



December 13, 2010

Department of the Interior  
Bureau of Ocean Energy Management, Regulation and Enforcement  
Regulations and Standards Branch (RSB)  
Attention: Cheryl Blundon  
381 Elden Street, MS-4024  
Herndon, VA 20170-4817

**Re: Oil and Gas and Sulfur Operations in the Outer Continental Shelf  
Increased Safety Measures for Energy Development on the Outer Continental Shelf,  
Information Collection 1010-AD68, Docket ID BOEM-2010-0034**

Also submitted electronically via the Federal eRulemaking Portal: BOEM-2010-0034

Ms. Blundon:

The Pew Environment Group appreciates the opportunity to submit comments on this interim final rule. We applaud the Bureau of Ocean Energy Management, Regulation and Enforcement's (BOEMRE) swift implementation of these improved and critical safety and operating requirements for Outer Continental Shelf (OCS) exploration and production operations. This letter identifies ten (10) priority issues for the next phase of BOEMRE's regulatory reform of 30 CFR Part 250.

### **Comments Supporting the Interim Final Rule**

As noted in the *Federal Register* notice for this rule (75 FR 63346, October 14, 2010):

*BOEMRE recognizes that this interim final rule does not fully address all issues associated with OCS drilling operations, although it is a critical step. We anticipate future rulemakings as we learn more about the causes of the Deepwater Horizon event and other issues associated with deepwater<sup>1</sup> drilling operations. (75 FR 63362)*

Pew agrees that BOEMRE has additional, significant reforms to make to increase the safety and environmental protection of OCS oil and gas exploration and production. We are committed to working closely with BOEMRE to improve federal regulations to avert future OCS disasters.

The initial rulemaking on October 14, 2010 was an exemplary first step in applying rules to ensure improved safety and operations for OCS activity. While we support BOEMRE's October 14, 2010 action to improve the federal regulation at 30 CFR Part 250, we offer several additional recommendations below. We believe BOEMRE should take swift action to address the concerns listed below, such that these additional requirements will be required for OCS drilling operations carried out in 2011 and beyond.

---

<sup>1</sup> Note that many of the requirements of this interim final rule apply to both deepwater *and* shallow water drilling operations.

As highlighted in our previous comments to BOEMRE, extensive regulatory reform is also needed for BOEMRE's oil spill prevention and response requirements at 30 CFR Part 254 to restore public confidence in the entire drilling program. We recognize that this comment period specifically pertains to 30 CFR Part 250 improvements; therefore, we have not listed improvements needed in 30 CFR 254. However, we request that BOEMRE also take similar, swift action to implement 30 CFR Part 254 in as early as possible in 2011.

**Comments for Additional Improvement of the Interim Final Rule:**

1. **BOP Improvements at 30 CFR 250.416(f) Should Apply to All BOPs.** New regulations at 30 CFR 250.416(f) require independent third party verification to ensure that **subsea** BOPs are designed for the specific equipment on the rig and for the specific well design; that the BOP stack has not been compromised or damaged from previous service; and that the BOP will operate in the conditions for which it will be used. These are critical improvements, but these same requirements should be applied to **all** BOPs used in the OCS, and should not just be limited to subsurface BOPs.
2. **Some BOP Improvements at 30 CFR 250.442 Should Also Apply to Surface BOPs.** New regulations at 30 CFR 250.442 require operational and physical barriers on BOP control panels to prevent accidental disconnect functions; clear labeling of BOP control panel systems; a management system for operating the BOP including the prevention of accidents or unplanned disconnects of the system; minimum requirements for personnel authorized to operate critical BOP equipment; and a requirement for the blind-shear rams to be capable of shearing any drill pipe in the hole under maximum anticipated surface pressures. These are critical improvements, but these same requirements should be applied to **surface** BOPs used in the OCS and should be included in the surface BOP requirements at 30 CFR 250.441.
3. **New Blind-Shear Ram Redundancy Requirements.** With this rule, BOEMRE has made the important first step of requiring independent third party verification of blind shear ram capability, but deferred one of the most critical safety improvements, the requirement to install redundant blind-shear rams in each OCS BOP, to a later rulemaking process. We recommend that redundant blind-shear rams be required for all OCS drilling operations as of June 1, 2011. While we agree that installation of a second set of blind shear rams will require modification to BOP stacks, vendors and operators have been aware of this recommended safety improvement for over 6 months now. An implementation date of June 1, 2011 will provide industry one full year to comply from the initial date of this important safety recommendation. We disagree with BOEMRE's reason for deferring this critical safety improvement. We do not agree that the new requirements added in the October 14, 2010 rulemaking "decrease the urgency of immediately requiring blind-shear ram redundancies on BOPs."<sup>2</sup>
4. **Relief Well Drilling.** BOEMRE's rulemaking deferred regulatory improvements for relief well rigs. We recommend that BOEMRE require companies to have an alternative drilling rig available on site and prepared to drill a relief well within eight hours. Regulations should specify

---

<sup>2</sup> BOEMRE conclusion at FR, Vol. 75, No. 198, October 14, 2010, Page 63353.

that the drilling operator must provide BOEMRE a signed rig contract showing evidence of a contractual commitment, along with documents verifying that the relief well drilling rig company has trained and qualified personnel and equipment to drill the relief well. The drilling operation should also be required to submit a written relief well plan with as much detail as possible as part of the application for a permit to drill, to expedite relief well drilling approvals needed during an emergency. We recommend that this requirement be put into place no later than June 1, 2011.

