



REAR ADMIRAL PAUL F. ZUKUNFT
ASSISTANT COMMANDANT FOR MARINE SAFETY, SECURITY AND STEWARDSHIP
ON THE
LESSONS LEARNED FROM THE BP DEEPWATER HORIZON OIL SPILL RESPONSE
BEFORE THE SENATE COMMERCE, SCIENCE, AND TRANSPORTATION
SUBCOMMITTEE ON OCEANS, ATMOSPHERE, FISHERIES, AND COAST GUARD
JULY 20, 2011

Good Afternoon Chairman Begich, Ranking Member Snowe, and distinguished members of the subcommittee. I am honored to appear before you today to discuss the lessons learned from the BP Deepwater Horizon oil spill.

COMPREHENSIVE OVERVIEW OF COAST GUARD LESSONS LEARNED REVIEW AND IMPLEMENTATION STRATEGY FOR THE BP DEEPWATER HORIZON INCIDENT

BACKGROUND

On the evening of April 20, 2010, an explosion aboard the Mobile Offshore Drilling Unit (MODU) Deepwater Horizon led to the sinking of the MODU, the tragic loss of 11 lives, and the worst oil spill in U.S. history. Given the size and scope of the spill, Secretary Napolitano designated the incident a Spill of National Significance (SONS) and designated then-Commandant of the Coast Guard Admiral Thad Allen as the National Incident Commander (NIC). Due to the severity of the spill, the complexity of the response effort, and the large-scale potential for adverse impacts on the environment and public health, this response required extraordinary coordination of federal, state, local, tribal and commercial resources to contain and mitigate the effects of the spill. Using the framework provided for in the National Contingency Plan (NCP), a monumental response was undertaken through the unified efforts of more than 47,000 federal, state, and local responders, including more than 7,000 active and reserve Coast Guard members. We established five Incident Command Posts (ICPs) across the Gulf Coast states and 15 staging areas to help flow critical resources to impacted locations. I served as the Federal On-Scene Coordinator (FOSC) for more than six months during the response and recovery period.

The size and scope of this incident required significant coordination of public and private resources at both the strategic and operational level. The command and control structure facilitated the NIC and FOSC's ability to direct and coordinate with other federal, state and local stakeholders to address the most critical needs. The FOSC worked with other parties to address operational resource requests and state-by-state concerns throughout the operation. The NIC provided national-level support to the operational response—from resources to policy decisions—to secure the source and mitigate the impact of the spill. The NIC and the FOSC met regularly with key stakeholders, including the Governors of each state on the Gulf Coast and established a critical line of communication to resolve conflicts. At the operational level, a Unified Area Command was established to oversee operational activities across the entire Gulf Region. The FOSC served as the Unified Area Commander in accordance with established incident command doctrine, and under the Unified Area Command (UAC) there were the five ICPs: Houston, TX; Galveston, TX; Houma, LA; Mobile, AL; and Miami, FL.

Although the role and functions of the NIC evolved considerably during the response, the NIC concept proved to be an extremely effective command organization that promoted unity of effort across all levels of government, ensured that timely information was provided to the public and first responders, and efficiently marshaled the resources of the federal government, private sector, and international sources to combat this unprecedented oil spill. As the first SONS and NIC designation in U.S. history, the BP Deepwater Horizon (DWH) oil spill response enabled us to learn a great deal about NIC roles and responsibilities. Going forward, the Coast Guard will work with our interagency partners to memorialize in doctrine and policy the responsibilities that accrued to the NIC during this response.

The effort to contain and secure the well and the resulting spill response effort became extraordinarily large and complex. This effort required two drilling ships, numerous oil containment vessels used to control the source, and the highly coordinated use of mechanical recovery, surface burning, and dispersant applications. The weather significantly impacted our ability to carry out skimming and surface burn operations. Despite these constraints, we employed more than 835 oil skimmers, more than 6,100 response boats and 3,190 vessels of opportunity, and over 120 aircraft. More than 34.7 million gallons of oil-water mix were recovered through skimming, 411 controlled in-situ burns removing over 11 million gallons of oil from the open water, and the dispersion of oil both at the surface and at the wellhead.

