



Reforms since the *Deepwater Horizon* Tragedy

In response to the *Deepwater Horizon* blowout, explosion and resulting oil spill in the Gulf of Mexico in 2010, the Department of the Interior launched the most aggressive and comprehensive reforms to offshore oil and gas regulation and oversight in U.S. history. This included restructuring to provide independent regulatory agencies that have clear missions and are better resourced to carry out their work, while keeping pace with a rapidly evolving industry. These efforts help ensure that the United States can safely and responsibly expand development of its domestic energy resources.

Bureau of Safety and Environmental Enforcement

The comprehensive reforms undertaken by the Bureau of Safety and Environmental Enforcement (BSEE) touch all facets of the offshore oil and gas program and cover components of its regulatory and oversight responsibilities as well as the promotion of a culture of safety and investments in the latest scientific safety and technology. A few highlights of BSEE efforts are described below:

Reducing Risk through Enhanced Well Design and Casing Standards – The 2010 Drilling Safety Rule requires that permit applications for drilling projects meet heightened standards for well-design, casing and cementing. BSEE engineers have reviewed, analyzed, and approved a total of 719 new well permits for drilling in the Gulf of Mexico since October 2010, when the new rule went into effect.

Workforce Realignment – BSEE has realigned its functions and personnel under a new national program model. The Bureau now includes a Safety Enforcement Division (SED) and Safety and Incident Investigations Division (SIID). The SED monitors the execution and effectiveness of the enforcement activity, while the SIID establishes national policies regarding investigator training and procedures for investigations.

Increasing Inspection and Engineering Workforce – The total number of inspectors in BSEE has increased from 58 in April 2010 to 121 currently. BSEE inspectors now specialize in well or production operations; this specialization allows for more training and time devoted to a specific area of inspection. The engineer workforce has increased from 106 at BSEE's inception in October 2011 to 233 currently. This allows for the increased review of permits and more analysis to ensure compliance with the enhanced standards.

Promoting Safety Culture and Continuous Improvement at All Levels of Industry – The 2010 Safety and Environmental Management System (SEMS) rule establishes performance based standards for industry to maintain an active integrated program for safety and environmental management that empowers workers to participate in safety management decisions.

Emerging Technology – BSEE funded the start-up costs for the Ocean Energy Safety Institute to provide recommendations and technical assistance to BSEE related to emerging technologies and serve as an important source of unbiased, independent information. In a separate initiative in 2014, BSEE established a Technology Center to serve as a resource to BSEE engineers who review and approve the use of new technology by the offshore oil and gas industry.

Decommissioning Costs Reporting Rule – In order to better understand and estimate the future decommissioning costs related to OCS leases, rights-of-way, and rights of use and easement, BSEE now requires offshore oil and gas lessees and owners of operating rights to submit summaries of their actual expenditures for the decommissioning of wells, platforms, and other facilities. The rule was finalized in December 2015.

Well Control Rule – BSEE has been working to increase equipment reliability and build upon enhanced industry standards for blowout preventers and, in a comprehensive way, address the multiple systems and processes critical to well control operations. The final rule was completed in April 2016 and operators must now demonstrate that they have access to all necessary equipment for subsea well control and containment in order to get approval of deepwater operations.

Arctic Rule - The Arctic-specific regulations focus solely on OCS exploratory drilling operations from floating vessels within the U.S. Beaufort and Chukchi Seas. The regulations codify and further develop current Arctic-specific operational standards to ensure that operators take the necessary steps to plan through all phases of OCS exploration in the Arctic, including mobilization, maritime transport and emergency response, and the conduct of safe drilling operations while in theater.

Production Safety Systems Rule – BSEE announced final regulations August 2016 to ensure that safety and maintenance requirements are current for offshore oil and gas production technologies. The final rule addresses a number of safety issues including production safety systems, subsurface safety devices, safety device testing, and production processing systems.



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Bureau of Ocean Energy Management

The comprehensive reforms implemented by the Bureau of Ocean Energy Management (BOEM) are designed to ensure that – before plans from industry are approved for exploration or development – environmental safeguards are strong and based on the best science available. In addition, the bureau has taken action to raise the cap on industry liability for oil spills and to provide its expertise in long-term Gulf of Mexico restoration and recovery. A few highlights of BOEM’s efforts are described below:

Strengthening environmental review – BOEM is conducting comprehensive site specific environmental assessments for all initial deepwater exploration plans in accordance with the National Environmental Policy Act in order to strengthen the framework designed to ensure that environmental risks are thoroughly analyzed, appropriate protective measures are implemented, and that environmental analyses are transparent and well-understood within the Federal government and by the public and stakeholders.

Focus on science-based decision-making – A new Office of Environmental Programs (OEP), led by a Chief Environmental Officer, was established in 2011. This allows better integration of science into decision-making at every stage of the oil and gas development process and facilitates top-quality research by talented scientists from a range of disciplines.

Environmental research focused on Gulf of Mexico Monitoring, Recovery and Renewal – BOEM has focused on long-term monitoring, recovery and renewal of the Gulf of Mexico by conducting studies with federal, university and industry partners. These studies investigate impacts of the oil and dispersants on marine resources, develop state-of-the-art tools for modeling oil spill transport, and analyze social and economic recovery from oil spill impacts.

Thorough review of exploration and development plans – Enhanced web-based review of plans has helped ensure that companies are complying with rigorous operational and environmental standards and that BOEM’s reviews are efficient and transparent. The bureau is modernizing plan review through web-based applications and has added an evaluation process for reviewing information related to the potential for an oil spill that is submitted to the agency by the industry.

Improving Worst Case Discharge calculations – Rigorous Worst Case Discharge (WCD) calculations are required for the offshore oil and gas industry. BOEM engineers and geoscientists validate the assumptions and calculations and conduct independent analyses of the WCD scenarios included in operators’ plans.

Improving accuracy in air quality modeling – BOEM announced proposed updated air quality regulations that will more accurately account for and more effectively address emissions from offshore oil and gas activity, effectively ensuring that those activities do not significantly harm the air quality of any state -- giving coastal communities and stakeholders greater confidence regarding expected air quality impacts from OCS activity.

Long-term ecosystem health and restoration – BOEM is a key federal partner in carrying out the goals of the RESTORE Act. Through research and coastal restoration expertise, BOEM contributes to the framework for a long-term program to restore the natural resources of the Gulf of Mexico and Gulf Coast region.

Increasing limits of liability – BOEM has implemented new strategies to hold responsible parties accountable. BOEM has increased the limit of liability for oil-spill related damages from \$75 million to approximately \$134 million for offshore oil and gas facilities – the maximum allowed under the law – and has established a process for future increases to keep pace with inflation.

Developing shared standards in the Arctic – BOEM and BSEE have published proposed standards specific to the Arctic to ensure that operators take the necessary steps to thoroughly plan for and conduct safe exploratory drilling operations under unique Arctic conditions

The Department of the Interior Commitment

Central to the nation’s domestic energy portfolio, the Outer Continental Shelf (OCS) provides about one-fifth of the oil produced in the country, with production projected to increase in the coming years. As our commitment and duty to the American people, BOEM and BSEE will remain vigilant in instituting reform efforts and lessons learned since the tragic *Deepwater Horizon* event. Our goals are to ensure safe and responsible operations on the OCS, the long-term improvement and restoration of the Gulf Coast, and protection of other unique ecosystems of the OCS.