consistency of APC reviews. Under Coast Guard policy, military personnel rotate in and out of locations on a regular basis, and 12 of the 18 non-Coast Guard stakeholders GAO spoke with cited personnel rotation as a key concern given the associated loss of experience and local expertise. In October 2019, the Coast Guard created an advisory group to identify solutions to challenges faced by the VRP Program, including those for APC. However, the Coast Guard did not initiate the advisory group using key program management practices, such as establishing milestones, roles and responsibilities, and the methods for how the group is to carry out its work. By adopting such program management practices, the Coast Guard's advisory group would be better positioned to successfully address challenges identified in the VRP review and approval process.

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Abbreviations

Coast Guard	U.S. Coast Guard
DHS	Department of Homeland Security
NOV	Notice of Violation
OMB	Office of Management and Budget
OPA90	Oil Pollution Act of 1990
Resource Inventory	Response Resource Inventory
VRP	vessel response plan

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September 29, 2020

The Honorable Roger F. Wicker
Chairman
The Honorable Maria Cantwell
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Peter A. DeFazio
Chairman
The Honorable Sam Graves
Ranking member
Committee on Transportation and Infrastructure
House of Representatives

In 2019, nearly 17 billion gallons of crude oil or other refined petroleum products were transported as cargo by tank vessel or barge through U.S. waters. Other types of vessels, such as large container or cruise ships, routinely travel through U.S. waters and have the capacity to carry a million or more gallons of oil for use as fuel. These vessels can pose a significant risk to the marine environment if they were to be involved in an incident that results in the discharge of their oil. In March 1989, this risk was realized when the supertanker *Exxon Valdez* ran aground in Alaska's Prince William Sound, spilling nearly 11 million gallons of oil and contaminating about 1,200 miles of Alaska's coastline.¹ At the time, this incident was the largest offshore oil spill in U.S. history and underscored the importance of a timely response to protect lives, property, and the environment. Soon thereafter, the Oil Pollution Act of 1990 (OPA 90) was enacted, establishing requirements, among other things, that the U.S. Coast Guard (Coast Guard) issue regulations requiring owners and operators of tank vessels carrying oil and operating in U.S. waters to prepare and submit vessel response plans (VRP).²

¹Alaska Oil Spill Commission, *Spill: The Wreck of the Exxon Valdez (Final Report)*, (State of Alaska: Feb. 1990).

²33 U.S.C. § 1321(j)(5). OPA 90 amended the Federal Water Pollution Control Act of 1948 and required the President to issue regulations requiring the submission of vessel response plans. This authority was subsequently delegated to the Coast Guard.

VRPs must describe the measures a tank vessel owner or operator would take to respond, to the maximum extent practicable, to a worst case oil spill or a substantial threat of such a spill.³ The plans must also identify specific response resources, such as other vessels or equipment that would be able to provide oil spill removal and salvage and marine firefighting services, such as emergency towing, in the event of an incident. In 2004, OPA 90 was amended to expand this requirement to other large vessels, such as container ships, car carriers, and other cargo ships.⁴ In September 2019, the capsizing of the *Golden Ray*, a 656-foot-long vessel carrying over 4,200 cars and more than 300,000 gallons of oil, near Brunswick, Georgia, demonstrated the potential risk to the marine environment posed by incidents involving large vessels and underscored the continuing importance of response planning to prevent or mitigate environmental damage.⁵

The Coast Guard is responsible for reviewing and approving VRPs submitted by vessel owners against the national planning criteria—the Coast Guard’s regulatory requirements that outline what must be included in the plans. These criteria specify, among other things, response times for resources, equipment, and personnel to arrive on scene of an incident, along with information on the capability of those resources to provide the necessary oil spill, firefighting, or marine salvage response. For vessels operating in remote areas, such as Alaska, where response resources are more limited, the Coast Guard allows vessel owners and operators to request and propose an alternate approach, called alternative planning criteria, for ensuring an adequate response in case of an incident, among other things.⁶ According to the Coast Guard, there are currently approximately 3,000 VRPs, covering 27,000 vessels operating in U.S. waters.

³33 U.S.C. § 1321(j)(5). A worst case discharge is defined as the discharge in adverse weather conditions of a vessel’s entire fuel or cargo oil, whichever is greater. 33 U.S.C. § 1321(a)(24); 33 C.F.R. §§ 155.1020, .5020.

⁴The Coast Guard and Maritime Transportation Act of 2004, Pub. L. No. 108-293, § 701, 118 Stat. 1028, 1067 (codified at 33 U.S.C. § 1321(j)(5)(A)(ii)). Additional information about these changes is discussed later in this report.

⁵Hobbs, Larry. “A Golden Ray of Hope for Shipwreck’s Removal in 2020,” *The Brunswick News*, (Brunswick, Georgia: December 28, 2019).

⁶33 C.F.R. §§ 155.1065(f), .5067. More detailed information comparing national planning criteria and alternative planning criteria is discussed later in this report.

In recent years, industry stakeholders and others have raised questions about the Coast Guard's management and oversight of the VRP Program. The Frank LoBiondo Coast Guard Authorization Act of 2018 includes a provision for us to review this Coast Guard program.⁷ This report examines (1) the Coast Guard's processes for assessing the adequacy of VRPs against national planning criteria and (2) the Coast Guard's processes for assessing alternative planning criteria requests submitted by vessel owners and operators.⁸

To address our first objective, we reviewed Coast Guard regulations, policies, VRP Program operating procedures, review checklists, and other VRP information including guidance on how the Coast Guard verifies the assets and capabilities of response resource providers identified in the plans. We also interviewed Coast Guard officials with the VRP Program officials at headquarters and with the National Strike Force Coordination Center to obtain perspectives on their activities and authorities related to the review and approval of VRPs.⁹ We interviewed officials with the Coast Guard's Counsel Office of Maritime and International Law about regulatory issues related to the Coast Guard's VRP activities. In addition to headquarters-based personnel, we interviewed Coast Guard field-unit personnel at five sectors about how they carry out VRP-related activities. We selected these sectors for their diversity in geographic location, high volume of vessel traffic, and frequency of enforcement actions for VRP-related deficiencies. While the information and perspectives obtained from these sectors are not generalizable to all sectors nationwide, they provide context and insight into how VRP-related activities are carried out in the field. We also compared the Coast Guard's VRP processes with Coast Guard policies, as well as laws, and federal guidance. These include Office of Management and Budget (OMB) and Coast Guard

⁷Pub. L. No. 115-282, § 824, 132 Stat. 4192, 4312.

⁸For the purposes of this report, "review processes" refer generally to the steps and guidance the VRP Program uses to carry out reviews of VRPs and alternative planning criteria, as well as the sources of data or other information used in those reviews.

⁹Operating out of Elizabeth City, North Carolina, as a unit of the Coast Guard's National Strike Force, the National Strike Force Coordination Center, among other things, oversees the maintenance of the Response Resource Inventory, Oil Spill Removal Organization Classification Program, and National Maintenance Contract.

guidance on program evaluation and analysis.¹⁰ In addition, we obtained and analyzed Coast Guard data on:

- expenditures and personnel staff hours spent from fiscal years 2014 through 2019 on VRP plan review, approval, and compliance verification activities;¹¹ and
- enforcement actions taken for VRP-related deficiencies from calendar years 2014 through 2018.¹²

We determined the data to be sufficiently reliable for background and contextual purposes.

We also interviewed 12 maritime industry stakeholder entities that have key roles or responsibilities in carrying out VRP-related activities, including two entities that prepare VRPs on behalf of vessel owners or operators, two industry associations that represent owners or operators, seven entities that provide response services, such as for salvage or marine firefighting or oil spill removal, and one protection and indemnity insurer. We selected these entities through a review of Coast Guard VRP-related information, and consideration of their geographic proximity to the five Coast Guard sectors we selected for review. While the information obtained from these entities is not generalizable, these interviews provided perspectives from the regulated industry and others involved in VRP activities about the Coast Guard's VRP requirements and processes.

To address our second objective, we reviewed Coast Guard regulations, policies, and other guidance on the review and acceptance of requests for use of alternative planning criteria. We also reviewed the field-unit level guidance and tools that Coast Guard personnel use to guide their reviews of requests. We interviewed cognizant VRP officials about Coast Guard

¹⁰OMB, *Phase I Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance*, OMB Memorandum M-19-23 (Washington, D.C.: July 10, 2019); OMB, *Increased Emphasis on Program Evaluations*, M-10-01, Memorandum for the Heads of Executive Departments and Agencies (Washington, D.C.: The White House, Oct. 7, 2009); and U.S. Coast Guard, *Standard Operating Procedures for the Coast Guard's Training System, Volume 2, Analysis*, (Washington, D.C.: Dec. 2018).

¹¹We chose this time period because it represents the 6 most recent full fiscal years.

¹²We chose this time period because it was the most recent 5 year period of data available when we started our work and data for 2019 were not yet available.

policy and processes for reviewing these requests. We also interviewed Coast Guard field unit personnel with Pacific Area command, Districts 14 and 17, and Sectors Anchorage and Honolulu to obtain information on their respective policies and processes for reviewing alternative planning criteria requests and their perspectives on how these processes are currently working. We selected those field units because, according to Coast Guard data, they manage the highest volume of alternative planning criteria requests overall.

We also interviewed 18 non-Coast Guard stakeholders involved in alternative planning criteria requests or other related VRP activities to obtain their perspectives on the Coast Guard's processes for reviewing requests, communicating guidance and feedback, and implementing the alternative planning criteria framework. These stakeholders included the 12 maritime industry stakeholders we interviewed for our first objective; plus the primary alternative planning criteria administrators that have made requests to use alternative planning criteria in Alaska as well as a response resource provider that has made requests to use alternative planning criteria in Hawaii, among other entities. We also interviewed officials with the Alaska Department of Environmental Conservation to obtain their perspective on the Coast Guard's processes for reviewing requests to use alternative planning criteria and its consultation with regional stakeholders. We selected these entities through a review of Coast Guard documents and input from the entities we interviewed.

Given the extensive use of alternative planning criteria in Alaska, eight of the 18 stakeholders we interviewed had some involvement in activities related to the use or review of alternative planning criteria in the state. While the perspectives of the officials and entities we interviewed are not generalizable, they provide valuable input on the Coast Guard's implementation of the alternative planning criteria framework in the locations where it is currently most used. Finally, we analyzed key documents of the Coast Guard's Maritime Oil Spill Response Plan Advisory Group formed by the VRP Program in April 2020 to determine the extent to which they are consistent and align with key aspects of the Coast Guard's *Maritime Commerce Strategic Outlook*, and the standards for program management.¹³ Appendix I describes our objectives, scope, and methodology in more detail.

¹³U.S. Coast Guard, *Maritime Commerce Strategic Outlook*, (Washington, D.C.: October 2018) and Project Management Institute, Inc., *The Standard for Program Management*, 4th ed. (Newtown Square, PA: 2017).

We conducted this performance audit from March 2019 to September 2020 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

Vessel Response Plan Program

The Coast Guard established the VRP Program in response to requirements in OPA 90. As the lead federal agency responsible for preparedness and response to oil discharges and hazardous substance releases in the Coastal Zone, the Coast Guard VRP Program works to ensure that vessels operating in U.S. waters comply with all oil spill response and salvage and marine firefighting regulations, and have plans in place to respond to a potential incident.¹⁴ The VRP Program consists of three Coast Guard personnel and 10 contractor staff who are to review and approve VRPs, liaise with industry and Coast Guard field units, and update VRP policy information. According to the Coast Guard, three additional staff members within the Office of Marine Environmental Response Policy also spend a portion of their time carrying out VRP Program-related activities. For fiscal year 2019, the program expended about \$1.7 million, including expenditures for contract and Coast Guard personnel. According to Coast Guard records, program staff spent approximately 31,000 staff hours per year on VRP activities from fiscal years 2014 through 2019. See appendix II for more information on Coast

¹⁴Jurisdictional boundaries delineating Coastal and Inland Zones are defined by the regional contingency plan, which provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants within a region. According to the *U.S. Coast Guard Marine Environmental Response and Preparedness Manual*, actual boundary lines between these zones should be drawn so that all Coast Guard regulated marine transportation-related facilities, bridges, and any potentially significant spill sources that would affect the navigable waterway are included in the Coastal Zone. Major roads and bridges may serve as landmarks for delineating the Coastal and Inland Zone boundaries.

Guard expenditures and personnel resources used to carry out the VRP Program and other related activities.

VRP Plan Requirements

The requirement to have a VRP applies to tank vessels that carry, or are designed to carry, oil in bulk, and to certain nontank vessels operating in U.S. waters.¹⁵ A variety of entities can be involved in writing VRPs, including vessel owners or operators (known as planholders) or others they may hire to develop the plan on their behalf.¹⁶ In developing the plans, preparers are to use national planning criteria, which are detailed in federal regulations, and to ensure the availability of response resources for a worst case discharge incident.¹⁷ VRPs must, among other things:

- identify, and ensure the availability of, through contract or other approved means, key response resource providers to assist with oil

¹⁵The Coast Guard regulations for tank vessels apply to any vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue, and that (a) is a vessel of the United States, (b) operates on the navigable waters of the United States, or (c) transfers oil or hazardous material in a port of place subject to the jurisdiction of the United States. 33 C.F.R. § 155.1015(a). Coast Guard regulations for nontank vessels apply to any self-propelled vessel that (a) carries oil of any kind as fuel for main propulsion or as secondary cargo; (b) is not a tank vessel or is not certified as a tank vessel; (c) operates upon the navigable waters of the United States; and (d) is 400 gross tons or more, as measured by standards described in other federal regulations. 33 C.F.R. § 155.5015(a).

¹⁶According to Coast Guard VRP Program officials, the term “planholder” technically describes the entity to which an approval letter for a VRP is issued, which, according to Coast Guard practice, is the entity that provides the certification statement that the plan complies with regulatory requirements. See 33 C.F.R. §§ 155.1065(b), .5065(b). According to VRP Program officials, this could be a vessel owner or operator, or a third-party management company that accepts ship management responsibility on behalf of the vessel owner. For the purposes of this report, we use the term “planholder” to generally refer to the entity that has assumed liability for compliance of a given vessel with the regulations pertaining to VRPs.

¹⁷National planning criteria are found in 33 C.F.R. part 155 and are determined by both the vessel specifics, such as type and volume of oil carried, as well as the intended operating area, such as a specific port, and the operating environment, such as inland, nearshore, or offshore. The criteria specify equipment requirements by operating environment, response time for on-scene arrival, and response capabilities based on oil type and vessel specifics.

spill removal and salvage and marine firefighting services as needed during an incident;¹⁸

- include contact information for key individuals and organizations that would be involved in an incident response; and
- detail procedures for plan-related training and exercises, shipboard spill mitigation, and shore-based response activities, among other things.

VRPs must also cover all geographic areas of the United States in which a vessel intends to handle, store, or transport oil, including port areas and offshore transit areas.¹⁹ For vessels that operate in different Coast Guard Captain of the Port zones, their VRPs must also include an appendix for each zone containing zone-specific response resource information.²⁰ In addition, for plans that cover multiple vessels, an appendix must be

¹⁸Coast Guard regulations for tank vessel oil spill response provide that a contract or other approved means can include (1) a written agreement between a vessel owner or operator and a required response resource provider that must identify, and ensure the availability of, specified personnel and equipment required within stipulated response times in specified geographic areas; (2) active membership with a local or regional oil spill removal organization that has identified specific personnel and equipment that are available to respond to a discharge within stipulated response times in specified geographic areas; or (3) a document that identifies the personnel, equipment, and services capable of being provided by the oil spill removal organization within stipulated response times in the specified geographic areas. The regulations also provide that a contract or other approved means set out the parties' acknowledgment that the oil spill removal organization intends to commit the resources in the event of a response; permits the Coast Guard to verify the availability of the identified response resources through tests, inspections, and exercises; and is referenced in the VRP. 33 C.F.R. § 155.1020. Coast Guard regulations for salvage and marine firefighting provide that a contract or other approved means is, among other things, a written contractual agreement between a vessel owner or operator and response resource provider that must expressly provide that the response resource provider is capable of, and intends to commit to, meeting the plan requirements. The contract or other approved means must include a funding agreement. 33 C.F.R. § 155.4025.

¹⁹33 C.F.R. §§ 155.1030(a); .5030(b).

²⁰33 C.F.R. §§ 155.1030(c)(10), 5030(c)(9). There are currently 41 Captain of the Port zones within and around the continental United States and its territories geographically defined in 33 C.F.R. part 3. Organizationally, the Coast Guard's field units are structured around individual command units, called "sectors," which generally correspond with the Captain of the Port zones. For the purposes of this report, "sector" also refers to the Captain of the Port zone. A Geographic-Specific Appendix is to identify, among other things, the response resource providers the planholder will use within a specific Captain of the Port zone in the event of an incident, such as oil spill removal organizations and providers of salvage and marine firefighting response resources.

included for each vessel that details vessel-specific characteristics and diagrams.²¹

As described earlier, if a planholder believes that national planning criteria are inappropriate for their vessel or cannot be met in certain geographic locations where, for example, response resources may be limited, the planholder may submit alternative approaches—or alternative planning criteria—to demonstrate how they will meet the VRP requirements in ways other than those specified in national planning criteria. Information on what is required of planholders when requesting to use alternative planning criteria and the Coast Guard's processes for reviewing such requests is discussed later in this report.

For initial application and plan renewal, planholders are required to submit their plans to the Coast Guard for review. With their plan submission, planholders must also certify in writing that their plan meets regulatory requirements. Plans that receive Coast Guard approval are valid for up to 5 years, during which time the planholder is required to review their VRP annually and resubmit it for review and approval if they make any changes to it. According to Coast Guard regulations, some revisions or amendments to an approved VRP must be submitted to the VRP Program for approval whenever they occur, such as a change in the vessel owner or operator, a significant change in vessel configuration, or changes to emergency response procedures.²²

²¹33 C.F.R. §§ 155.1030(c)(11), .5030(c)(10).

²²33 C.F.R. § 155.1070(c).

VRP Activation

Example of a Vessel Response Plan Activation and Response—The *Golden Ray*



On September 8, 2019, the 656-foot car carrier, *Golden Ray*, carrying 4,200 vehicles and over 300,000 gallons of oil, capsized shortly after midnight outside of Brunswick, Georgia. Coast Guard records indicate that within about 5 hours, there was a fire onboard and an oil sheen around the vessel. Coast Guard records also indicate that Coast Guard, state, and commercial assets rendered assistance by rescuing the crew, and deploying tugboats and oil spill removal equipment. Of the 24 persons on board, 20 were rescued within about 5 hours and the remaining four within 40 hours of the incident.

A Coast Guard official stated that the *Golden Ray*'s VRP was activated shortly after the incident; however, it is not clear whether the assets identified in the VRP were those that conducted the initial response to the incident. Industry information indicates that a vessel capable of marine firefighting arrived on scene 31 hours after the *Golden Ray* capsized.

In October 2019, the vessel was deemed a constructive total loss, and the VRP-listed salvor developed a wreck removal plan. However, the vessel owner/operator did not find it acceptable and, as a result, sought and reviewed plans from other companies. In December 2019, the vessel owner/operator requested of the Coast Guard, and was granted, a deviation from their VRP that allowed them to select another company to conduct removal of the vessel. According to the Coast Guard, a deviation is a rare and exceptional occurrence. As of September 2020, salvage operations were ongoing and wreck removal was planned for October 2020.

Sources: St. Simons Sound Response, Coast Guard, and maritime industry documentation. | GAO-20-554

Coast Guard policy states that VRPs are to be activated in the event of an incident when the resources and personnel on board a vessel cannot sufficiently respond to the needs of an actual discharge or the substantial threat of a discharge of oil; or when unresolved hazardous conditions are present. According to Coast Guard guidance, although hazardous conditions, such as an engine casualty, grounding, fire, or flooding, may not directly result in an oil discharge, plan activation is still required because, if left unresolved, such events could result in a discharge.

Activation begins when a vessel master contacts the vessel's qualified individual—a designated shore-based contact who is responsible for coordinating a vessel's response activities during an incident—to alert the contact that additional response resources identified in their VRP are needed. Once a VRP is activated, the qualified individual is to notify the Coast Guard of the spill or hazardous condition. According to Coast Guard guidance, when the Coast Guard is notified of an oil spill or hazardous condition, the federal on-scene coordinator will ask if the VRP has been activated and, if so, is to assume that certain resources identified in the plan are being employed or consulted. See sidebar for a recent example of an incident in which a VRP was activated.

