

# EWD Workshop Introduction

## *An Observer's Perspective*

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# An Observer's Viewpoint

- ▶ Opportunity for ANL to serve as a neutral entity to help BSEE pull together this Workshop
  - First hand look at the impact of the Macondo Spill on both Regulator & Industry
  - On-site visits and conversations with BOEMRE / BSEE
  - Forums and discussions with a broad range of experts from the Oil & Gas Industry
    - EWD Workshop interactions
    - Industry Workshops
    - Relationships from the Oil Spill Committee Meetings



# Who is Argonne National Lab (ANL)?

- ▶ Argonne National Laboratory has a long history of working with MMS → BOEMRE → BSEE
  - Much of this in environmental assessments (GoM, Arctic)
- ▶ The ANL team conducting the EWD workshop for BSEE:
  - Dr. Dan Fraser
    - Risk Management, Six Sigma, computational applications for oil & gas
    - ANL representative attending the President's Oil Spill Commission Meetings
  - Dr. Joseph Braun
    - Nuclear Engineer, risk management, regulations, training
  - Dr. Lorraine LaFreniere
    - 18 years as a petroleum geologist (Arco)
    - Regulatory expertise, USDA program director
  - David Surgnier, P.E.
    - 35 years drilling (including deepwater) (Arco)
  - Admin Team (Brea Grischkat, Jacque LaBreck, Kristen Lambert)



# The Oil & Gas Industry is Not Alone

## ▶ Aerospace

- Jan 28, 1986 Challenger explosion
- Feb 1, 2003 Columbia reentry explosion

## ▶ Chemical Industry

- Dec 3, 1984 Chemical leak  
Bhopal, India (Union Carbide)
- Oct 23, 1989 Chemical Explosion  
Richmond, Tx (Phillips)
- Est. 4000 – 20000 lives lost
- 25 killed, 314 injured

## ▶ Aviation

- May 25, 1979 AA 191
- Jul 19, 1989 United 232
- Engine came off
- Engine came off
- Total loss (271)
- Crash landed – 62% (184) survived



# Not Alone Continued ...

## ▶ Nuclear

- |                            |                 |            |
|----------------------------|-----------------|------------|
| ◦ Mar 28, 1979<br>14, 2011 | April 25, 1986  | Mar        |
| ◦ Three Mile Island        | Chernobyl       | Fukushima  |
| ◦ Long Term Effects<br>LTE | Explosion + LTE | Explosion, |

## ▶ Oil & Gas

- |                          |                        |
|--------------------------|------------------------|
| ◦ Aug 21, 2009           | Apr 20, 2010           |
| ◦ Montara blowout        | Macondo blowout        |
| ◦ 74d spill until relief | 85d spill until capped |

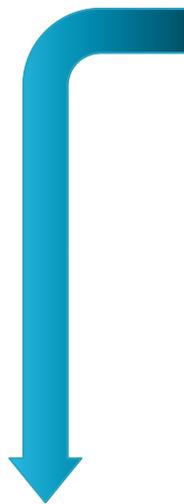


# A Popular But Painful Response to an (Environmental) Accident

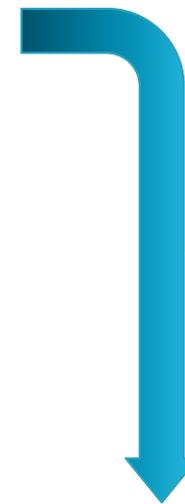
“RAGE”



The unfortunate entity under whom the accident occurred.



The Industry



The Government / Regulator

*We've all felt the effects of this!*



# Many Investigations & Reports

- ▶ **Government Agencies**
  - Joint Coast Guard / BOEMRE Investigation
  - Presidents Oil Spill Commission
  - National Academy of Engineering
  - U.S. Chemical Safety Board
  - Department of Justice Investigations
  - More than 10 other investigations ...



