



Non Oil tanker Spills

Nick Hazlett-Beard Global Head of Operations



Our Industry Commitment



Oil industry's Tier 3 spill response provider of choice



38 oil and energy companies



The only oil spill response co-operative with a global remit



Industry funded



Accredited centre for oil spill training

Our Heritage



Participant Members

bp

Associate Members (updated in Feb 2011)



AED South East Asia Ltd Afren Energy plc Angola LNG ATP Oil and Gas BAPCo Bailiwick of Guernsey Bridge Energy (Silverstone) Bridge Resources Cairn Energy India Capricorn Energy **CNOOC** Africa Dana Petroleum Desire Petroleum Dona E&P Dragon Oil Edison International Encore Petroleum Endeavour Energy Energy Resources Technology Engen EnQuest plc EOG Resources Eon-Ruhgas EurOil Fairfield Energy Ltd Fluor Ltd Foxtrot International Galoc Production GDF Suez Gibraltar Port Authority Great Lakes & Dredging Guam Response Services Ltd Gujarat State Petroleum Corp. Hardy E&P India HM Naval Portsmouth Hvdrocarbon Resources Irish Coast Guard Ithaca Energy Kosmos Enerav LLC

Lundin Services Mitra Energy (Indonesia) N Operating Company Nautical Petroleum NCOC Kazakhstan Newfield Peninsula Malavsia Nido Petroleum Nippon Oil OMV OPET **Ophir Tanzania** Origin Energy PA Resources Peru LNG Petrobras Angola Petrobras Nigeria Petrobras Turkey Petrogas Petronas Carigali Vietnam Ltd Petronas Carigali Mauritania Petro SA Philodrill Premier Oil

Prestoil Kouilou PT Arah Prana PT KID (Wilmar) PT PHE ONWJ Red Sea Petroleum Reliance Industries Ltd Repsol Exploration SA **Rockhopper Exploration** RWE Dea UK Ltd Salamander Santos Sampang Serica Energy Singapore Petroleum Company Spanish Coast Guard Sterling Resources TAQA Totalerg SpA Tupras Valiant Petroleum Vanco International Vermilion Energy Wintershall Xcite Energy



No. of Members



Industry Partnerships



Incidents for 2010/11

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1.	Marine terminal UK	January
2.	Pipeline Ghana	February
3.	Platform UK	March
4.	Platform UK	March
5.	Platform UK	March
6.	Platform UK	March
7.	Macondo USA	April
8.	Pipeline Nigeria	May
9.	Platform Egypt	May
10.	Tanker, Singapore	May
11.	Platform Ghana	June
12.	Marine terminal UK	June
13.	Platform Malaysia	June
14.	Pipeline Kuwait	August
15.	Vessel India	August
16.	Vessel India	August
17.	Platform UK	September
18.	Platform Nigeria	September
19.	Marine terminal Singapore	October
20.	Vessel Indonesia	October
21.	Platform Nigeria	October
22.	Platform UK	December
23.	FPSO Gabon	January
24.	FPSO UK	February

Total until end February 5,263 days



The Kerteh Response July 2010





Lessons learnt



- Due to a good relationship with PIMMAG a seamless integration with immigration and customs made the operation "a breeze"
- Smooth transition of Member's activation to 3rd Party Contract
- PIMMAG provided timely logistics support
 - Dispersant stockpile for subsequent spray runs
 - Manpower for loading of dispersant
- Joint effort during the response was critical



MSC Chitra – 7th August



Collision with MV Kalijia III 400 Tonnes bunker oil spilled - World Heritage Site impacted 1200 Containers onboard

- Dangerous goods



MSC Chitra August 2010– Feb 20011







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MSC Chitra August 2010– Feb 20011









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Lessons learned

- Precautionary approach to Risk Assessment
- Culturally significant impacted location
- Issues of waste management
 - Oiled trash removal





Mina Al Ahmadi Kuwait

- Date: 5th August 2010
- Location: Kuwait, Mina Al Ahmadi
- Release from an export line
- Product: EOCENE Crude
- Small quantity released
- Impact on a number of beaches
- Technical Advisor mobilised from Bahrain
- Equipment from Bahrain mobilised by road through Saudi to Kuwait
- Equipment deployed the shoreline cleanup







Deepwater Horizon Incident



Incident Details

 Spill Source: Macondo Well
 Location: Gulf of Mexico, USA.

Date: 20th April 2010

 Reason: subsea blowout and rig explosion

Oil: ongoing release of crude oil

 Sensitivities: media, industry, ecology, fishing, livelihood, politics...

Oil type / fate

•35 API oil

- •High evaporation rates
- •High asphaltenes
- •Oil weathering during surfacing (14hrs)
- Emulsification of oil
- •High level of dispersion ~ subsea and surface
- •Low level of oil impact in comparison to reported volume spilled



Response

- Dispersant application
 - Surface
 - Subsurface
- Environmental concerns
- Supply issues
- Method of application
 - Vessels
 - Aircraft
 - Large / Small
- Control
- Effectiveness monitoring



Dispersant Application

Surface

- Vessels [VOC control]

Aerial

- 5 C130 Hercules
- DC 3
- AT802

Subsurface

- -First ever use
- -Highly effective
- Highly dispersible oilDispersant productionEffectiveness monitoring









Response - SMART

SMART

- Special Monitoring of Applied Response Technologies
- Tier 2+ (fluorometry plus sampling)
- Fluorometry
 - **Data Collection and Analysis**





Response – at sea

Host of vessels
Large and small
Control and co-ordination is a major issue
Effectiveness v cost
Local pressures

In situ burning



- Proving highly effective
- 411 burns (407 more than ever before)
- Varying effectiveness of different boom types





Response - SCAT

SCAT Shoreline Cleanup Assessment Technique Strong logistical support Conducting over flights Wide ranging shoreline impact



SCAT / OPS. LIAISON

DEDICATED LIAISON STAFF

- Experienced in all aspects of spill response
- Communicate STR in an operational way
- Ensure STR content is embedded in 204 work assignment
- Help in the testing and evaluation of special S.T.R. Recommendations.

Finding the balance within the branches



What does the role do?

- Influence
- Sound technical advice
- Encourage bestpractice
- Diplomatic
- Practical Interpretation of STR
- Oiling the wheels of the process



NOT "operational"
NOT to be distracted
from the mission
NOT overtly critical







Command and control

Unified command

Multiple command centres (800 persons)





Deepwater Horizon by Numbers

- 77 major skimming vessels with 1.2Mbbls/day EDRC
- 1000+ over-flights
- 48,000 "responders"
- 800,000 gals dispersant applied sub-surface (15, 000 gals / day)
- 976,000 gals dispersant applied (air and sea). (=1.5 Olympic swimming pools)
- 28,000 Water samples analysed
- 8000 Vessels Of Opportunity (VOO) engaged
- 9,100,000 feet of sorbent boom deployed
- 120,000 "ideas" submitted to BP on how to improve the response
- 1200 cleaned birds re-released



Media

• "The rigorous testing we have done from the very beginning gives us confidence in the safety of seafood being brought to market from the Gulf," said Jane Lubchenco, Ph.D., under secretary for commerce and NOAA administrator. "This test adds another layer of information, reinforcing our findings to date that seafood from the Gulf remains safe." NOAA web site 1.11.10