VRP Enforcement

The Coast Guard can take enforcement action against a planholder for deviating from their approved VRP during an incident without prior approval from the federal on-scene coordinator or for other noncompliance issues with VRP requirements that may be identified during a vessel inspection or examination.²³ For example, Coast Guard personnel within the Captain of the Port zones may verify that a plan approval letter is in place when conducting required vessel compliance examinations or inspections. The enforcement actions range from a written warning to civil penalties, as well as operational controls that can impose limitations on, or restrict vessels from, operating within U.S. waters. According to Coast Guard data, from calendar years 2014 through 2018, 149 enforcement actions were taken. Of these, 93 were warnings made in 2014 by Sector Anchorage against nontank vessels.²⁴ For more information on the processes for monitoring compliance with VRPs and the types of enforcement actions the Coast Guard has taken for noncompliance from calendar years 2014 through 2018, see appendix III.

Coast Guard and Industry Stakeholders Involved in Vessel Response Plan Processes

A variety of Coast Guard stakeholders at different levels of the agency and industry stakeholders are involved in VRP-related processes. See

²³Under the National Oil and Hazardous Substances Pollution Contingency Plan, the federal on-scene coordinator is the federal official designated to coordinate and direct responses for actual or potential discharges of oil and/or releases of hazardous substances, among other responsibilities. Under presidential delegation, the federal on-scene coordinator makes decisions during an incident, manages response and support resources, ensures the safety of the public and response personnel, and mitigates incident impacts. Sector commanders and Marine Safety Unit Commanding Officers with Captain of the Port authority are pre-designated as the federal on-scene coordinator for their area of responsibility. For U.S.-flagged vessels, compliance is monitored through the certification inspections of the vessels. For foreign-flagged vessels, compliance monitoring for VRP-related requirements is accomplished through examinations conducted as part of the Coast Guard's Port State Control program. For more information on these inspections and examinations, see app. III.

²⁴According to Coast Guard officials, the high number of enforcement actions taken against nontank vessels in 2014 may be due to VRP requirements for nontank vessels going into effect in 2014, so some nontank vessel operators may not have been aware of or prepared to meet the requirement. According to the officials, enforcement actions declined in subsequent years presumably as nontank vessel operators new to VRP requirements became more familiar with the requirements and improved their compliance.

**Appendix I: Objectives, Scope, and
Methodology**

table 1 for information on the Coast Guard stakeholders involved in VRPs.

Appendix I: Objectives, Scope, and Methodology

Table 1: U.S. Coast Guard (Coast Guard) Stakeholders Involved in Vessel Response Plan (VRP) Processes

Coast Guard stakeholder	Role
Headquarters Vessel Response Plan Program, Office of Marine Environmental Response Policy	Establishes and oversees the policy, national guidelines, and program management activities of VRPs and alternatives. Reviews and makes approval decisions on VRPs under national planning criteria. Also reviews and makes final decisions on whether to accept alternative planning criteria requests. Program staff also coordinate and liaise with other Coast Guard units and industry stakeholders on plan issues.
Headquarters National Strike Force Coordination Center (operating out of Elizabeth City, North Carolina)	Oversees the Coast Guard’s Oil Spill Removal Organization Classification Program, which is designed to verify that oil spill removal organizations meet regulatory response requirements for oil spill removal. Also administers the Response Resource Inventory database, which catalogs organizations’ response equipment inventory and capabilities and is used for the classification program.
Sectors ^a	Review alternative planning criteria requests submitted for their area of responsibility. If the sector endorses the request, it will forward it to the respective district for further review. Monitor vessels operating within their area of responsibility for compliance with plan requirements. These activities are carried out through inspection and enforcement actions, as needed. ^b Sector Commanders serve as the federal on-scene coordinators for their respective areas of responsibility. As such, they serve as the lead federal official responsible for coordinating; directing; and monitoring all federal, state, and private actions to address a spill, among other things. Upon request, the federal on-scene coordinator may authorize a planholder to deviate from an approved VRP. ^c
Districts	Review and, if acceptable, endorse alternative planning criteria requests. Endorsed requests are sent to their respective area command for further review. Provide guidance and coordinate vessel response plan and alternative planning criteria activities across subordinate sectors. Support federal on-scene coordinator during large or complex incidents.
Areas ^d	Review and, if acceptable, endorse alternative planning criteria requests. Endorsed requests are sent to the VRP Program for final review and acceptance decisions. Provide guidance and coordinate vessel response plan and alternative planning criteria activities across subordinate districts. Support federal on-scene coordinator during large or complex incidents.

Source: GAO analysis of Coast Guard information and regulations. | GAO-20-554

^aSectors generally correspond with Captain of the Port zones—specific port areas geographically defined in 33 C.F.R. part 3. The Sector Commander is responsible for all Coast Guard missions within a sector’s area of responsibility, including serving in the role of Captain of the Port for their respective zone.

^bIf a vessel requests to enter a sector but does not have an approved vessel response plan, the Sector Commander may order the vessel to remain outside the sector or may grant written authorization for a vessel to make one voyage in the respective area by issuing a one-time port waiver. 33 C.F.R. §§ 155.1025(e), .5025.

^cFederal on-scene coordinators have the regulatory authority to approve a deviation from an approved vessel response plan under exceptional circumstances in instances where such deviation would best effect a more successful response or when a deviation would provide for a more expeditious or more effective response. 33 C.F.R. §§ 155.4032, .5012.

^dAtlantic Area command oversees all of the Coast Guard’s operations east of the Colorado Rockies to the Arabian Gulf from Canada to the Caribbean. Pacific Area command oversees all of the Coast Guard’s operations from Montana to Madagascar and from the North to the South Poles.

See table 2 for information on key industry stakeholders involved in VRP processes.

Table 2: Key Industry Stakeholders Involved in the Vessel Response Plan (VRP) Processes

Industry stakeholder	Role
Vessel owner/operators	The owner is a person holding legal or equitable title to a vessel. The operator is a person who is an owner, a demise charterer, or other contractor who operates, or is responsible for operating, the vessel. These stakeholders are responsible for the development and implementation of VRPs for their vessels and may contract with other entities to develop their VRP and provide response resources. ^a
Planholder	The official entity to which a VRP approval letter is issued. The planholder may be the vessel owner or vessel operator, or a third-party plan preparer.
Plan preparers	Third-party entities with expertise in VRP requirements that may be contracted by a planholder to develop a VRP for their vessel(s).
Qualified individuals	Shore-based representatives of planholders who are to assist in coordinating the proper response to an incident and implementation of a VRP. Qualified individuals must meet certain requirements listed in regulations. Typically, plan preparers also serve as qualified individuals.
Response resource provider	Generally defined, third-party entities such as oil spill removal organizations or providers of salvage and marine firefighting response resources that are contracted by planholders to respond to an incident.
Oil spill removal organizations	A person or entity who owns or otherwise provides oil spill removal resources that remove oil from the water or shoreline. Provides oil spill response equipment and services, individually or in combination with subcontractors, under contract or other approved means, directly to a vessel owner or operator.
Providers of salvage and marine firefighting response resources	An entity that provides personnel, equipment, supplies, and other capabilities necessary to perform salvage and/or marine firefighting services identified in the response plan and has been arranged by contract or other approved means. May also subcontract with owners of vessels of opportunity (see below) to provide emergency towing services, for example. ^b
Alternative planning criteria administrators	Entities contracted by planholders to develop and manage the administration of alternatives that would be implemented under alternative planning criteria applications.
Vessel of opportunity	A vessel engaged in spill response activities that is normally and substantially involved in activities other than spill response, and not a vessel carrying oil as a primary cargo (e.g., a fishing vessel that is used to tow boom or deploy skimmers).

Source: GAO analysis of U.S. Coast Guard information and regulations. | GAO-20-554

^aVessels required to have approved VRPs generally include tank vessels carrying oil as cargo, and self-propelled nontank vessels greater than 400 gross tons that carry oil as fuel or secondary cargo while operating in U.S. waters.

^bAs defined in 33 C.F.R. § 155.4025, emergency towing is also referred to as rescue towing, which means the use of towing vessels that can pull, push, or make-up alongside a vessel. This is to ensure that a vessel can be stabilized, controlled, or removed from a grounded position.

Serious Marine Incidents That May Have Involved the Use of a VRP

As defined in regulation, serious marine incidents include a variety of incident types involving loss of vessels and discharges of 10,000 or more

gallons of oil, among other things.²⁵ The Coast Guard tracks data on such incidents and reports on the 3-year average for their occurrence as one of its key performance measures included in the Department of Homeland Security's (DHS) annual performance report.²⁶ While such data are not necessarily comprehensive of all incidents that may result in the use of a VRP, they provide perspective on the relative frequency and type of incidents that may have involved the activation of a VRP. Data on serious marine incidents for the 10 most recent fiscal years indicate that there were 113 such incidents total involving the loss of vessel, an oil spill of 10,000 gallons or more, or the loss of a vessel and an oil spill of 10,000 gallons or more (see fig. 1).²⁷ Of the different incident types, the most frequent was "loss of vessel," with a total of 97 incidents.²⁸ Oil spills of 10,000 gallons or more were the least frequent over this time frame, with a total of 10 incidents.²⁹ Six incidents involved both the loss of a vessel and an oil spill.

²⁵46 C.F.R. § 4.03-2.

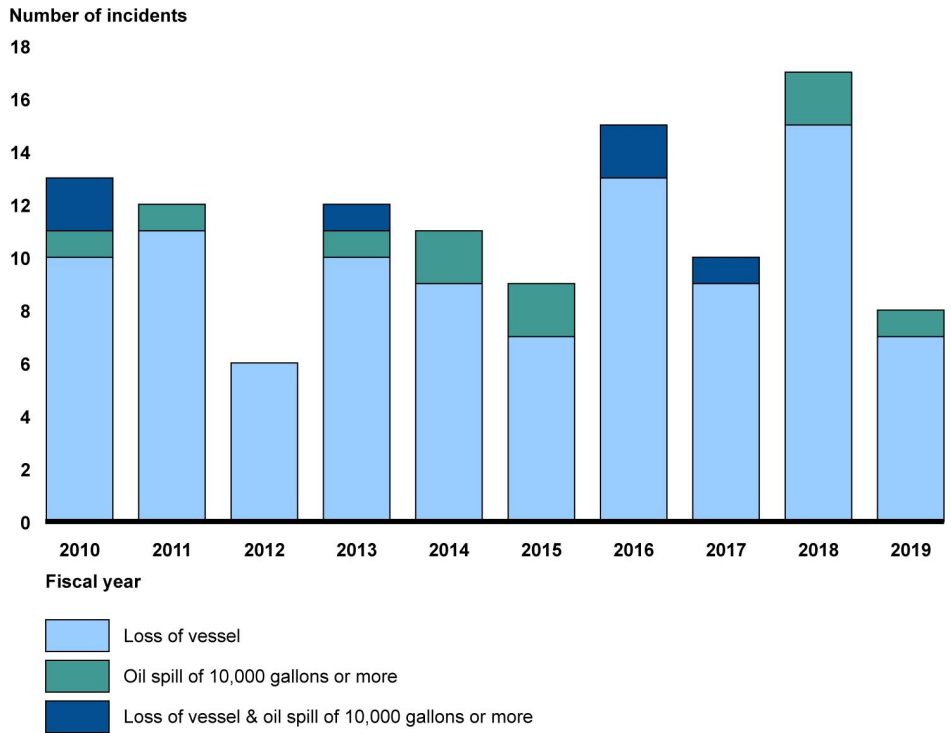
²⁶See U.S. Department of Homeland Security, *Fiscal Year 2019-2021 Annual Performance Report*, (Washington, D.C.: Feb. 10, 2020).

²⁷To conduct this analysis, we obtained and reviewed Coast Guard data on serious marine incidents for fiscal years 2010 through 2019 that involved at least one vessel of 400 gross tons or more and resulted in at least one of the following outcomes: a vessel loss (actual or constructive); and discharge of 10,000 gallons or more of oil.

²⁸The term "loss of vessel" is used to indicate the "actual or constructive total loss of a vessel" for the purposes of being counted in the "serious marine incident" data, as defined in 46 C.F.R. § 4.03-2, and does not necessarily mean that the vessel was sunk or not recovered. "Actual" and "constructive" losses are terms used to reflect the severity of the damage to an insured object, such as a vessel, and the recoverability or reparability of the insured object relative to its value. An actual total loss is a loss that occurs when insured property, such as a vessel, is destroyed or damaged to such an extent that it can be neither recovered nor repaired for further use. A constructive total loss is when the cost of repair of a damaged vessel is more than the value of the vessel itself.

²⁹As these data only include oil spills of 10,000 gallons or more, smaller oil spill incidents are excluded.

Figure 1: Serious Marine Incidents by Incident Type, Fiscal Years 2010 through 2019



Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Coast Guard Uses Multiple Steps to Review VRPs, but Does Not Analyze Incidents for Ways to Better Ensure Plan Effectiveness in Light of Risks

Coast Guard Processes for Assessing VRP Compliance with National Planning Criteria Involve Several Steps and Multiple Data Sources

The Coast Guard's VRP review processes includes several steps and the use of multiple data sources to assess whether plans comply with the national planning criteria elements described in the regulations.³⁰ In conducting their reviews, Coast Guard plan reviewers are to compare the content of VRPs against a checklist that identifies specific items the reviewer is to confirm, depending on the plan type.³¹ For example, according to the checklists, the plan reviewer is to confirm whether a VRP contains contact information for the qualified individual; the geographic areas the vessel is expected to operate in; and a written letter from the planholder certifying that their plan meets federal regulations, among other things. To assess the oil spill response services described in a VRP, the checklists direct reviewers to confirm whether the VRP includes vessel diagrams and characteristics, the capacity of the tanks on board, and the type of fuel or oil carried. Reviewers are also to check whether the VRP identifies the oil spill removal organizations and providers of salvage and marine firefighting response resources that would be called on to respond if the vessel were involved in an incident.

³⁰For the purpose of plan preparation, the regulations provide "planning criteria" that are based on assumptions that may not exist during an actual incident. The regulations explicitly state that the criteria are not performance standards. See, e.g., 33 C.F.R. § 155.1010. Consequently, planholder compliance with the regulations is based upon whether a plan ensures that adequate response resources are available and not how they meet these criteria in a real emergency situation.

³¹The program has different checklists that reviewers are to use, depending on the type of review needed (e.g., tank vessel, nontank vessel, addition of a vessel to a previously approved VRP, or addition of a new operating area (Coast Guard Captain of the Port zone) to a previously approved VRP).

The Coast Guard's level of review and verification is different for oil spill removal organizations compared with salvage and marine firefighting response resources. For oil spill removal organizations, the Coast Guard has established a program to verify their capabilities. Through its Oil Spill Removal Organization Classification Program, the Coast Guard "classifies" organizations according to the type of environment they can operate in (e.g., river or canal, nearshore, open ocean, etc.) and the volume of and type of oil they are capable of removing within established response times. As such, the program provides a means to indicate that the Coast Guard has determined that an organization's removal capacity equals or exceeds the classification standards established in Coast Guard guidelines and that the organization is able to respond to the planning volume caps stated in regulation. According to Coast Guard officials, classification does not certify that an organization can meet the planning needs of any particular planholder as the response capability needed is different for each vessel and operating area. Consequently, it is the responsibility of the planholder to ensure that the organizations included in their VRP have the equipment and personnel to support their specific planning and response needs, including meeting the response time planning requirements as stated in regulation.³²

Participation in the program by the organizations is voluntary, but in order to obtain a classification under the program, the provider must provide specific information about the resources available for each location where it has equipment. Such information is maintained in the Response Resource Inventory (Resource Inventory) database, administered by the Coast Guard, which we describe in more detail below. The Coast Guard's National Strike Force Coordination Center is then responsible for periodically verifying this information when it conducts on-site assessment visits in which it inspects the equipment, reviews personnel training and equipment maintenance records, and conducts an inventory to ensure

³²According to Coast Guard guidance for the classification program, the fact that an oil spill removal organization has been classified does not guarantee performance, nor does the use of a Coast Guard-classified oil spill removal organization relieve planholders of their responsibility to ensure the adequacy of the response resources of a classified oil spill removal organization. Rather, classification is to serve as a reference for planholders to use when developing their VRP to help identify organizations they could consider using given the specific planning requirements that are applicable to their vessels.

that the information provided by the organization is accurate.³³ According to Coast Guard officials, classification is granted as soon as an oil spill removal organization sufficiently populates the Resource Inventory database with information on its response resources and is not dependent on an on-site assessment visit, as those may happen only once every four years.³⁴ By using the Coast Guard's classification of an oil spill removal organization as a reference in the development of a VRP, and after conferring with an organization that the planholder's response planning requirements can be met, a planholder can identify the responding organization by name in their plan, rather than providing detailed lists of response resources as would otherwise be required under the regulations.

For providers of salvage and marine firefighting response services, VRP Program officials carry out scenario-based verifications on a selection of VRPs prior to approving or renewing them.³⁵ According to the program's operating procedures

- VRP program officials may send the planholder a hypothetical salvage or marine firefighting-related scenario in one of the Captain of the Port zones listed in the VRP;³⁶

³³According to National Strike Force Coordination Center officials, with a staff of four personnel, the frequency of these on-site visits to all oil spill removal organizations nationwide is approximately once every four years on average. The officials noted that additional on-site spot checks may be conducted as needed to verify whether corrective action has been taken by the organization if discrepancies are recorded during a previous visit, exercise, or response, for example.

³⁴According to Coast Guard officials, if the Coast Guard determines through an assessment visit that the oil spill removal organization's equipment does not match the information in the Resource Inventory, the classification may be removed at that time.

³⁵According to the program's operating procedures, these verifications are to be performed on randomly selected VRPs that have been submitted for first-time approval or renewal. More details on the frequency and selection processes for these verifications are discussed later in this report.

³⁶The 19 different salvage and marine firefighting services are listed at 33 C.F.R. § 155.4030 (e.g., emergency towing, emergency lightering, salvage plan, on-site fire assessment, external firefighting teams, etc.). The regulations also specify the response time frames planholders are to use as planning criteria for nearshore and offshore areas. As defined in regulation, nearshore areas are generally the area between the shoreline of a Captain of the Port zone extending out 12 nautical miles. Offshore area is defined as the area up to 38 nautical miles seaward of the outer boundary of the nearshore area.

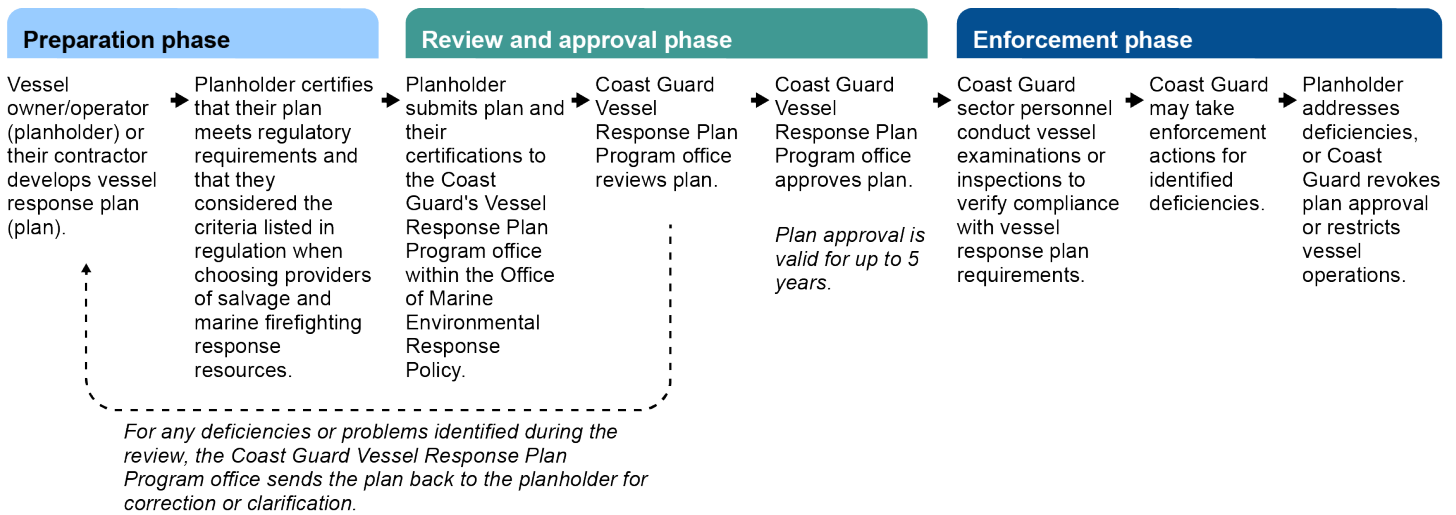
- the planholder or their plan preparer then has 5 business days to respond in writing about the actions they and their contracted response resource providers would take and the assets they would deploy to respond to the scenario;³⁷
- VRP Program staff then are to evaluate the response to determine whether the identified response resources are consistent with those identified in the VRP and would meet the response time frames in the regulations; and
- after the VRP Program office completes its evaluation, it is to report the results to the planholder and require any deficiencies to be addressed before the VRP can be approved or renewed.

