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Natural Resources & Energy Law Section:

Developments in Offshore Oil & Gas: Regulatory Pullbacks and Drilling Expansions

"The post-Macondo SEMS rule and industry culture"

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What was root cause of Macondo disaster?

"Systematic failures in risk management [that] place in doubt the safety culture of the entire industry." DWH Presidential Comm'n

- A culture of complacency ("we've never had a blowout/oil spill").
- *Oil & Gas Journal* editorial asks: **What regulatory system can prevent industry's complacency?"**

Complacency causes disasters

Industry:

Blowouts are "**low probability**, high consequence" events.

Safety experts:

Blowouts are "**low frequency**, high consequence" events that are **very probable**.

Blowouts do not happen often, but it is highly probable that they will happen. **Complex systems migrate to a state of high risk because everyone becomes *complacent*.**

SEMS: a risk management rule

- SEMS-type rules differ from rules related to the design, testing and specification standards for equipment, which form the bulk of the Drilling Safety, Well Control and Production Safety System Rules passed after *Macondo*.
- A SEMS program requires companies to:

  "actively identify, manage and improve safety performance related to ***human behavior***, ***organizational structure, leadership***, *monitoring of safety critical equipment and processes, and adoption of standards, processes and procedures*."

The new SEMS requirements

All operators offshore are required to have a Safety & Environmental Management System (SEMS) with 13 elements by November 2011, such as:

- Hazards analysis—a facility-level risk assessment
- Management of change programs
- Safe work practices: manuals, standards, rules of conduct
- Training, including contractors
- Mechanical integrity: preventive maintenance & quality control
- Pre-start up review
- Emergency response plans
- **Audits of the SEMS program—**first one due to BSEE November 15, 2013; second one due June 2015.

Added in SEMS II, June 2013 by BSEE: Stop Work Authority, Ultimate Work Authority; Employee Participation in safety programs; whistleblower procedures; audits by Accredited Audit Service Providers.

The safety regime today

- Almost entirely a construct of the offshore industry itself, using API RP 75 and the Center for Offshore Safety (COS) SEMS audit protocols which BSEE has incorporated by reference into its regulations.

- ***"Government cannot inspect safety into the industry."***
- Then who are the watchdogs of the Gulf?

