

Industry Initiatives to Ensure Safe, Protective Drilling Practices in the Deepwater Gulf of Mexico:

The Marine Well Containment System

Bureau of Ocean Energy Management, Regulation and Enforcement Forum
August 4, 2010

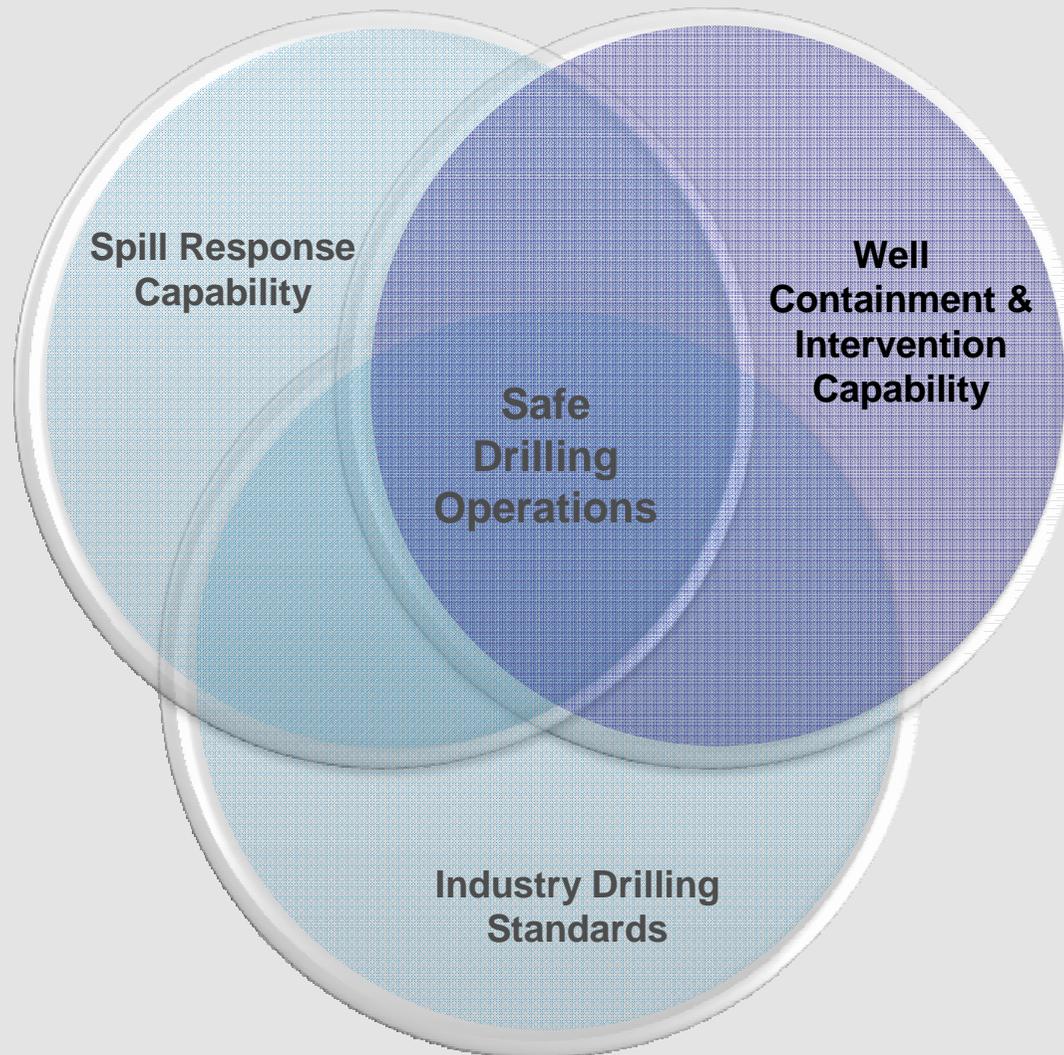


ConocoPhillips

ExxonMobil



Restoring Confidence in Deepwater Drilling Operations



Our initiatives are aligned with Administration / Congressional expectations of how to resume safe drilling operations in the Gulf of Mexico

