# PAJ Symposium Organisational & Technical Developments in Australia following recent spills

An Australian Oil Spill Response Organisation perspective



## Scope

- discuss the Australian setting
- discuss shaping factors around preparedness and response to oil spills in Australia
- changes to the Australian regime Since 2010
- Hot issues in Australia
- who is AMOSC



### The sector

**Industry Associations** 









Regulators







States

















## The 'geo' graphics - 2011 DNV Risk review

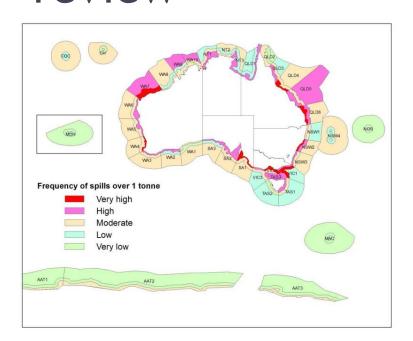


Table 3.3 Overall National Oil Spill Risk

SOURCE	SPILL RISK	%
	(tonnes per year)	
Trading ships at sea	278	27.4%
Trading ships in port	174	17.1%
Small commercial vessels	2	0.2%
Offshore production	310	30.5%
Offshore drilling	209	20.6%
Shore-based	42	4.2%
Total	1015	100.0%

Table 4.2 Oil Spill Risk in 2020

SOURCE	SPILL RISK	% OF	% INCREASE
	(tonnes per year)	2020	FROM 2010
Trading ships at sea	491	37.7%	77%
Trading ships in port	337	25.8%	94%
Small commercial vessels	2	0.2%	7%
Offshore production	217	16.6%	-30%
Offshore drilling	209	16.0%	0%
Shore-based	48	3.7%	14%
Total	1304	100.0%	29%

## The 'geo' graphics - 2013 National Plan outcomes

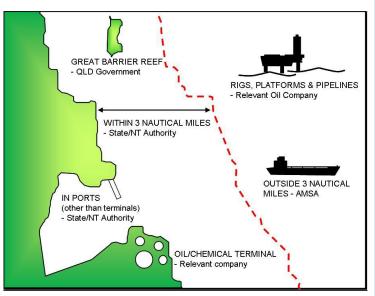
#### **Statutory Agencies**

(Coastal Waters – within3nm)

### Petroleum & Shipping Activity:

Relevant State Agency –
i.e. Department of Primary
Industries (DPI),
Department of Transport
(DoT), Environment
Protection Authority (EPA)

#### **Combat Agencies**



#### **Statutory Agencies** (Commonwealth Waters)

#### **Petroleum Activity:**



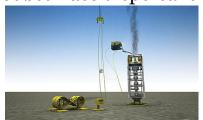


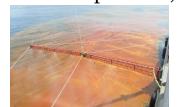
#### **Shipping Spill:**

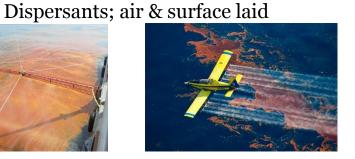


#### The Toolbox of response options

Subsurface dispersant







Mechanical recovery







In Situ burning

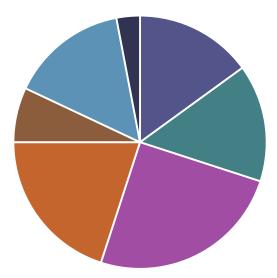


Monitor & Evaluate



## The toolbox approach....

Macondo daily oil budgets Aug 2010



- direct recovery
- evaporated/dissolved
- skimmed

- Naturally dispersed oil
- in-situ burned

- Chemically dispersed oil
- other oil

## Hot issues; Dispersant use

- Operational safety during use
- Efficiency (efficacy)
- Eco-toxicity

Human health

• Just in time manufacture vs stockpiles



## Hot issues; The subsea success

Deepwater Horizon on 10/11 May 2012



Prior to injection



11 hours of injection

Australian industry subsea dispersant/debris clearance toolkit with 500m<sup>3</sup>

dispersant



#### **Debris clearance**



## Hot issues; Oiled Wildlife

- 2 X Containers for industry
- Training
- Plans
- Contracts for support
- Industry exercises