Response operations took place in four zones: at the source of the spill, off-shore, near-shore, and in-shore. At the source, the drilling rigs and remotely operated vehicles necessary for deep water drilling were the only means of accessing the well at a depth of 5,000 feet. Off-shore, as close to the source as possible, the response focused on removal of the oil. Key to these operations were large skimmers and in situ burn task forces. Near-shore operations focused on skimming and the use of booms to protect sensitive areas and as much of the shoreline as possible. In Barataria Bay, for example, shoreline operations involved extensive assessment, environmental protection, and treatment strategies. After the well was capped, shoreline cleanup became the focus of continued response operations.

Health and Safety was a primary strategic goal throughout this response, as reflected by our efforts to address the potential public health impacts of the spill and the remarkably low injury rate for responders across the operation. At its peak, there were 47,000 people working on the response, ranging from those drilling relief wells on ships fifty miles off-shore to those working on skimming and booming vessels and the work crews cleaning the shoreline. Thousands of personnel worked to decontaminate oiled booms, vessels and equipment. A significant safety organization was staffed by numerous federal and state agencies and private safety experts who oversaw and examined broad aspects of worker safety.

Overall, Section 311 of the Clean Water Act, as amended by the Oil Pollution Act of 1990 (OPA '90), as well as the NCP and the supporting National Incident Management System (NIMS), proved effective during the DWH oil spill response. The NCP provided a sound framework that allowed for the needed discretion and freedom of action to address contingencies that arose.

MAJOR REPORT SUMMARIES

As with any incident, there are ongoing assessments and reviews to gain a better understanding of lessons learned from the response to inform equipment standards, technology, and preparedness to respond in the future. These assessments come from both Coast Guard and third party reviews.

The National Incident Commander's Report, released on October 1, 2010, discussed the effectiveness of the NCP as the United States' blueprint for responding to both oil spills and hazardous substance releases. The report reviewed the roles and responsibilities of the NIC and examined whether existing legal authorities and doctrine were adequate. Coast Guard Admiral Thad Allen provided his observations and recommendations regarding the authorities, doctrine, and policy that collectively provide the governance constructs used for oil spill response. Admiral Allen offered key recommendations to improve our collective ability to respond to the next major oil or hazardous substance release. These key recommendations include:

- Incentivizing the private sector to develop 21st century oil spill response capabilities to keep pace with advancing technologies in oil exploration, deepwater offshore drilling, oil production, and maritime transportation;
- Ensuring that all appropriate federal, state, local, and tribal government authorities and response structures are included in response plans and their elected or appointed officials are invited to participate in oil spill response exercises; and
- Ensuring a NIC has appropriate authorities necessary for the execution of the position.

The National Commission on the Deepwater Horizon Oil Spill and Offshore Drilling was created by Executive Order 13543 on May 21, 2010 as an independent, nonpartisan entity directed to provide a thorough analysis and impartial judgment of the DWH oil spill. The Commission was charged with examining the facts and circumstances concerning the root causes of the DWH explosion, improving the country's ability to respond to oil spills associated with offshore drilling, and recommending reforms to make offshore energy production safer. The report develops options to overhaul the U.S. approach to drilling safety and greatly reduce the chances of a similar, large scale disaster in the future.

The Coast Guard's Marine Safety Manual prescribes a process to conduct a comprehensive review to capture lessons learned from a major spill response. The Incident Specific Preparedness Review (ISPR) is the process by which the Coast Guard examines the implementation and effectiveness of the preparedness for and response to a major response, as it relates to the National Oil and Hazardous Substances Pollution Contingency Plan, Area Contingency Plans and other oil spill response plans. On June 14, 2010, the Commandant of Coast Guard Admiral Robert Papp, Jr., chartered an ISPR team to conduct an independent, third-party review of the Deepwater Horizon response. The ISPR team was comprised of federal and state government representatives along with representatives from the oil exploration and production industry, non-governmental organizations, community groups and the professional oil spill response industry who served as technical advisors. The report represents the views of the ISPR team and provides an assessment of the Coast Guard's preparedness process as well as recommended corrective actions.