Industry Committed to Improving Response Capabilities

- Industry will continue its focus on prevention, while developing new response capabilities
- Chevron, ConocoPhillips, ExxonMobil and Shell have initiated development of a new, rapid response system
 - Fully contain oil flow in the event of a potential future underwater blowout
 - Designed to address a variety of scenarios
 - New specially designed equipment constructed, tested and available for rapid response
 - Can operate in deepwater depths up to 10,000 feet
 - Adds containment capability of 100,000 barrels per day (4.2 million gallons per day), exceeding size and scope of the Gulf spill
- Initial investment \$1 billion in specially designed equipment
 - System can be expanded and adapted for new technologies
 - Additional costs for operation, maintenance and contracts for existing equipment / vessels
- Our goal is to have response capabilities in place within six months
 - System further enhanced as new equipment is constructed over the next 18 months
 - Companies will employ existing equipment and vessels while construction progresses on new equipment

New Equipment Developed for Multiple Containment Scenarios

The system is designed to achieve a complete seal to contain oil flow either through: 1) connection to the well or 2) connection to the sea floor. Both connections will prevent hydrate formation and blockage

1) Subsea containment assembly for connection to well

- Contains multiple production and venting outlets
- Provides a means to re-enter the wellbore
- Contains blowout preventor (BOP) rams on top to allow for possible well shut-in

2) Capture caisson assembly for sea floor connection

- Addresses leaks outside well casing, damaged connector or leak from BOP
- Subsea containment assembly connects to top of caisson

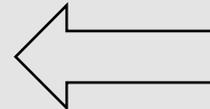
Containing Flow through Connection to Wellbore

- Subsea containment assembly will be specially designed for situations where oil is flowing from the wellbore
- Assembly will be equipped with a suite of adapters and connectors to interact with any well design and equipment used in the Gulf
- This equipment can be mobilized and attached within days

Selected examples:



