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DEEPWATER HORIZON

Coast Guard and Interior Could Improve Their Offshore Energy Inspection Programs

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Coast Guard and Interior Could Improve Their Offshore Energy Inspection Programs

Highlights of [GAO-12-203T](#), a testimony before the Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

The April 2010 explosion of the *Deepwater Horizon*, a mobile offshore drilling unit (MODU), showed that the consequences of an incident on an offshore energy facility can be significant. A key way to ensure that offshore energy facilities are meeting applicable security, safety, and production standards is through conducting periodic inspections of the facilities. The Coast Guard and the Department of the Interior (Interior) share oversight responsibility for offshore energy facilities. The Coast Guard is to conduct security inspections of such facilities, whereas based on an agreement between the two agencies, Interior is to conduct safety compliance inspections on some offshore facilities on behalf of the Coast Guard as well as its own inspections to verify production. This testimony addresses: (1) the extent to which the Coast Guard has conducted security inspections of offshore energy facilities, and what additional actions are needed; (2) the extent to which Interior has conducted inspections of offshore energy facilities, including those on behalf of the Coast Guard, and challenges it faces in conducting such inspections; and (3) the Coast Guard's oversight authority of MODUs. This testimony is based on GAO products issued from September 2008 through October 2011.

What GAO Recommends

GAO has previously recommended that the Coast Guard develop policies and procedures to monitor and track annual security inspections for offshore energy facilities and that Interior address its human capital challenges. The Coast Guard and Interior agreed.

View [GAO-12-203T](#). For more information, contact Stephen L. Caldwell at (202) 512-9610 or caldwells@gao.gov and Frank Rusco at (202) 512-3841 or ruscof@gao.gov.

What GAO Found

The Coast Guard conducted about one-third of its required annual security inspections of offshore energy facilities from 2008 through 2010 and does not have procedures in place to help ensure that its field units conduct such inspections in accordance with its guidance. The Coast Guard's guidance does not describe specific procedures for the way in which Coast Guard staff should track whether annual inspections have been conducted. For example, Coast Guard field unit supervisors and marine inspectors GAO interviewed from five of the six Coast Guard field units that are to conduct annual security inspections said that they do not maintain any tool to track whether such inspections had been conducted. GAO recommended in October 2011 that, among other things, the Coast Guard develop policies and procedures to monitor and track annual security inspections. The Coast Guard concurred and stated that it is planning to update its guidance for field units to address these issues.

Interior's inspection program has not consistently met its internal targets for production inspections, and faces human capital and reorganization challenges, but has met its limited target for compliance inspections conducted for the Coast Guard. In March 2010, GAO found that for four district offices it reviewed, Interior only met its production inspection goals once during fiscal years 2004 through 2008. Further, GAO reported that difficulties in hiring, training, and retaining key staff had contributed to challenges in meeting its inspections goals. However, in recent years, Interior reported that it met its 10 percent target to conduct compliance inspections of staffed, fixed offshore energy facilities on behalf of the Coast Guard. In fiscal year 2010, Interior reported that it exceeded its target and conducts such inspections on 169 of the 1,021 staffed, fixed offshore energy facilities and has met this target for such inspections for the previous 5 years. In May 2010, Interior reorganized its bureau responsible for overseeing offshore energy activities. In June 2011, GAO reported that while this reorganization may eventually lead to more effective operations, GAO is concerned with Interior's ability to undertake this reorganization while meeting its oversight responsibilities. Among other things, Interior plans to hire additional staff with expertise in inspections and engineering. Amidst these changes, Interior reported that it was difficult to determine how many inspections it would conduct in fiscal year 2012.

The Coast Guard has limited authority regarding the security of MODUs registered to foreign countries, such as the *Deepwater Horizon*. MODUs are subject to Coast Guard security regulations if (1) they are self-propelled or (2) they meet specific production or personnel levels. Whereas the Coast Guard may physically inspect a U.S.-flagged MODU to ensure compliance with applicable security requirements, the Coast Guard's oversight of foreign-flagged, self-propelled MODUs, such as the *Deepwater Horizon*, is more limited. The Coast Guard is conducting a study designed to help determine whether additional actions could better ensure the security of offshore energy facilities, including MODUs. Further, the Coast Guard has implemented a risk-based oversight policy for all MODUs to address safety and environmental protection issues. Although this policy does not directly address security, increased oversight resulting from this policy could help mitigate the risk of a terrorist attack to a MODU.

