



BSEE Priorities Regarding SEMS – Offshore Technology Conference 2015

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Agenda

- Background – Safety & Environ. Mgt. System (SEMS) development history
- First audit cycle observations and preparation for second audit cycle
- Continuous improvement possibilities
 - API
 - COS
 - BSEE

Development of SEMS

- Triggers
 - Process Safety Incidents
 - Development of safety management systems
- Initially a voluntary standard
 - API Recommended Practice for a Safety and Environmental Management Program (RP75)
 - 1991 First Edition
 - 2004 Third Edition (reaffirmed 2008)

Development of SEMS

- Eventually adapted as Regulation
 - 2009 Notice of Proposed Rulemaking (NPRM) from MMS (predecessor to BSEE)
 - 2010 April
 - *Deepwater Horizon* tragedy
 - U.S. President directs DOI to recommend safety improvements
 - 2010 May: DOI recommends management system mandate
 - 2010 October: DOI publishes SEMS I regulation
 - Adopts RP 75 framework

SEMS Continuous Improvement

- 2011: SEMS II NPRM issued
- 2013: SEMS II Final Rule issued
- 2015 (June): Compliance with SEMS II required

Observations from 1st Audit Cycle (concluded in 2014)

- Findings confirm that OCS operators have implemented a SEMS – Compliance rate of 96%.
 - 90 → 80 OCS operators subject to Subpart S (consolidation is reducing the number of operators)
 - 447 offshore facilities visited during first audit cycle (17-18% of all production platforms and rigs in well ops)
- Significant variability in:
 - Understanding of management systems
 - System maturity
 - Audit report format

Variance by Operators

- Operators with an existing, internal SEMS mapped their mgt. system elements to CFR requirements
 - SEMS gave them an opportunity to evaluate internal programs and processes against a government definition of what elements should be included in a robust management system
- Operators without existing SEMS had to develop and then implement a formal program
 - Focus appeared to be on fulfilling the requirements of Subpart S by creating a documented management system, but it is unclear if further steps were taken to ensure the tool is effectively managing safety and environmental risks

Trends in Performance

- *Emergency Response* and *Auditing* were identified as best understood, documented, communicated, and implemented SEMS elements
- There appeared to be a strong focus on historically established SEMS elements, e.g., *Training* and *Safe Work Practices*

Gaps in Development and Implementation

- *Hazard Analysis and Management of Change* were not being consistently implemented as tools to manage risks
- *Pre-startup Review* observations showed lack of implementation of procedures
- Relationship between SEMS elements did not appear to always be understood (e.g., Hazard Analysis should feed Pre-startup Review)
- SEMS elements were documented but triggers for implementation were inconsistent (e.g., Management of Change)

Audit Process Observations

- Wide variation in audit report format, content, and methodology
- Audit protocols often focused on assessing compliance, not risk management
- Many of the initial audit protocols did not guide auditors to evaluate levels of *documentation, implementation, AND effectiveness*

BSEE's Plans for Strengthening SEMS Approaches in Industry

- Emphasize that “compliance” requires operators to demonstrate that they are implementing Subpart S as a performance-based standard
- Good faith efforts to use the management system to improve offshore safety and environmental protection will be applauded
- Work with API and the offshore industry to redraft and refocus RP75
- Emphasize expectations by a management system on risk control, leadership, performance measurements, and consideration of human factors

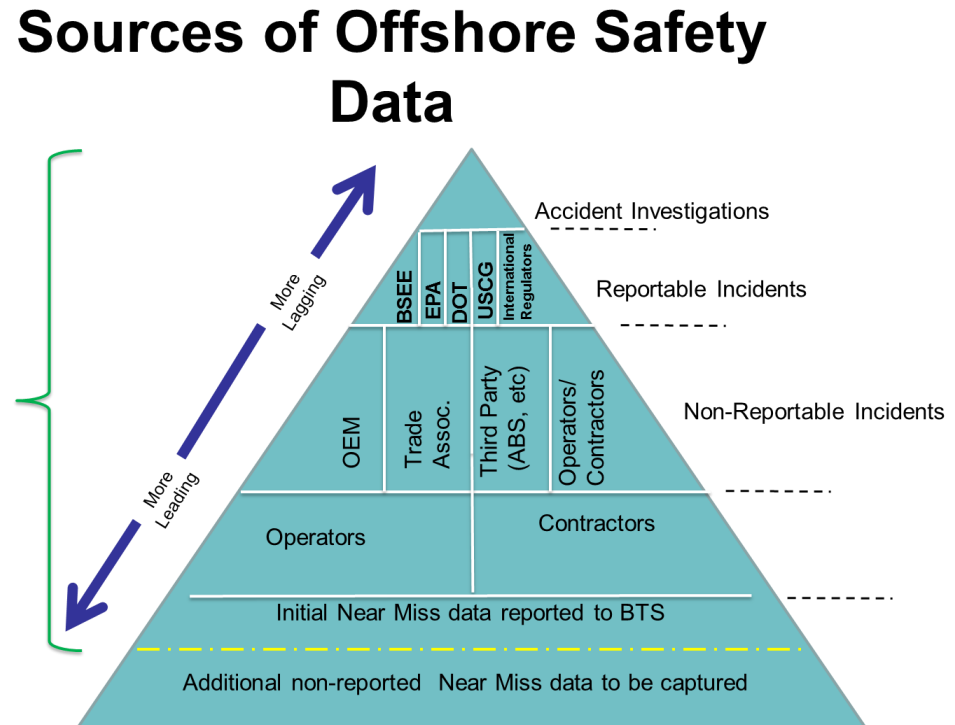
BSEE's Plans for Moving Ahead – with SEMS Auditors

- Agreements with Accreditation Bodies such that Audit Service Providers add more value to the industry
- Improved support / guidance for the auditing community
- Better reporting (will an ISO 17022 report format provide more value to the operators from the SEMS audits?)
- Measure management system maturity and modify audit approach based on it
- Re-focus the second cycle SEMS audits as a test of the effectiveness and integration of each SEMS element

Other BSEE Initiatives on Management System Effectiveness

- Examine how to improve the interface and safety controls between operators, contractors and subcontractors
- Examine and implement measures to improve data exchanges on safety challenges and resolutions

For example, Safe OCS is now active



Other BSEE Initiatives on Management System Effectiveness

- Investigate the successes and challenges for various risk control methodologies (e.g. ALARP, 3rd party review, when is it justified to replace older strategies with newer methods, etc.)
- Analysis of the statistical basis for the current 15% sampling frequency during triennial SEMS audits
- Outline critical human factor considerations, determine how to measure safety culture, and determine how to use these results within the context of SEMS
- Identify other ISO, ANSI, API and other international standards that may be useful to adopt within a SEMS context

Initiatives Within BSEE

- Many SEMS day-to-day responsibilities assigned to regional staff
 - HQ and Regional Coordinators as stronger partners
 - Development of standard approaches and criteria to review and accept SEMS submittals
 - Enhanced inspections at district level – with frequency tied to risk profiles
- Improved communication with regulated community
 - FAQ page on the www.BSEE.gov website
- Promote internally and externally performance-based approaches to regulatory compliance (vs. prescriptive requirements) and the role of Performance Indicators in determining their successes

BSEE Website: www.bsee.gov



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