# The Regulators Have Been Working in High Gear

- ▶ 2010 May – Dec
  - 6 month moratorium / repeal / new moratorium
  - NTL 5 Increased safety measures (FAQs) / repeal
  - NTL 6 WCD & Relief wells (FAQs)
  - Shallow water drilling FAQ
  - New EA requirements (EP/DOCDs)
  - [Interim Final / Final SEMS Rule](#)
  - NTL 10 Certification & Containment
  - New approvals for SS BOPs & Surface BOPs (Floating)
- ▶ 2011 Jan – Oct
  - Some exceptions for new EA requirements (41)
  - New Archaeological Survey Requirements
  - “Should to Must” Supplemental Info change re BOPs
  - New process for EP/DOCD wells
  - Improve efficiency of APD approval process
  - NTL 5 Procedure for requesting SOO
  - New APD Requirements
  - Final Drilling Safety Rule – ANPRM (coming)
  - Reorg: BOEMRE → BSEE + BOEM (Split of 30 CFR 250)

*Dedicated BOEMRE professionals working overtime to be responsive to dynamic public, governmental, and industry pressures*



# The Oil & Gas Industry Has Also Been Burning the Midnight Oil

- ▶ Conducting Investigations
  - Investigations from all affected Industry Participants
  - Re-examinations of internal practices as data came out of the Macondo investigations
  - JITFs and other Industry investigations ...
  - Equipment manufacturing changes (BSRs)
- ▶ Being Compliant with new BSEE Regs and NTLs
  - New well permits
  - JITF Offshore Operating Procedures and Equipment
  - [A healthy respect for BOEMRE SMEs and staff](#)
- ▶ Standards Efforts (RP53, RP96, RP97, ...)
- ▶ Variety of JIPs
- ▶ \$1 B Marine Well Containment Company & Helix WCG
- ▶ Participation in government and industry taskforces
- ▶ ...



# This Workshop Is One Outcome

- ▶ From the beginning we understood that this was NOT a “check the box” exercise
  - Opportunity to have a broad engagement between Industry and Regulators
- ▶ Industry members volunteered their time working to assemble six white papers
  - Responding quickly to direction and input from BSEE
- ▶ The Industry and Regulatory Steering Committee members are First Rate



# Subject Matter Experts (SMEs)

- ▶ Steering Committee's Decision
  - We are all SMEs!
- ▶ **We** bring something above and beyond a corporate or governmental “position”
- ▶ **We** are in a position to exert leadership and make a difference in our organizations

*Let Us Not Under Estimate Ourselves !*



# Every Industry Must Find Its Own Safety Path

- ▶ Unique Culture (and subcultures)
- ▶ Unique Relationships
  - Partners
  - Contractors
- ▶ Unique Industry / Regulator Relationship
- ▶ Unique Processes
- ▶ Unique Technology
- ▶ *Unique expectations from the public*

*Learn from others but do it Your way !*



# Many Strengths to Build On

- ▶ Solid Work Ethic
  - Both Industry & Regulators are dedicated to what they do
- ▶ Existing safety culture
  - Tremendous amount of common sense & historical experience
  - Care for the safety of one another
  - Track Record on Industrial Safety
- ▶ Respect for the environment
  - Place where we work, play, and get our food
- ▶ Good relationship between regulator and industry
  - Free & open communication
  - Balance between prescriptive and performance based regs
- ▶ Positive attitudes
  - Always looking at and testing new ideas
- ▶ Most powerful technology in the world available
  - Vetted before using in production



# Meeting of “Opportunity”

- ▶ New regulatory organization
  - Only been doing business as BSEE for 33 days
  - Committed to an open dialogue with the industry
  - That’s why we are all here today!
- ▶ Signs of new thinking
  - First major event is a joint industry / regulator “workshop”
  - 20 key SMEs from BSEE here today
  - So many are willing to come here, listen, and discuss

*To me this says a lot about what  
the organization will do in the  
future*