According to Coast Guard officials, in addition to hypothetical scenarios to evaluate salvage and marine firefighting responses, they also conduct a limited number of verifications of salvage and marine firefighting responses to real world events as well. For example, the program conducted a verification of an October 2018 incident in which a vessel experienced an engine room fire that was extinguished but left the vessel disabled and adrift. In response, the salvage and marine firefighting response resource provider listed in the vessel's VRP dispatched towing assets. The verification found that the provider used assets not listed in its Geographic-Specific Appendix and the VRP Program required the provider to update its appendix accordingly.

According to Coast Guard officials, the Coast Guard's approval of a VRP plan indicates that the planholder has, in its plan, identified and contracted with enough assets to meet the planning criteria time frames and response requirements for their vessel, operating area, and operating environment. Figure 2 shows the processes for the review and approval of plans using national planning criteria.

³⁷When the VRP Program first began these scenario-based verifications, planholders and their response providers were given 10 business days to respond. Coast Guard officials stated that it was reduced to 5 business days after they determined (in consultation with industry) that a shorter time frame would be reasonable.

Figure 2: Vessel Response Plan Processes Using National Planning Criteria



Source: GAO analysis of U.S. Coast Guard information. | GAO-20-554

In carrying out its review processes, the Coast Guard uses two sources of information on response resources—the Resource Inventory database and Geographic-Specific Appendixes—to inform its plan reviews as follows:

- The Resource Inventory database.** The Resource Inventory is an information source reflecting the capability, resources, and location of oil spill removal organizations. The database is used to monitor the status and location of these organizations' equipment and to collect data for classifying them. As currently structured, oil spill removal organizations manually input their asset information into the Resource Inventory. For example, for oil containment boom, users are to input such information as type, length, and boom height capacity and, for skimmers, they are to input pump capacity and storage capacity.³⁸ In addition, whenever there are significant changes to an oil spill removal organization's resources, such as moving equipment or personnel from one location to another, Coast Guard guidelines direct the

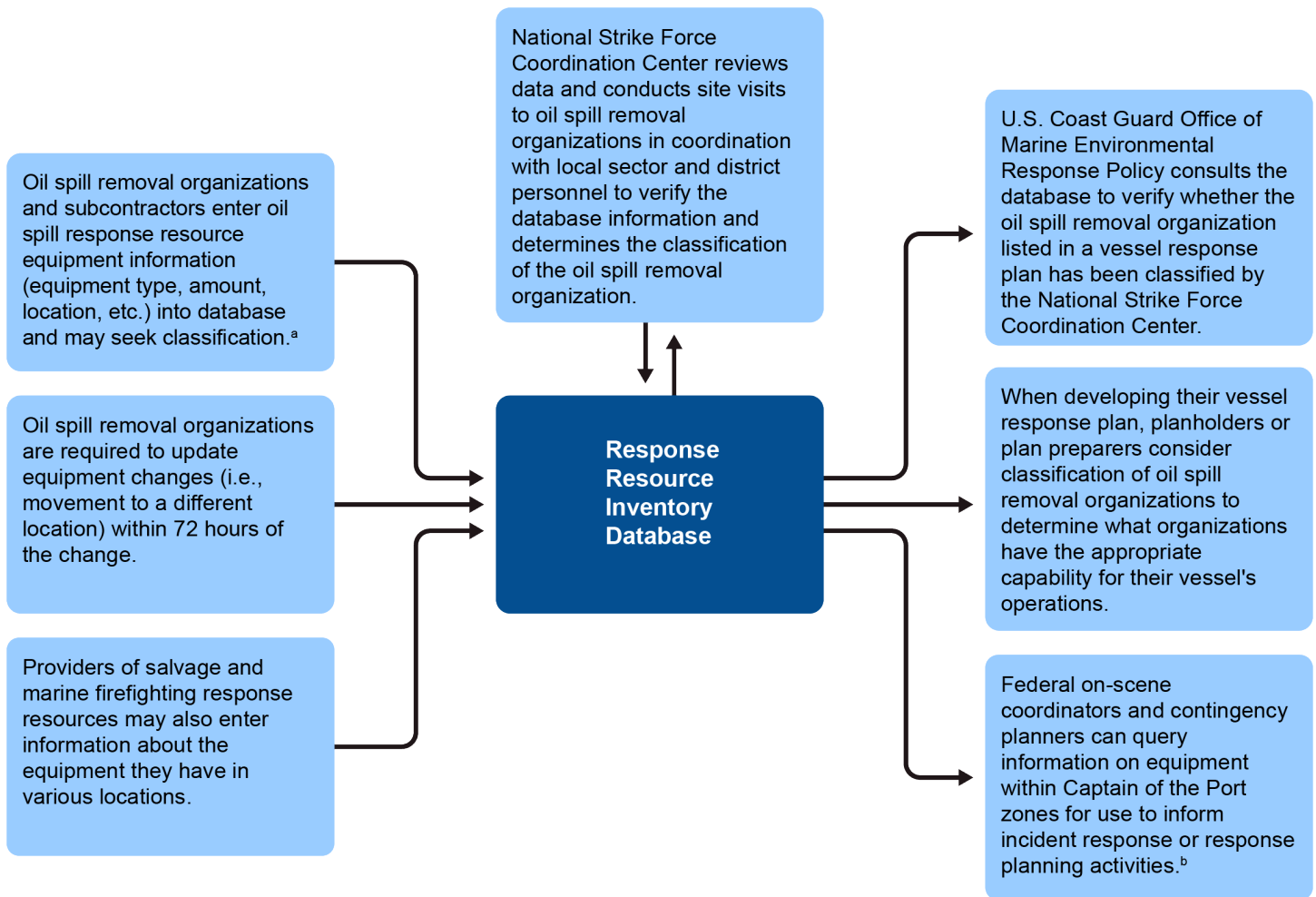
³⁸An oil containment boom is used to collect and hold oil on the water's surface for recovery. Skimming systems (skimmers) are used to remove spilled oil from the water's surface through mechanical suction, adhesion, absorption, or some similar mechanism of action that allows separation and recovery of spilled oil from the water's surface.

organizations to update their inventory within 72 hours to ensure accurate database information.³⁹

Providers of salvage and marine firefighting response resources may also use the Resource Inventory database to enter information about their equipment. For example, providers may enter information about their firefighting resources (e.g., type, quantity, location) as well as other details, such as how the resources can be transported. While entry of information into the Resource Inventory is voluntary for both oil spill removal organizations and providers of salvage and marine firefighting response resources, the Coast Guard verifies only information entered by oil spill removal organizations seeking to be classified or to maintain a classification under the Oil Spill Removal Organization Classification Program. Figure 3 shows the key information inputs and uses of the Resource Inventory database.

³⁹“Significant changes” are defined as a reduction in the oil spill removal organization’s classified capacity by a factor of 10 percent or greater, for a period of 48 hours or longer. The Coast Guard’s Oil Spill Removal Classification Program guidelines also identify other changes that should be updated in the Resource Inventory within 72 hours, such as deleting equipment that is no longer functioning that could affect classification.

Figure 3: U.S Coast Guard-Administered Response Resource Inventory System, Key Data Inputs and Uses



Source: GAO analysis of U.S. Coast Guard information. | GAO-20-554

^aThe Coast Guard's Oil Spill Removal Organization Classification Program verifies the capabilities of oil spill removal organizations within specific geographic operating areas as a means to indicate the Coast Guard has determined that an organization's removal capacity equals or exceeds the classification standards established in Coast Guard guidelines and that the organization is able to respond to the planning volume caps stated in regulation. Participation by the organizations is voluntary, but those that seek to be classified are required to enter detailed information on their response resources into the Response Resource Inventory.

^bUnder the National Oil and Hazardous Substances Pollution Contingency Plan, the federal on-scene coordinator is the federal official designated to coordinate and direct responses for actual or potential discharges of oil and/or releases of hazardous substances, among other responsibilities. Contingency planners are involved in developing contingency plans, which outline how the Coast Guard, other federal, state, and local government agencies; and the private sector respond to oil or hazardous substance incidents.

- **Geographic-Specific Appendixes.** Providers of salvage and marine firefighting resources that are cited in a VRP have the option to create Geographic-Specific Appendixes that list the salvage and marine firefighting assets they own or contract with that may be utilized to respond to an incident within specified Captain of the Port zones. Response resource providers may submit these appendixes biannually to the VRP Program for review. Planholders using response resource providers whose appendixes have been accepted by the VRP Program may reference the provider and its accepted appendix in their VRPs, which can be done in lieu of submitting detailed information on the provider's salvage and marine firefighting resources.⁴⁰ According to Coast Guard officials, this approach helps reduce the administrative burden on planholders of having to include detailed response resource information in their plans and on the Coast Guard of having to review the detailed information. However, Coast Guard officials noted that while this reduces administrative burdens for both planholders and reviewers, the planholder is still responsible for verifying that the resources listed in the Geographic-Specific Appendixes are adequate for their vessels.

Coast Guard Does Not Fully Analyze Data on Real World Incidents in Determining the Effectiveness of its VRP Review and Approval Processes

While the Coast Guard has processes for reviewing and approving VRPs against national planning criteria, we, along with industry stakeholders, identified several risks that limit the Coast Guard's assurance that approved VRPs as designed will be effective when activated to respond to an incident. These risks include (1) the relatively small number and limited nature of verifications of salvage and marine firefighting response information in VRPs, (2) the potentially limited availability of response resource providers to respond to an incident if or when one occurs, and (3) the limited availability of reliable data on assets and equipment used for incident response. However, the Coast Guard does not fully analyze real world incident data to identify whether and to what extent these risks may limit the effectiveness of VRPs in mitigating marine pollution risk. The analysis of incidents involving the use of a VRP—or a sample of such incidents—would help the Coast Guard understand whether VRPs, in

⁴⁰This "incorporation by reference" by planholders is only for response resource providers with whom the planholders have established contracts and funding agreements in accordance with 33 C.F.R. § 155.4045.

practice, have been carried out as designed despite the risks identified. The analysis would also help inform whether enhancements are needed to the VRP review processes—such as its approach to verifications—to mitigate risks.

Verification of salvage and marine firefighting information

The VRP Program conducts a relatively small number of written, scenario-based verifications to ensure the accuracy of salvage and marine firefighting information listed in VRPs. The Coast Guard began conducting these written verifications in April 2017 and, as of December 2019, had completed verifications for 71 of about 3,000 VRPs (or about 2 percent).⁴¹ According to program officials, while they do not have a set program goal for the number of verifications to complete, they stated that they complete about two verifications each month, as staff availability permits.

In addition to the relatively small number of verifications conducted, the Coast Guard's processes for conducting the verifications are also limited in their independent validation of the information provided. According to program officials, they review written verification responses to ensure that the assets cited in the response align with those listed in the planholder's VRP. According to industry stakeholders we met with, certain assets, such as towing vessels, have different capabilities, personnel, and equipment that make them better suited for some incident responses than others, depending on the circumstances of the incident. However, the verification processes do not include any testing or independent verification of the information provided about asset or personnel capabilities to ensure they can meet specific needs, such as for marine

⁴¹As of December 2019, the Coast Guard had not completed any verifications within Districts 9 (Great Lakes region) and 17 (Alaska). The conducted verifications involved reviews of 13 of the 19 specified salvage and marine firefighting services. The six salvage and marine firefighting services not verified include "remote assessment and consultation," "begin assessment of structural stability," "assessment of structural stability," "salvage plan," "special operations salvage plan," and "marine firefighting remote assessment and consultation."

firefighting.⁴² For responses requiring assets such as towing vessels, the program uses automatic identification system data to verify the location of the asset at the time of the hypothetical incident and whether the selected asset would be able to reach the scene of the incident within the planning time frame.⁴³ However, some of the data sources used, such as the position data provided by an automatic identification system and the Coast Guard's Marine Information for Safety and Law Enforcement database, are limited and may not be sufficient to confirm characteristics of a response vessel such as their personnel or other performance capabilities.⁴⁴

Further, while VRP Program officials review the Geographic-Specific Appendixes submitted by providers of salvage and marine firefighting response resources, they noted that this review does not include verification of the equipment or the accuracy of the information in the appendixes. All four industry stakeholders we spoke with that represent the majority of the five "core Geographic-Specific Appendixes" of salvage and marine firefighting response resources the Coast Guard has reviewed and accepted also told us that the Coast Guard's verification processes do little to provide assurance of the effectiveness of a given VRP under real world conditions. As such, these stakeholders stated that

⁴²According to Coast Guard officials, the Coast Guard recently issued regulations (Subchapter M) requiring towing vessels longer than 26 feet to be inspected by the Coast Guard and receive a certificate of inspection by July 2022. Previously, such vessels were not limited to specific routes. However, with the implementation of Subchapter M, the routes the vessels are allowed to operate in will be specifically identified. 46 C.F.R. § 136.230. According to Coast Guard officials, if the towing asset identified by a planholder as a response asset for a verification scenario has a certificate to meet Subchapter M requirements, the VRP Program can use the certificate and the information it contains to verify some characteristics and capabilities of the vessel, such as its horsepower and bollard pull and whether it can respond to incidents in offshore areas. However, as this requirement is still in the process of being implemented, not all vessels may have a certificate of inspection. 46 C.F.R. § 136.202.

⁴³An automatic identification system is used on ships and by vessel traffic services for identifying and locating vessels by electronically exchanging data with other nearby ships, automatic identification system base stations, and satellites.

⁴⁴As the Coast Guard's largest operational information system, the Marine Information for Safety and Law Enforcement contains information on about 650,000 domestic and foreign-flagged vessels, among other key data for nine of 11 Coast Guard missions.

review and assessment of their performance in real-world incidents would be a more accurate and useful approach for verifying their capabilities.⁴⁵

VRP Program officials told us that resources are a key factor in the level of verification they can do for salvage and marine firefighting and that they used to be able to do more. According to program officials, from 2011 through 2013, sector officials conducted some in-person, on-site verifications of salvage and marine firefighting assets listed in the Geographic-Specific Appendixes whereby sector personnel verified the accuracy of equipment information; the number of personnel available; and the physical location of listed assets, among other things. As part of these verifications, sector personnel also evaluated whether the planholder could meet the planning time frames for a hypothetical incident within that sector. According to VRP Program officials, these verification processes were suspended in 2014, when the new VRP requirement for nontank vessels came into effect, which increased the total number of VRPs requiring Coast Guard review from approximately 600 plans to 3,000 and made it infeasible to continue the sector-based appendix verifications with the existing number of staff. According to VRP Program officials, after a few years of not conducting any verifications, the VRP Program began conducting written, scenario-based verifications in April 2017, which are the current processes used to verify VRP information related to salvage and marine firefighting assets.

Given the small number and types of verifications the VRP Program is able to do of salvage and marine firefighting-related information in VRPs, analyzing incidents where VRPs have been activated to identify whether aspects of its VRP verification processes need to be strengthened, could help the Coast Guard mitigate this risk.

Availability of Resource Providers to Respond to an Incident

As described earlier, planholders are to designate, in their VRPs, response resource providers who agree to respond in the event of an incident, such as an oil spill or vessel fire. For this purpose, planholders

⁴⁵According to VRP Program officials, the regulations for VRPs are based on planning standards as stated in regulation, and as such, the actual performance during a response may be different.

enter into contracts with resource providers to secure their services.⁴⁶ These resource providers may, in turn, subcontract with owners of “vessels of opportunity,” such as tugboats or other assets, to provide additional response capabilities.⁴⁷ However, according to industry stakeholders with whom we spoke, some subcontracts with vessels of opportunity include language that the vessels of opportunity will respond to incidents on an “as available” basis, with their availability to be determined by the owner of the subcontracted vessel. According to program officials, in reviewing and approving VRPs, the extent of their review is to verify that a valid contract exists between the planholder and the provider of the response assets, and they do not review subcontracts—nor are subcontracts required to be submitted as part of a VRP.

During the course of our review, the Deputy Chief Counsel of the Coast Guard’s Office of Maritime and International Law told us that such language is not consistent with Coast Guard regulations and that it was his view that the Coast Guard should no longer accept such contracts.⁴⁸ According to VRP Program officials, their current processes for reviewing and approving VRPs do not include reviewing subcontracts. Program officials told us they had begun to obtain subcontracts in December 2019, but had not started reviewing them as part of VRP oversight processes.⁴⁹ Instead, officials stated that they were in consultation with Coast Guard counsel to determine what might be acceptable with respect to the use of

⁴⁶Certain nontank vessels with a capacity of less than 2,500 barrels but greater than or equal to 250 barrels, and nontank vessels with capability less than 250 barrels, are not required to ensure that certain resources are available by contract; rather, they may submit written consent from the response resource provider to be listed in the plan. 33 C.F.R. § 155.5050(i)(2), (3).

⁴⁷A vessel of opportunity is defined as a vessel engaged in spill response activities that is normally and substantially involved in activities other than spill response and is not a vessel carrying oil as a primary cargo. An example of a vessel of opportunity is a towing vessel (e.g., tugboat or towboat) that normally assists other vessels in their mooring or berthing operations, or is involved in the transport of barges, but can also be called on to provide emergency towing services in the event a vessel loses power or control.

⁴⁸According to Coast Guard officials, a 2016 internal legal analysis reached a similar conclusion, that it was not appropriate for subcontract language to limit an asset’s obligation to respond “as available” without explicitly detailing the conditions under which the asset could not respond.

⁴⁹According to Coast Guard guidance, the Coast Guard reserves the right to request and verify subcontracts.

“as available” language in contracts, including the circumstances under which a response resource provider may not be available to respond.

Coast Guard officials told us that, because many response resources, such as towing assets, are not dedicated to response activities and are engaged in other work, changing the terms of contracts to require them to respond to an incident, even if already engaged in other work at the time, would likely result in significant increases in costs to planholders for using such resources. Officials said it could be prohibitively expensive, as response resource providers would likely demand a premium from planholders for prioritizing a response to an incident over their other work. However, the question of obligating vessels of opportunity to respond to incidents has come up previously with regard to VRPs, including during the 2008 rulemaking amending the salvage and marine firefighting requirements in VRPs. At that time, the Coast Guard considered comments suggesting that planholders could rely on large numbers of response resources that are not committed to respond to an incident, and instead the Coast Guard decided to adopt the current approach of requiring VRPs to list vessels that are obligated to respond to an incident through enforceable contracts.⁵⁰ Coast Guard officials stated that as they are considering options for including subcontract reviews as part of their VRP review processes, they would likely seek input from industry stakeholders to obtain their perspectives on the potential impact of this change on their operations.⁵¹

⁵⁰For example, in the preamble to the final rule for salvage and marine firefighting services, the Coast Guard discussed a comment that suggested that the use of nondedicated resources is a viable and commercially acceptable, cost-effective way of responding to emergencies, and therefore should be utilized to establish appropriate salvage and firefighting standards. The Coast Guard disagreed with the comment and stated that this rulemaking was designed to mirror the success that the oil spill removal organizations and planholders have had with prearranged contracts, ensuring that both industry and resource providers are clearly aware, prior to any incident, of who will respond on scene. 73 Fed. Reg. 80,618, 80,634 (Dec. 31, 2008). Similarly, with respect to towing assets, another commenter suggested that the owners and the public make use of the large number of tugs that are generally available on short notice, but not make any commitments, which result in large expenditures that do not provide any real assurances that tugs will be on-scene quickly. The Coast Guard disagreed with this comment and stated that the regulation requires towing vessels that are contractually obligated and able to meet the minimum requirements. 73 Fed. Reg. 80,633 (Dec. 31, 2008).

⁵¹In its technical comments on a draft of this report, the Coast Guard stated that it has determined that equipment cannot be included in VRPs on an “as available” basis and that the VRP Program is in the process of developing guidance for a process to review subcontracts. Because these actions are still in process, we have not been able to assess them to determine whether they will address the issue.

