



**MARY KAY O'CONNOR  
PROCESS SAFETY CENTER**  
TEXAS A&M ENGINEERING EXPERIMENT STATION

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18<sup>th</sup> Annual International Symposium  
October 27-29, 2015 • College Station, Texas

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## **The Challenges and Successes in Safety and Environmental Management System (SEMS) Approaches to Offshore Operations**

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### **Abstract**

Using management systems to improve the quality of products and of operations has been a common practice for 30 years. While management systems started out as industry-led, voluntary efforts, they are now often required by regulators sometimes as a response to significant events. When BSEE's SEMS regulations became effective after the Deepwater Horizon incident, it initiated a change in how regulators and regulated parties actually interact with each other, and that change is continuing to evolve. This is because in the US, prescriptive regulations have often been the norm, which has led to decades of "Tell me what to do, and I'll do it" mentality.

BSEE still utilizes prescriptive regulations in its oversight responsibilities for offshore safety and environmental protection, especially where there are established and recognized industry standards that define a baseline for operations. But the SEMS regulations represent a hybrid approach to improving safety and environmental performance in OCS activities, one that incorporates both prescriptive and performance-based elements. The performance based elements derive from and are similar to some international regulations in that they require operators to manage their risks in new and self-critical ways. This is true in performance elements, especially as operators risks change, as technology changes, and as their knowledge grows. In this way BSEE is looking for the operator to take primary responsibility to drive performance and adopt a "beyond compliance" mentality.

In addition, SEMS has required both BSEE and the regulated parties to recognize the need to think in different ways and modify their approaches to each other. This approach is required in order to make sure that a robust management system and not overly prescriptive regulations becomes the real-time driver for continuous improvement in safe and environmentally protective designs and behaviors. This is especially important in an operating environment with many unknowns and where the process for creating new standards and modifying regulations is slow. In this talk, BSEE will give examples of how a change from prescriptive to performance-based

approaches in regulation is changing the regulators job by allowing it to recognize a wider range of enforcement approaches. This approach is beginning to empower operators to do more on their own without waiting for or needing regulators to require more.