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Department of the Interior  
Bureau of Safety and Environmental Enforcement (BSEE)  
Regulations and Development Branch  
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[HTTP://www.regulations.gov](http://www.regulations.gov)

Docket#: BSEE-2018-0002

(RIN) 1014-AA39

Dear Director Angelle:

On behalf of Alaska Wilderness League, Defenders of Wildlife, Friends of the Earth, the National Audubon Society, the Natural Resources Defense Council (NRDC), Ocean Conservancy, Ocean Conservation Research, Pacific Environment, The Wilderness Society and their millions of members and online activists, we submit these comments on the proposed rule (83 Fed. Reg. 22128 (May 11, 2018) that would significantly revise and weaken the Oil and Gas Sulfur Operations in the Outer Continental Shelf (OCS) - Blowout Preventer Systems and Well Control Rule.

It has been almost ten years since the *Deepwater Horizon* disaster occurred in 2010, killing 11 people and resulting in the largest marine oil spill in U.S. history. Following this disaster, the Department of the Interior (DOI) instituted important new safeguards to prevent future oil and gas disasters in the OCS. These new safeguards include heightened safety standards to prevent and adequately respond to loss of well control so as to avoid another *Deepwater Horizon* disaster. Those safeguards are contained in the Blowout Preventer (BOP) Systems and Well Control Rule (WCR) published on April 29, 2016 (81 Fed. Reg. 25888) which was adopted after extensive public review and input.

Now, just two years after these new regulations were promulgated, the Department of the Interior is proposing to *significantly weaken* these rules, thereby undermining offshore safety and spill prevention and response. This is happening at the same time that the Department is proposing to greatly expand offshore oil and gas leasing, as evidenced by its draft proposed 5-Year OCS Leasing Program (2019-2024); lowering the safety and environmental standards for offshore operations exposes our nation's coasts and oceans and the communities that depend on them to even greater risk of harm.

These comments are based on a technical review of the proposed rule by Susan Harvey, Harvey Consulting LLC. Ms. Harvey is a petroleum and environmental engineer with over 30 years of experience working on oil and gas exploration and development projects. A summary of her experience is detailed in Attachment 1 to these comments.

We strongly oppose the proposed rule for the many important reasons summarized below.

**1. Proposed revision to 30 CFR § 250.462(b) would weaken source control and containment equipment requirements**

The proposed rule would remove the requirement that companies have access to and the ability to deploy specific and important Source Control and Containment Equipment (SCCE), leaving the specifics to the discretion of the operator. DOI eliminates the specific requirements for access to

containment domes and capping stacks, subsea hydraulic power sources, dispersant injection equipment, riser systems, remotely operated vehicles (ROVs), capture vessels, support vessels and storage facilities. These are all required under the April 2016 regulations. The proposed rule now states that SCCE may (rather than “must”) include these items. The proposed revision weakens a critical improvement in DOI’s regulations put in place after the *Deepwater Horizon* well blowout. One of the main lessons learned from the *Deepwater Horizon* disaster is that there must be in place certain pre-fabricated equipment that can immediately be deployed in the case of a loss of well control. This language significantly diminishes the requirement for that capability and could significantly increase the time involved to control a major oil spill from an offshore drilling rig.

**2. Proposed revision to 30 CFR § 250.724 would significantly weaken requirements for real time monitoring**

The requirement for Real Time Monitoring was a significant recommendation resulting from the *Deepwater Horizon* oil spill. This regulation was added to ensure that real-time drilling and operational data is not only available to rig personnel but is transmitted to onshore monitoring teams consisting of qualified personnel who have the capability to be in contact with rig personnel during operations. The purpose of the existing requirements is to ensure increased oversight and safer operations by having onshore technical assistance to help rig personnel identify and evaluate abnormalities or unusual conditions while conducting operations. DOI is proposing to delete the requirement to have a second set of experts (onshore) monitoring real-time data. This revision removes a redundant check that was determined to be essential to prevent loss of well control after the *Deepwater Horizon* Disaster.