On April 27, 2010, the Department of Homeland Security and Department of Interior jointly convened an investigation into the marine casualty, explosion, fire, pollution, and sinking of the DWH. Volume I of the report of this joint investigation concerns matters under the jurisdiction of the Coast Guard. The Coast Guard members of the joint investigation released Volume I on April 22, 2011. Volume II of the report will address matters under the jurisdiction of the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE).

Lastly, the FOSC report is under development. The FOSC report will contain observations and perspectives of the FOSC regarding the oil removal operation and actions taken. As required by 33 C.F.R. § 300.165, the report will document the situation as it developed, the actions taken, the resources committed, and challenges.

COAST GUARD INITIATIVES RESULTING FROM DEEPWATER HORIZON LESSONS LEARNED

The BP Deepwater Horizon oil spill and other incidents have prompted the Coast Guard to review all operations and systems under its responsibility for potential improvements to both regulations and the inspection regime for foreign-flagged MODUs on the U.S. Outer Continental Shelf (OCS). Prior to the incident, we were already pursuing improvements to our offshore inspection capability through our marine safety improvement program. We recently increased our inspection resources and established an Offshore National Center of Expertise that greatly enhances inspector competency.

All MODUs operating in the United States are subject to annual examinations to verify compliance with area laws and international conventions. If that exam finds "questionable equipment, systems, or crew competency issues" the Coast Guard can expand its investigation to determine whether a deficiency exists, and may require additional tests, inspections, or crew drills. On July 7, 2011 we announced in the Federal Register a risk-based oversight program for MODUs that will result in more frequent examinations of the highest risk MODUs based on accident history, past discrepancies, flag state performance, and classification society performance. Marine inspectors will focus on critical areas representing the greatest risks, such as dynamic positioning systems and operator competency. The President's Fiscal Year (FY) 2012 budget request seeks additional Marine Safety personnel, including Inspectors and Investigators, to staff vessel inspections and post-incident investigations.

Additionally, we are actively engaged in oversight of rapidly developing well spill containment capabilities (Marine Well Containment System and Helix Well Control Group) to promote rigorous testing to ensure these response vessels are capable of responding to a deepwater well spill and meet applicable safety and environmental requirements. We recently established an OCS Activities Matrix Team to leverage expertise throughout the Coast Guard including various headquarters offices, the Marine Safety Center, the Eighth Coast Guard District in New Orleans, LA, and the OCS Center of Expertise. This team will focus on emerging OCS issues and enhance the Coast Guard's ability to address them, increase our plan review and inspection oversight, support investigations and casualty analysis, and provide a holistic approach to management of OCS safety programs.

The Coast Guard shares MODU regulatory responsibilities with the BOEMRE and each agency's areas of responsibility are delineated in regulations as well as in Memorandums of Understanding. In general, the Coast Guard's primary responsibilities are related to vessel operations and safety systems including firefighting, lifesaving, electrical systems, and hull structures on the MODU and BOEMRE's primary responsibility is subsea operations and drilling systems. The Coast Guard does not oversee drilling systems, but the interface between subsurface and surface operations warrants close coordination and collaboration between both agencies. We continue to engage and improve coordination with BOEMRE through a Prevention Working Group that focuses on enhancing alignment and consistency between the two agencies on how inspections are conducted. The team will coordinate closely with Coast Guard-sponsored OCS stakeholder organizations such as the National Offshore Safety Advisory Committee (NOSAC) and other BOEMRE-Coast Guard meetings and Working Groups as vehicles for improving OCS safety.

The lessons learned from the BP Deepwater Horizon oil spill emphasize the importance of updated and comprehensive Regional and Area Contingency Plans around the nation. The Coast Guard, as the FOSC for oil spills in the coastal zone, is ensuring the Worst Case Discharge (WCD) planning scenarios are accurate and reflect all potential sources for oil spills, including offshore facilities.