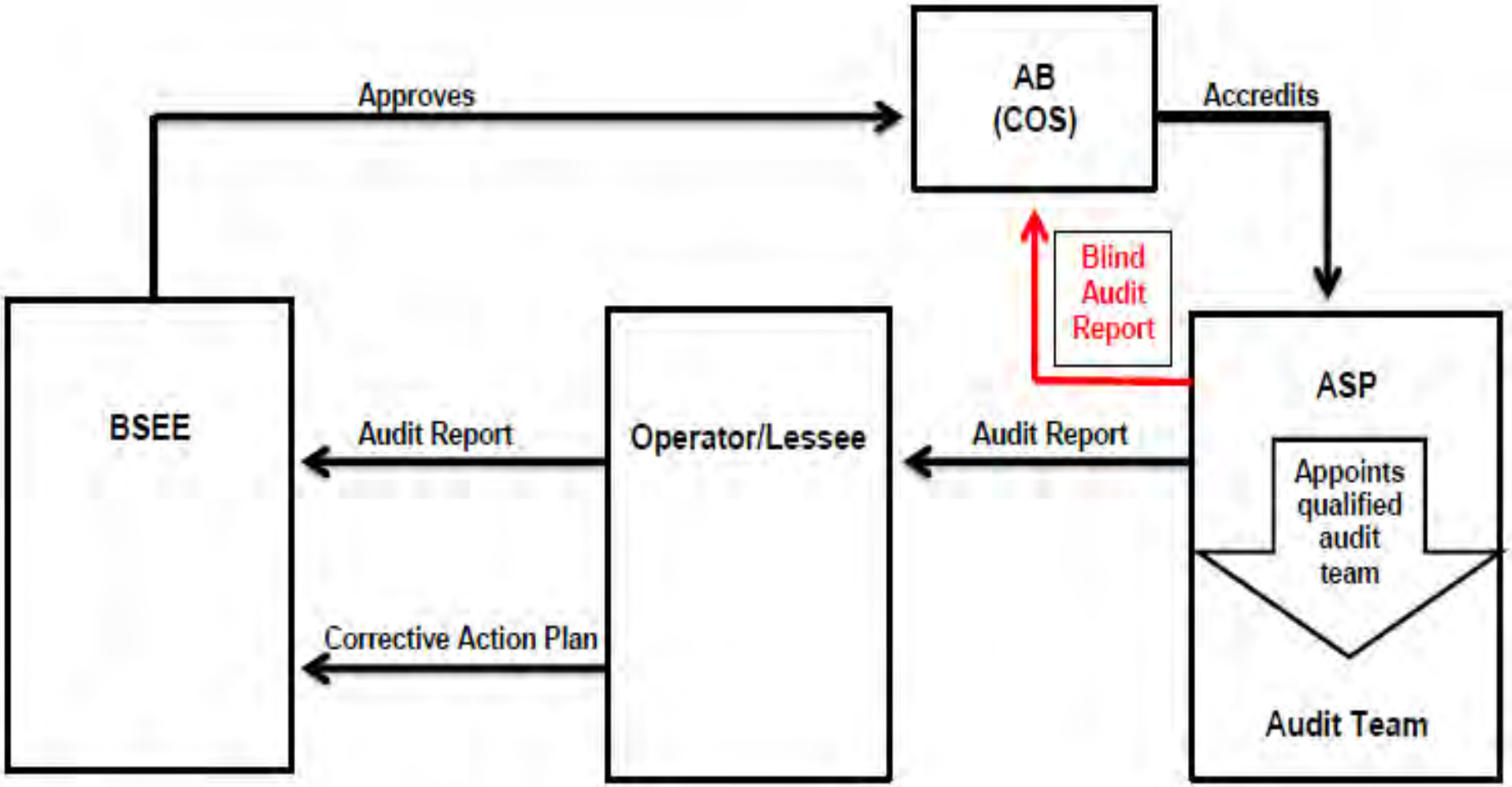
Who are the watchdog guardians of the Gulf? Meet the ASPs

U.S. Code of Fed. Reg.

§ 250.1920 What are the auditing requirements for my SEMS program?

(a) Your SEMS program must be **audited by an accredited ASP** according to the requirements of this subpart and API RP 75, Section 12 (incorporated by reference as specified in § 250.198). The audit process must also meet or exceed the criteria in Sections 9.1 through 9.8 of Requirements for Third-party SEMS Auditing and Certification of Deepwater Operations COS-2-03 (incorporated by reference as specified in § 250.198) or its equivalent.