Until the Coast Guard resolves this issue, the potential limited availability of certain vessels identified in VRPs to respond to incidents limits the Coast Guard's assurances that a given VRP will be able to function as designed. As such, analyzing incidents of VRP activation—including determining whether vessels identified in VRPs have been available to respond or whether changes are needed within the review processes to better ensure the availability of response providers identified in VRPs—could help the Coast Guard mitigate such risks.

Availability of Reliable Data on Inventory and Location of Response Resources

VRP Program officials use information from the Resource Inventory database when reviewing VRPs to determine whether the oil spill removal organizations listed in a VRP are appropriate and adequate. However, industry and Coast Guard officials described issues with their ability to ensure or rely on the accuracy and completeness of this information, given the system's limited capabilities and its upcoming obsolescence. In addition, unlike for oil spill removal organization assets, the Resource Inventory contains very little salvage and marine firefighting information and does not include a parallel system of classification for salvage and marine firefighting assets listed in VRPs.

As described earlier, officials from oil spill removal organizations who use the Resource Inventory are to enter their own asset data into the system. However, these officials stated that the limited capabilities and functionalities of the system make it challenging to maintain complete and current information on the location and availability of their equipment. For example, the industry officials stated that the Resource Inventory is not compatible with basic software applications commonly used to track their information internally, such as spreadsheet programs. Additionally, when a change occurs—such as an asset moving to another location—officials we spoke with said they must update each asset manually, which is time-consuming and labor-intensive because of the database's antiquated user interface.⁵² A Coast Guard field official acknowledged user interface challenges and cited an example in which they found incorrect data in the Resource Inventory for a response organization resulting from confusion about the data entry process. This error resulted in Coast Guard

⁵²Sites where equipment is stored may have dozens of individual pieces of equipment. Large oil spill removal organizations may have over 50 storage sites nationwide.

personnel spending a week on site to help the organization update its information in the database.

Officials we spoke with from oil spill removal organizations also stated that the Resource Inventory does not link the information entered by an organization with information entered separately in the database by any subcontractors they may use. For example, when oil spill removal organizations create their profile in the system, they are to include information on their own organization, as well as any subcontractors they use. However, if, for example, a subcontractor's assets are moved to another location, the subcontractor is required to update its own profile within the Resource Inventory, but the change will not automatically also be reflected in the profile of an organization for which it is a subcontractor—that is, unless the organization is aware of the change and makes the same updates to its own profile. Consequently, there is an increased risk of the information being inaccurate.

In 2009, the National Strike Force Coordination Center proposed that the Resource Inventory be updated and modified to capture salvage and marine firefighting data to support multiple purposes, such as providing Coast Guard field personnel with more complete information on available response resources and assisting headquarters personnel with VRP reviews. To implement this, the center established a workgroup of Coast Guard personnel and industry officials to address multiple objectives for improving the Resource Inventory.⁵³ However, while the Resource Inventory was modified to capture some additional resource data, the workgroup was disbanded in 2012 without accomplishing its broader goal of making the database a clearinghouse for salvage and marine firefighting data.⁵⁴

According to Coast Guard officials, the Resource Inventory was first established in 1993 and is soon approaching obsolescence. The technical

⁵³The workgroup's specified objectives included, for example, developing a module within the Resource Inventory to facilitate the review and approval of VRPs, enhancing preparedness for incidents requiring salvage and marine firefighting response resources, and developing a plan to systematically and recurrently verify salvage and marine firefighting response resources in the Resource Inventory to ensure data integrity, among other objectives.

⁵⁴A Coast Guard official familiar with the working group said it disbanded in large part because of the lack of Coast Guard personnel bandwidth to continue, given the Coast Guard's extended response to the 2010 Deepwater Horizon oil spill.

support and updates provided by the manufacturer for the Resource Inventory's underlying operating system begin phasing out in July 2022. According to Coast Guard officials, they are in the initial stages of planning for its replacement, which includes reviewing and documenting concerns with the Resource Inventory.⁵⁵ Officials said they plan to include the results of this review as part of the Coast Guard's 2020 Operational Analysis, which was about halfway complete as of June 2020.⁵⁶ In the meantime, analyzing incidents involving VRP activations—including identifying whether the availability of reliable data affected the effectiveness of a response and whether related improvements are needed to the data and information sources used in VRP review processes—could help the Coast Guard mitigate risks related to the availability of data.

Regarding the three risks discussed above that we and others have identified, Coast Guard officials stated that their verification efforts do not include verifying certain aspects of response resources in their VRP reviews, such as the location and capability of equipment, because the regulations explicitly place the responsibility on planholders for determining that a response resource provider's capabilities and services are adequate for their vessel response needs.⁵⁷ They further noted that because the regulations are planning standards—not response requirements—their reviews consider whether planholders have identified adequate response resources in their VRPs. Officials acknowledged that information obtained through incident investigation and lessons learned

⁵⁵The Oil Spill Liability Trust Fund was created in 1986 to address resource needs and support activities related to responding to oil spill incidents. Specifically, OPA 90 states that its funds may be used for a number of purposes associated with removing spilled oil. Such purposes include expenses that are reasonably necessary for and incidental to the implementation, administration, and enforcement of multiple provisions of OPA 90, such as vessel response plan requirements. 33 U.S.C. § 2712. According to a Coast Guard official associated with the fund, an appropriation would be necessary to obtain funding from the Oil Spill Liability Trust Fund for the purpose of funding a replacement of the Resource Inventory, and none has been requested as of May 2020.

⁵⁶An operational analysis is a method of examining the ongoing performance of an operating asset investment, such as an information technology system, and measuring that performance against an established set of cost, schedule, and performance goals. See OMB, *Circular No. A-11, Preparation, Submission, and Execution of the Budget, Capital Programming Guide Supplement* (Washington, D.C.: July 2020), page 43.

⁵⁷The regulations identify 15 selection criteria that planholders are to consider when determining the adequacy of salvage and marine firefighting response resource providers included in their plans and planholders are required to certify in their plans that they considered those factors when choosing their response resource providers. 33 C.F.R. § 155.4050.

during exercises provide some information on the effectiveness of response capabilities in a defined operating area and subsequently the effectiveness of a VRP. However, they noted that the effectiveness of response capabilities is beyond the scope of VRP review. As such, their review does not necessarily determine whether the response resources identified in VRPs will provide an effective response within the planning time frames identified in the regulations, given the unknown real-world conditions associated with each response at the time of an incident. Coast Guard officials also noted that if a particular asset is not available from an approved VRP, the federal on-scene coordinator can either grant the planholder a deviation from their VRP to use an asset not included in their plan or can take enforcement action against the planholder if it is determined that the VRP was inadequate for the operations being conducted.

VRP Program officials stated that they began collecting and reviewing data on VRP activations in April 2018 to obtain awareness of recent incidents and to determine if assets that responded were those identified in the VRP.⁵⁸ Specifically, they have collected data and information on incidents reported to the Coast Guard National Command Center to determine whether the VRP was activated, and if so, whether the incident response met regulatory requirements, such as whether the response assets used were consistent with the VRP as written and responded within the time frames specified in regulation.⁵⁹ However, the Coast

⁵⁸These data are based on incidents that meet the Critical Incident Communication threshold and are reported to the Coast Guard's National Command Center, whose mission is to maintain awareness of Coast Guard operations worldwide and all significant external events of potential interest to the Coast Guard or DHS. These incidents include those with a suspected terrorist nexus; incidents involving Maritime Critical Infrastructure that significantly disrupt operation of the maritime transportation system; and Transportation Security Incidents, as defined in 33 C.F.R. § 101.105 (a security incident that results in a significant loss of life, environmental damage, transportation system disruption, or economic disruption in a particular area), among others. VRP Program officials stated that this list of incidents is not comprehensive of all potential VRP activations but provides them a means to spot-check national response capabilities during substantial oil spills or incidents.

⁵⁹According to Coast Guard guidance and VRP Program officials, a response is considered to have met regulatory requirements if the response resources used (e.g., oil spill removal or salvage and marine firefighting), if any, were deployed by the provider listed in the VRP as approved and responded within the planning time frames listed in the regulations. Since the program began collecting and reviewing these data, 31 incidents occurred between June 2018 and January 2020. Of those, 29 were determined to have met regulatory requirements, one resulted in a deficiency that was corrected with a subsequent amendment to the VRP, and one is still under investigation by the Coast Guard.

Guard does not have a process for fully analyzing the incident data to determine whether and to what extent the risks we and others have identified within the Coast Guard's review processes may have affected the response, and any steps needed to address them.

Coast Guard officials acknowledged that they do not have such a process and reiterated that the purpose of the VRP review processes is to ensure regulatory compliance, such as whether response assets are able to arrive within planning time frames, and not make a determination whether the response resources identified in VRPs will provide an effective response within the planning time frames identified in the regulations. However, Coast Guard officials also noted that while the VRP Program does not fully analyze real world incident data or other information such as lessons learned from exercises, such information should be considered by the Coast Guard when evaluating response resource provider capability, and by planholders when evaluating the adequacy of contracted providers supporting their plan. The Coast Guard officials also agreed that they have authority to do more to verify response resource capability and availability, such as conducting verifications to validate a planholders' certification that they have considered the criteria stated in regulation and identified a response resource provider that meets that criteria. To that end, the officials stated that the VRP Program is currently evaluating options that could assist with compliance verification at the field level.

OMB and the Coast Guard have issued guidance on the importance of evidence-based policymaking and the use of data and evidence to inform program decisions. For example, in July 2019, OMB issued guidance on implementing evidence-based policymaking activities that use data and evidence to address information gaps and better enable agencies to, among other things, manage risks.⁶⁰ More recently, in the proposed federal budget for fiscal year 2021, OMB reiterated the need to implement

⁶⁰ OMB, *Phase I Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance*, OMB Memorandum M-19-23 (Washington, D.C.: July 10, 2019). Our prior work has also noted other guidance and direction that OMB has issued to encourage agencies to improve government effectiveness by increasing their use of evidence and rigorous program evaluation in making budget, management, and policy decisions. See GAO, *Evidence-Based Policymaking: Selected Agencies Coordinate Activities, but Could Enhance Collaboration*, [GAO-20-119](#) (Washington, D.C.: Dec. 4, 2019), and *Program Evaluation: Strategies to Facilitate Agencies' Use of Evaluation in Program Management and Policy Making*, [GAO-13-570](#) (Washington, D.C.: June 26, 2013).

evidence-building activities to improve policy, programs, and regulations, among other things.⁶¹ In addition, the Coast Guard's Force Readiness Command promulgated guidance in December 2018 stating that analysis is the primary tool for providing detailed and comprehensive information to program managers, among others, so they can make informed decisions.⁶² The guidance also notes that conducting an analysis before taking action can significantly reduce the risk of making bad decisions.

By developing a process for more thoroughly analyzing incident data to identify whether or how its VRP review processes should be strengthened, the Coast Guard could help mitigate the risks identified in the review processes and provide greater assurance of VRPs' effectiveness. Such analysis could include identifying factors that affected or impeded a response and what changes in the VRP review or verification processes could help address them.

Coast Guard officials stated that in October 2019 they decided to establish the Maritime Oil Spill Response Plan Advisory Group, comprised of a range of Coast Guard stakeholders, to examine and provide input to VRP Program management on issues impacting the review and approval processes under both national planning criteria and alternative planning criteria. As the establishment of the working group is still in process, no changes have been made to the existing VRP review and approval processes as of August 2020. The working group and its planned activities related to alternative planning criteria are discussed later in this report.

Coast Guard Uses Guidelines to Evaluate Alternative Planning Criteria, but Its Efforts to

⁶¹Office of Management and Budget, *A Budget for America's Future, Fiscal Year 2021 Budget of the U.S. Government*, (Washington, D.C.: Feb. 10, 2020).

⁶²Force Readiness Command is an organization within the Coast Guard responsible for preparing the Coast Guard workforce to perform and execute missions. As such, the command is responsible for overseeing the Coast Guard's training plans and policies, including developing and delivering training courses, and conducting performance and compliance assessments of units to determine whether each mission has the necessary equipment and personnel skills to ensure operational readiness. Coast Guard, *Standard Operating Procedures for the Coast Guard's Training System, Volume 2, Analysis*, (Washington, D.C.: Dec. 2018).

Address Ongoing Challenges Do Not Follow Key Program Management Practices

The Coast Guard uses federal regulations and national guidelines to assess alternative planning criteria requests, and Coast Guard officials at the sector and district levels have also developed local guidance and tools to assist industry and communicate plan requirements.⁶³ However, Coast Guard and maritime industry officials cited the lack of clarity on evaluating measures designed to prevent incidents from occurring as one source of challenges, among others, in the processes. The Coast Guard recently initiated an advisory group to examine issues related to VRPs and alternative planning criteria and provide input to the VRP Program on how to address those issues, but it has not implemented key program management practices to help ensure that the group will be able to effectively address challenges related to alternative planning criteria.

The Coast Guard Uses Various Guidelines, Tools, and Communication Methods to Help Assess Alternative Planning Criteria Requests

Coast Guard officials use language contained in federal VRP regulations, national guidelines issued by headquarters, and regionally developed guidance and tools to manage the alternative planning criteria processes, including to assess requests by vessel owners and operators to use alternative planning criteria.⁶⁴ Officials also use various methods of communication to explain the processes and note changes to the program.

National Guidelines

In 2017, the Coast Guard updated national guidelines for inclusion of alternative planning criteria within VRPs; this guidance informs Coast

⁶³For the purposes of the discussion on alternative planning criteria, “maritime industry officials” refers to stakeholders we spoke with from response resource providers, oil spill removal organizations, and alternative planning criteria administrators.

⁶⁴See 33 C.F.R. § 155.1065(f) (alternative planning criteria for tank vessels); 33 C.F.R. § 155.5067 (alternative planning criteria for nontank vessels). Throughout this report section, the term “regional guidance” refers to interim supplemental guidance developed by Coast Guard officials in either sectors or districts.

Guard officials about how they are to review and evaluate industry requests for alternative planning criteria.⁶⁵ For example, the national guidelines state that, to be approved for alternative planning criteria, planholders must

- identify the national planning criteria that are inappropriate for their vessel and intended operating area;
- explain how the proposed alternative(s) would provide procedures, methods, or equipment standards, where applicable, for an equivalent level of planning, response, and pollution mitigation strategies;
- include prevention and mitigation strategies that would ensure a low risk of oil spills and adequate response measures as a result of the alternative; and
- describe how they intend to improve the vessel's response capabilities in the intended operating area over time.⁶⁶

The national guidelines also state that requests should describe vessel characteristics, such as whether a vessel is a tank or nontank vessel and what volume and type of oil it carries, and discuss the costs of complying with national planning criteria compared to using the alternatives, among other things. Planholders must also calculate and document how the vessel's response equipment would perform in different operating

⁶⁵The Coast Guard's Office of Marine Environmental Response Policy issued the national guidance for alternative planning criteria (*Policy Letter 01-17: Alternative Planning Criteria National Guidelines for Vessel Response Plans*) in 2017. According to this guidance, *alternatives* are response strategies that are accepted by the Coast Guard to meet specific VRP requirements where the national planning criteria are inappropriate. Alternatives may change the criteria used in the calculations to determine the scale of planning standards and response resources. VRP requirements remain the same; alternatives are not replacements for VRPs or Geographic-Specific Appendixes.

⁶⁶According to the Coast Guard's national guidelines, *equivalent* means that the alternative provides planning, response, and pollution mitigation capability for the effective removal of spilled oil as would be calculated using the national planning criteria. *Prevention measures* refers to tools, processes, and other means that would be used to mitigate the risk of spillage of oil or other hazardous materials prior to an incident occurring.

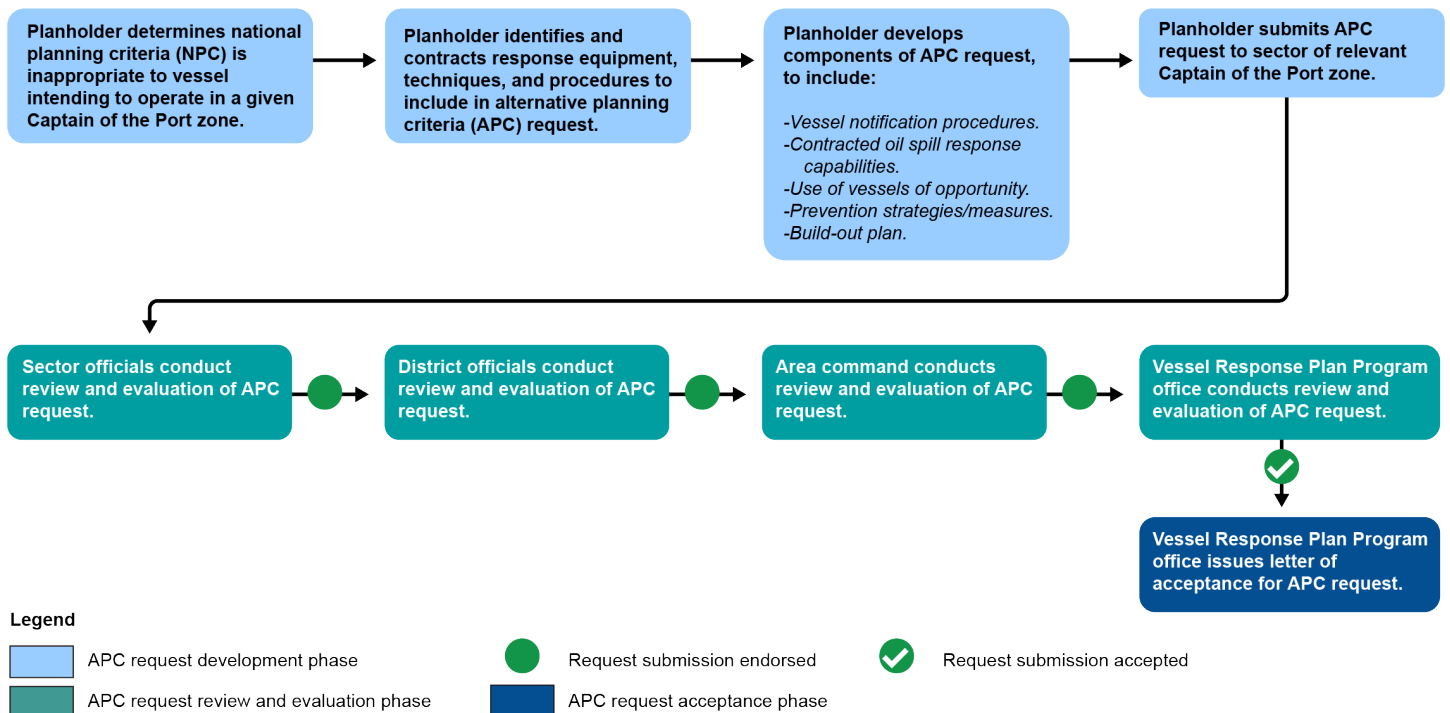
environments, such as nearshore or offshore areas, using formulas described in federal regulation.⁶⁷

According to the national guidelines, the processes for reviewing alternative planning criteria requests starts at the Coast Guard sector where the alternative is to be used.⁶⁸ If the sector endorses the request, then district and area commands are to conduct further reviews, with a final review and decision by the VRP Program office (see fig. 4). If endorsed and accepted, the alternative planning criteria may be included in a submitted VRP for the specific operating area. In their reviews, sector and district officials are to analyze data provided by planholders to determine whether the proposed alternative would be sufficiently equivalent to national planning criteria or not. Once a decision to accept the request has been made, headquarters officials provide a formal correspondence letter to planholders or alternative planning criteria administrators outlining the duration of acceptance and any additional conditions or requirements. The VRP Program office is the only authority for approving a VRP utilizing alternatives. For more information on the review processes for evaluating alternative planning criteria, see appendix IV.

⁶⁷For example, 33 C.F.R. pt. 155, app. B, outlines the process to be used to determine the effective recovery capacity of oil spill recovery devices and to compare that against various potential spill scenarios for the vessel or vessels to be covered under a VRP.

⁶⁸Coast Guard officials at the sector level are responsible for initially reviewing all alternative planning criteria requests for the Captain of the Port zones within their respective sector's area of operation.

Figure 4: U.S. Coast Guard Alternative Planning Criteria Processes



Source: GAO analysis of U.S. Coast Guard information. | GAO-20-554

Note: At any time during the review and evaluation phase, reviewing officials may ask the alternative planning criteria applicant to provide additional clarification or revise their request, as needed, to gain approval.