**3. Proposed revision to 30 CFR § 250.730 narrows the conditions under which a BOP must function and increases the time allowed to investigate and report on a BOP failure**

DOI proposes to revise 30 CFR § 250.730 to only require a BOP to be capable of closing and sealing a wellbore “in the event of flow due to a kick,” rather than retain existing language that requires a BOP to be capable of closing and sealing the wellbore “at all times.” Other conditions exist besides a kick such as an approaching hurricane or a fire or other malfunction. This change substantially weakens the standards for when a BOP should be capable of closing.

The current regulation requires the investigation and analysis of a BOP failure to be completed within 120 days. DOI proposes to delay the timeframe for the investigation and failure analysis by requiring that the investigation only be started (rather than completed) within 120 days and then allows another 120 days for the investigation to be completed. This essentially doubles the failure investigation timing and delays completion of the investigation by 4 months. It does not make sense to delay failure investigation because one of the primary outcomes is to inform BSEE and the manufacturer of problems, so they can be resolved quickly and prevent other accidents or failures. Prolonging failure investigation timelines prolongs preventive remedies. The proposal is also problematic because it removes the requirement that the failure analysis report be provided to BSEE in instances where BSEE has designated a third party to receive the data. However, these reports, if submitted to a third party, may not be publicly available. See 83 Fed. Reg. at 22137-22138. It would be important for technical experts and others to be able to acquire and review the equipment failure information to make recommendations to prevent similar failures in the future.

**4. Proposed revision to 30 CFR § 250.731 reduces the standard for BOP ram closure and removes BSEE Approved Verification Organizations (BAVO) and mechanical integrity assessment certification of BOPs**

DOI proposes to change 30 CFR § 250.731 to reduce the standard for BOP ram closure. Existing regulation requires BOP rams to “achieve an effective seal” of the well. DOI proposes to revise the regulation to require the BOP ram to “close,” but that does not set the standard of achieving an

“effective seal.” DOI’s rationale for reducing this standard is to mirror API Standard 53 for BOPs. Matching API’s lower standard should not be the goal. DOI should maintain higher standards for safety, even if industry trade organization does not.

DOI also proposes to remove two important requirements: the requirement for the Certification of the BOP by a BSEE Approved Verification Organization (BAVO); and the requirement for an annual Mechanical Integrity Assessment Certification of the BOP. Both changes are significant reductions in the current standard. Removing the BAVO certification requirement from 30 CFR § 250.731(d) would eliminate independent third-party verification by a BSEE approved expert that the BOP stack is designed for the specific equipment on the rig and for the specific well design; has not been compromised or damaged from previous service; and will operate in the conditions in which it will be used. These are all critical safety recommendations resulting from the *Deepwater Horizon* blowout. Additionally, in 2015 DOI was proposing to expand the type of BOPs that would be required to undergo BAVO certification (to include all well operations, not just a limited subset of subsea BOPs, BOPs in a high pressure or high temperature (HPHT) environment or a surface BOP on a floating facility). Therefore, DOI is not only proposing a regressive change to the existing regulation, but is completely abandoning its 2015 plan of further expansion to other BOPs to increase safety.

DOI’s proposal to completely remove the requirement for an annual Mechanical Integrity Assessment Certification of the BOP is also regressive. When adopted, this regulatory improvement was described as important to fully understanding the entire BOP system and verifying that it would perform in an acceptable manner.

**5. Proposed revision to 30 CFR § 250.732 eliminates entirely the BAVO Program and the requirement to ensure testing of outer edges of BOP shearing blades was performed**

DOI proposes eliminating the BAVO program, a program that is designed to maintain a list of “BSEE approved verification organizations,” or BAVOs, for Blowout Preventer (BOP) systems and system components. It will no longer require that a verification organization submit its credentials, be certified by BSEE as qualified and be on a BSEE approved listed. Instead, DOI proposes allowing independent third-parties to replace BAVOs without any *credential and qualification process for those independent third-parties*. Consequently, there is no assurance that the third-party will be well-qualified for the extremely important work that is required, which includes verifying and documenting the proper functioning of the BOP.