Assembly attached to undamaged mandrel profile at wellhead or BOP

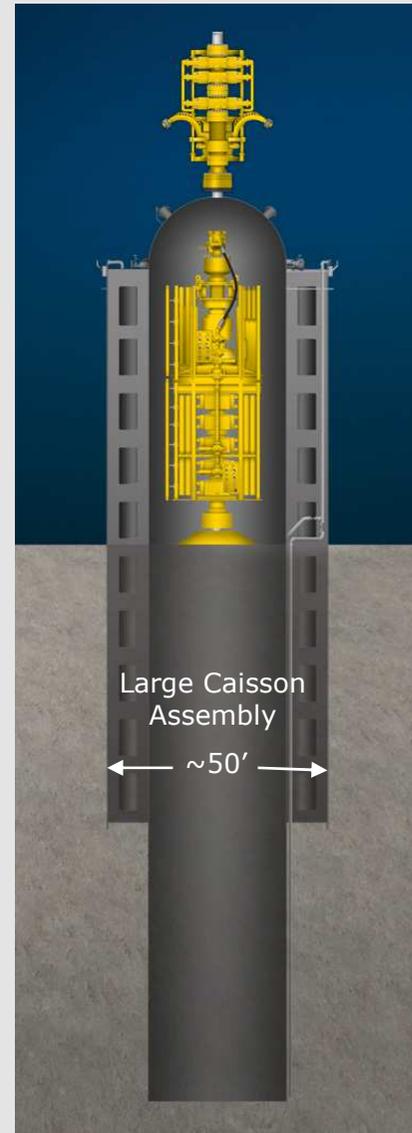


Assembly attached to damaged riser



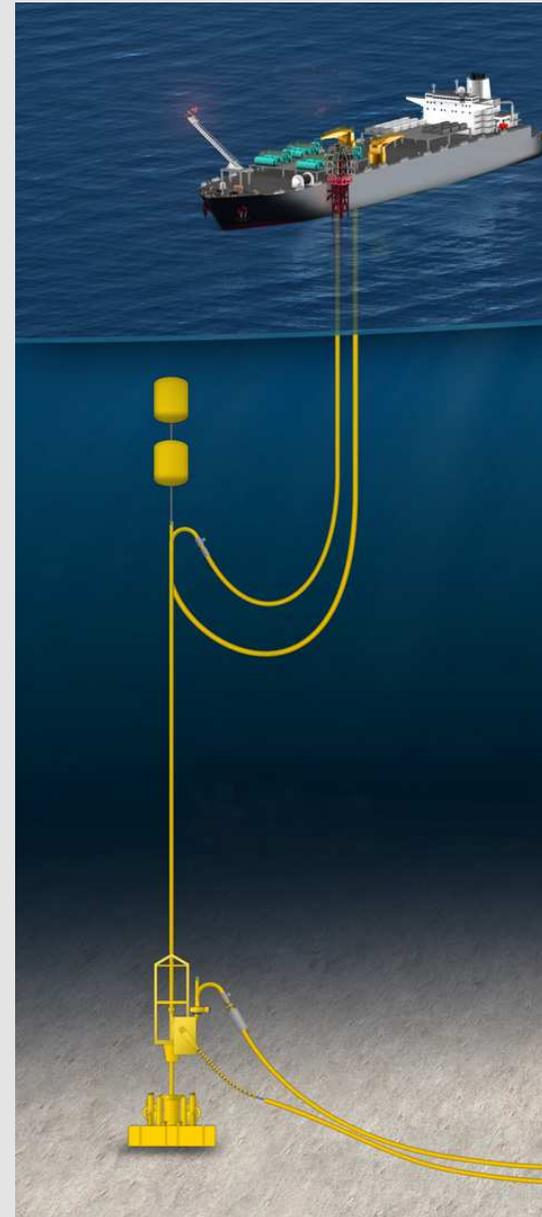
Containing Flow through Connection to Sea Floor

- New caisson assemblies will be constructed for situations where the oil is flowing outside the wellbore or over a larger area
- Caisson will create a seal with the seabed to prevent seawater from entering
- Subsea containment assembly will attach to caisson assembly
- Larger equipment and multi-step installation process may take weeks to fully contain oil



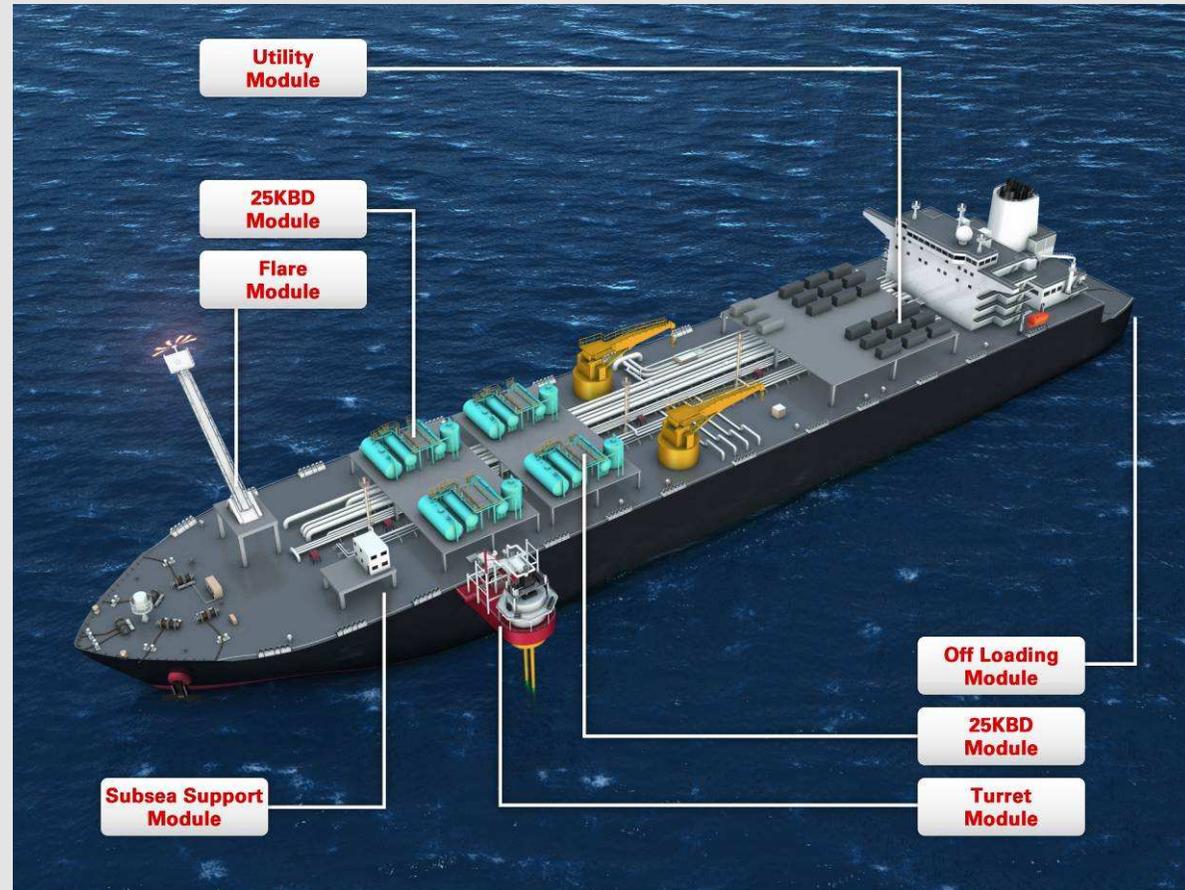
Riser System Provides Maximum Flexibility

