

Testimony of

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before

THE SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

of the

HOUSE COMMITTEE ON NATURAL RESOURCES

on

THE SCIENCE BEHIND DISCOVERY:

SEISMIC EXPLORATION AND THE FUTURE OF THE ATLANTIC OCS

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I. Introduction

Chairman Lamborn, Ranking Member Holt and members of the Subcommittee, my name is Donald F. Boesch, President of the University of Maryland Center for Environmental Science. I was one of seven commissioners who comprised the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. I thank you for the opportunity to testify today.

As the nation considers the expansion of offshore drilling to the East Coast of the United States, I believe it is important to evaluate the lessons provided by the catastrophic blowout of the Macondo well almost four years ago.

The explosion that tore through the *Deepwater Horizon* drilling rig on April 20, 2010, as the rig's crew completed drilling the exploratory Macondo well deep under the waters of the Gulf of Mexico, began a human, economic, and environmental disaster that is still playing out.

Eleven crew members died, and others were seriously injured, as fire engulfed and ultimately destroyed the rig. For almost three months more than four million barrels of oil gushed uncontrolled into the Gulf—threatening livelihoods, the health of Gulf coast residents and of those responding to the spill, precious habitats, and even a unique way of life. A treasured American coast already battered and degraded from years of neglect and mismanagement as well as natural disasters, faced yet another blow as the oil spread and washed ashore. Five years after Hurricane Katrina, the nation was again transfixed, seemingly helpless, as this new tragedy unfolded in the Gulf. The costs from this one industrial accident are still not yet fully adjudicated and counted, but it is already clear that the impacts on the region's natural systems and people were enormous, and that economic losses will total tens of billions of dollars.

On May 22, 2010, President Barack Obama announced the creation of the National Commission on the BP *Deepwater Horizon* Oil Spill and Offshore Drilling (the Commission): an independent, nonpartisan entity, directed to provide thorough analysis and impartial judgment. The President charged the Commission to determine the causes of the disaster, and to improve the country's ability to respond to spills, and to recommend reforms to make offshore energy production safer. And we were told to follow the facts wherever they led.

After an intense six-month effort to fulfill the charge, the Commission released its final report on January 10, 2011, three years ago today. As a result of our investigation, we concluded:

- The explosive loss of the Macondo well could have been prevented.
- The immediate causes of the Macondo well blowout could be traced to a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic failures in risk management that they place in doubt the safety culture of the entire industry.

- Deepwater energy exploration and production, particularly at the frontiers of experience, involve risks for which neither industry nor government has been adequately prepared, but for which they can and must be prepared in the future.
- To assure human safety and environmental protection, regulatory oversight of leasing, energy exploration, and production require substantial reforms, probably even beyond those significant reforms the Department of the Interior has already initiated since the *Deepwater Horizon* disaster.
- The technology, laws and regulations, and practices for containing, responding to, and cleaning up spills lag behind the real risks associated with deepwater drilling into large, high-pressure reservoirs of oil and gas located far offshore and thousands of feet below the ocean's surface. Government must close the existing gap and industry must support that effort.
- Scientific understanding of environmental conditions in sensitive environments in deep Gulf waters, along the region's coastal habitats, and in areas proposed for more drilling, such as the Arctic, is inadequate. The same is true of the human and natural impacts of oil spills.

We reached these conclusions and made our recommendations in a constructive spirit. Our goal was to make American offshore energy exploration and production far safer, today and in the future.

Since we released our report, several other highly qualified committees and organizations have also completed analyses of what went wrong with the Macondo well and what should be done to protect against such a catastrophe happening again. These include the Department of the Interior-Coast Guard Joint Investigation, several studies of the National Academies of Sciences and Engineering, and even some industry analyses. I wish to point out that all of these studies have supported the Commission's findings and often reinforced its recommendations.

The Commissioners, however, were not satisfied with merely issuing a report. Too many task forces and commissions, after devoting significant time and effort to their assignments, watch the value of their contribution diminish as other issues and priorities command public attention. As a group, we vowed not to let the spotlight fade from our work and elected to do what we can to advance the implementation of our recommendations so that the nation can move forward to secure the oil and gas off our shores in a safer, more environmentally responsible manner.

To this end, we established an Oil Spill Commission *Action* (OSCA) project to monitor progress in making offshore drilling safer and more environmentally protective, and to continue to engage the many actors how can implement the recommendations. On the second and third anniversaries of the explosion, OSCA issued "report cards" – the most recent was released on April 17, 2013 – addressing the progress that has been made in implementing the Commission's recommendations. I have brought copies of this report for Committee members and would like to request that it be entered into the record.