SEMS Audit World: COS & BSEE Linked



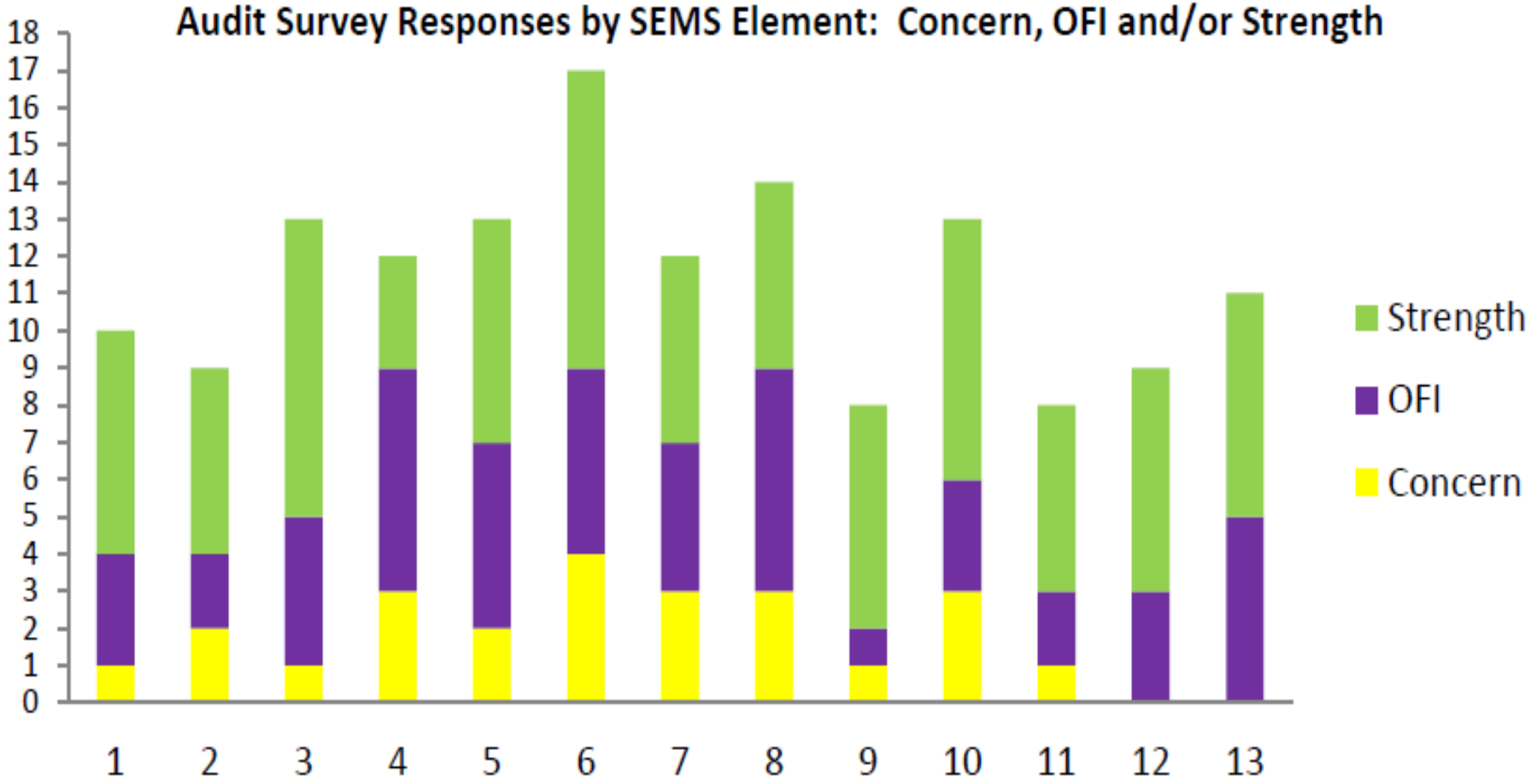
In sum:

- US operators are largely regulated using third-party auditors to verify SEMS implementation and SEMS effectiveness.

- Auditors are pre-qualified through the industry's Center for Offshore Safety and must use COS Audit Protocols.
  - Long history of virtually meaningless inspections by MMS regulators.)

- The BSEE regulations are largely based on API RPs.

- COS plays a key role, especially in Learning from Incidents and Continuous Improvement programs (using the blind data from the ASP audit).



Note: The number on the horizontal axis represents the SEMS Element number.

1 – General	8 - Mechanical Integrity of Critical Equipment
2 - Safety and Environmental Information Required	9 - Pre-startup Review
3 - Hazards Analysis	10 - Emergency Response and Control
4 - Management of Change	11 -Investigation of Incidents
5 - Operating Procedures	12 - Audit of SEMS Program Elements
6 - Safe Work Practices & Contractor Selection	13 – Recordkeeping
7 - Training	

Peter Drucker: “Culture eats strategy for breakfast”

“Safety Culture” versus SEMS

- BSEE Director Watson stated that creating a Safety Culture offshore was his highest priority, but that this is **not a job for regulation.**

