

# **Deepwater Horizon** Oil Spill: Highlighted Actions and Issues

**Curry L. Hagerty** Specialist in Energy and Natural Resources Policy

#### **Jonathan L. Ramseur** Specialist in Environmental Policy

January 28, 2011

**Congressional Research Service** 7-5700 www.crs.gov R41407

### Summary

This report highlights actions taken and issues raised as a result of the April 20, 2010, explosion on the *Deepwater Horizon* offshore drilling rig, and the resulting oil spill in the Gulf of Mexico. Readers can access more extensive discussions in various CRS reports, identified at the end of this report.

Some members of Congress and stakeholders have raised a range of issues after observing the Gulf oil spill and response efforts. Selected areas of concern that may emerge in the 112<sup>th</sup> Congress include

- the regulatory regime for outer continental shelf (OCS) oil exploration and development activities;
- the liability and compensation framework created by the 1990 Oil Pollution Act;
- technological challenges involved with deepwater activities;
- response activities (e.g., the use of chemical dispersants) and decision-making.

Future congressional activity may be influenced by several factors, including conditions in the Gulf region, independent inquiries, judicial actions, and the availability of data for further study.

Members of the 111<sup>th</sup> Congress raised a wide range of concerns as a result of the Gulf oil spill. The House of Representatives conducted at least 32 hearings in 10 committees; the Senate conducted at least 30 hearings in 8 committees. Members in the 111<sup>th</sup> Congress introduced more than 150 legislative proposals that would affect policies related to oil spills, enacting three of these proposals into law (P.L. 111-191, P.L. 111-212, and P.L. 111-281). These laws direct appropriations and authorizations related to oil spill activity; they do not address the key policy issues raised by the 2010 Gulf spill.

Multiple executive branch agencies continue to respond to the incident within the framework of the National Contingency Plan. For example, the U.S. Coast Guard plays a key role in response efforts, because the spill occurred in the coastal zone. In addition, the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE), formerly known as the Minerals Management Service (MMS), initiated internal procedures for safety inspections and other regulatory functions for offshore operations.

As a responsible party for the spill, BP worked to control the well and the spill and continues to perform cleanup measures at the direction of the federal government. According to BP's thirdquarter financial statements, the company's costs have totaled over \$11 billion, including response activities and claims. BP estimates that future costs could approach \$30 billion and include continued response efforts, further claims compensation, legal costs, and Clean Water Act penalties.

# Contents

Overview of Spill Response Efforts	1
Congressional Actions	1
Executive Branch Actions	2
Responsible Party Actions	2
Issues Raised by the Gulf Spill	3
Statutory and Regulatory Framework	3
Prevention and Containment Technology for Deepwater Oil Spills	4
Relief Wells	4
Dispersants	4
Liability and Compensation Framework	4
Factors Influencing Future Congressional Action	5
Conditions in the Gulf	5
Independent Inquiries	5
Judicial Activity	5
Further Research	6
CRS Reports for Further Reading	6

#### Contacts

Author Cont	act Information				7
-------------	-----------------	--	--	--	---

# **Overview of Spill Response Efforts**

In the aftermath of the explosion of the *Deepwater Horizon* offshore drilling rig on April 20, 2010, the federal government and responsible parties faced an unprecedented challenge in the Gulf of Mexico. Never before had a subsea drilling system blowout of this magnitude, or an oil spill of this size—estimated at approximately 206 million gallons (4.9 million barrels)—occurred in U.S. waters. The spill continued for approximately 84 days, until, following several attempts, responders gained control of the oil discharge on July 15, 2010.

- Response activities continue but have diminished substantially compared to the height of operations. According to a December 17, 2010, press release from the Unified Command (http://www.restorethegulf.gov), more than 6,400 personnel and 360 vessels are involved in oil response activities. During the summer, personnel levels rose to 47,000; vessel numbers approached 7,000.
- The natural resources damage assessment (NRDA) process is progressing as federal and state natural resource trustees have moved from a pre-assessment phase to a restoration planning phase.
- On behalf of BP, the Gulf Coast Claims Facility (GCCF) continues to compensate parties for economic losses resulting from the oil spill.

