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Offshore Drilling Safety: A Status Report

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Summary

More than four years after the explosion of the *Deepwater Horizon* offshore drilling rig in the Gulf of Mexico (April 20, 2010), the federal government, state governments, and responsible parties continue to face drilling safety challenges in federal waters. Recently, Chairwoman Landrieu focused on challenges arising in the federal context at a Senate Committee on Energy and Natural Resources hearing (July 22, 2014). This hearing was one of several addressing management of energy resources on federal lands and particularly touching on drilling safety issues that might accompany expanding America's energy production.

Safety experts have contributed to legislative dialogue about offshore drilling safety by studying government safety performance following the 2010 oil spill, the largest in U.S. waters. Of these experts, many conclude that lessons stemming from the Macondo well blowout are relevant to ensuring greater levels of safety in the future. As a result, among other federal responses to the 2010 discharge, regulators are implementing of a host of structural and operational reforms to prevent deepwater blowouts in the future.

As part of an overarching set of department-wide reforms within the Department of the Interior (DOI), a new DOI agency was created specifically to address safety missions—the Bureau of Safety and Environmental Enforcement (BSEE). Starting in 2010, many but not all safety experts agreed on the need for BSEE to promulgate and implement a host of related safety reforms. Thus began a regulatory process stemming from technical and policy changes to enhance the safety of offshore drilling activities. In general, these BSEE initiatives were intended to reduce accidents, injuries, and spills accompanying offshore drilling activities. Once implemented, the initiatives are anticipated to enhance performance of operators' Safety and Environmental Management Systems (SEMS). Specific requirements stemming from BSEE reforms pertain to developing and implementing stop work authority (SWA) and establishing guidelines for reporting unsafe working conditions. Other requirements include conducting job safety analyses (JSA) for activities identified in an operator's SEMS program. In addition, there are requirements that SEMS programs be audited by an accredited audit service provider (ASP).

This report describes selected BSEE safety reforms, provides a concise summary of relevant offshore safety milestones, and offers insights about policy discussions related to safety. As part of overseeing DOI safety reforms initiated in 2010, the 113th Congress is placing an emphasis on agency performance. In particular, some Members are focusing oversight efforts on agency performance associated with implementing reforms to improve safety initiated in 2010. One mechanism for legislative oversight of DOI performance is the Government Accountability Office (GAO) High Risk Report. The scope of this GAO report expanded after 2012 to include analyzing the performance of DOI agencies responsible for domestic energy production on federal lands. GAO is developing the next High Risk Report for publication at the start of the 114th Congress. GAO is expected to provide a status report to Congress on DOI agency implementation of selected missions, including offshore drilling safety.

This CRS report will be updated upon DOI completing implementation of safety reforms, anticipated in 2015. Updates will include relevant GAO findings and reflect emerging legislative issues, if any, related to offshore drilling safety.

Contents

Contacts

Introduction

In the aftermath of the explosion of the *Deepwater Horizon* offshore drilling rig on April 20, 2010, the federal government, state governments, and responsible parties faced unprecedented challenges (safety, natural resource monitoring and restoration) in the Gulf of Mexico. A subsea drilling system discharge causing the largest oil spill in U.S. waters—estimated at approximately 206 million gallons (4.9 million barrels)[1]—tested U.S. offshore drilling safety standards. It also prompted reforms in the safety requirements called for by federal and state governments and private industry.[2]

While the uncontrolled discharge from the *Deepwater Horizon* continued for approximately 84 days (responders gained control of the release on July 15, 2010), safety concerns involved multiple agencies for years following the spill. As this spill occurred in the coastal zone, the U.S. Coast Guard directed and coordinated the initial on-site safety activities of federal, state, local, and private entities (e.g., BP Exploration and Production Inc. and its contractors).[3]

Safety reforms commonly take several years to implement. At the start of the implementation period some activities may have diminished substantially compared to the height of concurrent oil spill response operations. This can be due to government suspensions in the aftermath of the spill or to operators' decisions based on a variety of factors.