Chairman LoBiondo, Ranking Member Larsen, and Members of the Subcommittee:

We are pleased to be here today to discuss oversight and inspections of offshore energy facilities. The April 2010 explosion of the *Deepwater Horizon* mobile offshore drilling unit (MODU) showed that the consequences of an incident at offshore energy facilities can be significant. The explosion resulted in 11 deaths, serious injuries, and the largest oil spill in the history of the United States. Recent reports on the *Deepwater Horizon* incident, including the Incident Specific Preparedness Review, On Scene Coordinator Report, and Joint Investigation Team Report, have raised questions about the oversight of such offshore energy facilities.¹ Our recent work raises similar concerns about federal inspections and related oversight of offshore energy facilities and MODUs.²

Offshore energy facilities include facilities that operate on the outer continental shelf (OCS) and are generally described as facilities temporarily or permanently attached to the subsoil or seabed of the OCS and which engage in exploration, development, or production of oil, natural gas, or mineral resources.³ There are currently about 3,900 such facilities in the Gulf of Mexico, which include fixed and floating offshore energy facilities as

¹U.S. Coast Guard, *BP Deepwater Horizon Oil Spill: Incident Specific Preparedness Review* (Washington, D.C.: January, 2011); *On Scene Coordinator Report: Deepwater Horizon Oil Spill* (Washington, D.C.: September 2011); and *Report of Investigation into the Circumstances Surrounding the Explosion, Fire, Sinking, and Loss of Eleven Crew Members Aboard the Mobile Offshore Drilling Unit Deepwater Horizon in the Gulf of Mexico, April 20-22, 2010, Volume I* (Washington, D.C.: September 2011).

²GAO, *Maritime Security: Coast Guard Should Conduct Required Inspections of Offshore Energy Infrastructure*, [GAO-12-37](#) (Washington, D.C.: October 28, 2011); *Oil and Gas: Interior's Restructuring Challenges in the Aftermath of the Gulf Oil Spill*, [GAO-11-734T](#) (Washington, D.C.: June 2, 2011); and *Oil and Gas Management: Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes*, [GAO-10-313](#) (Washington, D.C.: Mar. 15, 2010).

³See 33 C.F.R. § 101.105. The OCS is a designation for all submerged lands extending seaward from generally 3 nautical miles off the coastline to at least 200 nautical miles, and of which the subsoil and seabed appertain to the U.S. and are subject to its jurisdiction and control. See 43 U.S.C. § 1331(a); 33 C.F.R. § 140.10.

well as MODUs.⁴ The nation's economy and security are dependent, in part, on the domestic offshore exploration and production of oil and natural gas that occur at offshore energy facilities. However, if an incident occurs at one of these offshore facilities, it could be difficult for the Coast Guard and other federal or local agencies to respond quickly because such facilities are generally located many miles from shore.

A key way to ensure that offshore energy facilities are meeting applicable security, safety, and environmental standards is through conducting periodic inspections of the facilities. The Coast Guard and the Department of the Interior (Interior) share oversight responsibility for offshore energy facilities. The Coast Guard—a component of the Department of Homeland Security—is the lead federal agency responsible for maritime security, including the security of offshore energy facilities. Interior, through its component agencies, is the lead federal agency responsible for enforcing safety, environmental oversight, and conservation compliance regarding offshore resources on the OCS.⁵

Our testimony today will address three main objectives:

- the extent to which the Coast Guard has conducted security inspections of offshore energy facilities, and what additional actions are needed;
- the extent to which Interior has conducted inspections of offshore energy facilities, including those on behalf of the Coast Guard, and what challenges it faces in conducting such inspections; and

⁴A fixed offshore energy facility is a bottom-founded facility permanently attached to the seabed or subsoil of the OCS, including platforms, guyed towers, articulated gravity platforms, and other substructures. A floating offshore energy facility is a buoyant facility securely and substantially moored so that it cannot be moved without special effort. This term includes tension leg platforms, spars, semisubmersibles, and shipshape hulls. A MODU is a vessel capable of drilling operations for exploring or exploiting subsea oil, natural gas, or other minerals.

⁵On October 1, 2011, the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), reorganized into two independent entities: the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE). BOEM is responsible for managing development of the nation's offshore resources in an environmentally and economically responsible way, and its activities include oversight of leasing, environmental studies, and economic analysis. BSEE is responsible for enforcing safety and environmental regulations. More information on this reorganization is provided later in this statement.

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- the Coast Guard’s oversight authority of MODUs.

This testimony is based on an October 2011 report on the Coast Guard’s efforts to ensure the security of offshore energy facilities⁶ as well as our body of work on Interior’s oil and natural gas leasing and royalty collection programs issued from September 2008 through June 2011.⁷ We conducted the performance audit work that supports this statement in accordance with generally accepted government auditing standards. Detailed information on the scope and methodology for our prior work can be found in those reports. Further, we reviewed memorandums of understanding or agreement between the Coast Guard and Interior regarding how the two agencies regulate offshore energy facilities as well as agency documents, such as budget justifications.

Background

Memorandum of Understanding Regarding Jurisdictions on the OCS

In 2004, the Coast Guard and the Minerals Management Service—a component of Interior that was subsequently reorganized into the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), and, most recently, the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE)—signed a memorandum of understanding (MOU) to delineate inspection responsibilities between the agencies. Per the MOU, the Coast Guard is responsible for ensuring (1) the safety of life and property on offshore energy facilities and vessels engaged in OCS activities; (2) workplace safety and health, including enforcement of requirements related to personnel, workplace activities, and conditions and equipment on the OCS; and (3) security of offshore energy facilities. The MOU assigns Interior responsibility for, among other things, managing the nation’s oil, natural gas, and other mineral resources on the OCS in a safe and environmentally sound manner.

⁶[GAO-12-37](#).