5. **Pre-fabricated Subsea Containment Structure.** BOEMRE's rulemaking deferred regulatory improvements for pre-fabricated subsea containment structures to collect oil from a subsea well blowout. We recommend that BOEMRE require companies to have a containment structure built, tested, and available onsite, along with trained personnel and resources necessary to deploy the structure. We recommend that this requirement be put into place no later than June 1, 2011.
6. **Well Control Experts.** BOEMRE's rulemaking does not currently include, or discuss any future plans for well control expert requirements. We recommend that BOEMRE require the operator to hold contracts with well control experts, including independent well control experts on the rig while drilling. We recommend that this requirement be put into place no later than June 1, 2011.
7. **Cement Quality Evaluation.** BOEMRE has deferred regulatory improvements for cement evaluation. We recommend that improved cement evaluation rules be developed and put into place no later than June 1, 2011. The lack of quantitative, mandatory cement evaluation requirements in BOEMRE regulations has been a longstanding problem. Due to the incremental cost of running cement evaluation tools in offshore wells, many operators skip this test relying only on cement displacement volumes and limited pressure testing to estimate cement placement success. Cement is a critical structural component of building a safe and environmentally sound well.<sup>3</sup> BOEMRE should require operators to run cement evaluation tools, and submit the well logging data to BOEMRE as evidence of a successful cement job. If the cement evaluation tools show cement integrity problems, BOEMRE's regulations should also require automatic remedial cementing action to follow.
8. **Operator Qualification.** The interim final rule does not ensure operator qualification, particularly with respect to interpreting well integrity pressure test results, and instead only contains training requirements. Training alone does not ensure that workers are qualified, especially if certain tasks are rarely performed. Each OCS rig operator should have a written operator qualification program. That program should include at a minimum an evaluative procedure that includes reevaluation as appropriate, explicit reasons why individuals no longer would be qualified, and record-keeping requirements. In general, operator qualification through periodic testing and/or certification is essential for key safety-related tasks. To view an example of operator qualification requirements, see 49 CFR 195 Subpart G which covers U.S. DOT's qualification requirements for oil pipeline personnel.

---

<sup>3</sup> Poor cementing has been cited as a problem for loss of well control in the Macondo blowout and in a July 2007 MMS report: "During the current period [1992-2006], the percentage of blowouts associated with cementing operations increased significantly from the previous period." [http://drillingcontractor.org/dcp/dc-julyaug07/DC\\_July07\\_MMSBlowouts.pdf](http://drillingcontractor.org/dcp/dc-julyaug07/DC_July07_MMSBlowouts.pdf)

9. **Accident Event Reporting.** Also missing from the interim final rule is a requirement that OCS operators and their contractors report to BOEMRE any accidental event that could significantly impact well integrity or blowout prevention. This proposed reporting requirement includes but is not limited to any event where blowout preventer seal material may be compromised.<sup>4</sup>
10. **Professional Engineer Requirements.** BOEMRE now requires a Registered Professional Engineer to certify a number of well design aspects including: casing and cementing design, independent well barriers, and abandonment design. This is a new, important requirement. BOEMRE does not, however, require that the engineer be certified as a Registered Professional Engineer in any particular engineering discipline. This creates the possibility that a Professional Engineer, with little or no experience with oil and gas well design, drilling operations or well pressure control could be certifying these designs. For example, BOEMRE's rule would allow an electrical engineer to certify a well design that may have no expertise or experience on offshore well construction design.

We recommend that the Registered Professional Engineer requirement be limited to the discipline of Petroleum Engineering, and/or a Registered Professional Engineer in any engineering discipline that has 5 or more years of experience designing and drilling offshore wells. We agree that Registered Professional Engineers have the technical capability to assimilate the knowledge to certify well construction methods over a period of time, but only the Registered Professional Petroleum Engineer is actually tested on well casing, cementing, barriers and other well construction design and safety issues. Other engineering disciplines require on-the-job training and experience to expand their expertise and apply their engineering credentials to offshore well construction design certification.

Again, we wish to reiterate how important the immediate implementation of these requirements is to the safety of OCS drilling operations and appreciate your consideration of our comments on additional areas for improvement.

Sincerely,



Marilyn Heiman  
Director, Offshore Energy Reform  
Pew Environment Group

---

<sup>4</sup> See *60 Minutes*, CBS, May 16, 2010, which discusses such an incident four weeks prior to the *Deepwater Horizon* tragedy (see <http://www.cbsnews.com/stories/2010/05/16/60minutes/main6490197.shtml>.)