Preparedness Decision Making in Offshore Oil & Gas – How much is enough?

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THE QUESTION
Collaborative group of national regulators dedicated to raising environmental performance standards within global/national offshore petroleum E&P industry.

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AN APPROACH

1. Risk Assessment
2. Response Planning
3. Preparedness Planning
INPUTS

• activity type, location, timing.

• OS hazards (spill scenarios, duration/flow rates/volumes, oil characteristics).

• Likelihood of occurrence

• Physical/environmental characteristics of receiving environment (metocean and seasonal variations).

• Sensitivities/values of the area, environmental, cultural, economic
OUTPUTS

Information on:

- Oil weathering
- ‘Area that May Be Affected’ (AMBA)
- Probability of impact
- Magnitude of impact
- Prioritised receptors
- Seasonal/spatial variations,
- ID of scenarios for planning
- Description of response needs
RESPONSE NEEDS

STOP/ ADDRESS/ PROTECT...

- On-going release at the well-head
- Fresh surface oil slicks at source
- Drifting slicks before they hit shore/ receptors
- Pre-determined priorities through other means
- Remobilisation of stranded oil
- Contaminated shorelines of contamination
- Oiled wildlife.

International Offshore Petroleum Environmental Regulators
OIL SPILL RESPONSE PLANNING

• Strategy & tactics
• types/quantities/ times/ locations
PREPAREDNESS PLANNING

• Planning: cost, contracting, procurement, supply, stocking, maintenance, logistics
• Supply-chain approach
• Flexibility/ cost savings
• Access to shared resources
DISCUSSION
1. Capability statements alone do not demonstrate appropriate preparedness.
2. C. planning should be activity and location-specific.
3. Detail - commensurate to the nature and scale of risk.
5. Response plans based on scenario(s) representative of consequences.
6. Independence of controls should be respected.
8. Response tactics and preparedness plans should satisfy the ALARP principle.
CONCLUSION

• OSR capability ≈ location/activity specific risk

• Link strategic & tactical response planning to specific risk

• Craft preparedness arrangements to match nature & scale of risk and characteristics of the chosen response options/resources