As our report cards have indicated, we have been gratified by the positive response to many of our recommendations. The oil industry, for instance, has established a Center for Offshore Safety, implementing one of our major recommendations. Similarly the Department of the Interior has implemented many of our recommendations to reduce conflicting incentives that had existed in the Minerals Management Service, and improve the efficacy of its regulatory programs. All in all, we have made important improvements in the way the Nation manages its offshore oil and gas exploration and production.

II. Congress Needs to Take Action

But that does not mean that the job is done. A recent investigation by WWL-TV in New Orleans found that there have been 17 events over the last 4 years in the Gulf of Mexico where the drilling crew lost control of a well. There were 7 such events reported through the first 10 months of 2013 alone. It was a loss of well control that resulted in the *Deepwater Horizon* catastrophe. These incidents also show that risks occur closer to shore and in shallower water, where older infrastructure and smaller operating companies prevail.

This experience demonstrates the importance of implementing the Commission's recommendations. As I said, the initiatives taken by the Administration and industry have been encouraging. However, through today, coincidentally the third anniversary of the submission of the Commission's report, Congress has yet to enact any of the recommendations we made to it to improve the management and safety of offshore drilling.

With respect to improving safety and environmental protection, we continue to urge Congress to codify the organizational changes the Department of the Interior has made in its regulatory programs. Although these were not as extensive as the Commission recommended, they are a substantial improvement over the organization that existed when the Deepwater Horizon disaster occurred. Congress should make these improvements permanent.

The Commission's other recommendations for improving safety and environmental protection included making the following modifications to the Outer Continental Shelf Lands Act (OCSLA):

- The period for approving exploration plans should be extended from 30 days to 60 days. This conclusion is particularly important with respect to proposals to extend outer continental shelf exploration and production operations to the relatively unfamiliar conditions in the Arctic and along the East Coast of the United States.
- Whistleblowers involved in offshore drilling operations should be provided the same protection that workers are guaranteed in other comparable settings. Those oil companies providing leadership in the pursuit of an effective safety culture agree that any employee should have the authority to stop operations if they see conditions they think may be unsafe. Legally protecting employees working for less committed companies could be an important step in identifying problems before they become serious.
- The liability cap and financial responsibility requirements for offshore facilities should

be substantially increased. Increasing the liability cap, set by law as only \$75 million, is important for two reasons. First, it would increase the incentive to make sure that the operations are conducted safely. The incredibly low existing cap eliminates such incentives for companies that would take advantage of it. The nation was very fortunate that BP did not try to take advantage of this limitation with Deepwater Horizon. The second concern is that people damaged by a spill would not be adequately compensated for damages they experienced if a company took advantage of the cap.

- The existing limit of \$1 billion on per-incident payouts from the Oil Spill Liability Trust Fund should be increased. The potential costs of responding to spills have increased substantially since these limits were established. It would be extremely unfortunate if the government were unable to respond effectively to a spill because of an arbitrarily low limit on how much money can be provided by the trust fund.
- A mechanism should be established to ensure that the offshore energy industry pays the entire costs associated with its regulatory oversight, just like other regulated industries do. This includes the costs of agencies such as BSEE and BOEM primarily charged with overseeing the offshore energy operations — ensuring their safety and compliance with environmental protection requirements — and also the incremental costs of other agencies responsible for overseeing offshore operations. We recognize that Congress has agreed to budget increases for these agencies to help support improved regulatory programs, but it would benefit both the federal budget and these oversight programs if they were funded by user fees rather than taxes

We have several other recommendations for Congressional action as well. These are outlined in the attachment to my testimony and discussed in the Commission's report discussing its recommendations.

III. Conclusion

In the years between the *Exxon Valdez* spill and the spring of 2010, Congress, like much of the nation, appeared to have developed a false sense of security about the risks of offshore oil and gas development. Congress showed its support for offshore drilling in a number of ways, but did not take any steps to mitigate the increased perils that accompany drilling in ever-deeper water or in new frontiers areas such as icy Arctic seas. However, despite the lessons learned since the *Deepwater Horizon* exploded, 11 rig workers lost their lives, and millions of barrels of oil spilled into the Gulf of Mexico, Congress still has not enacted any legislation to improve the safety of offshore oil exploration and production.

I recognize that the topic of today's hearing concerns seismic exploration and the future of the Atlantic OCS, but believe that the Commission's recommendations for needed legislative action are very germane. Given what has occurred, it first just makes sense to improve and codify the

safety regime before moving forward into frontier areas. I have outlined some of the more important of these needs related to the safety of offshore energy development in my testimony.