Regional Guidance and Tools

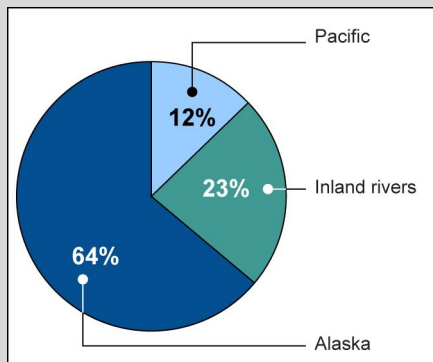
In addition to the national guidelines, Coast Guard officials in sectors and districts have developed supplementary guidance, as well as custom tools and processes, to assist in assessing alternative planning criteria requests within their respective areas of operation.

Specifically, some Coast Guard field units developed regional guidance on alternative planning criteria requirements in 2017 and 2018. For example, in 2018, officials in Sector Honolulu developed supplemental guidance that recommended how planholders should provide information (such as through tables) in their alternative planning criteria requests.⁶⁹ The supplemental guidance provided more details on what applicants should include in their build-out plans, economic assessments, and environmental assessments.⁷⁰ According to sector officials, the guidance also included commonly accepted prevention measures in their areas of

Geographic Locations where Alternative Planning Criteria Are Used

Of the vessel response plans that use alternative planning criteria, nearly two-thirds are for use in Alaska. Other regions where alternative planning criteria are used include the Pacific (Hawaii, American Samoa, and Guam), and inland river areas such as the Mississippi River.

Share of the Number of Vessel Response Plans Using Alternative Planning Criteria, by Region, as of May 2019



Total number of plans using alternative planning criteria is 2,844.

Source: GAO analysis of U.S. Coast Guard data (chart). | GAO-20-554

⁶⁹Sector Honolulu officials said they found that both the federal regulations and the national guidelines were not detailed enough to enable the analysis of national planning criteria requirements and associated gaps, particularly with respect to fleets of vessels, which was the impetus behind developing supplemental guidance with more detail on those topics and others.

⁷⁰According to the Coast Guard's 2017 national guidelines, alternative planning criteria requests should include a *build-out plan* with specific planned milestones for eliminating gaps over time between a vessel's national planning criteria requirements and the available response capabilities in the intended operating area.

operation based on input from Area Committee stakeholders.⁷¹ In Alaska, district officials also issued supplemental guidance to maritime industry about regional requirements for alternative planning criteria request submissions after the national guidelines were finalized in 2017. The district officials also provided guidance for district staff and the maritime industry to ensure that submitted requests contain the required information. See sidebar above for more information on the geographic regions where alternative planning criteria are used.

Sector and district officials also have developed tools that Coast Guard field personnel or maritime industry stakeholders can use when assessing or developing alternative planning criteria requests. For example, in 2019, Sector Honolulu developed a template for planholders to help guide the development of their alternative planning criteria requests. The template included comment boxes that provide details on what could or should be included in a request. Coast Guard officials in Hawaii told us that their supplemental guidance and tools, as well as their concerted outreach efforts to industry stakeholders, have led to reductions in the time needed to assess alternative planning criteria requests and have increased the overall consistency of requests they receive in terms of format and information provided. In addition, Coast Guard field unit officials from both Hawaii and Alaska created custom spreadsheets to assist field personnel in evaluating proposed response resources listed in alternative planning

⁷¹Area Committees were established pursuant to OPA 90 and are part of the larger National Response System. See 33 U.S.C. § 1321(j)(4). Area Committees are chaired by the relevant Federal On-Scene Coordinator and are required to develop Area Contingency Plans—reference documents for use by all agencies and industry partners engaged in responding to environmental emergencies within a defined geographic area. The plans are meant to identify gaps in response capabilities within the area of responsibility and provide guidance for industry partners operating in that region. They are to include, among other things, a description of the responsibilities of an owner or operator and of federal, state, and local agencies in removing an oil spill and in mitigating or preventing a substantial threat of an oil spill and a list of equipment and personnel available to an owner or operator to ensure an effective and immediate removal of an oil spill and to ensure mitigation or prevention of a substantial threat of an oil spill. For additional information, see 40 C.F.R. § 300.210.

criteria requests, as well as to compare the reported performance of a proposed alternative to the national criteria.⁷²

In addition to region-specific guidance, Coast Guard field personnel we spoke with told us they rely on professional judgment in determining the appropriateness of an alternative planning criteria request through a combination of subject-matter expertise and knowledge of response resources available in a given operating area. Coast Guard field personnel also said they rely upon conversations with regional stakeholders, often through the Area Committee, to inform decisions related to the viability of alternatives being proposed for that region.

Communication Methods

Coast Guard officials stated that their processes for assessing alternative planning criteria requests also involve communicating information about requirements to a wide range of stakeholders, using a variety of methods. These stakeholders included the maritime industry; local, state, and other federal government officials; tribal entities; and other nongovernmental organizations in different sectors. Coast Guard officials also stated that the purpose of their communications is to clarify how they evaluate alternative planning criteria requests, provide greater transparency on the processes, and facilitate commerce. These communication methods include the following:

- **Marine Safety Information Bulletins.** The Coast Guard uses these advisory notices to inform the public, the maritime industry, and the Coast Guard of upcoming events, changes to policies, new initiatives, and other items.⁷³ Both the Coast Guard's Office of Marine Environmental Response Policy, as well as sectors, have used these

⁷²For example, if the alternative planning criteria request includes the use of a specific oil spill removal organization, Coast Guard officials use the manufacturer specifications of the organization's equipment that are listed in the Resource Inventory to determine an estimated response capability. Coast Guard officials told us they review both a planholder's calculations for how the alternative compares to national planning criteria as well as independently make their own calculations in the same manner to create a baseline of comparison.

⁷³According to the Coast Guard, Marine Safety Information Bulletins are similar to notices or press releases typically issued through a public affairs function. While these bulletins are not referenced in either the Coast Guard's Marine Safety Manual or Public Affairs Manual, Coast Guard officials said the guidance in those two publications supports the concept of such advisory notices and describes the basic requirements to consider when developing them.

bulletins to provide guidance on VRP regulations and alternative planning criteria requirements.

- **Area Committees.** Coast Guard sector officials chair and facilitate local Area Committee efforts, which allow federal, state, local, tribal, or territorial representatives, as well as members of the maritime industry and general public, to regularly interact on issues related to environmental emergency planning in their geographic regions, and jointly develop plans for oil spill and hazardous material contingencies in U.S. coastal zones. Coast Guard officials, particularly in Alaska, told us that they use Area Committee meetings to educate stakeholders on VRP regulations and alternative planning criteria requirements.
- **Industry events and meetings.** Coast Guard officials periodically present information on topics related to VRPs and alternative planning criteria requirements during national industry-sponsored events and one-on-one meetings. For example, in 2018 and 2019 Sector Honolulu officials hosted two workshops for Area Committee members in American Samoa and Honolulu, respectively, to discuss current alternative planning criteria issues, recent request submissions, and supplemental guidance developed by Coast Guard officials in the region.

The Coast Guard and Maritime Industry Have Identified Challenges with the Alternative Planning Criteria Review Processes and Outcomes

Although Coast Guard officials use national guidelines and regionally developed guidance to inform their review processes and communicate with industry stakeholders, both Coast Guard and maritime industry officials we spoke with told us that the processes are not always efficient or consistently applied. According to these officials, several factors contribute to challenges within the alternative planning criteria review processes. Specifically, officials cited long review time lines for some requests, the impacts of Coast Guard personnel rotation issues, and lack of clarity when evaluating and accounting for the benefits of prevention measures.⁷⁴ Coast Guard officials have established an advisory group intended to examine and provide input to the VRP Program on how to

⁷⁴As previously stated, *prevention measures* refers to tools, processes, and other means that would be used to mitigate the risk of spillage of oil or other hazardous materials prior to an incident occurring.

address various challenges with VRPs, including those identified below that are related to the processes for reviewing and approving alternative planning criteria requests.

Alternative Planning Criteria Evaluation Cycle Time

Coast Guard data show that, since 2015, the agency has generally met its intended time frames for completing its evaluation of alternative planning criteria requests.⁷⁵ However, for three requests, it took between 263 to 448 days for the Coast Guard to complete its reviews. According to the national guidelines, planholders are expected to submit requests at least 90 days prior to the period when a vessel plans to operate in a specific region. However, the guidelines also state that due to the potential complexity of requests, review time lines may exceed 90 days; therefore, the Coast Guard recommends that submitters allow at least 180 days for the review to be completed.⁷⁶ Since August 2015, the Coast Guard has completed its reviews for 24 of 34 individual alternative planning criteria requests (71 percent) within the 90-day period across all districts where requests were submitted.⁷⁷ Of the requests that took longer than 90 days, seven (21 percent) were completed within the recommended 180 days, and three took longer than 180 days—263 days and 323 days for two in District 17 and 448 days for one in District 14.⁷⁸ Headquarters officials told us that those applications were relatively

⁷⁵The Coast Guard Office of Marine Environmental Response Policy began tracking alternative planning criteria data when it took over management of the VRP Program in 2015 and was not able to provide prior data.

⁷⁶According to the Coast Guard, the length of alternative planning criteria requests, as well as the overall time required to review them, is highly variable, since each individual alternative is unique to the specific vessel(s) and region they cover.

⁷⁷This includes Coast Guard Districts 8, 9, 14, and 17.

⁷⁸Headquarters' data reflect the time taken for a submission that is endorsed by the sector to be routed up the review chain. As a result, the data do not reflect the time it may take for the development of the initial request, as well as the review and revision process that can occur, prior to final sector endorsement. As a result, Coast Guard reported review times may not reflect the time spent by maritime industry officials or Coast Guard field personnel to reach the initial approval of a request at the sector level. For example, based on our analysis, one request took 84 days from the date it was submitted to reach sector-level approval. This additional time was not reflected in headquarters data, which indicated the process took 38 days. Another request took approximately 239 days before receiving sector approval, while headquarters data indicated the process took 52 days.

complex and required numerous resubmissions based on the Coast Guard's requests for additional information.

Sector and district officials in Hawaii and Alaska stated that they work with alternative planning criteria administrators and other maritime industry officials to obtain complete information in their alternative planning criteria requests. However, these officials said that submitted requests sometimes do not include key details, and that the cycle of follow-ups and resubmitted requests can increase overall review times. For example, officials said they have received requests that did not clearly identify alternative strategies to national planning criteria requirements, specify the vessels for which they were submitting a request, or include information about oil spill response capabilities.⁷⁹ Sector and district officials also said that initial requests sometimes do not contain information needed because the national guidelines do not provide detail on certain requirements.

The two primary alternative planning criteria administrators in Alaska also stated that misunderstanding of alternative planning criteria requirements and the evaluation processes has contributed to requests with missing or incomplete information. They noted that responses to the Coast Guard's questions and amendments to original requests can significantly increase the documentation requirements as well as the time frames for review at the sector or district level. In addition, both administrators provided mixed feedback on the time frames for reviewing requests.⁸⁰ For example, one stated that in 2014, the Coast Guard took 326 days to approve its plan, but the subsequent renewal of that alternative in 2018 took 84 days; the

⁷⁹According to Coast Guard officials, the response time frames for national planning criteria described in federal regulations are the policy goal that planholders developing VRPs, including those that use alternative planning criteria, should work towards. However, Coast Guard officials said the use of an alternative may not realistically meet national planning criteria requirements; this results in a delta, or gap in potential response coverage, which planholders must address. Coast Guard officials consider the degree such gaps would exist should an alternative planning criteria request be granted, as well as the consequent oil spill response risk to a sector or region that the Coast Guard would carry for the duration of time the request is considered valid.

⁸⁰The administrators we spoke with represent the two most widely used alternative planning criteria in VRPs for tank and nontank vessels in Alaska; we therefore focused on their feedback to provide a more direct comparison between the entities that were the most similar to each other. The Coast Guard has also accepted alternative planning criteria coverage for a third group of tank barge operators in Alaska, but the group is composed of 11 smaller companies that do not have the same coverage requirements as the two administrators previously mentioned.

administrator said that this reflected improved communication and engagement from Coast Guard officials. In contrast, another administrator stated that its 2018 renewal requests for tank vessels and nontank vessels took 298 days and 264 days, respectively.⁸¹ The administrator expressed frustration at the review time, noting that it negatively affected its ability to conduct long-term financial forecasting for planned operations in western Alaska.

Sector and district officials we spoke with also said requests can take a long time to review because the national guidelines do not provide a standard set of tools to assist with their analysis of requests. Such tools could include software, simulators, systems, or other technology relating to data analysis, weather or oil spill trajectory modeling, or risk management tools for comparing proposed alternatives against national planning criteria, according to the officials. While officials have developed custom spreadsheets, as described earlier, to manually calculate a vessel's national planning criteria requirements and other information about the potential performance of listed equipment, officials said they lack more advanced tools, such as customized systems or statistical software, to assist in their calculations. They also noted that such resources could improve the quantitative and qualitative assessments involved in evaluating complex requests.

Coast Guard officials stated that they do not formally track the hours it takes for its staff to complete one alternative planning criteria request evaluation, but they were able to provide estimates on the total cumulative hours spent annually reviewing all requests at the sector, district, and area levels. With respect to annual number of hours spent on reviews, in Alaska, one Coast Guard district official estimated about 2,000 hours annually (or one full-time equivalent) at the district level, and sector officials estimated approximately 1,200 hours in 2019.⁸² In Hawaii, sector officials estimated their review time at about 300 to 500 hours in 2019.⁸³

⁸¹The requests cited by both administrators are reflected in the total number of requests reviewed since 2015 previously described, and include the total number of days from initial submission to sector officials, as well as the time spent on subsequent revisions and answering Coast Guard requests for information or clarification.

⁸²Such tasks included plan review and analysis, documentation, meeting with alternative planning criteria administrators, and addressing operational concerns as they related to waivers and deviations from approved alternative planning criteria plans.

⁸³See app. II for more information on the staff hours used by the Coast Guard to conduct alternative planning criteria reviews.

Coast Guard Personnel Rotation Policy and Alternative Planning
Criteria Reviews

Coast Guard and maritime industry officials both stated that the Coast Guard's rotation policy for military personnel can have a negative impact on reviews. Per policy, Coast Guard military personnel typically rotate through sector and district positions every three years. They may then be replaced by military staff who may have limited familiarity with the area of responsibility, knowledge which maritime industry officials said is critical for alternative plan criteria reviews. Coast Guard officials told us that military staff newly assigned to a role involving alternative planning criteria reviews must learn how the assessment processes applies to their new unit's area of responsibility, which requires time, even if they have general familiarity with VRP and alternative planning criteria concepts. According to Coast Guard officials in Hawaii and Alaska, as well as non-Coast Guard stakeholders we spoke with, the rotation of personnel results in Coast Guard sectors and districts periodically losing valuable experience and local area expertise when staff are reassigned to another duty station.⁸⁴ In addition, officials noted that the review process tends to be highly cyclical with most of the requests undergoing review or coming up for renewal at the same time. As a result, some years may not have any reviews which makes it extremely challenging for rotating personnel to maintain proficiency and consistency of their review skills and knowledge. Furthermore, incoming staff then need time to learn the complex process of evaluating alternative planning criteria requests in their respective regions. For these reasons, sector and district officials highlighted the importance of developing detailed supplemental guidance to help maintain that knowledge. Coast Guard and maritime industry officials also stated that some permanently assigned civilian staff can provide long-term support and subject-matter expertise, but they believe the cycling of military personnel is a contributor to inconsistent review outcomes over time and a factor in the additional time needed for evaluation.

Overall, 12 of the 18 non-Coast Guard stakeholders we spoke with involved in oil spill response or other VRP-related activities and issues cited Coast Guard personnel rotation as a key issue affecting VRP and

⁸⁴This group of stakeholders includes the two primary alternative planning criteria administrators in Alaska, support organizations involved with oil spill response planning, an environmental advocacy group, Alaska state officials, and representatives from maritime industry trade associations.

alternative planning criteria reviews, including four maritime industry stakeholders participating in ongoing alternative planning criteria requests in Alaska.⁸⁵ According to these stakeholders, Coast Guard rotations create uncertainty for planholders, which makes long-term commercial planning difficult because they have little assurance that the requirements will be consistently enforced over time as Coast Guard personnel rotate in and out of the region.

Evaluation of Prevention Measures

Both Coast Guard and non-Coast Guard stakeholders expressed concerns about how the Coast Guard evaluates measures that planholders have included for preventing incidents from occurring—elements that are required to be included in alternative planning criteria requests. For example, the two primary alternative planning criteria administrators in Alaska use automatic identification system technology to track real-time vessel movements. The technology allows them to identify anomalies in a vessel's movements, which could indicate a serious problem such as an engine failure. The tracking system also allows them to identify the closest responders to the troubled vessel to help prevent potential incidents from escalating.

According to the Coast Guard, the viability of such measures depends on the unique factors specific to each individual case, such as the vessel's characteristics, available response resources (both for the vessel and in the region), and limitations imposed by the operating environment itself—such as weather and ocean conditions.

Given that the Coast Guard does not have a standard methodology to assess the potential viability of such measures within alternative planning criteria requests, sector and district officials develop their own standards and processes for determining the potential effectiveness of proposed prevention measures in their respective areas of operation. In some cases, Coast Guard officials work through their local Area Committees to determine what the commonly accepted prevention measures should be for their region. However, sector and district officials in Alaska and Hawaii said the lack of any directive language on prevention measures, such as

⁸⁵Among other effects of this rotation schedule, stakeholders cited insufficient knowledge about oil spill response issues in Alaska, inconsistent communications about VRP or alternative planning criteria requirements, and inconsistent enforcement of those requirements due, in part, to different interpretations based on who is currently serving as the Captain of the Port.

a general set of standards or methods, in regulation or policy guidance, makes this evaluation difficult and can limit their ability to make an informed assessment of an alternative planning criteria request. For example, one district official told us this issue has resulted in a “totality” of a request approach, in which he gives concessions in certain areas where there may be response gaps, even though another review might not have given the same concession.

In Alaska, seven of the eight non-Coast Guard stakeholders we spoke with said the Coast Guard has not provided enough guidance on commonly accepted prevention strategies in that region, nor does it utilize standards or practices to evaluate these strategies in a consistent way.⁸⁶ Industry stakeholders stated that the lack of such standards makes it difficult to determine or quantify how much such measures could reasonably contribute to a proposed alternative’s equivalence to national planning criteria, even though the Coast Guard recommends that planholders quantify these benefits. Industry officials also said the Coast Guard in that region should provide clearer guidance on either what could be appropriately included as prevention measures in requests or how it weighs such measures against the use or acquisition of equipment used for oil spill response. Moreover, industry officials directly involved in developing requests expressed concern that, due to the lack of standards or guidance, they are not confident that the prevention measures they propose are evaluated consistently.

Sector and district officials we spoke with said that to mitigate the challenge of assessing the value and impact of prevention measures, they have developed their own methods and standards for evaluating them utilizing their professional judgment, and they have informed industry stakeholders about them. For example, Sector Honolulu officials have provided examples of commonly accepted prevention measures in their sample alternative planning criteria request template for industry stakeholders. Examples included operating vessels at reduced speeds when transiting within certain distances of land and restricting vessel operations under adverse weather conditions. They further explained that this approach was derived from working with local Area Committee

⁸⁶This group of stakeholders includes the two primary alternative planning criteria administrators in Alaska, support organizations involved with oil spill response planning, an environmental advocacy group, Alaska state officials, and representatives from maritime industry trade associations.

stakeholders to develop general examples of alternatives that could be considered equivalent to national planning criteria in their region.

Although the Coast Guard in Alaska does not currently maintain a list of commonly accepted prevention measures, government and maritime industry stakeholders in Alaska have identified some options for these measures. For example, from 2009 to 2015, numerous government and industry stakeholders in Alaska participated in a multiphase risk assessment of oil spill response challenges for the Aleutian Island area.⁸⁷ Among other things, the assessment resulted in a report with multiple recommendations intended to mitigate risks to that region.⁸⁸ The recommendations included the establishment of real-time vessel monitoring via the automatic identification system to identify vessels that are not in compliance with travel restrictions or are in some way compromised or in distress. The analysis team for that report also recommended the use of a capable emergency-towing vessel stationed in the region to help prevent spills from both self-propelled vessels and barges. According to the report, the use of such measures would address the unique geographic challenges in the Aleutian Island area (such as weather impacts on possible response operations), as well as mitigate some of the costs of maintaining dedicated resources for oil spill response.