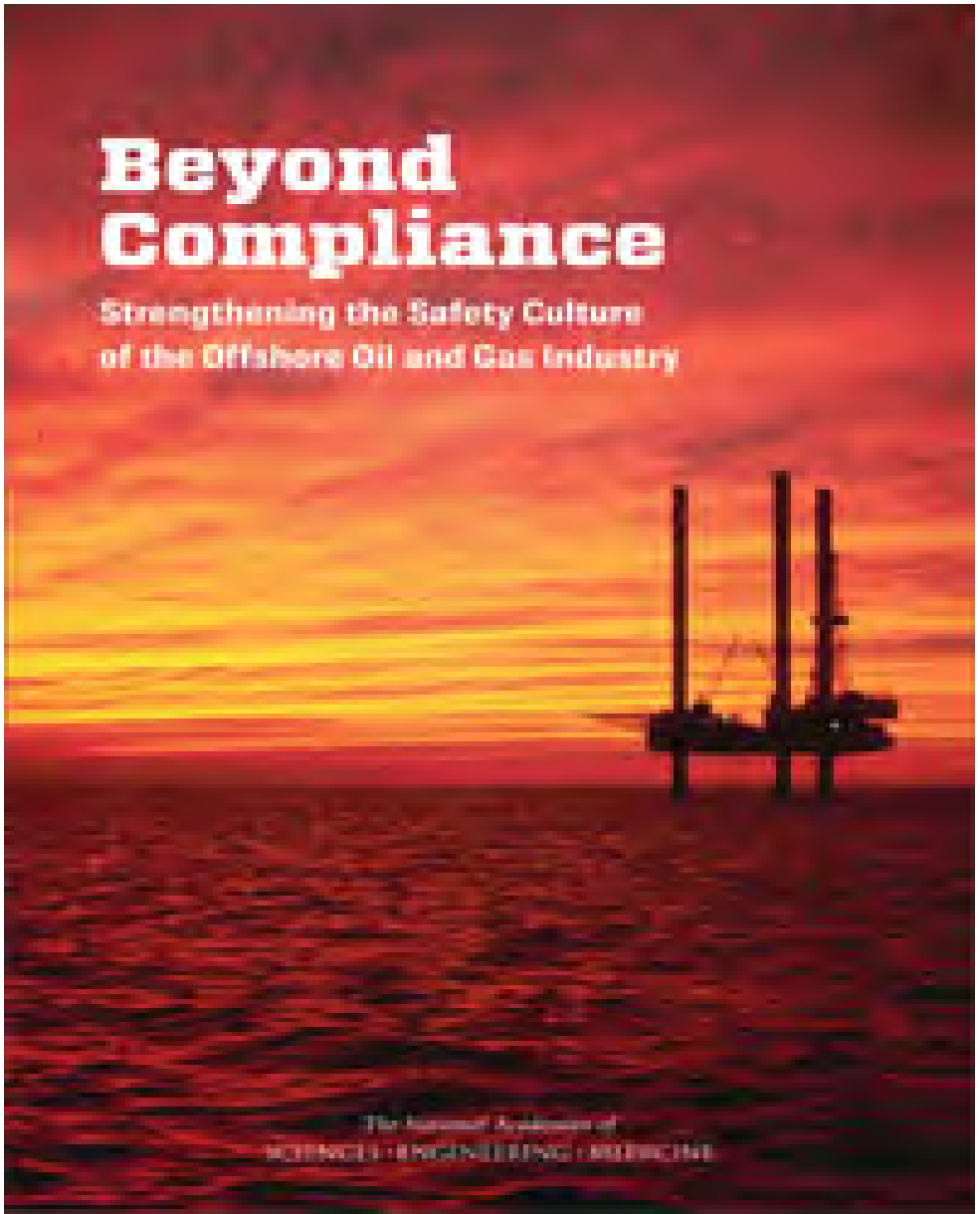
- Issued a Safety Culture Policy Statement in 2013 -- to change “patterns of thinking and behaving.” Goal is an “operator-driven” safety program.

A deeply rooted "prescribe, approve and inspect" culture in US

- How to change to a regulatory program conducive to safety leadership, personal accountability, teamwork, dialogue, and risk-free reporting that represents a real safety culture?
- The offshore industry must develop a vision of appropriate regulatory oversight—not just oppose all gov't initiatives/regulations.

Benchmark: The fatality rate in US offshore from 2004-2009 was 4 times higher than that in North Sea which uses a Safety Case approach.