To offer a status report on safety measures to date, it is important to examine the context in the Gulf of Mexico when the reforms were initiated. To provide readers with a brief view of the setting in the Gulf of Mexico in 2010-2012, selected highlights other than those directly related to safety are listed below:

- Federal government response costs approached $850 million as of October 3, 2012, most of which has been reimbursed by responsible parties.[4]
- In December 2012, the Coast Guard investigated recurring surface oil sheens near the site of the *Deepwater Horizon* incident that "correlated" to oil from the 2010 spill. After conducting a subsurface investigation, safety considerations, including the source of the sheen, remain unresolved.[5]

[1] An estimated 17% of this oil did not enter the Gulf environment, but was directly recovered from the wellhead. See the Federal Interagency Solutions Group, Oil Budget Calculator Science and Engineering Team, *Oil Budget Calculator: Deepwater Horizon-Technical Documentation*, November 2010. See also CRS Report R41531, *Deepwater Horizon Oil Spill: The Fate of the Oil*, by Jonathan L. Ramseur.

[2] More detailed analysis of these and other issues is addressed in other CRS products, including CRS Report R42942, *Deepwater Horizon Oil Spill: Recent Activities and Ongoing Developments*, by Jonathan L. Ramseur and Curry L. Hagerty.

[3] This framework of multiple parties working together under the leadership of the federal government is referred to as the Unified Command.

[4] Captain Duke Walker, U.S. Coast Guard Federal On-Scene Coordinator, Deepwater Horizon Status Brief before the Florida Oil Spill Commission, October 3, 2012, at http://www.dep.state.fl.us/deepwaterhorizon/files2/corc/100312_uscg_district8.pdf.

[5] See Unified Command Press Release, "ROV wraps up investigation," December 18, 2012, at http://www.restorethegulf.gov.

- The total payments associated with the 2010 Gulf spill have already surpassed those of the 1989 *Exxon Valdez* oil spill.[6]
- The Department of Justice (DOJ) completed criminal and civil settlements with several parties involved in the 2010 oil spill.[7] Although some still await court approval, settlements from various parties, to date, total almost $6 billion.
- On April 21, 2011, the trustees for the *Deepwater Horizon* oil spill announced that BP Exploration and Production Inc. (BP) has agreed to provide $1 billion toward restoration projects in the Gulf of Mexico. These projects are expected to address injuries to natural resources caused by the spill.[8]

The remainder of this report provides a summary of relevant developments and selected policy discussions arising during the ongoing implementation of DOI safety reforms.

2010 Safety Reforms

Federally regulated commercial energy and energy-related activities in the Gulf of Mexico region have, for the most part, returned to normalcy without a reported safety incident of a serious magnitude since the 2010 spill. Achieving cooperation with adjacent nations and other interested parties on the existence of offshore safety standards is perceived as a necessary step toward identifying safety priorities for U.S. leasing and drilling programs.

More than four years after the 2010 structural reforms (discussed below) were proposed, federal strategies for prioritizing safety as a top objective are starting to become apparent. Observers can examine instances of inter-departmental coordination—mainly among DOI, the Department of Transportation (DOT), and the Department of Energy (DOE). This degree of emphasis on departmental coordination was not apparent prior to 2010. Furthermore, the 113th Congress has considered legislative and diplomatic measures relevant to safety in international waters beyond the U.S. Exclusive Economic Zone (EEZ). Examples of these developments are discussed in the next section, "Related Structural Reforms."

These regulatory and policy changes are intended to reduce accidents, injuries, and spills during offshore drilling activities. Once implemented, reforms are anticipated to add several new requirements to regulations for Safety and Environmental Management Systems (SEMS). Some requirements pertain to developing and implementing stop work authority (SWA) and establishing guidelines for reporting unsafe working conditions. Additional requirements include conducting job safety analyses (JSA) for activities identified in an operator's SEMS program. In addition, there are requirements that SEMS programs be audited by an accredited audit service provider (ASP).

[6] The *Exxon Valdez* was a U.S.-flagged tanker that grounded in Prince William Sound, AK, in March 1989 spilling approximately 11 million gallons of oil. The oil spill sparked regional and nationwide interest in oil spill prevention, response, clean-up, and liability. In association with the 1989 oil spill, Exxon paid approximately $4.9 billion. Payments were made voluntarily and pursuant to several different legal proceedings at different times over approximately 20 years.