The third-party would also perform a substantially reduced scope of work. DOI cites increased “procedural burdens and costs without giving rise to meaningful improvements in safety or environmental protection,” but provides no specific justification to support this claim. For example, DOI proposes to delete the requirement “ensures testing was performed on the outermost edges of the shearing blades of the shear ram positioning mechanism as required in § 250.734(a) (16).” DOI’s justification for this requirement was based on lessons learned during the *Deepwater Horizon* blowout investigation, specifically that the blind shear ram could not fully close and seal because the drill pipe was forced to the side of the wellbore, outside the ram’s cutting surface. The reason this regulation was added was to ensure tests verify the outermost edges of the shearing blade of the shear ram are effective. DOI theorizes this problem is solved with newer shearing blades that can center the pipe but does not address the large inventory of existing shearing blades that do not have this new technology. This might be acceptable if DOI requires all existing shearing blades to be replaced with drill pipe centering technology before this change takes place, but DOI has not proposed doing this.

**6. Proposed revision to 30 CFR § 250.732 reduces the BOP Test Timeframe and eliminates the Mechanical Integrity Assessment Report requirement**

DOI proposes to reduce the BOP pressure integrity testing timeframe from 30 minutes to 5 minutes (to demonstrate a seal at the rated working pressure) 30 CFR § 250.732(b). DOI states 5 minutes has been proven in the lab as sufficient verification and promises to work with BOP testing facilities to determine if longer times are needed beyond 5 minutes in the future. A change from 30 minutes to 5 minutes is an 83% reduction test length. It would be prudent for DOI to take a more conservative approach with a smaller reduction in test length, and more thoroughly evaluate this change before codifying an 83% test length reduction.

DOI proposes to eliminate the annual 30 CFR § 250.732(d) Mechanical Integrity Assessment Report requirements, stating this work is redundant to the independent third-party verification requirement in 30 CFR § 250.731. However, 30 CFR § 250.732(d) requires substantially more of a BAVO when conducting a Mechanical Integrity Assessment. In addition, the third-party verification requirement is a one-time informational submittal, rather than an *annual* report, as currently required in 250.732(d).

**7. Proposed revision to 30 CFR § 250.739 weakens BOP 5-Year Complete Breakdown and Inspection**

DOI proposes to weaken the BOP maintenance and inspection requirements of 30 CFR § 250.739 by eliminating the requirement to conduct a “complete breakdown” and “physical inspection” of the BOP every 5 years. DOI proposes to require a lesser inspection it now calls a “major, detailed” inspection, of the well control system, but is clearly less involved. DOI’s justification for this change is to address industry’s concern about having to break down the BOP into its very smallest parts. While there is a reasonable threshold for breaking down the BOP (that does not require every minute component fully dismantled), DOI’s proposed change is just the opposite, by failing to specify to what level the BOP must be broken down. DOI should be more specific in its proposed regulation to explain how far the BOP must be broken down to meet an acceptable BOP “major, detailed” 5-year inspection. DOI also proposes to weaken the rule by eliminating the requirement for a BAVO to be physically present at the 5-year BOP inspection. Instead, DOI proposes an inadequate substitute, namely having a third-party inspector merely read industry’s inspection report after-the-fact before compiling its own report. If a third-party inspector is not physically present at the 5-year BOP inspection, that person would not have the opportunity to physically inspect the equipment, collect independent data and photos, or make recommendations for repairs/replacements before the BOP is returned to service or rebuilt. Any report prepared by a third-party absent the opportunity to participate in the actual inspection would have little value and would come much too late in the process to effect real change/improvement.

**8. Proposed revision to 30 CFR § 250.414 would weaken the requirements regarding Safe Drilling Margins**

Mud weight must be sufficiently high to control a well, but not too heavy to cause a fracture and loss of well control. Therefore, there is an important balance that must be reached. The lack of a safe drilling margin is believed to have been a contributory factor in DWH blowout. To address this, the current regulation sets a safe drilling margin of 0.5 pound per gallon (ppg), with an avenue for an operator to seek a waiver by providing well-specific information. DOI now seeks input on whether that current 0.5 ppg standard in the rule should be revised or removed and replaced with a case-by-case analysis for each well. However, the 0.5 ppg margin was added to the regulations based on technical work and the recommendation of the National Academy of Engineering and National Research Council. Both organizations recommended DOI do further work on this standard to ensure it is sufficiently *conservative*. DOI has cited no technical analysis to justify deviating from the 0.5 ppg standard. Absent such technical analysis by BSEE, the rule should not be changed.

