



## Well Control Final Rule Fact Sheet

Immediately following the *Deepwater Horizon* tragedy, the Department of the Interior and the Bureau of Safety and Environmental Enforcement (BSEE) issued a series of notices and regulations to improve safety offshore. In 2012, BSEE published the final drilling safety rule, and addressed some key recommendations made after the *Deepwater Horizon* tragedy; however, in this final rule BSEE closes gaps in existing requirements, addresses additional *Deepwater Horizon* recommendations, and updates BSEE regulations to reflect industry best practices. For example, the final rule:

- **Incorporates the latest industry standards that establish minimum baseline requirements for the design, manufacture, repair, and maintenance of blowout preventers (BOPs).**
  - Previous BSEE regulations did not include the updated industry standards that improve the reliability and performance of this equipment.
  - Adoption of these documents ensures that BSEE's regulations match the performance requirements recommended by the industry in the time since the *Deepwater Horizon* tragedy.
  - These requirements also help improve the reliability of surface BOP stacks that have typically been in service much longer than subsea BOP stacks.
  
- **Requires more controls over the maintenance and repair of BOPs.**
  - The final regulation improves the previous requirements for inspection, maintenance, and repair of this equipment.
  - The final regulation requires an annual Mechanical Integrity Assessment Report to be completed on certain BOPs by a BSEE approved verification organization. This report includes, but is not limited to, BOP repair and maintenance records, documentation of the equipment service life, and a comprehensive assessment of the overall system. This ensures that there will be complete traceability of the equipment even if it is serviced or repaired in a foreign jurisdiction.
  - The final regulation contains a performance requirement that the equipment be maintained pursuant to Original Equipment Manufacturer (OEM) requirements, good engineering practices, and industry standards.
  - The final regulation includes personnel training requirements for repairs and maintenance.
  - The final regulation includes, as a regulatory requirement, the complete break-down and detailed physical inspection of the BOP not longer than every 5 years. The complete breakdown and inspection may be performed in phased intervals.
  
- **Requires the use of dual shear rams in *deepwater* BOPs, which is now included in a baseline industry standard (API Standard 53).**
  - The use of dual shear rams in the BOP stack increases the likelihood that the drill pipe can be sheared in an emergency.
  - The final regulation also includes requirements for dual *shear* rams for surface BOPS on floating facilities.



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- **Requires that BOP systems include a technology that allows the drill pipe to be centered during shearing operations.**
  - Some experts believe that the failure of the *Deepwater Horizon* BOP stack to properly shear the drill pipe and seal the well was partially attributed to the fact that the drill pipe was not centered during shearing.
  - This provision will be in affect three years from rule promulgation.
- **Requires more rigorous third party certification of the shearing capability of BOPs.**
  - Previous regulations required independent third-party verification of shearing capability of BOPs, but did not specify any testing criteria.
  - This increases oversight and consistency of the shearing verification process and criteria used to establish shearing performance.
- **Expands accumulator capacity and operational capabilities for increased functionality.**
  - Proper accumulator capacity will help to ensure that the BOP system is capable of closing and sealing the well.
- **Requires real-time monitoring capability for *deepwater* and high-temperature/high- pressure drilling activities.**
  - The requirements for real-time monitoring help ensure that the operator has access to onshore technical expertise if needed and that there is another “set of eyes” available during critical operations.
  - Many *deepwater* operators already have real-time monitoring capability. The real-time monitoring requirements help ensure BSEE has access to the data and location of any onshore monitoring or data storage facilities.
  - The requirement also applies to shallow water operators involved in high-risk operations.
- **Establishes criteria for the testing and inspection of subsea well containment equipment in the regulations.**
  - The final regulation incorporates existing Notice to Lessees 2010-N10 on well containment.
- **Increases the reporting of BOP failure data to BSEE and the OEMs.**
  - The final regulation adopts the voluntary industry reporting protocols for reporting equipment issues.
  - OEMs and drilling contractors have stated that reporting of failure data is necessary to address key safety issues.
- **Adopts criteria for safe drilling margins consistent with recommendations arising out of the *Deepwater Horizon* tragedy.**
  - Previous regulations required the operator to show the planned drilling margin on the Application for Permit to Drill and did not clearly define the term.



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- The final regulations set expectations of what constitutes a safe drilling margin and allows for alternative safe drilling margins when justified.
- **Requires the use of accepted engineering principles and establishes general performance criteria for drilling and completion equipment.**
  - The final regulation requires that permanently installed packers and bridge plugs meet industry standards.
  - The final regulation requires the use of recognized engineering practices when operating on the OCS to reduce risks.
  - The final regulation requires the use of equipment that has been designed, tested, and rated for the maximum environmental and operational conditions to which it may be exposed while in service.
- **Establishes additional requirements for using remotely operated vehicles (ROV) to function certain components on the BOP stack.**
  - The previous requirement contained general performance objectives for ROV.
  - The final regulation adopts industry standards on ROV intervention capabilities. This provision will help to standardize this equipment.
- **Requires adequate centralization of casing during cementing.**
  - The final regulation provides a general performance obligation to ensure that the operator provides the centralization needed to ensure proper cementing of the well.
- **Makes the testing frequency of BOPs used on workover and decommissioning operations the same as drilling operations.**
  - This change requires the same BOP testing frequency for workover and decommissioning operations as for drilling and completion operations. This change will result in less “downtime” during operations and reduce wear and tear on critical safety equipment.
- **Utilizes the best available information gathered through extensive outreach and stakeholder engagement.**
  - The requirements detailed in the final well-control rule are based on previous recommendations, in addition to: extensive stakeholder input; industry best practices, standards and specifications; public comments collected after review of a proposed rule; and formal outreach including a public forum held at the Department of the Interior and more than 50 separate meetings with stakeholders.
- **The various requirements contained within the final rule will be phased in over several years ensuring a complete and orderly transition.**