

# BOEMRE Public Forum on Offshore Drilling Houston, Texas - Safety

September 7, 2010

Lois N. Epstein, P.E.  
Arctic Program Director  
Anchorage, Alaska



# Presentation Structure

1. Case Study: Federal Office of Pipeline Safety
  - Similarities with MMS/BOEMRE
  - Differences with MMS/BOEMRE
  - Safety Improvements Implemented
2. Lessons from Other Industry Sectors
3. Safety in the Arctic OCS



Bellingham, WA gasoline pipeline explosion  
(1999)



New Mexico natural gas pipeline explosion  
(2000)



# U.S. DOT's Office of Pipeline Safety

(now part of the Pipeline and Hazardous Materials Safety Administration, or PHMSA)

## Key Similarities with MMS/BOEMRE:

- Regulates the oil and gas industry for safety and environmental protection
- Utilizes industry standards as part of its regulations
- Covers offshore pipelines (as well as onshore)
- Limited enforcement/inspection resources
- Administrator is a former head of MMS
- Pre-2000, had a culture of ensuring production above all else



# U.S. DOT's Office of Pipeline Safety/PHMSA

## Key Differences with MMS/BOEMRE:

- Has an organic statute defining the mission
- Promulgated comprehensive, systemic “integrity management” requirements to improve safety, environmental protection
- NTSB, an independent technical agency, investigates major accidents/incidents and makes recommendations
- Money raised is spent on OPS/PHMSA operations, not the federal government



# Since 2000, OPS/PHMSA has...

- Created more specific, enforceable regulations, especially for integrity management which helped ensure continuous improvement and a valuable tension between regulators and operators
- Begun to address gaps, inadequacies, and unenforceable conditions in industry standards
- Required annual reporting of industry performance
- Changed the office's culture so its "clients" are the public, not the industry alone
- Ensured "operator qualification," not just operator training



# Since 2000, OPS/PHMSA has...

- Instituted transparent reporting of government enforcement actions
- Improved reporting of spills and provided useful analyses of trends
- Utilized its advisory committees as a means of improving public input
- Decreased its reliance on industry-developed risk management decision-making
- Supported a “beyond regulation” safety culture



Since 2000, OPS/PHMSA has...

**NOT:**

- Undertaken visible, expensive enforcement actions as a tool to ensure improved operator performance (and needs to)



# Lessons for Offshore Drilling from Other Industry Sectors

- Ensure that the regulatory agency's mission contains all relevant factors including safety and environmental protection; statutory language is best
- Ensure that governmental employees are well-trained, qualified, sufficiently paid, and can make independent decisions
- Provide whistleblower protections in statute
- Allow the Chemical Safety and Hazard Investigation Board - similar to NTSB - to investigate major accidents/incidents and recommend preventative changes
- Consider instituting Process Safety Management requirements
- Coastal and marine spatial planning needed to protect sensitive areas (sensitive area identification only occurs onshore)

# Lessons for Offshore Drilling from Other Industry Sectors, continued

- The public will not have confidence in drilling safety and environmental protection until meaningful regulatory and enforcement changes occur, e.g., implementation of the regulatory and enforcement recommendations in the May 27, 2010 DOI report to the President; this includes implementing not only the “immediate” recommendations contained in the recently-issued NTL 2010-N05



# Safety in the Arctic OCS

- Shallow water drilling - blowouts definitely occur in shallow water conditions
- Tougher to operate due to cold, darkness - human factors are a greater concern than elsewhere
- Frontier and pristine areas require extra precautions
- Spill response would be dramatically harder in Arctic conditions due to limited biodegradation, the difficulties of cleanup in broken ice, darkness impeding operations, adverse weather, lack of shore side infrastructure, etc.

“You cannot simultaneously prevent and prepare for war” - Albert Einstein

Can you regulate and promote an industry simultaneously?

[lois\\_epstein@tws.org](mailto:lois_epstein@tws.org)