⁷[GAO-11-734T](#); [GAO-10-313](#); and GAO, *Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put MMS Royalty Collections at Risk*, [GAO-08-893R](#) (Washington, D.C.: Sept. 12, 2008).

In addition to delineating inspection responsibilities between the Coast Guard and Interior, the MOU is further divided into five memorandums of agreement, one of which addresses the agencies' responsibilities where jurisdiction overlaps. In accordance with this memorandum of agreement, the Coast Guard is the lead agency with responsibility for the inspection and testing of all marine and lifesaving equipment onboard fixed and floating offshore energy facilities and MODUs, and Interior is the lead agency with responsibility for the inspection and testing of all production and drilling equipment on these facilities. The Coast Guard, however, had authorized Interior (specifically, what was then the Minerals Management Service) to perform inspections of fixed offshore energy facilities and to enforce Coast Guard regulations applicable to such facilities. For example, the Coast Guard is to conduct an initial inspection of each new fixed offshore energy facility to determine whether it is compliant with Coast Guard safety regulations. However, after the initial inspection, the Coast Guard has authorized Interior's inspectors to conduct such safety inspections on behalf of the Coast Guard and enforce Coast Guard regulations applicable to those facilities as a means to avoid duplicating functions, reduce federal costs, and increase oversight for Coast Guard compliance without increasing the frequency of inspections. Therefore, with respect to fixed offshore energy facilities, the only inspections for which the Coast Guard is exclusively responsible beyond the initial safety inspection are the annual security inspections, to the extent that these facilities meet the applicable criteria, as described below. The Coast Guard continues to have responsibility for conducting inspections and enforcing its regulations on floating offshore energy facilities and MODUs.

Coast Guard's Security Inspection Responsibilities

In accordance with federal laws, agreements between the Coast Guard and Interior described above, and Coast Guard guidance, Coast Guard is responsible for conducting annual security inspections of offshore energy facilities that meet or exceed any one of three thresholds for production or personnel—(1) producing greater than 100,000 barrels of oil a day, (2) producing more than 200 million cubic feet of natural gas per day, or (3) hosting more than 150 persons for 12 hours or more in each 24-hour

period continuously for 30 days or more.⁸ We refer to the 57 offshore energy facilities that met or exceeded these thresholds at some point from 2008 through 2010—and were therefore subject to security inspections during those years—as “OCS facilities.”⁹ Of these 57 OCS facilities, all of which are located in the Gulf of Mexico, 41 are fixed OCS facilities and 16 are floating OCS facilities.¹⁰

Staff at Coast Guard headquarters oversee and develop policies and procedures for field staff to follow when conducting security inspections of OCS facilities and to assist affected owners and operators so that they can comply with maritime security regulations. Among other things, Coast Guard marine inspectors in the field units conduct security inspections of OCS facilities by taking helicopter rides to facilities that can range up to 200 miles offshore. Once arriving, inspectors are to conduct on-site interviews with facility security officers and observe operations to verify whether required security measures are in place. As of August 2011, the

⁸See 33 C.F.R. § 106.105(a). In accordance with the Maritime Transportation Security Act (MTSA) of 2002, as amended, and its implementing security regulations, codified at parts 101 to 106 of title 33, Code of Federal Regulations, the Coast Guard undertakes efforts to ensure maritime security by, among other things, reviewing and approving security plans produced by owners and operators of regulated vessels and facilities. See Pub. L. No. 107-295, 116 Stat. 2064 (2002). An amendment by the Security and Accountability For Every (SAFE) Port Act of 2006 provides that, subject to the availability of appropriations, the Secretary of the Department of Homeland Security shall verify the effectiveness of facility security plans at least twice a year, one of which shall be an inspection of the facility conducted without notice. See Pub. L. No. 109-347, § 103, 120 Stat. 1884, 1888 (2006) (codified at 46 U.S.C. § 70103(c)(4)(D)). The Coast Guard undertakes to assess the effectiveness of such facility plans by, for example, conducting security inspections.”

⁹Facilities that meet these thresholds are subject to 33 C.F.R. part 106, which include additional security related requirements. For more information on the security of facilities regulated under part 106, see [GAO-12-37](#).

¹⁰A fixed OCS facility is a fixed offshore energy facility that meets at least one of the applicable threshold criteria to be regulated for security under 33 C.F.R. part 106. Fixed OCS facilities include (1) production platforms that produce oil and/or natural gas; and (2) transmission platforms, whose primary purpose is the pumping, maintenance, and/or inspection of transfer pipelines. A floating OCS facility is a floating offshore energy facility that meets at least one of the applicable threshold criteria to be regulated for security under 33 C.F.R. part 106. This term includes tension leg platforms and permanently moored semisubmersibles or shipshape hulls, but does not generally include MODUs or other vessels. However, for the purposes of this report, we include non-self-propelled MODUs that meet relevant production or personnel thresholds in the category of floating OCS facilities because such MODUs are also regulated for security under 33 C.F.R. part 106. From 2008 through 2010, there was one such MODU that was regulated for security under 33 C.F.R. part 106.