[7] DOJ also filed charges against individuals for various actions.

[8] See CRS Report R41640, *The Deepwater Horizon Oil Spill and the Gulf of Mexico Fishing Industry*, by Harold F. Upton.

Following is a time line of regulatory actions relevant to offshore drilling safety:

- October 14, 2010: interim final rule[9] that implements certain safety measures that were identified in a June 2010 report from the Secretary of the Interior.[10]
- October 15, 2010: final rule requiring operators to implement a Safety and Environmental Management System (SEMS) program.[11]
- September 14, 2011: proposed rule revising requirements associated with the SEMS proposed rule that would "expand, revise, and add several new requirements necessary for more thorough SEMS programs."[12]
- August 22, 2012: final rule amending and clarifying several provisions in the October 14, 2010, interim final rule.[13]
- April 5, 2013: final rule adding new requirements to the existing SEMS regulations.[14]

In addition to these hundreds of *Federal Register* pages demonstrating rulemaking and implementation activity, agencies have issued a series of notices to lessees (NTLs) offering guidance on specific safety priorities not always found in national rulemaking publications.[15] Not all the examples of DOI regulatory and policy guidance listed above offer explicit directives on oil and gas operations outside of the Gulf of Mexico region. Given the high degree of national attention, however, operators engaged in oil and gas exploration activity in the Arctic and California regions express considerable interest in BSEE notices stemming from the safety concerns prompted by the 2010 Gulf spill.[16]

Related Structural Reforms

DOI structural reforms proposed to achieve federal strategies for safety include the creation of a new agency and greater inter-departmental coordination (mainly among DOI, DOT, and DOE). Examples of developments in domestic and international spheres are discussed below.

[9] 75 *Federal Register* 63345 (October 14, 2010).

[10] On June 8, 2010, BOEMRE issued a Notice to Lessees (NTL) addressing those recommendations identified in the Safety Measures Report as warranting immediate implementation (NTL No. 2010–N05—Increased Safety Measures for Energy Development).

[11] This rule (75 *Federal Register* 63609) was first considered in an advance notice of proposed rulemaking in 2006.

[12] 76 *Federal Register* 56683 (September 14, 2011).

[13] 77 *Federal Register* 50856 (August 22, 2012).

[14] 78 *Federal Register* 20423 (April 5, 2013). The SEMS implementation period continues without further regulatory notices.

[15] The chief source of NTL safety information is the one available at http://www.bsee.gov/uploadedfiles/11-n09.pdf.

[15] For a more comprehensive discussion of how BSEE notices stemming from the safety concerns in the Gulf of Mexico are of interest to those engaged in drilling policy discussion in the Arctic, see relevant sections of CRS Report R41153, *Changes in the Arctic: Background and Issues for Congress*, coordinated by Ronald O'Rourke.

For a more comprehensive discussion of how BSEE notices stemming from the safety concerns in the Gulf of Mexico are of interest to those engaged in drilling policy discussion in the Arctic, see relevant sections of CRS Report R41153, *Changes in the Arctic: Background and Issues for Congress*, coordinated by Ronald O'Rourke.

Creating the Bureau of Safety and Environmental Enforcement (BSEE)

Prior to the oil spill, DOI and congressional investigations had identified a number of management shortcomings, ethical lapses among personnel, and conflicts of interest in the former lead DOI agency responsible for offshore safety—the Minerals Management Service (MMS). Specific concerns involving safety were addressed in proposals for agency reorganization. Many safety experts testified supporting these structural reforms (particularly in combination with reforming policies toward safety inspections, safety training, and the safety of drilling equipment) as a way to achieve overall improvements in offshore drilling operations.[17]

The Bureau of Safety and Environmental Enforcement (BSEE) is one of three separate entities responsible for ocean energy resources.[18] Selected examples of reforms accompanying the creation of BSEE include the following:

- Establishing a National Training Center designed to keep federal inspectors current on new technologies and processes.
- Implementing new safety standards for offshore oil and gas facilities, particularly focusing on ascendant technologies and deepwater operations.[19]
- Enhanced oversight of worker safety to address risks associated with human exposure to ocean conditions such as high winds, ice, fog, and extreme temperatures.
- Maintaining the Technical Information Management System (TIMS) to provide data for making regulatory decisions based on required reports and maps. TIMS is a database offering Bureau of Ocean Energy Management (BOEM) and BSEE officials the data necessary to carry out respective agency missions.[20]

For the most part, these reforms, after being implemented over the next several years, are expected to add several new requirements related to the regulations for Safety and Environmental Management Systems (SEMS).

[17] After April 20, 2010, full texts of this testimony can be found in hearing records starting with oversight hearings in both chambers during the 111th Congress. Prior to 2010, examples of testimony of this nature can be found summarized in executive branch reports, including reports by the DOI inspector general: DOI, Office of Inspector General, *Evaluation Report: Minerals Management Service Royalty-In-Kind Oil Sales Process*, 2008; DOI, Office of Inspector General, *Investigative Report: Island Operating Company et al*, 2010; DOI, Office of Inspector General, *Investigative Report: MMS Oil Marketing Group - Lakewood*, 2008.

[18] The other two agencies are the Bureau of Ocean Energy Management (BOEM), and the Office of Natural Resources Revenue (ONRR). For more information see CRS Report R42599, *Department of the Interior (DOI) Reorganization of Ocean Energy Programs*, by Curry L. Hagerty.

[19] CRS Report R42123, *Controlling Air Emissions from Outer Continental Shelf Sources: A Comparison of Two Programs—EPA and DOI*, by Jonathan L. Ramseur.

[20] Programs supported by TIMS include lease sales and adjudications, environmental reviews related to plans and permits for wells, platforms, and pipelines. In May 2012, TIMS was upgraded to support interdependencies and business needs of the new bureaus. See the TIMS Memorandum of Agreement (October 3, 2011) available at http://www.boem.gov/Environmental ... /Plans_Permits_MOA_signed.aspx.

Inter-departmental Coordination

A significant feature of DOI reforms has been the ongoing nature of examining offshore drilling safety challenges from perspectives beyond DOI. Focusing on these challenges has resulted in greater inter-departmental coordination on offshore safety issues. On August 16, 2013, BSEE and the Bureau of Transportation Statistics (BTS, within DOT) signed an interagency agreement to develop a confidential near-miss reporting system. This system would expand the ability of BSEE and industry to collect specific information about accident precursors and potential hazards associated with offshore operations in particular locations. A distinguishing characteristic of this system is the voluntary reporting involving both industry and federal personnel. One feature of this reporting is an attempt to ensure confidentiality for those who report near misses. The BTS is responsible for developing and managing the reporting system, which is expected to be operational in late 2014.

Another example of inter-departmental coordination on safety began on August 22, 2013, when BSEE and the Department of Energy (DOE) signed a Memorandum of Collaboration to coordinate the ongoing efforts on offshore research and technological improvement projects. BSEE and DOE reportedly plan to continue to collaborate in support of three primary objectives: building safety through technological improvements, supporting research and development for offshore operations, and working together to support the implementation of recommendations arising from various investigations and studies related to the *Deepwater Horizon* oil spill.[21]

In July 2014, as part of soliciting bids for a lease sale expected to occur on August 20, 2014, BOEM published stipulations clarifying the coordination between the Environmental Protection Agency (EPA) and DOI related to suspension of certain firms from new contracts with the federal government. This action helped clarify EPA-DOI coordination on the ability of bidders to participate in offshore lease sales for oil and gas production. To implement EPA policies, DOI announced that for the August 20, 2014, sale, bids from suspended parties are possible; however, any bids from suspended parties would be administered following an internal DOI procedure for acceptance or rejection.[22] As background, in 2012 EPA had suspended BP Exploration and Production Inc. (and a number of affiliated companies) from certain future government contracting activities, including government procurement contracts.[23] This was perceived partly as a government response to claims of safety lapses.[24]

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[21] More information is available at http://www.bsee.gov/BSEE-Newsroom/Press-Releases/2013/Press08232013z.aspx.