In contrast to the Coast Guard, the state of Alaska has established an approach for assessing the value of prevention efforts. Specifically, the state of Alaska requires all VRPs in the state to include individual prevention plans with a detailed description of all oil discharge prevention measures and policies employed on the vessel, with reference to the risks involved.⁸⁹ According to an official from the Alaska Department of

⁸⁷Beginning in 2009, the National Fish and Wildlife Foundation, the Coast Guard, and the state of Alaska Department of Environmental Conservation initiated an effort to assess risks and potential mitigation measures associated with maritime transportation in the Aleutian Archipelago. A multi-stakeholder Advisory Panel, including representatives from wide-ranging stakeholder groups familiar with the region, marine industries, and fisheries and subsistence use provided input throughout the project. Project outcomes were reviewed by a Technical Peer Review Panel of experts coordinated through the Transportation Research Board. The analysis team's recommendations received almost unanimous support from the Advisory Panel members in April 2014.

⁸⁸Nuka Research and Planning Group, LLC, *Aleutian Islands Risk Assessment. Recommending an Optimal Response System for the Aleutian Islands: Summary Report* (Seldovia, Alaska: February 2015). See also *Aleutian Islands Risk Assessment Phase B: Final Program Report* (March 2016).

⁸⁹See 18 A.A.C. § 75.425(e)(2).

Environmental Conservation, the department also utilizes a “credit” system for planholders wherein certain response requirements are reduced in accordance with the type of prevention measures a planholder utilizes.

Coast Guard Recently Established an Advisory Group to Address VRP and Alternative Planning Criteria Challenges, but Has Not Followed Key Program Management Practices

VRP Program officials said that in October 2019 they decided to establish the Maritime Oil Spill Response Plan Advisory Group, composed of a range of Coast Guard stakeholders involved with the alternative planning criteria processes, to examine VRP issues within their areas of operation and provide input to the program on ways to address those issues.⁹⁰ These officials said the decision to establish the group was a result of feedback obtained from field personnel and maritime industry stakeholders on the alternative planning criteria processes since 2017. The group began holding meetings in April 2020.

According to its draft charter, the advisory group will provide input to the VRP Program and the Office of Marine Environmental Response Policy on how to address issues impacting VRP review and approval. Such issues include ensuring that the alternative planning criteria submission and review processes are consistently enforced and well understood. Headquarters officials said they intend to use the advisory group to identify best practices being used by different sectors and districts in their reviews and intend to create a uniform checklist that all regions could use when evaluating alternative planning criteria requests, while still allowing for local requirements and practices. Additionally, these officials said they expect that the national guidelines for alternative planning criteria will likely undergo revisions based on the group’s input and feedback. In April 2020, VRP Program officials told us they had circulated the draft charter, plan of action, and milestones with advisory group members and were awaiting feedback before finalizing both guidance documents. These

⁹⁰According to the draft charter, at a minimum, the advisory group will be composed of a single Coast Guard representative from each of the Captain of the Port zones comprised of remote operating areas where alternative planning criteria exists, such as Sector Anchorage and Sector Honolulu. The advisory group will also have representation from each Coast Guard district, area, and the Office of Marine Environmental Response Policy, among others.

officials said they anticipated a signed charter in May 2020. However, as of August 2020, Coast Guard officials were still obtaining input from various internal entities about the establishment, goals, and time frames of the Maritime Oil Spill Response Plan Advisory Group.

In the interim, headquarters officials confirmed that the group has met weekly since April 2020 through conference calls with officials from affected units. Our review of minutes from the group's meetings held through April 2020 found that Coast Guard stakeholders recognized the need to organize the group around certain goals, such as clarifying alternative planning criteria requirements to maritime industry stakeholders as well as revising the national guidelines, as appropriate. However, Coast Guard officials told us that while they originally intended for the group to complete a full review of the VRP Program by the end of 2020, they will likely not be able to meet this goal due to Coronavirus Disease 2019, associated travel restrictions, and the redirection of limited personnel resources.

Although Coast Guard officials said they intend to use the advisory group to make improvements to the VRP Program, our review of the draft charter for the group and other documentation related to the group's structure and functions found that the advisory group does not reflect key aspects of sound program management, which could affect the group's ability to meet its goals.

- First, the group's charter does not identify the systems and methods for carrying out its work, such as a planned meeting schedule to help ensure that the advisory group remains active even as other priorities arise. Rather, the charter states that the group is to meet when the Advisory Group Chair deems it appropriate.
- Second, the charter does not identify the roles and responsibilities of stakeholders involved, including who will be specifically responsible for ensuring that such improvements are incorporated into new or updated guidance. For example, according to the draft charter, the role of the Advisory Group is to provide advice to the Coast Guard Office of Marine Environmental Response Policy on issues related to the VRP Program and alternative planning criteria, but it will not have policymaking responsibility or authority to implement any recommendations or changes.
- Third, the charter does not identify the mechanisms by which potential process improvements will be made or success will be assessed.

- Fourth, the Advisory Group’s documentation does not establish time frames and milestones for carrying out actions under the plan to help monitor progress toward resolution of existing challenges within the VRP processes.
- Finally, we found that the draft charter also does not identify how, if at all, the Coast Guard will obtain and incorporate feedback from non-Coast Guard stakeholders, such as those within the maritime industry, on identified issues, which may have major implications for their operations.

The Coast Guard’s *Maritime Commerce Strategic Outlook* issued in October 2018 states that the Coast Guard must support uniform and consistent standards for vessels as part of its mission to facilitate lawful trade and travel on secure waterways.⁹¹ *The Standard for Program Management* states that the governance of programs calls for organizations to describe the systems and methods to be used to manage and support a given program as well as describe the roles and responsibilities of key stakeholders and who is to have accountability and authority with respect to key decision-making responsibilities.⁹² Additionally, it states that such plans are to include mechanisms or processes by which potential changes to the program are to be assessed and authorized as well as criteria for defining success. Furthermore, programs should include the concept of time and incorporate schedules through which specific milestone achievements are measured to ensure that appropriate progress is made toward a defined set of outcomes. Lastly, program stakeholders—to include those who use or will be affected by changing policies and procedures—should be continuously engaged to ensure that their feedback is incorporated into efforts to make program changes. Furthermore, the *Coast Guard Strategic Plan for 2018 to 2022* states that the Coast Guard should cultivate relationships across the maritime community and foster productive relationships with the maritime industry to build expertise and enable effective oversight.

The establishment of the Maritime Oil Spill Response Plan Advisory Group is a positive step toward addressing identified challenges within the alternative planning criteria processes. As the Coast Guard continues finalizing its charter and plan of action for the Maritime Oil Spill Response

⁹¹U.S. Coast Guard, *Maritime Commerce Strategic Outlook*, (Washington, D.C.: October 2018).

⁹²Project Management Institute, Inc., *The Standard for Program Management*, 4th ed. (Newtown Square, PA: 2017).

Plan Advisory Group, adopting key practices for program management in its implementation could better position the group to successfully address challenges identified in the VRP approval processes, including those related to reviewing alternative planning criteria requests. In turn, this could also help to promote better familiarity both within and outside of the Coast Guard with the associated review, evaluation, and approval processes for VRPs and alternative planning criteria, as well as the various specific issues different regions face in managing these processes.

Conclusions

The aftermath of the 1989 *Exxon Valdez* oil spill placed greater attention on the environmental risks associated with a large oil spill, and the ensuing enactment of OPA 90 strengthened federal oversight of oil spill prevention and response efforts, in part by requiring VRPs. Nevertheless, we identified several risks that limit the Coast Guard's assurance that VRPs will be implemented as planned in response to an incident. For example, while the Coast Guard conducts some limited verifications of submitted VRPs, its review processes largely rely on self-certified information supplied by industry. Coast Guard officials have acknowledged that they could do more to assess VRPs under current regulations, and in 2018, the Coast Guard initiated an effort to help determine if VRPs have been implemented as planned. While this is an important step, the Coast Guard does not have a process for fully analyzing these real world incidents to determine whether and to what extent certain risks—such as relying largely on self-certified information from industry in their submitted VRPs with limited verification—may affect VRP effectiveness. Given the myriad vessels carrying billions of gallons of oil, as cargo or for propulsion through U.S. waters, the ability of VRPs to facilitate an effective incident response is critical to mitigate the risk of environmental harm and pollution to the marine environment. As such, more thoroughly analyzing data on VRP activations and the extent to which planned resources are effectively used in responses may help the Coast Guard to identify what, if any, changes may be needed to strengthen its VRP review processes.

For remote areas such as Alaska where the national planning criteria cannot be met, industry and planholders have the option of submitting another approach using alternative planning criteria for meeting response requirements. However, given concerns Coast Guard field and industry officials have raised regarding the Coast Guard's review processes, such

as the potential for inconsistent review outcomes and enforcement, the VRP Program established the Maritime Oil Spill Response Plan Advisory Group in October 2019. The establishment of this group, which is intended to examine and advise the Coast Guard on these processes, is a positive step that may help the Coast Guard identify how it can strengthen and clarify the national guidelines and improve consistency in evaluating requests. In developing the charter and plan of action for this advisory group, adopting key program management practices—such as outlining time frames and milestones for conducting its work and establishing mechanisms to assess and incorporate identified improvements into the review processes—would help the Coast Guard to successfully address challenges. Further, given the significant impact of any decisions on maritime industry stakeholders, obtaining and incorporating feedback from these stakeholders, would better position the Coast Guard and maritime industry to work collaboratively to address VRP and alternative planning criteria issues.

Recommendations for Executive Action

We are making the following two recommendations to the Coast Guard:

The Commandant of the Coast Guard should ensure that the Program Manager of the Vessel Response Plan Program establishes a process to analyze incidents where VRPs have been activated to determine whether or how the Coast Guard should improve its VRP review processes—including its approach to verifying plan information, contracts, and the quality of data used in review processes-- to assure VRP effectiveness. (Recommendation 1)

The Commandant of the Coast Guard should ensure that the Vessel Response Plan Program, in developing the charter and plan of action for the Maritime Oil Spill Response Plan Advisory Group, adopts key practices of program management. These practices include—outlining the (1) systems and methods to be used by the group to carry out its work and monitor progress on achieving desired outcomes, (2) roles and responsibilities of stakeholders involved, (3) mechanisms by which potential improvements identified by the group will be incorporated by the Vessel Response Plan Program into its processes and how such progress will be measured, (4) time frames and milestones for carrying out actions under the plan, and (5) mechanisms by which the group will obtain and incorporate feedback from the maritime industry. (Recommendation 2)

Agency Comments

We provided a draft of this report to DHS for review and comment. In its comments, reproduced in full in appendix V, DHS concurred with our two recommendations and described actions planned to address them. DHS also provided technical comments, which we incorporated as appropriate.

With regard to our first recommendation, DHS concurred and stated in its comments that the VRP Program analyzes real-world incidents involving vessel-related oil spills and/or salvage responses to determine whether response actions are conducted in accordance with VRP and regulatory requirements. As noted in our report, the VRP Program has taken steps to collect and review data on VRP activations to obtain awareness of recent incidents and to determine if assets that responded were those identified in the VRP. However, having a process or approach for using its analyses to more broadly identify potential needed improvements to its VRP Program review processes would help the Coast Guard better ensure VRP effectiveness and mitigate the risks identified in the report. In this regard, DHS also stated in its comments that the Coast Guard's Office of Marine Environmental Response Policy, will develop processes to assure VRP effectiveness and initiate policy amendments, as appropriate, through the work of the Maritime Oil Spill Response Plan Advisory Group. DHS estimated the completion date for these actions to be September 30, 2021.

With regard to our second recommendation, DHS concurred and stated that the Coast Guard's Office of Marine Environmental Response Policy signed the charter for the Maritime Oil Spill Response Plan Advisory Group in August 2020, formally establishing the working group to evaluate the VRP Program and make recommendations for improvements. In its comments, DHS stated the group will implement key practices of program management and update the charter and associated plan of action and milestones to reflect the changes, as appropriate. We will review future Coast Guard efforts to implement these actions to determine if they fully address our recommendation. DHS estimated the completion date for these actions to be September 30, 2021.

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

If you or your staff have any questions about this report, please contact me at (206) 287-4804 or AndersonN@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 VI.

A handwritten signature in black ink that reads "Nathan J. Anderson". The signature is written in a cursive, flowing style with a prominent initial 'N'.

Nathan J. Anderson
Director, Homeland Security and Justice

Appendix I: Objectives, Scope, and Methodology

This appendix provides additional information on our objectives, scope and methodology. This report examines (1) the U.S. Coast Guard's (Coast Guard) processes for assessing the adequacy of vessel response plans (VRPs) against national planning criteria and (2) the Coast Guard's processes for assessing alternative planning criteria requests submitted by vessel owners and operators.

To address our first objective, we reviewed Coast Guard regulations as well as Coast Guard policies, VRP Program operating procedures, review checklists, and other guidance on VRP-related activities to identify the standards and key processes used for reviewing and approving plans under national planning criteria. We also reviewed relevant Coast Guard guidance and documents on the processes to obtain, assess, and verify information on the assets and capabilities of response resource providers identified in the plans (e.g., oil spill removal organizations and providers of salvage and marine firefighting resources) to inform plan reviews and for monitoring compliance with VRP requirements.

We selected and interviewed 12 maritime industry stakeholder entities that have key roles or responsibilities in carrying out VRP-related activities, such as their preparation, review, activation, or as providers of response resources in the event of an incident. Specifically, we interviewed officials from two entities that prepare VRPs on behalf of vessel owners or operators; two industry associations that represent owners or operators of vessels required to have VRPs; four entities that provide salvage or marine firefighting response; three oil spill removal organizations; and one protection and indemnity insurer. We interviewed officials of those entities to obtain information on their respective activities to carry out VRP-related requirements, as well as their perspectives on Coast Guard requirements and processes for VRPs and obtaining and verifying information on response resources. We identified and selected these entities through a review of publicly available information on various industry stakeholders, Coast Guard documents and information, and consideration of their geographic proximity to the five Coast Guard sectors we selected as described below. While the information obtained from these entities is not generalizable, these interviews provided context

and perspective from regulated industry and others involved in VRP activities about the Coast Guard's VRP requirements and processes and issues related to incident response.

We also:

- obtained and analyzed Coast Guard data and information for fiscal years 2014 through 2019, as available, on Coast Guard expenditures and personnel staff hours spent by Coast Guard headquarters and field unit staff to carry out VRP plan review, approval, and compliance verification activities.¹ As the Coast Guard does not track personnel hours specifically spent on VRP-related activities, the data and information provided were based on self-reported estimates by Coast Guard program and field unit personnel. We determined these expenditure and personnel data to be sufficiently reliable for background and contextual purposes;
- obtained and analyzed Coast Guard data on enforcement actions taken for VRP-related deficiencies between calendar years 2014 through 2018.² To assess this data for reliability, we examined responses that the Coast Guard provided to questions regarding the administration and oversight of the relevant information systems about how these data were collected and maintained. We determined the data to be sufficiently reliable for background and contextual purposes;
- interviewed Coast Guard officials with the VRP Program at headquarters and with the National Strike Force Coordination Center to obtain information and perspectives on the Coast Guard's activities and authorities related to the review and approval of VRPs.³ Specifically, we interviewed VRP Program officials on the processes and practices used by the program to review plans, including

¹ We chose this time period because it represents the 6 most recent full fiscal years.

²We chose this time period because this was the most recent five year period of data available when we started this work and data for 2019 was not yet available.

³Operating out of Elizabeth City, North Carolina as a unit of the Coast Guard's National Strike Force, the National Strike Force Coordination Center oversees the maintenance of the Response Resource Inventory, Oil Spill Removal Organization Classification Program, and National Maintenance Contract. In addition, the Center provides support and standardization guidance to three geographically positioned strike teams that can assist the response to an oil spill; a hazardous substance release; a weapon of mass destruction or a chemical, biological, radiological, or nuclear event; or natural disaster. The Atlantic Strike Team is located in Fort Dix, New Jersey; the, Gulf Strike Team is located in Mobile, AL; and the Pacific Strike Team is located in Novato, California.

verification of plan information and capabilities of response resource providers, and to ensure that plan reviewers have the professional background, experience, and training appropriate for conducting all VRP reviews. We also interviewed officials with the Coast Guard's Office of Maritime and International Law to obtain information on legal issues related to the Coast Guard's VRP activities. We interviewed officials with the National Strike Force Coordination Center to obtain information on their activities to collect and verify data on oil spill removal organizations;

- interviewed Coast Guard field-unit personnel at five selected sectors (Anchorage, Delaware Bay, Houston-Galveston, San Francisco, and the Upper Mississippi River) to obtain information and perspectives on how VRP-related activities are carried out in the field. We selected these sectors using criteria to provide diversity in terms of geographic location, volume of vessel traffic within the sector, use of alternative planning criteria, number of reported VRP activations or related incidents, and frequency of Coast Guard enforcement actions taken for VRP-related deficiencies. While the information and perspectives obtained from these sectors are not generalizable to all sectors nationwide, they provide context and insight into how VRP-related activities are carried out in the field; and
- finally, we compared the Coast Guard's processes for assessing the adequacy of vessel VRPs with criteria such as key Coast Guard policies and guidance and documentation from the Coast Guard and the Office of Management and Budget (OMB) such as guidance for program evaluations and the Fiscal Year 2021 budget to determine the extent to which they are consistent with such criteria.⁴

To address our second objective, we reviewed Coast Guard regulations, policies, and other guidance on the review and acceptance of requests for use of alternative planning criteria. We also reviewed the field-unit guidance and tools that Coast Guard field unit personnel use to guide their reviews and analysis of requests. We interviewed cognizant officials

⁴U.S. Coast Guard, *Standard Operating Procedures for the Coast Guard's Training System, Volume 2, Analysis*, (Washington, D.C.: Dec. 2018); OMB, *Phase I Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance*, OMB Memorandum M-19-23 (Washington, D.C.: July 10, 2019); OMB, *Increased Emphasis on Program Evaluations*, M-10-01, Memorandum for the Heads of Executive Departments and Agencies (Washington, D.C.: The White House, Oct. 7, 2009); and OMB, *A Budget for America's Future, Fiscal Year 2021 Budget of the U.S. Government*, (Washington, D.C.: Feb. 10, 2020).

with the VRP Program to obtain information on Coast Guard policy and processes for reviewing alternative planning criteria requests, including the establishment and activities of the Maritime Oil Spill Response Plan Advisory Group formed by the VRP Program in April 2020 to consider issues and challenges related to the processes for considering such requests, among other VRP-related response issues. We also interviewed Coast Guard field unit personnel with Pacific Area command, Districts 14 and 17, and Sectors Anchorage and Honolulu to obtain information on their respective policies and processes for reviewing alternative planning criteria requests, the role of regional stakeholders (e.g., state and tribal government entities) in the review processes, how they communicate feedback and provide guidance to requesters of alternative planning criteria, and their perspectives on how the processes for reviewing requests are currently working. We selected those field units because, according to Coast Guard data, they manage the highest volume of alternative planning criteria requests overall.⁵

We also interviewed and obtained information from 18 non-Coast Guard stakeholders involved in alternative planning criteria requests or other VRP-related activities and issues to obtain their perspectives on the Coast Guard's processes for reviewing and evaluating requests, communicating guidance and feedback, and the overall implementation of the alternative planning criteria framework. In addition to the 12 maritime industry stakeholders we interviewed for the previous objective as described above, three of which were response resource providers involved in alternative planning criteria activities in Hawaii and Alaska, we also interviewed other entities such as key alternative planning criteria administrators that have made requests to use alternative planning criteria in Alaska, among other entities. We also interviewed officials with the Alaska Department of Environmental Conservation to obtain their perspective on the Coast Guard's processes for reviewing requests to use alternative planning criteria and its consultation with regional stakeholders

We identified and selected these entities through a review of Coast Guard documents and input from the entities we interviewed who identified other stakeholders we could also consider interviewing for additional perspectives. Given the extensive use of alternative planning criteria in

⁵According to Coast Guard data, of the vessel response plans that use alternative planning criteria, nearly two-thirds are for use in Alaska. Other regions where alternative planning criteria are used include the Pacific (Hawaii, American Samoa, and Guam), and inland river areas such as the Mississippi River.

Alaska, eight of the 18 stakeholders we interviewed had some involvement in activities related to the use or review of alternative planning criteria in the state. While the perspectives of the Coast Guard officials and non-Coast Guard stakeholder entities we interviewed are not generalizable, they provide valuable input on the Coast Guard's processes and implementation of the alternative planning criteria framework in the locations where it is currently most used. Finally, we analyzed key documents of the Coast Guard's Maritime Oil Spill Response Plan Advisory Group, such as the charter, plan of action, and key milestones to determine the extent to which they are consistent and align with the Coast Guard's *Maritime Commerce Strategic Outlook* as well as the standards for program management.⁶

We conducted this performance audit from March 2019 to September 2020 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.