- Self standing risers (2) will be used in design based on industry-proven deepwater technologies
- Each riser can manage up to 50,000 barrels per day
- Riser is offset from well location to allow rig access
- Manifold will distribute the oil from the subsea containment assembly to multiple riser assemblies if needed
- Allows expansion to capture more oil and transfer to more than one vessel if necessary
- Modular design to address different deepwater depth requirements (up to 10,000 feet)
- Riser and umbilical to emergency disconnect from vessel during hurricanes; will withstand hurricanes and loop currents while in place
- Vessels can quickly reconnect to risers once hurricane passes



Modular Equipment Allows Rapid Capacity Expansion

- New modular process equipment will be built to increase amount of oil that can be captured
- Modules will connect to riser(s), separate oil from gas, flare gas, safely store and offload oil to shuttle tankers
- Modules can be installed on many different types of capture vessels
- Shuttle tankers will be U.S.-flagged / Jones Act compliant
- During hurricanes, capture vessels will disconnect and move away for crew safety; return when hurricane passes



System Significantly Enhances Current Gulf Response Capabilities

Improves safety and environmental protection

- Fully contain oil flow and operate until the well is under control
- Enhances safe operations by reducing congestion (e.g. fewer vessels and risers / flowlines)

Pre-designed, constructed and maintained in the Gulf

- Utilizes existing technology and proven components specifically configured for well containment
- Capable of a rapid response; begin mobilization to the field within 24 hours and fully operational within days to weeks
- System components will be fully tested and maintained in a state of continuous readiness

Designed to be flexible and adaptable for multiple potential future scenarios

- New equipment will connect to well or sea floor and is responsive to a multitude of scenarios
- Will operate in a wide range of depths, weather conditions and oil flow rates
- Scalable to allow for expansion

System Capabilities in Place as Early as Six Months

Hundreds of people will be needed to construct the new equipment, maintain and operate the system

Over the next six months

- Set up project organization to begin construction
- Establish new company to operate / maintain equipment
- Identify and secure available equipment - containment caps, manifolds, risers, modules, vessels and other components
- Engage with government agencies to review system
- Complete design of new response equipment and begin construction

Over the next 18 months:

- Utilize existing vessel fleet and capture equipment until new components added
- Complete construction of new system components
- Test new equipment as it becomes available

Past 18 months:

- Pursue system enhancements and development of new technologies

Company Created to Operate and Maintain Readiness

- Chevron, ConocoPhillips, ExxonMobil and Shell will immediately commence detailed engineering and construction of new equipment and secure access to existing equipment and vessels
- ExxonMobil has been designated to lead the engineering and construction of the system
- The companies are forming a non-profit organization, the Marine Well Containment Company (MWC), to operate and maintain the system
 - Provide fully trained crews to operate equipment
 - Ensure the equipment operational and ready for rapid response
 - Conduct research on new containment technologies
- Additional industry participation encouraged
- MWC will have ongoing engagement with state and federal entities

Industry Committed to Identifying Solutions

- Concurrent industry efforts are underway to improve prevention, well intervention and spill response to ensure continued safe drilling operations
- We are committed to develop, build and deploy a rapid response system that will be able to capture and contain oil from a potential underwater blowout in the Gulf
- This new system will significantly exceed current Gulf response capabilities
- Our goal is that this system is never used