NAS: Industry's Weak Safety Culture



NAS: Industry should adopt BSEE Safety Culture Policy Statement 2013

1. **Leadership commitment to safety values and actions.**
2. **Respectful work environment.** A focus on ***teamwork and collaboration***.
3. **Environment for raising concerns.** No fear of retaliation.
4. **Effective safety and environmental communication.** Knowledge and experience are shared.
5. **Personal accountability** of every individual .
6. **Inquiring attitude.** ***Individuals avoid complacency*** and continuously review existing conditions and activities. ***Workers are expected to question work practices as part of everyday conversations without hesitation.***
7. **Hazard identification and risk management. HSE** issues are promptly identified, evaluated, and addressed or corrected .
8. **Work processes.** Ensure use of the correct equipment, in the correct way.
9. **Continuous improvement.** Opportunities to learn about better HSE practices are sought.

Beyond Compliance to a Safety Culture: NAS and CSB Recommendations

Two extensive reports on safety culture in offshore industry issued in late 2016 by National Academy of Sciences and Chemical Safety Board (CSB):

1. COS must become independent of API, known for lobbying against regulation.
2. ***All*** companies offshore must join COS as "fitness to operate" qualification. (75 operators, 17 drilling contractors, 1,000+ others.)
3. Industry leadership is key: Must build training and demand accountability at Bd of Directors level, like UK and Norwegian safety regulators do. (BSEE rated by GAO as a high-risk agency).

- Much guidance in NAS report on how to assess a company's safety culture (from ethnographics to climate surveys) and how to implement change (moving a company from a pathological culture to reactive to proactive to generative culture).

NAS/CSB recs: progress to date?

- NAS offers 9 recommendations to industry; 7 to regulators for fostering a safety culture.
- CSB offered 16 recommendations: 14 still open-awaiting response; 1 closed/superseded; 1 closed (unacceptable action/response by BSEE).

Bottom Line: Evidence of limited action/focus here.

- BSEE: NAS committee met after long hiatus to discuss BSEE's inspection program for "high risk" operations. 12-2018
- BSEE Performance-Based Risk Inspection on Lifting Safety 4-2018.
- BSEE/Bur of Transportation Stats: SafeOCS data reports for BOP equipment failures.
- COS is finishing a revision of RP 75. More human factor focus?
- COS issued "Guidelines for a Robust Safety Culture" April 2018. E.g.: Guideline 3.6 on Safety Culture Characteristic: Inquiring Attitude (training, encouragement, finding weak signals and early precursors; story-telling by leaders where inquiring attitude really mattered).
- COS issued "Guidelines for SEMS Maturity Self-Assessments" Oct. 2017.

A shared learning from COS Offshore Safety Forum, Sept. 22, 2016

A pilot project on Shell Oil ‘s Brutus platform offshore:

At the start of the work day, supervisor asked crew members four open-ended questions.

1. What can go wrong today (including the “worst case” wrong)?
2. What can cause it to go wrong?
3. What can prevent it from going wrong?
4. if it does happen, what is the mitigation plan?

Result: **A 40% to 50% decrease in environmental noncompliance events**, such as oil spills.

Shell instituted the 4 questions in all GOM operations, and then globally.

Litigation will fill reg/ind gaps: allocating blame thru tort liability

Under the UK Manslaughter Act of 2007, jury may consider:

> *"the extent to which the evidence shows that there were **attitudes,** policies, systems **or accepted practices** within the organization that were likely to have encouraged any [failure to comply with HSE legislation] or to have produced tolerance of it."*

Unlimited damages, intended to be punitive.

Which should be the safety watchdog?

Privatized governance in the public interest

The post-Macondo SEMS regime is a form of "privatized governance," that is, the pursuit of public ends through private standards, auditing, and enforcement.

Compare:

- It takes an average of 8 years for OSHA, the US workplace safety regulator, to finalize a new safety standard; 20 years for a new scaffolding standard.
- Virtually overnight, API 65 (the Drilling Safety Rule) and API 75 (SEMS) become regulatory requirements.