⁶U.S. Coast Guard, *Maritime Commerce Strategic Outlook*, (Washington, D.C.: October 2018) and Project Management Institute, Inc., *The Standard for Program Management*, 4th ed. (Newtown Square, PA: 2017).

Appendix II: U.S. Coast Guard Vessel Response Plan (VRP) Program Staffing Model, Expenditures, and Personnel Hours

VRP Program Staffing Model

The U.S. Coast Guard's (Coast Guard) VRP Program office is staffed by three Coast Guard and 10 contractor staff who review and approve VRPs, liaise with industry and Coast Guard field units, and update policy related to VRP activities. Depending on their position, the staff have different roles and responsibilities. According to VRP Program officials, Coast Guard personnel may fill multiple Coast Guard roles at any given time, depending on the needs of the program. For example, the Commercial Vessel Safety Specialist may also act as the Alternative Planning Criteria Subject Matter Specialist. Table 3 below shows the different positions held by these staff members and their respective roles and responsibilities.

Table 3: Vessel Response Plan (VRP) Program Staff Roles and Responsibilities.

U.S. Coast Guard (Coast Guard)	
VRP Program Manager	Manages the VRP Program, leads Coast Guard staff and works with the VRP Contractor Manager in managing contract staff. Has ultimate accountability for VRP and alternative planning criteria reviews.
VRP Technical Advisor	Provides subject matter expertise, advice, and guidance to contractor staff conducting VRP reviews and liaises between VRP Program staff and Coast Guard field units. Assists the VRP Program Manager with internal projects and external presentations to stakeholders.
Commercial Vessel Safety Specialist	Provides subject matter expertise, advice, and guidance to the Program Manager and contract staff. Leverages Coast Guard and industry networks to improve VRP-related processes.

**Appendix II: U.S. Coast Guard Vessel
Response Plan (VRP) Program Staffing Model,
Expenditures, and Personnel Hours**

Alternative Planning Criteria Subject Matter Specialist	Provides oversight of the alternative planning criteria portion of the VRP review and approval processes. Liaises with Coast Guard field units (Area, District, and Sector commands) on managing alternative planning criteria request submissions. Provides final review of alternative planning criteria requests once all endorsements have been provided by Coast Guard field unit reviewers and ensures that accepted alternative planning criteria requests are properly acknowledged and applied to appropriate VRPs.
Contractor	
VRP Project Manager	Oversees contract staff and is responsible for program improvement and management. Ensures all contractual deliverables and reports are completed on time and accurately; liaises between industry and contracted VRP reviewers; and provides contractual guidance to the Program Manager and Coast Guard Office of Marine Environmental Response Policy.
VRP Contract Program Analyst	Provides guidance, expertise, and, under the direction of the Project Manager, oversight of contracted VRP reviewers.
VRP Marine Transportation Specialists (seven total)	Complete technical reviews of new VRPs, revisions to VRPs, and amendments to VRPs using Coast Guard-provided checklists and guidance to ensure compliance with applicable regulations. Perform reviews of oil spill removal organizations and salvage and marine firefighting resource providers. Enter and maintain data in Coast Guard databases (i.e., VRP Express plan database and the Coast Guard's Marine Information for Safety and Law Enforcement database). Liaise with maritime industry to resolve VRP-related issues and provide status updates.
Senior Documentation Specialist	Supports contractor VRP reviewers and receives logs and distributes incoming correspondence to VRP staff. Assists Project Manager.

Source: GAO analysis of Coast Guard information. | GAO-20-554

Coast Guard Expenditures Related to the VRP and Oil Spill Removal Organization Classification Programs

Coast Guard Expenditures for VRP Program and Personnel

The largest Coast Guard expenditure for the VRP Program is for contract personnel who review plans. From fiscal years 2015 through 2019, expenditures for this contract workforce ranged from about \$842,000 in fiscal year 2015 to about \$1.2 million for fiscal year 2019. A small portion of the program's expenditures to carry out other activities to liaise with stakeholders, such as planholders and resource providers. Table 4 below shows Coast Guard expenditures for the VRP Program for fiscal years 2015 through 2019.

Appendix II: U.S. Coast Guard Vessel Response Plan (VRP) Program Staffing Model, Expenditures, and Personnel Hours

Table 4: U.S. Coast Guard Expenditures for Vessel Response Plan Program, Fiscal Years 2015 through 2019 (dollars in thousands)

Response Plan	2015	2016	2017	2018	2019
Vessel Response Plan Contractor	842	1,145	1,167	1,191	1,214
Vessel Response Plan Program Activities ^a	18	22	20	20	18
Total	860	1,167	1,187	1,211	1,232

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

^aAccording to the Coast Guard, this includes activities (e.g., site visits, outreach, meetings, etc.) to liaise with stakeholders, such as planholders and resource providers.

In addition to expenditures related to contractors and program activities, the VRP Program made expenditures associated with the salaries of Coast Guard personnel working on program activities. According to Coast Guard officials, in addition to three staff members dedicated to the program full-time, three other staff members within the Office of Marine Environmental Response Policy spend a portion of their time carrying out VRP Program-related activities. Coast Guard officials stated that the Coast Guard does not track annual expenditures specifically related to VRP Program work carried out by Coast Guard personnel and, therefore, was unable to provide such information for fiscal years 2014 through 2018. However, according to Coast Guard information for fiscal year 2019, expenditures for Coast Guard personnel carrying out VRP Program activities totaled approximately \$500,000.¹ See table 5.

Table 5: Estimated Expenditures for U.S. Coast Guard (Coast Guard) Salaries for Vessel Response Plan (VRP) Program Activities, Fiscal Year 2019

Position	Fiscal year 2019 annual salary (in dollars)	Estimated percent of time spent on VRP Program activities^a	Total salary spent on VRP Program activities^b (in dollars)
Petty Officer First Class	84,930	100	84,930
Civilian (GS-13)	109,088	100	109,088
Lieutenant Commander	136,152	100	136,152
Commander	152,556	50	76,728
Civilian (GS-15)	166,500	20	33,300

¹We calculated this estimate based on the pay scale of the specific military rank or civilian grade of the Coast Guard personnel involved in the program and the approximate time spent by the personnel on VRP Program activities. According to Coast Guard officials, the percent of time spent on VRP Program activities is an approximate estimate of the relative time spent by persons in that position on VRP Program activities.

Appendix II: U.S. Coast Guard Vessel Response Plan (VRP) Program Staffing Model, Expenditures, and Personnel Hours

Position	Fiscal year 2019 annual salary (in dollars)	Estimated percent of time spent on VRP Program activities^a	Total salary spent on VRP Program activities^b (in dollars)
Captain	168,732	30	50,620
Total Coast Guard personnel expenditures			490,818

Source: GAO analysis of Coast Guard data. | GAO-20-554

^aThe percent of time spent on VRP Program activities is an approximate estimate by the Coast Guard of the relative time spent by persons in that position on VRP Program activities.

^bThe values in this column were calculated based on the percent of time spent by personnel on VRP Program activities multiplied their respective annual salary.

Expenditures for Oil Spill Removal Organization Classification Program

In addition to the VRP Program, the Coast Guard also carries out the Oil Spill Removal Organization Classification Program to obtain information on and verify the capabilities of oil spill removal organizations. The Coast Guard’s National Strike Force Coordination Center administers the program, and the information obtained through the classification program is used by the VRP Program to inform its review of the VRPs and the oil spill removal organization response providers identified in them. From fiscal years 2014 through 2019, the Coast Guard expended anywhere from \$47,000 to \$119,000 per year on the classification program. In addition, as a component of the classification program, the Coast Guard operates and maintains a database inventory, known as the Response Resource Inventory, where organizations are to enter and update information on their response equipment. Coast Guard expenditures to operate and maintain the inventory ranged from \$130,000 in fiscal year 2014 to \$206,000 in fiscal year 2019. See table 6.

Table 6: U.S. Coast Guard Expenditures for the Oil Spill Removal Organization Classification Program, Fiscal Years 2014 through 2019 (dollars)

Program	2014	2015	2016	2017	2018	2019
Oil Spill Removal Organization Classification Program	70,000	115,000	47,000	63,000	62,000	119,000
Response Resource Inventory	130,000	130,000	130,000	206,000	206,000	206,000
Total Expenditures	200,000	245,000	177,000	269,000	268,000	325,000

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Appendix II: U.S. Coast Guard Vessel Response Plan (VRP) Program Staffing Model, Expenditures, and Personnel Hours

VRP Program Staff Hours Spent on Plan Review and Approval Activities

The VRP Program’s contractor staff account for the majority of the time spent reviewing and approving vessel response plans. VRP Program staff spent approximately 31,000 hours each fiscal year from 2014 through 2019 carrying out VRP review and approval activities. See table 7.

Table 7: Hours Spent by Vessel Response Plan (VRP) Program Staff on Plan Review and Approval Activities during Fiscal Years 2014 through 2019, by Staff Type

Program	2014	2015	2016	2017	2018	2019
VRP Program U.S. Coast Guard staff	10,400	10,400	10,400	10,400	10,400	10,400
VRP Program Contractor staff	20,800	20,800	20,800	20,576	20,496	20,704
Total hours	31,200	31,200	31,200	30,976	30,896	31,104

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Note: Data on time spent on these activities were self-reported by U.S. Coast Guard staff involved in the activities.

Coast Guard Field Staff Hours Spent Reviewing Alternative Planning Criteria Requests

Coast Guard field staff at the area, district, and sector command levels also spent time reviewing requests by planholders to use alternative planning criteria for their plans. According to these officials, the Coast Guard does not specifically track the time spent on these reviews because such reviews are a portion of the overall responsibilities they have. However, the officials currently involved in these reviews provided self-reported estimates of the time spent on alternative planning criteria review activities for fiscal year 2019. According to Coast Guard officials, hours spent reviewing requests can vary from year to year, depending on the number and complexity of the requests submitted. See table 8.

Table 8: Estimated Hours Spent by U.S. Coast Guard Field Unit Staff Reviewing Alternative Planning Criteria Requests for Fiscal Years 2019, by Field Unit

Coast Guard Field unit	2019
Sector Anchorage	1,200
Sector Honolulu	300 to 500
District 17	2,000

**Appendix II: U.S. Coast Guard Vessel
Response Plan (VRP) Program Staffing Model,
Expenditures, and Personnel Hours**

Pacific Area

1,200

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Note: Data on time spent on these review activities were self-reported by U.S. Coast Guard staff involved in the activities. According to Coast Guard officials, hours spent reviewing requests can vary from year to year, depending on the number and complexity of the requests submitted.

Coast Guard Field Staff Hours Spent Conducting VRP-related Compliance Activities

A primary means by which the Coast Guard monitors compliance with VRP requirements is through inspections and examinations of vessels when they visit ports within the sectors. Such compliance inspections and examinations cover a number of different areas (e.g., including VRP requirements, health and safety requirements, lifesaving equipment, drills, and navigation equipment) and can take hours to complete. According to Coast Guard personnel we met with at our five site visits, sectors that are involved in carrying out these activities, the VRP-related component of these inspections and examinations represents a relatively small share (typically about 5 to 15 minutes per vessel on average) of the overall total time spent screening for and carrying out inspections of vessels. During the inspections and examinations, the VRP-related items verified for compliance include whether a current copy of the VRP and a current approval letter are on board; whether the sector the vessel is transiting in is listed as an approved zone of operation, or geographic area; and that the qualified individual is identified in the VRP.² The inspection officials we met with stated that they may verify or spot-check the accuracy of some of the information in the VRP, such as the contact information for the qualified individual, by calling the individual, for example. Officials stated that any discrepancies or deficiencies identified during this high-level review of the VRP documents would prompt closer scrutiny of compliance with VRP requirements and extend that portion of the inspection or examination.

While the Coast Guard does not track the time spent by field unit inspection personnel specifically to conduct VRP compliance activities such as inspections and examinations, officials at the five sectors we visited estimated the total time such personnel spent reviewing VRP-related information and documentation during compliance inspections and

²A qualified individual is a shore-based representative of a planholder who has the authority to activate and engage in contracting with the oil spill removal organization and other response-related resources identified in the plan, act as a liaison with the federal on-scene coordinator, and obligate funds required to carry out response activities.

Appendix II: U.S. Coast Guard Vessel Response Plan (VRP) Program Staffing Model, Expenditures, and Personnel Hours

examinations from fiscal years 2014 through 2019. Given that these activities are conducted of vessels visiting ports, the number of inspections and examinations conducted, and the corresponding amount of time spent by a given sector to conduct inspections and examinations, is largely determined by the volume of vessel traffic they receive and, therefore, the time spent can vary widely from sector to sector. See table 9.

Table 9: Estimated Hours Spent by U.S. Coast Guard Personnel at Selected Sectors Conducting Compliance Enforcement Activities for Vessel Response Plan Requirements during Inspections and Examinations of Vessels, Fiscal Years 2014 through 2019

Coast Guard Personnel	2014	2015	2016	2017	2018	2019
Sector Delaware Bay	143	149	165	176	180	139 ^a
Sector San Francisco	46	40	37	35	38	34 ^b
Sector Houston-Galveston ^c	304	289	278	282	270	N/A
Sector Upper Mississippi	18	16	16	12	20	13 ^d
Sector Anchorage ^e	N/A	N/A	N/A	N/A	32	29

Legend: N/A=Not available.

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Note: Data on time spent on these activities were self-reported by U.S. Coast Guard staff involved in the activities.

^aEstimate is for first half of fiscal year 2019.

^bEstimate is for first half of fiscal year 2019.

^cEstimates provided by Sector Houston-Galveston were for calendar years 2014 through 2018 only.

^dEstimate is for first half of fiscal year 2019.

^eData for estimates for fiscal years 2014 through 2017 were not tracked by Sector Anchorage.

Coast Guard Staff Hours Spent on Oil Spill Removal Organization Classification Program Activities

In its role as the lead Coast Guard unit for the Oil Spill Removal Organization Classification Program, the National Strike Force Coordination Center and its personnel spend time on various activities to administer the program. Such activities include maintaining the program’s Response Resource Inventory database and making on-site assessment and spot-check visits to verify the resources identified by the oil spill removal organizations participating in the classification program and their

Appendix II: U.S. Coast Guard Vessel Response Plan (VRP) Program Staffing Model, Expenditures, and Personnel Hours

operability. According to Coast Guard officials, four personnel are responsible for carrying out activities for the classification program. When conducting on-site assessment visits and spot-checks, other Coast Guard personnel at the field unit levels, such as sector and district, also participate; however, the time spent by those personnel conducting those activities is not captured. As table 10 shows, from fiscal years 2014 through 2019, the National Strike Force Coordination Center spent between about 2,800 and 3,700 hours each fiscal year carrying out those activities.

Table 10: Number of Hours Spent by National Strike Force Coordination Center Personnel to Carry Out Oil Spill Removal Organization Classification Program Activities, Fiscal Years 2014 through 2019

Year	2014	2015	2016	2017	2018	2019
Hours	3,736	3,448	2,840	3,256	3,160	3,104

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Appendix III: Key Types of U.S. Coast Guard Enforcement Actions for Violations of Vessel Response Plan (VRP)-related Requirements

Key Types of Enforcement Actions for Violations of VRP-Related Requirements

After a VRP has been approved, the U.S. Coast Guard (Coast Guard) can take a variety of enforcement actions against vessel owners or operators (planholders) to enforce compliance with VRP-related requirements. The enforcement actions range from a written warning to civil penalties, as well as operational controls that can impose limitations on or restrict vessels from operating within U.S. waters. Table 11 below shows the key types of enforcement actions the Coast Guard can take for violations of VRP-related requirements.

Table 11: Types of Enforcement Actions the U.S. Coast Guard (Coast Guard) Can Take for Vessel Response Plan Violations

Type of enforcement action	Description
Warning	A written notice to the responsible party of an apparent violation for which no monetary or other sanction is appropriate. According to Coast Guard guidance, warnings are appropriate for minor first-time violations that are corrected immediately. Warnings may be accepted or declined by the receiving party. When the party accepts, the Coast Guard treats the offense as a proven violation for the purposes of selecting any appropriate future enforcement actions. When the party declines, the Coast Guard proceeds with further enforcement action as necessary to assure compliance and deterrence. According to Coast Guard policy, there are no “verbal” warnings.
Notice of Violation (NOV)	A formal, written notice to the responsible party of an apparent violation for which a monetary penalty of \$10,000 or less is appropriate. The responsible party may either pay the NOV or decline, in which case the NOV is converted to an Administrative Civil Penalty (Class I) action (see below). The NOV and the final disposition is considered part of the record for use in future Coast Guard activities.

Appendix III: Key Types of U.S. Coast Guard Enforcement Actions for Violations of Vessel Response Plan (VRP)-related Requirements

Administrative Civil Penalty (Class I)	Intended for major noncriminal violations, repeat offenders, and minor violations that are not corrected immediately by the responsible party and for which the issuance of a warning or NOV is not appropriate. The responsible party may request an in-person hearing and cases are adjudicated by Coast Guard Hearing Officers. The final disposition of the penalty becomes part of the record for use in future Coast Guard activities.
Operational controls	Actions the Coast Guard can take through Sector or District Commander orders and other administrative orders under the Clean Water Act, among others. For example, the Coast Guard can deny a vessel entry into U.S. waters if allowing entry would create an unacceptable level of risk; or an immediate threat to the port, personnel, or the environment, such as when a vessel lacks an approved vessel response plan. Using another form of operational controls, known as administrative orders, the Coast Guard can direct a responsible party to take appropriate action to mitigate the threat to public health, welfare, or the environment of a discharge, or threat of a discharge and ensure the removal of oil or another hazardous substance by the responsible party, if a discharge has occurred. Operational controls are considered part of the relevant record for use in future Coast Guard activities.

Source: GAO analysis of Coast Guard information. | GAO-20-554

Coast Guard Processes for Monitoring Compliance with VRP-related Requirements

The primary means by which the Coast Guard monitors compliance with VRP requirements is through inspections or examinations of vessels operating within the sectors and federal on-scene coordinators who verify compliance with VRP requirements in the course of oil spills or incident responses. For U.S.-flagged vessels, compliance is monitored through the certification inspections of the vessels.¹ As part of the inspections, Coast Guard inspector personnel conduct a document review of the VRP to confirm that it is valid and contains information, such as whether the VRP is valid for their sector, and that it names a qualified individual and includes their contact information, among other things.² For foreign-flagged vessels, compliance monitoring for VRP-related requirements is accomplished through examinations conducted as part of the Coast

¹46 U.S.C. § 3309 requires that certain vessels possess a Certificate of Inspection, which is granted upon a vessel's satisfactory completion of an inspection for certification. The periods of validity for a certificate vary by vessel type and are specified within the applicable regulations.

²A qualified individual is a shore-based representative of a planholder who has the authority to activate and engage in contracting with the oil spill removal organization and other response related resources identified in the plan, act as a liaison with the federal on-scene coordinator, and obligate funds required to carry out response activities.