Second, the Commission recommended that frontier areas should be carefully studied to determine their environmental sensitivity, guide responsible planning within the region, and define a baseline against which damages caused by offshore energy development can be accurately assessed. One of the Commission's surprising findings was that when the Macondo blowout dumped enormous volumes of oil into the Gulf waters, scientists and policymakers suddenly realized they knew relatively little about biological systems, environmental conditions, and even key aquatic and coastal species in the area affected. Leasing of vast acreage combined with weak policies and limited funding had resulted in inadequate studies of critical environmental processes and sensitive environmental features where greater caution should be exercised. The Macondo blowout also taught us that large oil spills do not recognize state boundaries as shores over five states were oiled. As a resident of Maryland I feel compelled to remind Virginia proponents of offshore development that Ocean City is as close to areas targeted for exploration as Virginia Beach. Surely, risks to tourist economies in Maryland, Delaware and New Jersey, as well as Virginia, have also to be taken into account.

Third, it is also critical that the resources needed to respond effectively to spills that may occur be located in the region where the expansion is proposed before the new areas are explored and developed. This includes both the equipment and supplies necessary to respond to any emergencies, and adequate training of the federal, state, and local employees and volunteers who would be involved in such a response.

Offshore drilling has a substantial potential to contribute to the nation's oil and gas supplies and energy security. For this potential to be fully realized, however, the industry and government will have to rebuild public faith in offshore energy exploration and production. The Commission proposed a series of recommendations that would assist in this effort. Our message is clear: both government and industry must make dramatic changes to establish the high level of safety in drilling operations on the outer continental shelf that the American public has the right to expect and to demand. My fellow Commissioners and I continue to encourage Congress, the executive branch, and the oil and gas industry to take the necessary steps.



Recommendations Pertaining to Congress

A. Safety and Environmental Protection

Congress and the Department of the Interior should create an independent agency within the Department with enforcement authority to oversee all aspects of offshore drilling safety, as well as the structural and operational integrity of all offshore energy production facilities, including both oil and gas production and renewable energy production. The director of the new agency should be appointed by the President for a five-to-six year term and be confirmed by the Senate.

Congress and the Department of the Interior should create a Leasing and Environmental Science Office within the Department charged with fostering environmentally responsible and efficient development of the Outer Continental Shelf. To ensure that environmental concerns receive full consideration, the environmental division of this office should be led by a Chief Scientist, who would conduct all environmental reviews for offshore energy development.

Congress should amend the Outer Continental Shelf Lands Act (OCSLA) to extend the 30-day deadline for approving exploration plans to 60 days.

Congress should amend OCSLA to provide the National Oceanic and Atmospheric Administration (NOAA) with a formal consultative role during the development of five-year lease-plans and lease-sales.

Congress should amend the Outer Continental Shelf Lands Act or specific safety statutes to provide the same whistleblower protection that workers are guaranteed in other comparable settings.

Spill Response and Containment

Congress should provide mandatory funding (not subject to the annual appropriations process) for oil spill research and development.

Congress and the Administration should encourage private investment in response technology more broadly, including through public-private partnerships and a tax credit for research and development in this area.

Impacts and Restoration

Congress, federal agencies, and “responsible parties” should take steps to restore consumer confidence in the aftermath of a “Spill of National Significance.”

[Congress should dedicate 80 percent of the Clean Water Act penalties to long-term restoration of the Gulf of Mexico. – Done]

[To coordinate Gulf restoration and administer restoration funds, Congress should establish a joint state-federal Gulf Coast Ecosystem Restoration Council. The Council should be given authority to set priorities to govern the expenditure of funds and resolve any conflicts regarding eligibility of projects. Done]

Congress should ensure that the priorities and decisions of the Council are informed by input from a Citizens Advisory Council, which represents diverse stakeholders.

[In addition, Congress should establish and fund a Gulf Coast Restoration Science and Technology Program to support the design of scientifically sound restoration projects and evaluate individual projects for technical feasibility and consistency with the region-wide strategy.- Done]

Ensuring Adequate Resources

Congress should significantly increase the liability cap and financial responsibility requirements for offshore facilities.

Congress should increase the limit on per-incident payouts from the Oil Spill Liability Trust Fund.

The offshore energy industry should pay the costs associated with its regulatory oversight, just like other regulated industries do. This includes the costs of agencies such as BOEMRE primarily charged with overseeing the offshore energy operations — ensuring their safety and compliance with environmental protection requirements — and also the incremental costs of other agencies responsible for overseeing offshore operations.

Congress should increase and maintain its awareness of the risks of offshore drilling by

- designating specific subcommittees to oversee offshore safety and environmental risks,
- requiring the Department of the Interior and its Inspector General to submit annual reports to Congress on the subject, and
- requiring appropriate congressional committees to hold annual oversight hearings on the state of technology and safety.

Frontier Areas—The Arctic

There should be an immediate, comprehensive federal research effort to provide a foundation of scientific information on the Arctic.

Congress should provide resources to establish Coast Guard response capabilities in the Arctic, based on the Coast Guard's review of current and projected gaps in capacity.