## Hot issues; Aerially laid Dispersant

- Current support; 6 base airfields each providing 2 aircraft of single seat 802 aircraft (3m³ capacity) with a secondary capacity of an additional 6 aircraft (18 aircraft total available)
- Contract being renewed and market in Australia being tested for 'best fit'
- Montara success for offshore aerial dispersant deployment



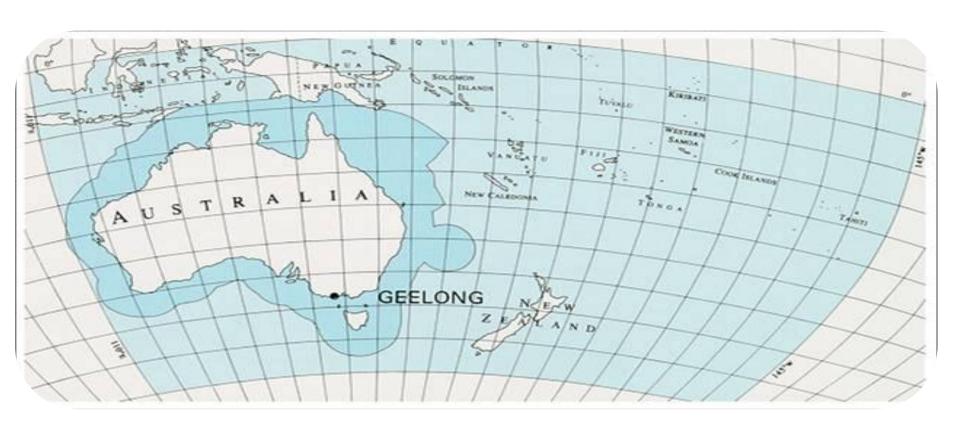


### Who is AMOSC?

- Formed in 1991 as subsidiary of Australian Institute of Petroleum
- \$10 million capital cost and net \$3.5 million annual operating cost provided by 28 industry companies
- Major response equipment
  - stockpile and training
  - centre located in Geelong
  - Office in Fremantle



## AMOSC Area of Operation



#### Members

#### **Participating Companies**

- Apache
- BHP Billiton
- BP
- Caltex
- Chevron
- ExxonMobil
- Santos
- Shell
- Woodside

#### **Associated Companies**

- ASP Ship Management
- CalEnergy Australia
- Conoco Phillips
- ENI Australia
- Hess Exploration
- Hunt Oil
- InterOil
- Inpex Browse
- Murphy Australia Oil
- Nexus Energy
- Oil Search
- Origin Energy
- PTTEP
- Rio Tinto
- Roc Oil
- Sinopec Oil&Gas
- Teekay Shipping
- Vermilion Energy

#### The Role of AMOSC

- Hire of equipment and resources for response to oil spills
- Provision of training in oil spill response
- Administration of AMOSPlan
- Provision of response planning and auditing services
- Representation of industry oil spill issues
- Engagement in international industry spill response issues





### AMOSC's current staff

- Incidents staff have operated in;
  - CV Rena IC, Ops Chief, Planning, OC Marine Ops, support & admin
  - Macondo –SCAT & shoreline ops
  - Montara dispersant ops, aerial surveillance, at sea containment & recovery
  - Pacific Adventurer, Pasha Bulker, Global Peace
  - & more ..... including Northern Hemisphere responses

#### 24 HOUR EMERGENCY TELEPHONE NUMBER: 0438 379 328



Phone: (03) 5272 1555 Fax: (03) 5272 1839

Email: amosc@amosc.com.au



AMOSC operates Australia's major oil spill response equipment stockpile on 24 hour stand-by for rapid response anywhere around the Australian coast. The Geelong location places the response centre at the heart of oil movements in Australian coastal waters and has excellent access to road and air transport.

#### AMOSC Provides spill preparedness and response through:

- · Equipment (Tier 3 and dispersant)
- · Training
- · Advice on Contingency planning
- · Mutual aid Scheme
- Australian interface to international responders

All offshore operators are AMOSC members.