**9. Proposed revision to 30 CFR § 250.733(b) would extend the BOP Compliance deadline**

DOI is proposing to weaken 30 CFR § 250.733(b) by extending the compliance date for surface BOPs on a floating production facility another two years. This would result in a delay in surface BOP improvements until 2021. DOI has not provided adequate justification for this delay.

**10. Proposed revision to 30 CFR § 250.734(a)(1)(ii) reduces the requirements for shear ram capability**

DOI proposes eliminating the requirement that both shear rams be capable of shearing certain equipment in the hole [30 CFR § 250.734(a)(1)(ii)] and proposes to replace it with a weaker requirement allowing “a combination of shear rams” to be capable of completing the shearing task. The existing rule was put in place after the *Deepwater Horizon* well blowout, when a single shear ram was not capable of shearing equipment in the hole and controlling the well. As a result, several investigations concluded that redundant shear rams would provide a substantially higher likelihood of controlling the well. Redundant shear rams were required with equivalent capability (both needed to be capable of doing the job). As proposed, DOI is weakening the regulation to allow one shear ram to be capable of shearing some equipment, and the second shear ram to be capable of shearing other equipment. DOI’s justification for this change is that combined the shear rams should be able to shear the range of equipment that may be in the hole. The problem with this rationale, is that it does not account for the possibility of one shear ram malfunctioning. The benefit of having two, fully-capable shear rams, is a fully redundant back up. As proposed, if one shear ram fails, and that shear ram’s capabilities are not matched in the remaining shear ram, well control may not be achieved.

**11. Proposed revision to 30 CFR § 250.734(a)(3) weakens the accumulator system capability**

DOI proposes to weaken the accumulator system capability added in 2015 at 30 CFR § 250.734(a)(3). The existing regulation requires accumulator capacity to be located subsea to provide BOP closure and to operate critical BOP functions in case there is a loss of connection to the surface facility. The existing regulation also requires dedicated independent bottles for the autoshear, deadman and Emergency Disconnect Sequence (EDS) systems. The deadman system automatically closes in a well in the event of a total loss of hydraulic supply and closes a well in case of an unplanned disconnect with the lower marine riser from the BOP. DOI proposes to eliminate the requirement for dedicated independent accumulator system bottles and proposes to eliminate the requirement for this system to be physically located subsea. DOI’s primary justification is to align federal regulations with a weaker standard found in industry’s API Standard 53. DOI writes, “this revision helps reduce non-critical accumulator capacity on the BOP stack subsea but would not affect safety of the critical components.” This rationale is inconsistent with DOI’s prior findings that dedicated independent bottles were needed to be physically located subsea (in case surface connection was lost) and that dedicated independent bottles were needed to operate critical well control equipment including autoshear, deadman, and Emergency Disconnect Sequence (EDS) systems.

**12. Proposed revision to 30 CFR § 250.734(a)(4) eliminates the requirement for Remotely Operated Vehicles (ROV) to perform certain functions**

DOI proposes to modify 30 CFR § 250.734(a)(4) to eliminate the requirement for an ROV to open each shear ram, ram lock, or pipe ram. Under the proposal, the ROV would only need to have capability to close these devices. DOI also proposes to rely on industry’s API Standard 53 to establish the timeframes that an ROV must meet to achieve ram or lock closure. ROV capability to close a ram or lock is a critical well control function; this is being retained, although instead of setting its own stringent timeframes for this work, DOI defers to industry to set its own pace. API Standard 53 is routinely revised by industry, and further weakening can occur, if specific standards are not set in regulation. Removing the requirement for an ROV to be capable of opening a ram or lock, eliminates

the ability to remotely open a well to conduct well control intervention that may require temporary opening of a ram or lock. DOI argues that the most important ROV function is to close a ram or lock; however, this does not diminish the need to also have the capability to open a ram or lock if needed for well control intervention operations. DOI does not provide adequate technical justification for eliminating the requirement for ROVs to have the capability to open a ram or lock to ensure further well control intervention.