[22] For more information on this topic contact the author or see the BOEM Notice of Sale Package at http://www.boem.gov/Final-Notice-of-Sale-Package-Sale-238/.

[23] The full announcement of this suspension can be found at http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/2aaf1c1dc80c969885257abf006dafb0!opendocument. EPA's suspension ended March 19, 2014. Press coverage surrounding BP government contracting started on November 27, 2012, when the Environmental Protection Agency (EPA) announced suspending BP from certain future government contracting activities, including government procurement contracts. After the suspension was announced, BP did not participate in U.S. lease sales administered by DOI until EPA lifted the ban in March 2014. During the suspension nothing indicated BP was prevented from participation in transferring and assigning U.S. leases unrelated to the *Macondo* accident. According to BOEM, BP has engaged in many transfers and assignments while suspended, specifically by submitting more than 75 requests related to transferable or assignable development rights during the EPA suspension from government contracting. (Communications to CRS from BOEM Congressional Affairs Office on March 25, 2014.) While there remains some judicial action surrounding the suspension, BP appears free to engage in a normal range of U.S. leasing and contracting options.

[24] EPA cited BP's lack of business integrity, particularly information that reportedly came to light during judicial settlement discussions, as grounds for this suspension. BP did not participate in a November 28, 2012, lease sale (continued...)

Safety Considerations on an International Scale

In addition to ongoing dialogue about safety issues in domestic waters, the 113th Congress is considering offshore drilling safety defined more broadly in the international context. One example of lawmakers addressing safety issues in connection with international ocean energy activities is enactment of provisions related to the U.S.-Mexico Transboundary Hydrocarbons Agreement (the Agreement) as part of the Bipartisan Budget Act of 2013 (P.L. 113-67). This act contains provisions approving a diplomatic agreement between the United States and Mexico. The Agreement addresses jointly developing hydrocarbon resources beyond the U.S. EEZ in the Gulf of Mexico.[25] Some in Congress have expressed an interest in possible safety implications of this Agreement, if any, in particular as part of possibly determining missions to promote environmental protection if drilling takes place beyond the U.S. EEZ. [26]

It remains to be seen if diplomatic efforts following passage of P.L. 113-67 might demonstrate interests of both countries in adopting a commitment to an explicit set of safety standards. To date there has been little or no indication of explicit safety standards, terms, dates, or conditions reported as part of these diplomatic discussions.

Congressional Interests

How best to avoid risks of catastrophic oil spills in U.S. waters remains a matter of policy debate and a challenging legislative and regulatory objective. While many conclude that another large-scale oil spill in U.S. waters might be a "low-probability, high-risk" event, there is general agreement that a future event could stem from a confluence of factors associated with legal, prudent drilling operations. Some experts conclude spills of a magnitude that might attract national attention are so rare that it is impractical to erect a new regulatory framework including explicit safety measures. Others claim regulatory measures might be considered as a way to prevent a large spill resulting from a number of different kinds of risks.[27]

(...continued)

administered by DOI, leaving some to question whether EPA and/or DOI may have barred BP from bidding until greater confidence was achieved in the company's capacity to safely and responsibly operate in U.S. waters, or whether BP decided to sit it out for any number of business reasons. For more information on this issue, see CRS Report RL34753, *Debarment and Suspension of Government Contractors: A Legal Overview*, by Kate M. Manuel.

[25]For more information on the U.S.-Mexico Transboundary Hydrocarbons Agreement (the Agreement) and related legislative action, see CRS Report R43204, *Legislation Proposed to Implement the U.S.-Mexico Transboundary Hydrocarbons Agreement*, by Curry L. Hagerty and James C. Uzel.