Much of this material is covered in greater detail in the CRS reports listed in the "Further Reading" section at the end of this report. Citations and footnotes are available in each of these reports, but are not included in this abridged version.

#### **Congressional Actions**

Members of the 111<sup>th</sup> Congress raised a wide range of concerns as a result of the Gulf oil spill. The House of Representatives conducted at least 32 hearings in 10 committees. The Senate conducted at least 30 hearings in 8 committees.<sup>1</sup> Hearing topics have included (among others):

- the role of industry and federal decision-making in the incident;
- the advantages and disadvantages of offshore drilling;
- the liability and compensation framework;
- the offshore drilling regulatory framework and its implementation.

Members in the 111<sup>th</sup> Congress introduced more than 150 legislative proposals that would have affected policies related to oil spills. The 111<sup>th</sup> Congress enacted three of these proposals into law (P.L. 111-191, P.L. 111-212, and P.L. 111-281). However, these laws do not address all of the policy and management issues raised by the 2010 Gulf spill.

<sup>&</sup>lt;sup>1</sup> CRS updates legislative activity involving the Gulf spill on its website, at http://crs.gov/analysis/researchsources/ Pages/OilSpill\_Hearings.aspx?source=homepage .

#### **Executive Branch Actions**

Pursuant to the framework of the National Contingency Plan (discussed below), the Administration's response has involved multiple agencies. The Secretary of Homeland Security is coordinating federal efforts and chairs the National Response Team, an organization of 16 federal departments and agencies. Upon classifying the event as a spill of national significance (SONS), Secretary Napolitano appointed retired Coast Guard Admiral Thad Allen as the National Incident Commander. As this spill occurred in the coastal zone, an on-scene coordinator (OSC) from the U.S. Coast Guard directs and coordinates the on-site activities of federal, state, local, and private entities (e.g., BP). This framework of multiple parties working together under the leadership of the federal government is referred to as the Unified Command.

Secretary of the Interior Ken Salazar deployed Deputy Secretary David J. Hayes as the Department's liaison to the Gulf for response efforts. As discussed below, in a related initiative, Secretary Salazar issued an administrative order to restructure the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE)—formerly known as the Minerals Management Service (MMS) and hereinafter referred to as BOEMRE.

In addition to various regulatory actions within BOEMRE, the Department of Justice (DOJ) initiated a civil proceeding on December 15, 2010, against BP and other defendants. Among other things, the civil action seeks penalties pursuant to the Clean Water Act (33 U.S.C. 1321). Due to uncertainty regarding several factors, including the spill's estimated volume, any possible penalties remain a matter of conjecture.

#### **Responsible Party Actions**

As an identified responsible party (others may also be legally responsible), BP is liable for cleanup costs, natural resource damages, and various economic damages. As a member of the Unified Command, BP has played a key role in response actions. Although efforts by BP to stop the uncontrolled oil flow from the well included a series of failed engineering and re-engineering methods, BP contained the well on July 15, 2010. In addition, BP has worked at the direction of the Coast Guard to mitigate the oil spill and its impacts.

According to BP's third-quarter financial statement, the company's costs have totaled \$11.6 billion through September 30, 2010, including

- spill response activities, including containment and relief well drilling;
- claims paid directly by BP and on behalf of BP through the GCCF; and
- reimbursement for federal response costs.

BP estimates that future costs could approach \$30 billion, including

- ongoing response, remediation and assessment efforts;
- legal costs associated with expected litigation;
- remaining payments to the escrow account that funds the GCCF claims;
- administrative costs for the GCCF; and
- Clean Water Act penalties.