Coast Guard had about 12 active marine inspectors who were qualified to conduct security inspections of OCS facilities. These inspectors work out of six field units near the Gulf of Mexico—Mobile, Alabama; Morgan City, Louisiana; New Orleans, Louisiana; Corpus Christi, Texas; Galveston, Texas; and Port Arthur, Texas.

Interior’s Inspection Responsibilities

In line with the responsibilities set forth in the MOU discussed above and to ensure compliance with applicable laws and regulations, Interior has an offshore oil and natural gas inspection program intended to verify that the operator complies with Interior regulations and requirements at a well site. Interior’s offshore oil and natural gas oversight includes inspections of production activities including drilling, regular production activities, meters, abandoned platforms, and pipelines, among other things.¹¹ Also in accordance with the MOU between the two agencies, Interior conducts both “full” and “limited” inspections of fixed offshore energy facility on behalf of the Coast Guard. During the full inspections of staffed, fixed offshore energy facilities, Interior’s inspectors are to review all applicable Coast Guard requirements, which include 27 safety items. During limited inspections, which are to be conducted on all fixed offshore energy facilities in the course of conducting inspections at those facilities for Interior’s purposes, Interior’s inspectors are to review less than half of the safety items. During these inspections, Interior’s inspectors are to, among other things, check for safety items such as the presence of equipment designed to prevent tripping, slipping, or drowning.

¹¹For the purposes of this testimony we refer to “production inspections,” which are measurement-related inspections that Interior defines as “site security” inspections. These inspections are designed to verify that offshore platforms and other measurement facilities meet Interior regulations concerning the handling of oil and gas production. Site security inspections typically include a visual examination of piping to verify that oil and gas do not flow around—or bypass—measurement meters.

Coast Guard's Security Inspection Program Has Faced Challenges and Could Be Improved

Coast Guard OCS facility guidance provides that Coast Guard personnel are to conduct security inspections of OCS facilities annually, but our analysis of inspections data show that the Coast Guard has not conducted such inspections for most of these OCS facilities.¹² For example, the Coast Guard conducted about one-third of the required annual inspections of OCS facilities from 2008 through 2010 (see table 1).¹³ Specifically, our analysis of Coast Guard inspections data shows that in 2008 the Coast Guard inspected 7 of 56 OCS facilities, which was 13 percent of the required annual inspections. More recently, in 2010, the Coast Guard inspected 23 of 51 (45 percent) OCS facilities that the Coast Guard should have inspected.¹⁴

¹²We use the term OCS facility guidance to refer to the Coast Guard's NVIC 05-03, *Implementation Guidance for the Maritime Security Regulations Mandated by the Maritime Transportation Security Act of 2002 for Outer Continental Shelf Facilities* (December 15, 2003).

¹³We present security inspection data only from 2008 through 2010. We also analyzed security inspection data for 2011 (through June 24, 2011), but did not report on this information because most of the annual security inspections on OCS facilities are typically not conducted until the fall. From January through June 2011, the Coast Guard conducted four inspections of the OCS facilities.

¹⁴These data come from the Coast Guard's Maritime Information for Safety and Law Enforcement database. As discussed in [GAO-12-37](#), we found that the database had limitations that make it difficult to determine if security inspections were conducted. To address these limitations, we worked with Coast Guard officials and took additional steps to assess the reliability of the data, which are described in that report. We recommended that the Coast Guard make improvements to the database or its guidance to better ensure that all OCS facilities are accurately and consistently identified and that the results of security inspections are consistently recorded to allow for better data analyses and management of the security inspections process. The Coast Guard concurred with this recommendation.

Table 1: Security Inspections Required and Conducted of OCS Facilities, Calendar Year 2008 through 2010

Coast Guard field unit	2008		2009		2010	
	Inspections required	Inspections conducted	Inspections required	Inspections conducted	Inspections required	Inspections conducted
Corpus Christi	2	1	2	1	2	1
Galveston	5	2	4	3	4	4
Mobile	1	0	1	0	1	0
Morgan City	31	3	32	7	31	7
New Orleans	10	1	7	2	6	5
Port Arthur	7	0	7	7	7	6
Total (%)	56	7 (13%)	53	20 (38%)	51	23 (45%)

Source: GAO analysis of Coast Guard data.

Note: The number of OCS facilities fluctuates year-to-year based on whether a facility continues to meet or exceed the threshold criteria. For example, in 2009 there were 53 OCS facilities, but in 2010, 2 of the facilities became "deregulated." Once a facility (1) is below the production thresholds for a year or below the personnel threshold for 30 days; (2) has informed the Coast Guard; and (3) provided relevant documentation supporting that the facility is below the thresholds, the Coast Guard considers it no longer subject to 33 C.F.R. part 106 requirements and the facility will no longer be subject to security inspections.