[26] The Bureau of Ocean Energy Management (BOEM) is the lead regulatory authority for government interactions related to the U.S.-Mexico Transboundary Hydrocarbons Agreement. BSEE has a significant role in implementing the U.S.-Mexico Transboundary Hydrocarbons Agreement. BOEM and BSEE regulations governing OCS activities generally require that a company with leasing obligations demonstrate that proposed oil and gas activity conforms to federal requirements, is safe, prevents waste, does not unreasonably interfere with other uses of the outer continental shelf, and does not cause impermissible harm or damage to marine environments. Further information on BOEM initiatives related to this agreement can be found in CRS Report IN10113, *DOI Announces Next Gulf of Mexico Offshore Energy Lease Sale*, by Curry L. Hagerty.

[27] BSEE identifies different kinds of risks. "When we are discussing safety, operational risk typically comes to mind. But there are financial risks, technical risks, geologic risks, and risks related to human factors. Failure to address any of these appropriately can have catastrophic consequences." See full statement, *BSEE Director Delivers Keynote Speech at the 2014 Offshore Technology Conference,* May 8, 2014.

Although legislative dialogue about safety-related policy alternatives arguably diminished in the 112th [28] and 113th Congresses (relative to interest in the 111th Congress), some Members continue to express concern about various oil spill-related safety matters. Congressional attention to energy development in federal lands and seas has included ongoing oversight of government measures to ensure safety in deepwater drilling operations. Furthermore, as Chairwoman Landrieu noted at a Senate Committee on Energy and Natural Resources hearing to address management of federal lands (July 22, 2014), some in the 113th Congress are intensifying legislative attention on these topics by examining proposals for "leveraging America's natural resources as a revenue generator and job creator."[29]

Explicit Safety Standards

Observers expressing concern about future safety challenges sometimes claim there is a need to promulgate explicit safety standards to ensure safety. Other than advocating for explicit safety standards, multiple positions have surfaced involving promoting overall safety interventions in addition to voluntary safety standards (involving management more directly, creating financing incentives and protocols, and utilizing insurance strategies). And, still others have advocated a shift away from explicit safety standards in favor of promoting a generalized culture of safety. The mechanisms for this approach to permeate operations might include public disclosures about financing and broader themes running throughout the permitting process (timetables, consultations, and workforce training options).

In the past it has been common for safety advocates to recommend safety policies interwoven with other relevant policy objectives: public health programs and oil spill preparedness for coastal communities (specifically to address oil spill risks) and enhancing offshore workforce communication and training. These measures can constitute implicit (rather than explicit) safety directives. Perennial policy divides can arise when safety issues are discussed in the context of enforcing various implicit safety-related policies: funding and training for U.S. inspection programs, bolstering credentials of managers responsible for safety, and making existing enforcement and monitoring standards tougher.

Managing Future Risks

Managing future risks is part of the current focus on expanding the U.S. ocean energy portfolio. Is it better for the United States to expand ocean drilling under the current safeguards, or to defer drilling due to safety concerns? The various factors related to an expansion of the U.S. ocean energy portfolio go beyond expanding drilling operations and can include an array of marine, coastal, and onshore industrial activities. Eliminating weaknesses in government's overall capacity to adequately safeguard the public would require time and attention to the overall policy context for the nation's energy and environmental goals.

Public information has played a key role in the ongoing dialogue about managing future public safety risks related to offshore energy development. Under current law do operators provide

[28] See CRS Report R41684, *Enacted and Proposed Oil Spill Legislation in the 112th Congress*, by Jonathan L. Ramseur.

[29] Opening statement, Chairwoman Landrieu, Senate Committee on Energy and Natural Resources hearing to address management of federal lands (July 22, 2014).

adequate information about the safety of drilling locations? If so, does the responsible agency have the capacity to use this information to manage possible risks such as risks of blowouts? After the 2010 Gulf Oil Spill, some DOI information requirements relevant to safety compliance were found to be rather limited and some information accompanying safety plans submitted to DOI with regard to a blowout scenario and worst case discharge scenario was found to be inadequate. Safety experts supporting reforms related to information disclosures anticipate when the reforms are fully implemented, higher levels of public confidence might prevail than were apparent in the four-year period examined in this report.