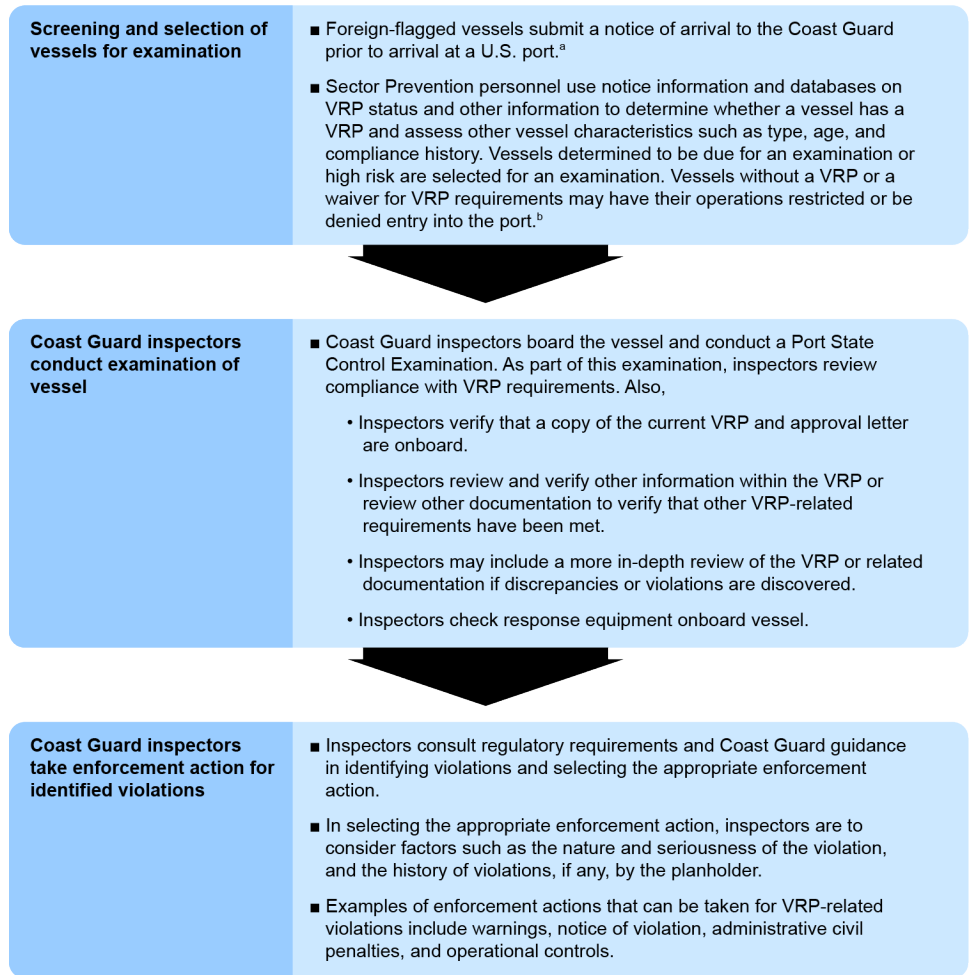
**Appendix III: Key Types of U.S. Coast Guard
Enforcement Actions for Violations of Vessel
Response Plan (VRP)-related Requirements**

Guard's Port State Control program.³ While there is no examination specifically dedicated to VRP requirements, compliance with the requirements is included as part of the Safety and Environmental Protection Compliance Examination. The process is carried out in the sectors that select and examine foreign vessels seeking to enter the sector's area of responsibility. The key steps in this process are shown in figure 5 below.

³Through its Port State Control program, the Coast Guard verifies that foreign-flagged vessels operating in U.S. waters comply with applicable international conventions, U.S. statutes, and U.S. regulations. When vessels are found to be not in substantial compliance with applicable laws or regulations, the Coast Guard imposes controls until the substandard conditions have been rectified and the vessels are brought into compliance. Generally, there are three types of compliance examinations conducted of foreign vessels: Port State Control Safety and Environmental Protection Compliance Examinations, International Ship and Port Security/Maritime Transportation Security Act Security Compliance Examinations, and Non-Convention Security Compliance Examinations (for foreign vessels that need to comply with domestic regulations but not international conventions).

Appendix III: Key Types of U.S. Coast Guard Enforcement Actions for Violations of Vessel Response Plan (VRP)-related Requirements

Figure 5: U.S. Coast Guard (Coast Guard) Process for Monitoring Compliance of Foreign Vessels with Vessel Response Plan (VRP)-related Requirements



Source: GAO analysis of U.S. Coast Guard information. | GAO-20-554

^a33 C.F.R. pt. 160, subpt C, requires that certain arriving vessels provide notice of arrival to the National Vessel Movement Center prior to entering the United States. Among other things, this notice is to include vessel name, type of cargo, country of registry, and vessel response plan control number. Complete information required to be submitted as part of this notice is defined in 33 C.F.R. § 160.206.

^bA vessel owner or operator may be authorized by the applicable Captain of the Port (COTP) to make one voyage to transport or handle oil in a geographic-specific area not covered by the VRP. The vessel owner or operator must certify that: a response plan meeting Coast Guard requirements (except for the applicable Geographic-Specific Appendix) or a shipboard oil pollution emergency plan approved by the flag state that meets international requirements; the approved response plan, or the required plan section(s) is aboard the vessel; the vessel owner or operator has identified and informed the vessel master and the COTP of the designated qualified individual prior to the vessel's entry into the COTP zone; and the vessel owner or operator has identified and ensured the availability of, through contract or other approved means, the private response resources necessary

Appendix III: Key Types of U.S. Coast Guard Enforcement Actions for Violations of Vessel Response Plan (VRP)-related Requirements

to respond, to the maximum extent practicable, to a worst case discharge or substantial threat of discharge from the vessel in the applicable COTP zone. 33 C.F.R. §§ 155.1025(e), .5025.

Coast Guard Data on VRP-Related Enforcement Actions Taken from 2014 through 2018

Coast Guard data on enforcement actions taken for VRP-related violations between calendar year 2014 through calendar year 2018 are shown in table 12. Of the 149 enforcement actions during this time period, 93 were warnings made in 2014 by Sector Anchorage against nontank vessels. According to Coast Guard officials, the high number of enforcement actions taken against nontank vessels in 2014 may be due to the fact that the VRP requirements for nontank vessels went into effect in 2014, so some nontank vessel operators may not have been aware of or prepared to meet the requirement. Although they could not say for certain since they were not stationed at the sector at the time, Sector Anchorage officials stated in 2019 that a possible reason Sector Anchorage accounted for over 90 percent of the enforcement actions overall is that it is usually the first sector many vessels encounter when making trans-Pacific voyages to the U.S. As a result, Sector Anchorage would be the first sector to check for compliance with VRP requirements. According to Coast Guard officials, enforcement actions declined in subsequent years presumably as nontank vessel operators new to VRP requirements became more familiar with the requirements and improved their compliance. The Coast Guard was unable to provide equivalent data on operational control actions taken for VRP-related deficiencies or violations.

Table 12: U.S. Coast Guard Enforcement Actions for Vessel Response Plan (VRP) Violations, by Tank and Nontank Vessels, for Calendar Years 2014 through 2018

Type of enforcement action	2014	2015	2016	2017	2018	Totals
Total Warnings	97	6	0	1	2	106
Tank vessel VRP warnings	4	0	0	0	1 ^a	5
Nontank vessel VRP warnings	93	6	0	1 ^b	1 ^c	101
Total Notices of Violation	29	6	2	1	0	38
Tank vessel VRP notices of violations	25 ^d	6	0	0	0	31
Nontank vessel VRP notices of violations	4	0	2 ^e	1 ^f	0	7
Total Administrative Civil Penalties (Class I)	1	1	0	1	2	5
Tank vessel VRP civil penalties	0	0	0	0	0	0
Nontank vessel VRP civil penalties	1 ^g	1 ^h	0	1 ⁱ	2 ^j	5
Total	127	13	2	3	4	149

**Appendix III: Key Types of U.S. Coast Guard
Enforcement Actions for Violations of Vessel
Response Plan (VRP)-related Requirements**

Source: GAO analysis of U.S. Coast Guard data. | GAO-20-554

Note: Unless noted otherwise in the table notes below, the enforcement actions shown were taken by Sector Anchorage.

^aMarine Safety Unit Texas City.

^bSector Key West.

^cSector Guam.

^dSector Guam issued one tank vessel VRP warning.

^eMarine Safety Unit Paducah issued one nontank vessel VRP notice of violation.

^fSector Miami.

^gMarine Safety Detachment Brownsville.

^hSector Delaware Bay.

ⁱSector Miami.

^jSector Miami issued one nontank vessel VRP civil penalty.

Appendix IV: Additional Information on Alternative Planning Criteria Reviews and Stakeholder Views on Related Issues

Key Alternative Planning Criteria Components Reviewed

According to the alternative planning criteria national guidelines, U.S. Coast Guard (Coast Guard) sectors, district, and area commands are to review and evaluate alternative planning criteria requests before they are submitted to the Vessel Response Plan Program office within the Office of Marine Environmental Response Policy for final review and acceptance for inclusion in a vessel response plan (VRP). During this process, Coast Guard officials examine the listed response resources, the contracts, or other approved means, supporting their inclusion in the plan and attempt to verify the gap between identified resources and what is required for the vessel (or fleet of vessels) in a VRP for that operating area. They also analyze planholder calculations that are to demonstrate how current response resources would not meet national planning criteria planning volume capacities and response times, particularly in the geographic area where the planholder's vessel (or fleet of vessels) intends to operate.¹ As part of their request, planholders must provide information on the types of oil the vessel will carry, as well as the time required to mobilize response resources to the scene with specific capabilities (such as oil containment boom and temporary storage). According to Coast Guard officials, planholders should use this information to define and describe any gaps between the vessel's national planning criteria requirements and its existing capabilities. Planholders are expected to provide a discussion on potential build-out of capabilities to narrow these gaps.

¹Planning volumes are adjusted scenario discharge volumes for Maximum Most Probable Discharge and Worst Case Discharge, which account for oil weathering and response mobilization.

Based on the data and information provided by the planholder in their alternative planning criteria request, Coast Guard officials are to determine the proposed alternative's overall response capability by comparing it against national planning criteria as a baseline to determine whether the proposed alternative could function as an "equivalent" to national planning

criteria.² Officials also use information included in an alternative planning criteria request to determine whether a listed resource provider could reasonably respond within specific time frames.³ Such information could be the location of equipment listed in an alternative, as well as nearby staging areas or logistics hubs. Based on the assessment of this response capability, Coast Guard officials evaluate the alternative's "equivalent" response level of planning, response, and pollution mitigation capability for the effective removal of spilled oil.

According to the national guidelines for alternative planning criteria, in addition to reviewing the proposed alternative for response, Coast Guard officials are also to review other key aspects of the request. For example, Coast Guard officials must evaluate build-out plans that contain specific planned milestones proposed by the planholder to increase response capacity, prevention strategies or measures, and the estimated costs and environmental impacts of utilizing and maintaining the proposed alternative in lieu of national planning criteria-compliant response resources. According to Coast Guard officials, in conducting their reviews, they may also consider the manufacturer's performance specifications of response equipment cited in an alternative planning criteria request—as well as other industry information on oil spill response products—to inform their analysis. In addition, they may consider equipment information from

²According to Coast Guard policy guidance, *equivalent* means that the alternative provides planning, response, and pollution mitigation capability for the effective removal of spilled oil as would be calculated using national planning criteria. Planholders must provide their own calculations and justifications for how an alternative would effectively be equivalent to national planning criteria (or as close to equivalent as possible, given available resources). In the context of alternative planning criteria evaluation, national planning criteria are factors that determine the applicability and scope of response resource capabilities for vessel operators, such as Effective Daily Recovery Capacity and Temporary Storage Capacity. National planning criteria applicability is typically vessel specific, often interdependent, and presented in different sections of federal VRP regulations.

³For example, response equipment identified to respond to a worst case discharge must be capable of arriving on scene within 12 hours from the time of discovery of a discharge in a high-volume port area and the Great Lakes (i.e., a "Tier 1" event as described in 33 C.F.R. pt. 155, app. B).

the National Strike Force Coordination Center's Response Resource Inventory and results from Preparedness Assessment Visits.

Coast Guard and Stakeholder Views on Issues Related to Alternative Planning Criteria

Coast Guard officials and maritime industry stakeholders involved in the alternative planning criteria processes identified issues with the existing processes. These issues include (1) Coast Guard personnel resource issues, and (2) differing perspectives between the Coast Guard and members of the Alaska maritime industry on the appropriate role of alternative planning criteria. Given issues such as these concerning the current review processes, the Coast Guard's VRP Program established the Maritime Oil Spill Response Plan Advisory Group in October 2019 to examine such issues and others and provide input to the program on ways it can address them. As of August 2020, the group was still in process of carrying out those activities.

Coast Guard Personnel Resource Issues

Both Coast Guard and maritime industry officials told us that the Coast Guard generally lacks the resources necessary to facilitate timely alternative planning criteria review and evaluation processes over time. Specifically, Coast Guard officials in both Alaska and Hawaii cited the lack of dedicated staff to review alternative planning criteria requests as an important factor affecting their ability to expeditiously review and evaluate alternative planning criteria requests. According to Coast Guard officials in both areas of operation, staff who review alternative planning criteria requests, which includes both Coast Guard military and civilian staff, typically do so as a collateral responsibility in addition to their primary day-to-day responsibilities. Coast Guard officials said that evaluation of alternative planning criteria requests can substantially increase the workload of reviewers, depending on the complexity and format of the alternative planning criteria request in question, as well as the timing of the request submissions.

Coast Guard and the Alaska Maritime Industry Perspectives on the Role of Alternatives in Alaska

Our discussions with the Coast Guard and maritime industry officials in Alaska also revealed differences in perspective about the appropriate role of alternative planning criteria in providing incident response coverage, as

well as the best methods for that coverage in Alaska. Coast Guard officials told us that although they recognize that alternatives will likely not ever meet the planning standards for national planning criteria, they believe that national planning criteria provide a standardized baseline of comparison against which they can assess the steps taken by planholders and administrators to build alternative response capabilities. Coast Guard officials told us they rely on planholders to specify why a selected national planning criteria would be inappropriate and work with regional administrators to develop solutions for addressing gaps in response. Therefore, according to Coast Guard officials, so long as alternative planning criteria administrators and response resource providers can describe the requisite equipment and capabilities to be used for response and demonstrate that they can reasonably provide an equivalency to national planning criteria planning standards with their proposed alternative, and the Coast Guard can validate those capabilities, then they will consider the inclusion of that equipment and capabilities when evaluating an alternative planning criteria request. Coast Guard officials believe this approach meets the goal of alternative planning criteria, fulfilling both the Coast Guard's environmental stewardship mission, as well as its goal of facilitating maritime commerce.

Maritime industry officials we spoke with across Alaska acknowledged that the Coast Guard has the authority to determine the standards and methods by which to implement the alternative planning criteria processes. However, we consistently heard from these officials that alternatives should, by their nature, be designed to meet the characteristics of their respective operational environments, while taking into account the resources and constraints inherent to those environments. Therefore, according to these officials, identified solutions should be evaluated based on whether they are, or would be, effective in responding to, or preventing, an oil spill discharge in their respective operating environment, rather than trying to meet a set of national standards such as national planning criteria which may or may not be realistically achievable in an environment like Alaska.

Appendix V: Comments from the Department of Homeland Security

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



**Homeland
Security**

September 15, 2020

Nathan J. Anderson
Director, Homeland Security and Justice
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Management Response to Draft Report GAO-20-554, "COAST GUARD: Improved
Analysis of Vessel Response Plan Use Could Help Mitigate Marine Pollution Risk"

Dear Mr. Anderson:

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.

The Department is pleased to note GAO's acknowledgment that the Coast Guard has taken initial steps to strengthen the Vessel Response Plan (VRP) program, including the analysis of incident data involving VRP activations reported to the National Command Center and establishment of the Maritime Oil-spill Response Plan Advisory Group. The Coast Guard remains committed to further analysis of the VRP program and the implementation of improvements to review and approval processes, as appropriate.

The draft report contained two recommendations with which the Department concurs. Attached find our detailed response to each recommendation. DHS previously submitted technical comments under a separate cover for GAO's consideration.

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,

JIM H

CRUMPACKER

JIM H. CRUMPACKER, CIA, CFE
Director

Departmental GAO-OIG Liaison Office

Digitally signed by JIM H
CRUMPACKER
Date: 2020.09.15 14:12:52
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Attachment

**Attachment: Management Response to Recommendations
Contained in GAO-20-554**

GAO recommended that the Commandant of the Coast Guard:

Recommendation 1: Ensure that the Program Manager of the Vessel Response Plan Program establishes a process to analyze incidents where VRPs have been activated to determine whether or how the Coast Guard should improve its VRP review processes to assure VRP effectiveness.

Response: Concur. The Coast Guard's Office of Marine Environmental Response Policy's (CG-MER) VRP Program analyzes real-world incidents involving vessel-related oil-spills and/or salvage responses to determine whether response actions are conducted in accordance with VRP and regulatory requirements. CG-MER, through the work of the Maritime Oil-spill Response Planning Advisory Group (MORPAG) chartered in August 2020, will develop processes to assure VRP effectiveness and initiate policy amendments, as appropriate. Estimated Completion Date (ECD): September 30, 2021.

Recommendation 2: Ensure that the Vessel Response Plan Program, in developing the charter and plan of action for the Oil Spill Response Plan Advisory Group, adopts key practices of program management. These practices include—outlining the (1) systems and methods to be used by the group to carry out its work and monitor progress on achieving desired outcomes, (2) roles and responsibilities of stakeholders involved, (3) mechanisms by which potential improvements identified by the group will be incorporated by the VRP program into its processes and how such progress will be measured (4) time frames and milestones for carrying out actions under the plan, and (5) mechanisms by which the group will obtain and incorporate feedback from the maritime industry.

Response: Concur. CG-MER signed the MORPAG charter in August 2020, establishing the working group to evaluate the VRP Program and make recommendations for improvements. The MORPAG will: (1) implement key practices of program management; and (2) update the charter and associated plan of action and milestones to reflect the changes, as appropriate. ECD: September 30, 2021.

Text of Appendix V: Comments from the Department of
Homeland Security

Page 1

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

September 15, 2020

Nathan J. Anderson
Director, Homeland Security and Justice

U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Management Response to Draft Report GAO-20-554, "COAST
GUARD: Improved Analysis of Vessel Response Plan Use Could Help
Mitigate Marine Pollution Risk"

Dear Mr. Anderson:

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.

The Department is pleased to note GAO's acknowledgment that the Coast Guard has taken initial steps to strengthen the Vessel Response Plan (VRP) program, including the analysis of incident data involving VRP activations reported to the National Command Center and establishment of the Maritime Oil-spill Response Plan Advisory Group. The Coast Guard remains committed to further analysis of the VRP program and the implementation of improvements to review and approval processes, as appropriate.

The draft report contained two recommendations with which the Department concurs. Attached find our detailed response to each recommendation. DHS previously submitted technical comments under a separate cover for GAO's consideration.

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,

JIM H. CRUMPACKER, CIA, CFE
Director
Departmental GAO-OIG Liaison Office

Page 2

**Attachment: Management Response to Recommendations
Contained in GAO-20-554**

GAO recommended that the Commandant of the Coast Guard:

Recommendation 1:

Ensure that the Program Manager of the Vessel Response Plan Program establishes a process to analyze incidents where VRPs have been activated to determine whether or how the Coast Guard should improve its VRP review processes to assure VRP effectiveness.

Response:

Concur. The Coast Guard's Office of Marine Environmental Response Policy's (CG-MER) VRP Program analyzes real-world incidents involving vessel-related oil-spills and/or salvage responses to determine whether response actions are conducted in accordance with VRP and regulatory requirements. CG-MER, through the work of the Maritime Oil-spill Response Planning Advisory Group (MORPAG) chartered in August 2020, will develop processes to assure VRP effectiveness and initiate policy amendments, as appropriate.

Estimated Completion Date (ECD): September 30, 2021.

Recommendation 2:

Ensure that the Vessel Response Plan Program, in developing the charter and plan of action for the Oil Spill Response Plan Advisory Group, adopts key practices of program management. These practices include—outlining the (1) systems and methods to be used by the group to carry

out its work and monitor progress on achieving desired outcomes, (2) roles and responsibilities of stakeholders involved, (3) mechanisms by which potential improvements identified by the group will be incorporated by the VRP program into its processes and how such progress will be measured (4) time frames and milestones for carrying out actions under the plan, and (5) mechanisms by which the group will obtain and incorporate feedback from the maritime industry.

Response:

Concur. CG-MER signed the MORPAG charter in August 2020, establishing the working group to evaluate the VRP Program and make recommendations for improvements. The MORPAG will: (1) implement key practices of program management; and (2) update the charter and associated plan of action and milestones to reflect the changes, as appropriate.

ECD: September 30, 2021.

Appendix VI: Accessible Data

Data Tables

Data Table for Figure 1: Serious Marine Incidents by Incident Type, Fiscal Years 2010 through 2019

Year	Loss of vessel	Oil Spill	Loss of Vessel/Oil Spill
2010	10	1	2
2011	11	1	0
2012	6	0	0
2013	10	1	1
2014	9	2	0
2015	7	2	0
2016	13	0	2
2017	9	0	1
2018	15	2	0
2019	7	1	0

Appendix VII: GAO Contact and Staff Acknowledgments

GAO Contact

Nathan Anderson, (206) 287-4804, AndersonN@gao.gov

Staff Acknowledgments

In addition to the contact above, Dawn Hoff (Assistant Director), Jason Blake, Breanne Cave, Benjamin Crossley, Emilio Fonseca, Charlotte Gamble, Christopher Hatscher (Analyst-in-Charge), Eric Hauswirth, Susan Hsu, Tracey King, John Mingus, Terry Richardson, and Molly Ryan made key contributions to this report.

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