Our analysis of Coast Guard inspections data shows that the Coast Guard generally inspected a greater percentage of floating OCS facilities than fixed OCS facilities (see table 2). For example, from 2008 through 2010, the Coast Guard conducted annual security inspections of 54 percent of floating OCS facilities compared to 24 percent of fixed OCS facilities. During our interviews with Coast Guard marine inspectors and their supervisors, we learned that some field units did not know that they were responsible for conducting security inspections of these fixed facilities, approximately one-third of which are not staffed because operations are automated. For example, marine inspectors in the Coast Guard field unit that oversees more than half of the OCS facilities stated that they had only recently learned that they were responsible for conducting security inspections of fixed OCS facilities. These marine inspectors stated that they thought that security inspections of the fixed OCS facilities within their area of responsibility were carried out by another field unit and that they had only been conducting annual security inspections of the floating OCS facilities. Further, other Coast Guard officials stated that it is easier to arrange for security inspections of floating OCS facilities because marine inspectors visit those facilities more frequently for other types of inspections, such as hull or safety inspections, whereas for fixed OCS facilities, the Coast Guard is required to conduct an initial safety inspection of each new facility and then is

solely responsible for conducting annual security inspections of fixed OCS facilities once a year for annual security inspections.¹⁵

Table 2: Security Inspections Required and Conducted at OCS Facilities, by Type, Calendar Year 2008 through 2010

Type	Inspections required	Inspections conducted	Percentage
Fixed OCS facility	119	28	24%
Floating OCS facility	41	22	54%

Source: GAO analysis of Coast Guard data.

The Coast Guard does not have procedures in place to help ensure that its field units conduct annual security inspections of OCS facilities annually in accordance with its guidance. *Standards for Internal Control in the Federal Government* state that internal controls should include control activities, such as policies, procedures, and mechanisms that help ensure management directives are carried out.¹⁶ However, the Coast Guard does not have such control activities in place. For example, the Coast Guard's OCS facility guidance does not describe specific procedures for the way in which Coast Guard staff should track whether annual security inspections have been conducted. Further, Coast Guard district officials and most local field unit supervisors and marine inspectors we spoke with do not maintain any kind of tool, such as a spreadsheet or calendar, to remind them when annual security inspections of OCS facilities are due. Coast Guard officials from five of the six Coast Guard field units that conduct annual security inspections of OCS facilities told us that they do not maintain a spreadsheet or other management tool to track whether

¹⁵As noted above, per the memorandum with Interior, the Coast Guard is solely responsible for the initial safety inspection of fixed offshore energy facilities, which includes fixed OCS facilities, after which Interior is authorized to conduct annual safety inspections of and enforce Coast Guard regulations applicable to such facilities. However, for floating facilities the Coast Guard still carries out various inspections throughout the year, including hull inspections.

¹⁶GAO, *Standards for Internal Control in the Federal Government*, [GAO/AIMD-00-21.3.1](#) (Washington, D.C.: November 1999). These standards, issued pursuant to the requirements of the Federal Managers' Financial Integrity Act of 1982 (FMFIA), provide the overall framework for establishing and maintaining internal control in the federal government. Also pursuant to FMFIA, the Office of Management and Budget (OMB) issued Circular A-123, revised December 21, 2004, to provide the specific requirements for assessing the reporting on internal controls. Internal control standards and the definition of internal control in OMB Circular A-123 are based on GAO's *Standards for Internal Control in the Federal Government*.

annual security inspections had been conducted. For example, at three of these locations, Coast Guard officials told us they rely on owners and operators to inform them when inspections were due rather than independently tracking when annual inspections were due. As a result of no procedures or control activities to manage the offshore security inspection program, the Coast Guard is not complying with its established maritime security requirements for most of the OCS facilities. Without conducting annual inspections of OCS facilities, the Coast Guard may not be meeting one of its stated goals of reducing the risk and mitigating the potential results of an act that could threaten the security of personnel, the OCS facility, the environment, and the public.

In our October 2011 report, we made a recommendation, among others, that the Coast Guard develop policies and procedures to monitor and track annual security inspections for OCS facilities to better ensure that such inspections are consistently conducted. The Coast Guard concurred with this recommendation and stated that it is planning to update its OCS facility policy guidance for field units to monitor and track annual security inspections for OCS facilities to better ensure that such inspections are consistently conducted.

Interior's Inspection Program Has Faced Challenges in Meeting Some Inspection Targets

Interior's inspection program has not consistently met its internal targets for production inspections, as we have reported in recent years. In 2008, we reported that Interior had not met its targets for conducting production inspections—examining metering equipment used to measure oil and natural gas production. Interior officials responsible for conducting production inspections in the Gulf of Mexico told us they completed about half of the required inspections in 2007, raising uncertainty about the accuracy of oil and natural gas measurement.¹⁷ In March 2010, we found that Interior had not routinely met its oil and natural gas production inspection goals. Specifically, we reported that Interior met its inspection goals only once—in 2008—during fiscal years 2004 through 2008, for four

¹⁷GAO, *Mineral Revenues: Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put MMS Royalty Collections at Risk*, [GAO-08-893R](#) (Washington, D.C.: Sept. 12, 2008).

district offices we reviewed in the Gulf of Mexico and the Pacific.¹⁸ Interior inspection staff told us that, during these years, there was a shortage of inspectors and that inspections were delayed because of cleanup related to Hurricanes Katrina and Rita in 2005. We are unable to present data for these years because, according to Interior officials, district offices often did not correctly record production inspections on their inspection forms; since then, Interior instituted a policy to record inspections correctly. Also in March 2010, we reported that Interior had encountered persistent human capital challenges in its inspection programs designed to ensure accurate measurement of oil and natural gas from federal lands and waters.¹⁹ In particular, we reported that Interior was hindered by difficulties in hiring, training, and retaining key inspections staff. We reported that this difficulty in attracting and retaining key staff contributed to challenges in meeting its responsibilities to conduct inspections, thereby, reducing its oversight of oil and gas development on federal leases, potentially placing the environment at risk. In our report, we made a number of recommendations to Interior to address these issues, some of which Interior is already in the process of implementing.