**13. Proposed revision to 30 CFR § 250.734(a)(6)(iv) regarding the Emergency Disconnect Sequence (EDS)**

DOI proposes to modify 30 CFR § 250.734(a)(6)(iv) to eliminate the requirement for the Emergency Disconnect Sequence (EDS) system to be capable of closing two shear rams in sequence. DOI does not explain how the shear ram closure should be assured when an Emergency Disconnect Sequence occurs. DOI's original rationale for including the EDS requirement was to improve safety and to ensure shear ram closure of the new two (redundant) shear ram requirement. DOI's justification for removing this requirement is insufficient.

**14. Proposed revision to 30 CFR § 250.734(a)(16) would eliminate the drill pipe centering technology requirements**

DOI proposes to eliminate the drill pipe centering technology requirements at 30 CFR § 250.734(a)(16). The existing regulation requires "a mechanism coupled with each shear ram to position the entire pipe, complete within the areas of the shearing blade and ensure shearing will occur any time the shear rams are activated." The need for drill pipe centering technology was a lesson learned from the *Deepwater Horizon* well blowout. Existing shear rams may have difficulty shearing a pipe if it is not centered in the ram. DOI states newer shear rams are being designed with a V or W cutting blade pattern that forces the pipe in the center (making drill pipe centering technology unnecessary). The problem is that only new shear rams with this new design would meet the existing standard set at 30 CFR § 250.734(a)(16). Existing shear rams found in all the other existing BOP systems would not. DOI states that it is considering a better option than the one proposed: retaining the drill pipe centering requirement, and only waiving this requirement when new shear rams with V or W cutting blade patterns (capable of drill pipe centering without another drill pipe centering device) are installed. This is a preferable proposal.

**15. Proposed revision to 30 CFR § 250.737(d)(2-3) would eliminate the requirement that DOI witness a BOP Test or Review BOP Test Data**

DOI proposes to eliminate the requirement for an operator to submit BOP test data if BSEE personnel do not witness the BOP test. DOI states it is a burden for them to review the BOP test data submitted by offshore operators, and they would prefer not to review any BOP test data unless an operator requests it. DOI did not provide any statistics on what percentage of BOP tests are actually witnessed by BSEE personnel, nor did DOI provide any statistics on how many BOP tests are not witnessed by DOI and are currently reviewed "on-paper" via BOP test data reports. More information is needed from DOI to better understand the impact of this change. For example, if most BOP tests are witnessed, there may be a small incremental impact of eliminating the 'on-paper-after-the-fact' BOP test review at DOI's offices. However, if most BOP tests are not being physically witnessed, eliminating the BOP test report submittal would mean DOI would be providing little or no routine review of BOP testing. *It is concerning that DOI would find BOP test data review a "burden;" when BOPs are a critical safety device for offshore well control.*

**16. Proposed revision to 30 CFR § 250.737(d) would reduce the frequency of pressure testing and BOP control station testing**

DOI proposes to revise 30 CFR § 250.737(d)(3)(v) to add "pressure testing of each ram and annular component is only required once." DOI's stated purpose for this change is to eliminate "unnecessarily

duplicative pressure testing” and to limit the risk of component wear. 30 CFR § 250.737(c) requires repeat testing if a pressure test in 30 CFR § 250.737(b-c) is not successful. The proposed revision to 30 CFR § 250.737(d)(3)(v) does not appear to take into account the possibility of a failed test, and the need for a repeat test.

DOI also proposes to weaken 30 CFR § 250.737(d)(5)(i)(A-B) to reduce BOP control station testing from weekly to every other week. This change cuts in half the BOP control station testing frequency.

**17. Proposed revision to 30 CFR § 250.428 the requirement for cement evaluation logging**

This change adds the use of cement tracers and clarifies that DOI approval of the cementing program is required as part of the permit approval, or during remedial activities. These changes are reasonable. However, in complex, higher risk wells a cement evaluation log should be a mandatory requirement. This recommendation has been made by a number of NGOs in the past; yet, DOI has not adopted this change. It may be useful to reiterate that temperature and tracer logs will indicate the cement top but will not provide information on cement quality throughout the entire cement column. A cement evaluation log provides substantially more information on cement placement and quality and should be required in all complex, higher risk wells, or wells placed in environmentally sensitive locations. Additionally, if remedial cementing is needed, a cement evaluation log should be run to verify the repair.