The Coast Guard and BOEMRE have formed a joint Response Workgroup to improve interagency partnerships and collaboratively work on improving preparedness efforts in several areas post-Deepwater Horizon. Significant Workgroup initiatives include joint Oil Spill Response Plan (OSRP) Review, Regional Contingency Plan and Area Contingency Plan WCD Gap Analysis, joint BOEMRE/Coast Guard pollution equipment compliance inspections, and a review of the effective daily recovery capacity standard for mechanical recovery equipment. The Coast Guard and BOEMRE have conducted a joint review of OSRP in BOEMRE's OCS Gulf of Mexico, Pacific, and Alaska Regions. This review, which included Coast Guard participants from each region, identified the most accurate, up-to-date WCD information for offshore facilities. In addition to the OSRP review, a comprehensive analysis of Regional Contingency Plans (RCP) and Area Contingency Plans (ACP) was conducted to identify significant WCD preparedness gaps.

The Coast Guard directed Area Committees to address these gaps and ensure WCD planning scenarios in all oil spill contingency plans reflect WCD information identified during the joint OSRP review. As mentioned in several key Deepwater Horizon lessons learned reports, the Coast Guard identified the need for Area Committees to encourage more participation from state, local and tribal officials in oil spill planning and preparedness efforts. The Coast Guard also re-emphasized existing guidance for District and Sector Commanders to develop aggressive outreach programs with state, parish, county, and other local officials.

The Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA), and Coast Guard, via the chairs of the National Response Team (NRT) and the Emergency Support Function Leadership Group (ESFLG), have formed a working group to develop recommendations that support improvements for responses involving the whole of government under both the National Response Framework (NRF) and the NCP. This working group is conducting a comprehensive review of the similarities, differences and synergies between the NRF and the NCP.

The BP Deepwater Horizon oil spill response also highlighted the need for Oil Spill Research and Development. The FY 2011 appropriations included \$4 million for research, development, test, and evaluation of technologies to prevent and respond to oil and hazardous substance spills. In addition, the President's FY 2012 budget request includes a full-time position for the Interagency Coordination Committee on Oil Pollution Research (ICCOPR) and Research Development Test & Evaluation funding for Oil Spill Detection/Response.

The DWH response highlighted the need for highly qualified surge personnel in the event of pollution incidents. Swift identification of trained and experienced personnel is critical in supporting FOSCs as they carry out their statutory responsibilities. To improve personnel competency in areas that support the Coast Guard FOSCs, we are strengthening our Marine Environmental Response training program for all responders. The President's FY 2012 budget request seeks 87 new environmental response personnel.

We are also developing a FOSC Representative course that will provide greater competency among junior officers and enlisted personnel who may be called upon to provide command and control functions during a range of oil spill and hazardous material incidents. The President's FY 2012 budget request also includes funding to establish a Coast Guard National Incident Management Assistance Team (IMAT) to an immediate, highly proficient, and deployable surge capacity to Coast Guard Incident Commanders nationwide to responds to threats and other disasters.

We continue to provide leadership and direction towards the establishment of a permanent civilian Regional Response Team (RRT) Co-Chair position at each Coast Guard District. These permanent Co-Chairs will provide leadership, continuity and subject matter expertise to regional elements of the National Response Systems and NRF.

Finally, we are considering personnel enhancements in the pollution response field that will allow our high-performing Marine Science Technician enlisted members to advance into greater leadership roles. Once in place, these experts will be able to lead the Coast Guard through future pollution incidents.

CONCLUSION

The BP Deepwater Horizon oil spill response required the collaborative and sustained response of more than 1,000 organizations and the lessons learned will help inform future Coast Guard operations. The OPA '90 as well as the NCP were used effectively, and the Incident Command System's scalable organizational structure proved effective in bringing together federal, state, local, tribal, and private sector entities. The division of responsibilities between the NIC and staff working at the National level, and the FOOSC serving as Unified Area Commander at the regional level, was effective in managing national, regional and local demands of this first "Spill of National Significance."

Thank you for the opportunity to testify before you today and I will be pleased to answer your questions.