# Issues Raised by the Gulf Spill

This section briefly highlights some of the issues raised in response to the *Deepwater Horizon* oil spill, many of which were not resolved during the 111<sup>th</sup> Congress. Issues raised by the spill include scrutiny of the regulatory regime for outer continental shelf (OCS) exploration and development activities; concerns about liability and compensation; the technological challenge of some deepwater activity; and other matters related to response activities. For more information, see CRS Report R41262, *Deepwater Horizon Oil Spill: Selected Issues for Congress*.

#### Statutory and Regulatory Framework

During the height of the spill response, some observers raised concerns about who was in charge and under what statutory authority decisions were made. The Oil Pollution Act (OPA) and the Clean Water Act (CWA) are the primary federal statutes governing the federal response to oil spills. These laws provide the President with broad authority to direct or monitor all federal, state, local, and private activities in response to an oil spill.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) contains the federal government's regulatory and operative requirements for responding to an oil spill (or hazardous substance release) into or on navigable waters and other specified locations. First developed through administrative processes in 1968, the NCP has been amended by subsequent laws, including the CWA and the OPA in 1990. Oil spill response actions required under the regulations of the NCP are binding and enforceable, per these enforcement authorities.

As cleanup efforts are continuing, a comprehensive analysis of federal activities pursuant to underlying statutes and the NCP would be incomplete. However, stakeholders raised various issues during response operations, including (1) the relationship between the federal government and the responsible party and (2) confusion regarding the role of state and local governments during oil spill responses.

In the aftermath of the Gulf spill, the regulatory framework for outer continental shelf (OCS) activities continues to be subject to heightened scrutiny. OCS activities are primarily regulated by BOEMRE/MMS and the U.S. Coast Guard. The Coast Guard generally oversees the systems and worker safety at the platform (or surface) level of mobile offshore drilling units (MODUs) such as the *Deepwater Horizon*. The sub-platform (i.e., underwater or sea floor) drilling systems are within the jurisdiction of BOEMRE.

Prior to the 2010 Gulf spill, members of Congress had focused on addressing a range of potential concerns at BOEMRE/MMS, including mismanagement, ethical shortcomings, mission conflicts, and, in some instances, agency capture by its regulated industry. These concerns have increased since the Gulf incident. To address them, on May 19, 2010, Interior Secretary Salazar issued an administrative order dividing MMS into three new offices, to separate three of the agency's functions: enforcement, energy development, and revenue collection. The Secretary issued the MMS name change one month after the reorganization order.

#### Prevention and Containment Technology for Deepwater Oil Spills

After observing recent operations in the Gulf, many have questioned the ability of industry and the federal government to prevent or respond to a significant blowout at substantial water depths. Although a blowout preventer (BOP) is designed as the last line of defense, and is built to include multiple backup mechanisms to stop an uncontrolled release, the Gulf incident demonstrated that BOPs are not failsafe. The Gulf response highlighted the technological challenges involved with containing an oil release 5,000 feet below the ocean surface. At these depths, equipment must be controlled by operators thousands of feet above and be able to withstand high pressures and low temperatures, which pose multiple engineering challenges. For example, when BP first attempted to intercept the oil and gas and divert it to the surface, solid methane hydrates formed and clogged the equipment intended to divert oil to the surface.

#### **Relief Wells**

The Administration and some members of Congress expressed interest in establishing a policy for relief wells. A relief well is drilled to intersect a well that has suffered a blowout and its construction is similar to an exploratory well. As the Gulf incident has demonstrated, deep relief wells can take months to reach their target. Drilling a relief well concurrently with drilling an exploration or development well would likely shorten the time between a blowout and when a leak is plugged. However, requiring a concurrent relief well is not a risk-free proposal: a possibility would exist for a blowout from the relief well itself; and a concurrent well would significantly increase costs and affect project schedules.