Although Interior has not consistently met its internal targets for production inspections, it has exceeded its target for Coast Guard compliance inspections. For fiscal year 2010, the most recent year reported, Interior's goal was to conduct full inspections covering all applicable Coast Guard regulations on 10 percent of the estimated 1,000 staffed, fixed offshore energy facilities. For fiscal year 2010, Interior reported that it more than met this goal by conducting such inspections on 169 of the 1,021 staffed, fixed offshore energy facilities—about 17 percent.²⁰ Further, Interior reported that it has met internal targets for

¹⁸In 2008, Interior changed its goal for measurement inspections for the Gulf of Mexico, its major production area. In 2008, the goal was to inspect the 100 highest-volume measurement locations in the Gulf. From 2004 through 2007, OEMM's goals were to conduct measurement inspections on 100 percent of all measurement locations. During those years, the agency performed about half of the inspections required to meet these annual goals.

¹⁹GAO, *Oil and Gas Management: Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes*, [GAO-10-313](#) (Washington, D.C.: Mar. 15, 2010).

²⁰Interior officials told us that Interior has never received additional funding to cover the inspections agreed upon in the MOU, and that Interior may review the MOU in the future based on level of future funding and its own inspection mandates.

these inspections for the previous 5 years. In addition, Interior reported that in fiscal year 2010 its inspectors also conducted limited inspections for compliance with Coast Guard regulations on all other fixed offshore energy facilities in the course of inspecting these facilities for their own purposes.

Interior has recently been reorganizing its offshore inspection program, which has resulted in some uncertainty regarding its inspection capabilities. After the *Deepwater Horizon* incident in April 2010, Interior initiated a reorganization of its bureau responsible for overseeing offshore oil and natural gas activities. Specifically, in May 2010, Interior reorganized its Minerals Management Service—the bureau previously tasked with overseeing offshore oil and natural gas activities—and created the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE). On October 1, 2011, Interior was further reorganized by dividing BOEMRE into two separate bureaus, the Bureau of Ocean Energy Management (BOEM)—which oversees leasing and resource management, and the Bureau of Safety and Environmental Enforcement (BSEE)—which is responsible for issuing oil and natural gas drilling permits and conducting inspections. We have reported that Interior could face challenges during its reorganization. In June 2011, we testified that Interior’s reorganization of activities previously overseen by MMS will require time and resources and may pose new challenges.²¹ We stated that while this reorganization may eventually lead to more effective operations, organizational transformations are not simple endeavors. We also expressed concern with Interior’s ability to undertake this reorganization while meeting its oil and natural gas oversight responsibilities. We believe that these concerns are still valid today.

While Interior was reorganizing its oversight responsibilities, it was also reforming its inspection program and, according to Interior, these reforms have created uncertainty regarding future oversight inspections. As part of the inspections program reform, Interior plans to hire additional staff with expertise in oil and natural gas inspections and engineering and develop new training programs for inspectors and engineers involved in its safety compliance and enforcement programs. Specifically, Interior reported in February 2011 that it was seeking to hire additional inspectors for its offshore inspection program to meet its needs during fiscal years

²¹[GAO-11-734T](#).

2011 and 2012.²² Interior reported that it had 62 inspectors—which, it reported, was not sufficient to provide the level of oversight needed for offshore oil and natural gas production. Interior has also requested additional funding to implement these changes. Further, Interior has stated that its new inspection program may involve inspectors witnessing more high-risk activities, and in-depth examination of some aspects of Gulf oil and natural gas production, and so inspections may take more time in the future and be more difficult to fold into the existing inspection schedules. As a result, Interior reported that it was difficult to determine how many inspections would be conducted in fiscal year 2012.

The Coast Guard Has Limited Authority over the Security of MODUs Registered to Foreign Countries

While the *Deepwater Horizon* incident was not the result of a breakdown in security procedures or the result of a terrorist attack, the loss of the *Deepwater Horizon*, a foreign-flagged MODU, and the resulting oil spill have raised concerns about U.S. oversight over MODUs that are registered to foreign countries.²³ In this regard, various circumstances govern the extent to which the Coast Guard oversees the security of MODUs. In general, MODUs operating on the OCS implement security measures consistent with applicable security requirements—specifically, they implement requirements in accordance with U.S. security regulations and the International Maritime Organization’s International Ship and Port Facility Security (ISPS) Code.²⁴ Depending on the particular characteristics and operations of the MODU—for example, its method of propulsion or its personnel levels—it may be subject to Coast Guard security regulations governing vessels (33 C.F.R. part 104) or OCS facilities (33 C.F.R. part 106). MODUs will fall under applicable Coast

²²The United States Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, *Budget Justifications and Performance Information, Fiscal Year 2012* (Washington, D.C.: February 18, 2011), 28.