**18. Proposed revision to 30 CFR § 250.433 regarding BOP system diverter testing**

Current regulation requires routine testing of a BOP system diverter on an offshore floating drilling operation with a subsea BOP stack. The diverter system must be fully activated every week. DOI proposes to modify the diverter testing protocol to eliminate full diverter activation and flow tests and replace it with a partial activation test of the diverter element. The Federal Register Notice page 22135 does not define “partial activation,” nor explain how DOI assures the public a partial activation provides an equivalent safety test to a “full activation and flow testing.” DOI states “full actuation of the diverter element and flow tests are unnecessary with subsequent testing because partial actuation of the element sufficiently demonstrated functionality of the element, and a full flow tests would be originally verified on the initial test.” DOI provides no technical/expert support for this change in testing procedures, nor does it explain if this change is consistent with API, ISO or other international best practices. DOI does not explain how often the “initial” full test would be completed or establish limits on how long it would allow partial testing or explain how long this lesser testing standard might continue.

**19. Proposed revision to BOP Testing Frequency Call for Comment**

DOI requests input on BOP testing frequency. In 2015 DOI relaxed BOP testing frequency from 7 to 14 days. Some groups opposed this change, citing DOI’s prior work that concluded a 7-day test interval reduced risk. DOI does not provide any technical risk analysis for the public to consider. It merely poses the question should the BOP test frequency be 7, 14, or 21 days? DOI should complete a technical risk analysis of BOP failure rates for the 7-day vs. 14-day vs. 21-day BOP test interval, examining the risk reduction benefit of identifying a failed or faulty BOP system. It is recommended that there be a 7-day interval, only extending the interval to a longer timeframe if a technical risk analysis provides justification. DOI’s argument is that more frequent testing wears BOP components faster; this is solved by rigorous BOP system repair and replacement programs.

## Conclusion

The revisions DOI is proposing significantly weaken the regulations and increase the environmental and safety risks of offshore oil and gas exploration, development and production. Given the lessons learned from the *Deepwater Horizon* disaster concerning the human death toll and massive economic, social and environmental damage that can result from the loss of well control, it is irresponsible to weaken these standards.

For these reasons, Alaska Wilderness League, Defenders of Wildlife, Friends of the Earth, National Audubon Society, NRDC, Ocean Conservancy, Ocean Conservation Research, Pacific Environment and The Wilderness Society strongly oppose these revisions.

Yours Sincerely,

A handwritten signature in dark ink, appearing to read "Sarah Chasis". The signature is written in a cursive, flowing style.

Sarah Chasis  
Senior Director, Oceans  
NRDC



## Attachment 1

Ms. Harvey is the owner of Harvey Consulting, LLC, a consulting firm providing oil and gas, environmental, regulatory compliance advice and training to clients. Ms. Harvey held engineering and supervisory positions at both Arco and BP, including Prudhoe Bay Engineering Manager and Exploration Manager.

Ms. Harvey has planned, engineered, executed and managed both on and offshore exploration and production operations, and she has been involved in the drilling, completion, stimulation, testing, and oversight of hundreds of wells in her career. Ms. Harvey's experience also includes air and water pollution abatement design and execution, best management practices, environmental assessment of oil and gas project impacts, and oil spill prevention and response planning.

Ms. Harvey has worked on oil and gas projects in Alaska, New York, Pennsylvania, Ohio, West Virginia, Colorado, Texas, New Mexico, California, and Oklahoma, as well as in Canada, Australia, Russia, Greenland, Belize, and Norway. Ms. Harvey has authored numerous technical reports related to oil and gas project construction, operation, and abandonment, including best practices for oil and gas well construction, air and water pollution abatement design and execution, environmental assessments of oil and gas projects, and oil spill prevention and response planning. Ms. Harvey holds a Master of Science in Environmental Engineering and a Bachelor of Science in Petroleum Engineering.