#### Dispersants

Dispersants are chemical agents that enhance the breakup of oil into small oil droplets that mix with the water column. Federal responders have allowed for the use of approximately 1.8 million gallons of dispersants in the Gulf. While dispersants have proven effective in breaking up the oil on the surface, questions remain about the fate of the dispersed oil and the chemical dispersants and their short- and long-term environmental impacts.

#### Liability and Compensation Framework

The Gulf spill placed a spotlight on the liability and compensation framework established by OPA in 1990. With some exceptions (whose applicability in the *Deepwater Horizon* incident has not been determined), the liability of a party responsible for an oil spill is limited. For example, the lease or permit holder of an offshore facility (e.g., BP) is liable for all removal (i.e., cleanup) costs, but liability for other damages/costs is capped at \$75 million. If a party's liability limit is met (and the party denies claims above its limit), claims for compensation may be awarded up to a per-incident cap of \$1 billion through the Oil Spill Liability Trust Fund, which is managed by the Coast Guard.

As noted above, BP has reportedly awarded claims exceeding its (conditional) liability limit. The Obama Administration and BP jointly announced on June 16, 2010, the creation of the Gulf Coast Claims Facility (GCCF), an independent claims facility administered by Kenneth Feinberg, to process claims for individuals and businesses. BP has begun to finance GCCF with incremental payments to eventually total \$20 billion. BP will continue to process claims from government

entities. The GCCF has received considerable attention, with some raising questions about its effectiveness in compensating injured parties.

## **Factors Influencing Future Congressional Action**

Several factors may influence future congressional action regarding the 2010 Gulf incident. These are discussed below.

#### Conditions in the Gulf

The perceived state of conditions in the Gulf will likely be as influential as the actual conditions, which may be difficult to conclusively assess and which will change over time. Extensive data was collected during the spill. Peer review reports (which are generally published many months after data collection) and other assessments of these data may spur legislative activity, depending on the conclusions drawn in and from these reports.

On November 23, 2010, the federal government released a peer-reviewed publication that provided an oil budget estimate (i.e., an estimate of what happened to the oil). At the time of these calculations, a substantial portion of the oil had been effectively removed from the Gulf environment through human interaction. However, a greater portion remained, in some form, in the Gulf. It is unknown what then happened to the oil that remained in the Gulf.

It is debatable whether the fate of the remaining oil will ever be established conclusively. Multiple challenges hinder this objective, and as time progresses, determining the fate of the oil will likely become more difficult. Researchers are continuing to study various components of the Gulf. Some of these efforts may provide clues to the oil's fate.

A related issue is how one defines the scope of the oil spill cleanup and restoration. For example, should the objective be to return the Gulf to pre-spill conditions or to attempt a more comprehensive restoration of the region? These different perspectives may influence policymakers.

#### **Independent Inquiries**

Several investigations and commissions—both federal and private—have been initiated to examine issues surrounding the *Deepwater Horizon* incident. For example, the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling was established by the President on May 22, 2010, to investigate root causes of the accident and to provide recommendations. The commission submitted its final report to the President on January 12, 2011. Findings and recommendations from this body and others may influence future congressional action.

#### **Judicial Activity**

Judicial proceedings regarding oil and gas activity in the Gulf region can be complicated. In the aftermath of a catastrophe, it is not uncommon for subsequent litigation to involve many litigants, to be advanced in more than one judicial venue, and to take long periods of time to resolve.

Sometimes judicial proceedings overlap with actions of the executive branch or of Congress. Litigation related to the BOEMRE suspension of certain OCS drilling activities in the Gulf of Mexico is an illustration of legal proceedings that address OCS activities in the Gulf region. Another judicial development precipitated by the *Deepwater Horizon* incident is the DOJ civil proceeding initiated on December 15, 2010, against BP and other defendants. These cases, and any other litigation, could influence policymakers.