²³The *Deepwater Horizon* was registered to the Republic of the Marshall Islands.

²⁴The Coast Guard’s security regulations—33 C.F.R. parts 101 through 106—are consistent with the ISPS Code. The International Maritime Organization is the international body responsible for improving maritime safety. It primarily regulates maritime safety and security through the *International Convention for the Safety of Life at Sea, 1974*. Among other things, the ISPS Code establishes an international framework, involving cooperation between contracting governments, government agencies, local administrations, and the shipping and port industries to detect and assess security threats and take preventive measures against security incidents affecting ships or port facilities in international trade, and to ensure confidence that adequate and proportionate maritime security measures are in place.

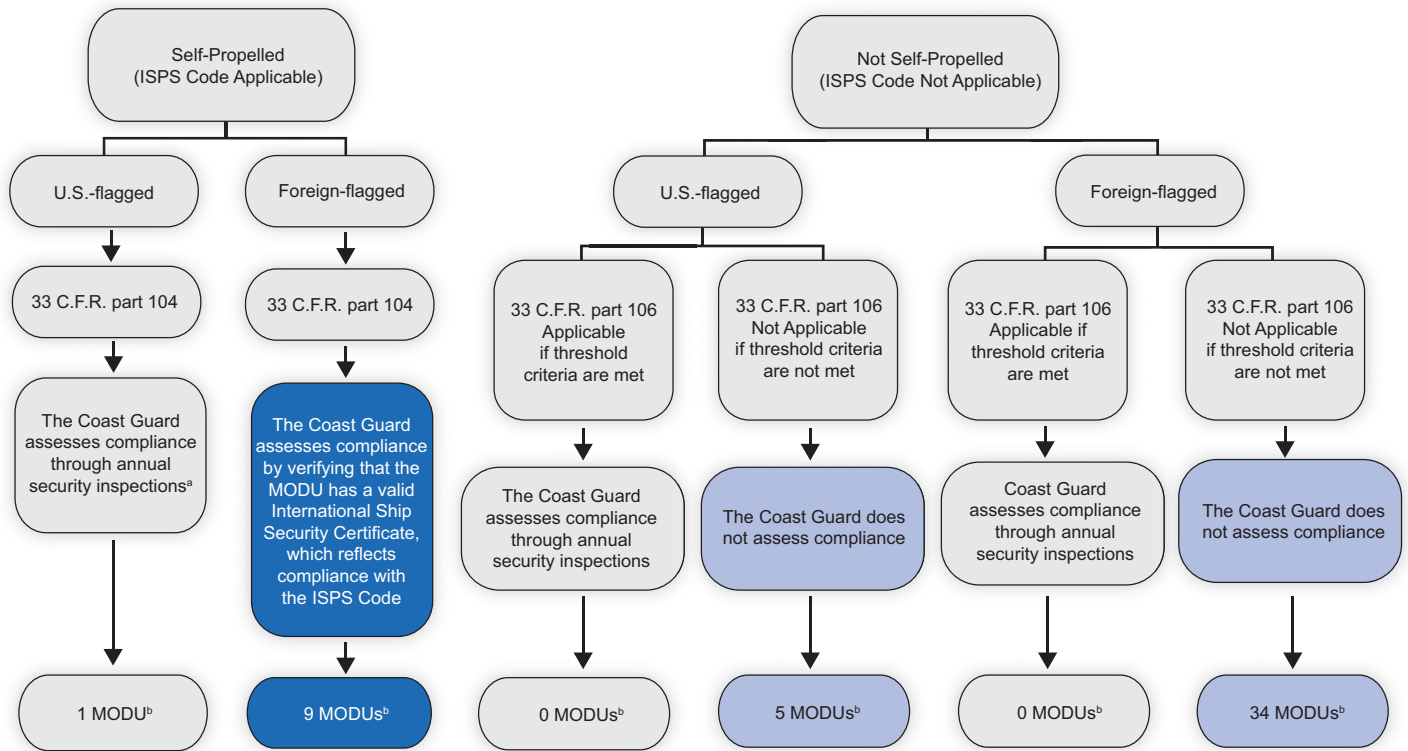
Guard regulations if (1) they are self-propelled—that is, they are capable of relocating themselves, as opposed to other types that require another vessel to tow them—in which case they are subject to the ISPS Code and 33 C.F.R. part 104, or (2) they meet production or personnel levels specified in 33 C.F.R. part 106. Whereas the Coast Guard may physically inspect a U.S.-flagged MODU to ensure compliance with applicable security requirements, the Coast Guard’s oversight of foreign-flagged, self-propelled MODUs, such as the *Deepwater Horizon*, is more limited.²⁵ In the case of self-propelled, foreign-flagged MODUs, the Coast Guard will assess compliance with part 104 by reviewing a MODU’s International Ship Security Certificate, which certifies compliance with the ISPS Code. While Coast Guard inspectors may also observe security measures and ask security related questions of personnel, absent consent from the flag state, the inspectors generally do not have authority to review a self-propelled, foreign-flagged MODU’s vessel security plan. In all other cases where MODUs are subject to Coast Guard security requirements, the Coast Guard assesses compliance with part 104 or part 106 through annual security inspections.²⁶ Figure 1 illustrates the types of MODUs, the applicable security requirements, and the means by which the Coast Guard assesses compliance.²⁷

²⁵As a self-propelled, foreign-flagged MODU, the *Deepwater Horizon* was subject to the requirements of the ISPS Code. In July 2009, Coast Guard inspectors conducted a certificate of compliance examination on the *Deepwater Horizon* in which the inspectors reviewed all applicable licenses and other compliance documents, including those related to security; the inspectors found no deficiencies during this examination.

