After Deepwater Horizon: Safety in U.S. Waters

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Agenda

- History of Major Milestones in Regulating Oil & Gas Development
- Regulatory Reviews Following Deepwater Horizon
- Permitting Process and Activity Levels following Deepwater Horizon
- Meeting the Regulatory Challenges of Deepwater
Major Milestones in Regulating

January 1969
  Santa Barbara Blowout & Spill, US Pacific
  Outcome: National Environmental Policy Act of 1970

June 1979
  Ixtoc I Blowout & Spill, Mexico
  Outcome: MexUS agreement establishing procedures for bilateral responses to pollution incidents

March 1980
  Kielland semi-submersible rig, Norway – North Sea
  Outcome: reform gave the Norway Petroleum Directorate overall responsibility for offshore safety
Major Milestones in Regulating

July 1988
Piper Alpha Explosion & Fire, UK – North Sea
   Outcome: Safety regulation was moved from UK Department of Energy to Health and Safety Executive

April 1989
Exxon Valdez Tanker Spill, Alaska
   Outcome: Oil Pollution Act of 1990

August 2009
Montara Blowout, Australia
   Outcome: consolidated regulatory framework under NOPSA
Deepwater Horizon Explosion and Oil Spill: The events of April 20, 2010 which took place in deepwater Gulf of Mexico have forever impacted the regulatory framework of deepwater oil and gas operations.
DOI Regulatory Reviews

- May 27, 2010: 30-Day Safety Report
- BOEMRE Director’s Forums on Offshore Drilling
- Sept. 1, 2010: OCS Safety Oversight Board Report
- Sept. 14, 2011: Joint Investigation Team Final Report

October 2010 – Office of Natural Resources Revenue

October 2011 – Bureau of Ocean Energy Management

October 2011 – Bureau of Safety and Environmental Enforcement
BSEE is responsible for regulatory, safety, environmental and conservation compliance for the development of the nation’s offshore oil and gas and renewable energy resources.

Functions:
- regulations
- inspection and enforcement program
- permitting
- safety management
- environmental compliance and enforcement
- oil spill response planning
Interim Final Rule

also called Drilling Safety Rule

Addresses both well bore integrity and well control equipment and procedures, including blowout preventers.

Operators are now required to obtain independent third-party inspection and certification of the proposed drilling process.

An engineer must certify that blowout preventers meet new standards for testing and maintenance and are capable of severing the drill pipe under anticipated well pressures.

Gulf Regional staff have worked with the containment organizations.

Formats for regional aspects are being established.

A well containment screening tool has been developed.

One approved permit has been analyzed with cap and flowback. All other permits approved to date since Deepwater Horizon have been analyzed as cap only designs.
All operators must be in compliance with the rule by November 15, 2011.

Operators’ upper management accountable for success of SEMS program

Key to SEMS is Identification of hazards and their mitigation through hazards analysis and job safety analysis

Operator personnel are responsible for the management and implementation on any facility regardless of whether that facility is totally operated by a contractor.

BSEE will begin conducting audits to ensure that these SEMS plans are operative.
SEMS II

- Implements independent third-party audits of operators’ programs.

- Formalizes ‘Stop Work Authority’ program.
All future regulations will be developed using the Proposed Rulemaking procedures.
Well Permits
Deepwater permits requiring subsea containment: Since applicants first successfully demonstrated containment capabilities in mid-February 2011, GOMR has approved 255 of these permits for 71 unique wells, with 50 permits pending, and 12 permits returned to the operator with requests for additional information, particularly information regarding containment. Twenty of the 50 pending permits are batch set wells for the Mars B and Big Foot deepwater development projects, with 18 of these submitted in December.
Deepwater activities not requiring subsea containment: Since the implementation of new safety and environmental standards, 67 of these permits have been approved, with 2 permits pending, and 1 permits returned to the operator with requests for additional information. These activities include water injection wells and procedures using surface blowout preventers on fixed platforms.
Shallow water: To date, 104 new shallow water well permits have been issued since the implementation of new safety and environmental standards on June 8, 2010. There are 11 of these permits pending; with 10 returned to the operator for more information.
Rigs & Non-Rig Units: All Water Depths

Comparison: # of rigs & non-rig units operating in all water depths

- 2009
- 2010
- 2011

Number of rigs working:

- January: 90
- February: 80
- March: 70
- April: 60
- May: 50
- June: 40
- July: 30
- August: 20
- September: 10
- October: 5
- November: 0
- December: 0
Comparison: # of rigs & non-rig units operating in deepwater

# of rigs working

- 2009
- 2010
- 2011
Future Activity

New Deepwater Development Projects:
- Jack- St. Malo
- Mars B
- Big Foot
- Lucius/Hadrian
- Stones
- Who Dat
- Tubular Bells
- Kaskida (appraisal)
- Tiber (appraisal)

Shelf Deep Gas Development

Davy Jones +
Preparing for the Future

Utilizing knowledge & lessons learned from:

- Deepwater Operations Plans
- Accident Investigations
- Advisory committees
  (Ocean Energy Safety Advisory Committee)
- Other efforts addressing recommendations from Deepwater Horizon investigations and reviews
The best method of regulating offshore energy draws upon all regulatory approaches including:

- Prescriptive Regulations
- Performance-based Regulations
- Safety & Environmental Management System
Meeting the Enforcement Challenges

- Specialization of inspectors
  - Witnessing BOP and secondary control systems
  - SCADA system analysis
- Inspector certification
- Environmental enforcement
- Measurement enforcement
- Enhanced aircraft capability
- Potential regulatory changes from accident investigations
Thank you for your attention.