#### Further Research<sup>2</sup>

An accident or natural disaster of national interest poses immediate demands for research, data, and statistics. In the case of the *Deepwater Horizon* incident, data on deepwater activities and vicinities are generally not viewed as robust, and some question the adequacy and objectivity of data immediately available for congressional hearings and other deliberations. Most observers anticipate that further research on these matters will be a useful tool for policymakers. The availability of data about federally regulated offshore activities, particularly in deepwater areas, seems to be a factor that would influence future congressional action.

## **CRS Reports for Further Reading**

CRS Report R41262, *Deepwater Horizon Oil Spill: Selected Issues for Congress*, coordinated by Curry L. Hagerty and Jonathan L. Ramseur.

CRS Report RL33705, *Oil Spills in U.S. Coastal Waters: Background and Governance*, by Jonathan L. Ramseur.

CRS Report R41531, Deepwater Horizon Oil Spill: The Fate of the Oil, by Jonathan L. Ramseur.

CRS Report R41453, Oil Spill Legislation in the 111th Congress, by Jonathan L. Ramseur.

CRS Report R41485, *Reorganization of the Minerals Management Service in the Aftermath of the Deepwater Horizon Oil Spill*, by Henry B. Hogue

CRS Report R41266, *Oil Pollution Act of 1990 (OPA): Liability of Responsible Parties*, by James E. Nichols.

CRS Report RL33404, Offshore Oil and Gas Development: Legal Framework, by Adam Vann.

CRS Report R41311, *The Deepwater Horizon Oil Spill: Coastal Wetland and Wildlife Impacts and Response*, by M. Lynne Corn and Claudia Copeland.

CRS Report R41370, Federal Civil and Criminal Penalties Possibly Applicable to Parties Responsible for the Gulf of Mexico Oil Spill, by Robert Meltz.

CRS Report R41320, *Deepwater Horizon Oil Spill Disaster: Risk, Recovery, and Insurance Implications*, by Rawle O. King.

<sup>&</sup>lt;sup>2</sup> Authors acknowledge the assistance of CRS Knowledge Services Group on topics related to data availability, data integrity, and other aspects of the scope of authoritative resources for *Deepwater Horizon* topics.

CRS Report R41396, *The 2010 Oil Spill: Natural Resource Damage Assessment Under the Oil Pollution Act*, by Kristina Alexander.

CRS Report RS22022, *Disaster Unemployment Assistance (DUA)*, by Julie M. Whittaker and Alison M. Shelton.

CRS Report R41323, Tax Issues and the Gulf of Mexico Oil Spill: Legal Analysis of Payments and Tax Relief Policy Options, by Molly F. Sherlock, Erika K. Lunder, and Edward C. Liu.

CRS Report RL34209, Commercial Fishery Disaster Assistance, by Harold F. Upton.

CRS Report R41308, *The 2010 Oil Spill: Criminal Liability Under Wildlife Laws*, by Kristina Alexander.

CRS Report R41265, The 2010 Oil Spill: MMS/BOEMRE and NEPA, by Kristina Alexander.

CRS Report R41234, Potential Stafford Act Declarations for the Gulf Coast Oil Spill: Issues for Congress, by Francis X. McCarthy.

CRS Report R40645, U.S. Offshore Oil and Gas Resources: Prospects and Processes, by Marc Humphries, Robert Pirog, and Gene Whitney.

CRS Report R41132, *Outer Continental Shelf Moratoria on Oil and Gas Development*, by Curry L. Hagerty.

CRS Report RS22145, *Environmental Activities of the U.S. Coast Guard*, by Jonathan L. Ramseur.

CRS Report R41365, Tax Deductible Expenses: The BP Case, by Molly F. Sherlock.

#### **Author Contact Information**

Curry L. Hagerty Specialist in Energy and Natural Resources Policy chagerty@crs.loc.gov, 7-7738 Jonathan L. Ramseur Specialist in Environmental Policy jramseur@crs.loc.gov, 7-7919