²⁶The *Deepwater Horizon* was self-propelled and foreign-flagged.

²⁷For more detail on the applicable security requirements for MODUs, see [GAO-12-37](#).

Figure 1: Coast Guard Security Requirements Applicable to MODUs Operating in U.S. Federal Waters



Source: GAO analysis of ISPS Code, 33 C.F.R. parts 104 and 106, and Coast Guard MISLE data, and U.S. Coast Guard.

^aA self-propelled, U.S.-flagged MODU must also comply with the ISPS Code and possess an International Ship Security Certificate if it is on an international voyage. 33 C.F.R. part 104 security regulations, which govern self-propelled, U.S.-flagged MODUs, are consistent with the ISPS Code.

^bThere are no MODUs operating in U.S. federal waters that meet the threshold criteria for being subject to 33 C.F.R. part 106. The numbers for other categories of MODUs shown above—those that are subject to 33 C.F.R. part 104 and those that do not meet the threshold criteria for being subject to 33 C.F.R. part 106—are the number of MODUs in each category that are, according to the Coast Guard, drilling in the Gulf of Mexico as of September 23, 2011.

The Coast Guard may not be fully aware of the security measures implemented by self-propelled, foreign-flagged MODUs because of its limited oversight of such MODUs. The Coast Guard and BOEMRE, BSEE's predecessor, conducted a joint investigation into the *Deepwater Horizon* incident, and the Coast Guard's report from the investigation emphasized the need to strengthen the system of Coast Guard oversight of foreign-flagged MODUs. The Coast Guard's report from the joint investigation stated that the Coast Guard's regulatory scheme for overseeing the safety of foreign-flagged MODUs is insufficient because it defers heavily to the

flag state to ensure safety. While the investigation focused on issues that were not related to security, such as safety, these findings may have implications for security oversight because the Coast Guard also relies on the flag state to carry out responsibilities for assessing compliance with security requirements. The joint investigation team recommended, among other things, that the Commandant of the Coast Guard develop more comprehensive inspection standards for foreign-flagged MODUs operating on the OCS. The Commandant concurred with this recommendation and has chartered an Outer Continental Shelf Activities Matrix Team, which has been tasked with providing recommendations on the establishment and implementation of an enhanced oversight regime for foreign-flagged MODUs on the U.S. OCS.

According to Coast Guard officials, it is likely that MODUs operating in deepwater would be subject to security requirements because the industry is increasingly using dynamically positioned MODUs that are able to maintain position without being anchored to the seabed, and as such MODUs are self-propelled, they would be subject to the ISPS Code and 33 C.F.R. part 104.²⁸ Additionally, the Coast Guard is conducting a study designed to help determine whether additional actions could better ensure the security of offshore energy infrastructure in the Gulf of Mexico, including MODUs. This study is expected to be completed in the fall of 2011. Gaining a fuller understanding of the security risks associated with MODUs could better inform Coast Guard decisions and potentially improve the security of these facilities. Further, the Coast Guard has implemented a new risk-based oversight policy for MODUs, including foreign-flagged MODUs, to address safety and environmental protection issues. This policy includes a targeting matrix to assist inspectors in determining whether a foreign-flagged MODU may require increased oversight, based on inspection history or other related factors, through more frequent examinations by the Coast Guard. Additionally, the policy calls on Coast Guard field units to conduct random, unannounced examinations of a portion of all MODUs in their areas of responsibility. Although this policy does not directly address security, increased oversight resulting from this new policy could help mitigate some of the ways in which a MODU might be at risk of a terrorist attack.

²⁸According to a 2006 report from Interior's Mineral Management Service, deepwater is traditionally defined as those water depths greater than or equal to 1000 feet. See Department of the Interior, Minerals Management Service, *Leasing Oil and Natural Gas Resources: Outer Continental Shelf* (Washington, D.C.: 2006).

Chairman LoBiondo, Ranking Member Larsen, and Members of the Subcommittee, this completes our prepared statement. We would be happy to respond to any questions you may have at this time.

GAO Contacts and Staff Acknowledgments

For questions about this statement, please contact Stephen L. Caldwell at (202) 512-9610 or caldwells@gao.gov, or Frank Rusco at (202) 512-3841 or ruscof@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. In addition to the contacts named above, key contributors to this testimony were Christopher Conrad, Assistant Director; Jon Ludwigson, Assistant Director; Lee Carroll and Erin O'Brien, analysts-in-charge; and Alana Finley. Thomas Lombardi provided legal support and Lara Miklozek provided assistance in testimony preparation.

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