Studying a Range of OCS Risks

Several studies were initiated to examine numerous types of OCS risks following the *Deepwater Horizon* incident. A prominent example is the U.S. Government Accountability Office (GAO) study of DOI safety performance in the aftermath of the spill.[30] Starting in 2011, GAO listed DOI offshore energy programs as part of the "High Risk" series. Including safety programs in this series of studies is based on the rationale that the combination of regulatory changes in the aftermath of the *Deepwater Horizon* events warranted a close look at DOI agency performance in five areas: (1) reorganization, (2) balancing responsibilities, (3) human capital, (4) revenue collection, and (5) development of existing leases.[31]

GAO updated reporting on this series in 2013.[32] The 2013 report announced GAO plans to continue studying all three DOI agencies (Office of Natural Resources Revenue (ONRR), BOEM, and BSEE) to, among other objectives, "focus on the causes of human capital challenges, actions taken, and how DOI plans to measure the effectiveness of corrective actions."[33] GAO is expected to update this report in 2015, at the start of the 114th Congress.[34]

The following list includes other selected studies examining offshore drilling safety published to date:

- **U.S. Coast Guard**: *National Incident Commander's Report: MC252 Deepwater Horizon*, October 2010 and related *Incident Specific Preparedness Review*, January 2011;[35] U.S. Coast Guard, *On Scene Coordinator Report: Deepwater*

[30] This information comes from GAO's 2013 High Risk Report. This report is typically updated every two years, at the start of each new Congress. GAO offers information on the High Risk Series at http://www.gao.gov/highrisk/. See also 2013 Update to GAO's High Risk List at http://www.gao.gov/multimedia/podcasts/652144.

[31] See Gene L. Dodaro, U.S. Comptroller General, testimony before the House Committee on Oversight and Government Reform, February 17, 2011; Committee on Appropriations, Subcommittee on Interior, Hearing March 17, 2011. According to Comptroller General Gene L. Dodaro's testimony, GAO is analyzing the strengths and weaknesses of DOI offshore oil and gas programs to understand the implications, if any, of the reorganization on cross-cutting missions within DOI.

[32] GAO-13-283 High-Risk Series. GAO reports that because of the progress that has been made, the scope has been narrowed for certain areas on the 2013 High Risk List (GAO-13-283).

[33] For information on specific corrective actions related to managing federal oil and gas resources, see the following GAO reports: *Oil and Gas Management: Interior's Reorganization Complete, but Challenges Remain in Implementing New Requirements*, GAO-12-423 (July 30, 2012); *Interior Has Strengthened Its Oversight of Subsea Well Containment, but Should Improve Its Documentation*, GAO-12-244 (February 29, 2012).

[34] GAO-13-283 High-Risk Series (February 14, 2013) at p. 29.

[35] See http://www.nrt.org. See also http://www.uscg.mil/foia/docs/DWH/BPDWH.pdf.

Horizon Oil Spill, September 2011;[36] Joint Investigation of Bureau of Ocean Energy Management, Regulation, and Enforcement and U.S. Coast Guard (Volume I and II), April 2011.[37]

- **National Oil Spill Commission:** National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, *Deep Water: The Gulf Disaster and the Future of Offshore Drilling*, Report to the President, January 2011;[38] Oil Spill Commission Action, *Assessing Progress: Implementing the Recommendations of the National Oil Spill Commission*, April 2012.[39]
- **National Academy of Engineering and National Research Council:** *Macondo Well–Deepwater Horizon Blowout: Lessons for Improving Offshore Drilling Safety*, December 2011.[40]

Looking Ahead

While implementation of the 2010 reforms is underway, it remains too early to know the significance, if any, and the potential effects the reforms might have. Lawmakers are examining executive branch claims that offshore drilling operations can be conducted in a safe and responsible fashion.

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[36] See https://homeport.uscg.mil.

[37] For cover letter, see http://www.boemre.gov/pdfs/maps/JointMemo092011.pdf; Volume I available at https://homeport.uscg.mil; Volume II available at http://www.boemre.gov/pdfs/maps/DWHFINAL.pdf.

[38] See http://www.oilspillcommission.gov/.

[39] See http://oscaction.org.

[40] See http://www.nae.edu/default.aspx?id=19649.