Offshore Petroleum Forum

Spill Preparedness and Response

Documents provided;
- Marine Pollution Incident Response Arrangements
- Explanatory Note: Oil Spill Preparedness and Response
- Program
- Feedback Form
Emergency procedures
• Introduction

• Australian arrangements: Government perspective
  – Commonwealth and State arrangements
  – Government panel session

• Australian arrangements: Industry perspective
  – Industry arrangements and experience
  – Industry panel session

• Workshop: key priorities and implementation
Forum aim and scope

- Strengthen and clarify cooperation and coordination of oil spill preparedness and response under the National Plan
- Covering:
  - Offshore petroleum operations and operators
  - Oil spill preparedness and response
  - The National Plan as it relates to offshore petroleum activities
  - Regulation of oil spills from offshore petroleum operations
Introduction and context

- Assumed level of knowledge
- Pre-reading provided
- The National Plan
- The OPGGSA and Environment Regulations
Session 2:
AMSA
National Plan
The National Plan
Origin of the National Plan

- 1970 Oceanic Grandeur
- 1973 National Plan inception
- 1993 National Plan review
- 1998 Hazardous & Noxious Substances
International links

► OPRC convention

► Australia’s obligations

► Memoranda of Understanding (MOU)
Aim & Objectives

- Protection of the environment
- National Contingency Plans
- State, local & Industry Plans
- Response equipment
- Comprehensive national training
National Maritime Emergency Response Arrangements

- Commenced in 2006
- Intervention Powers
- Maritime Emergency Response Commander (MERCOM)
- ETV Programme
Emergency Towage Vessel (ETV) Program

- Minimum level of towage capability around coast.
- Capability is provided by contractors.
- Three tiers:
  - Level 1: dedicated ETV in northern GBR/Torres Strait/Coral Sea
  - Level 2: contracted capability in strategic locations
  - Level 3: vessels of opportunity.
Background to the Current Review

- Last reviewed in 1999
- Recent review commenced 2011, completed end 2012
- Objective of the Review was to determine the adequacy of arrangements
- Takes into account
  - DNV Risk Assessment outcomes
  - Montara Commission of Inquiry Report
  - Pacific Adventurer Incident Analysis Report
- Supported by:
  - National Risk Assessment
  - Capability Review
- Comprehensive consultation process with public submissions
National Risk Assessment (Frequency)

2011 Risk Assessment

1999 Risk Assessment
**Risk Assessment – Future Trends**

- Increase of 79% in total national port traffic
- Increase of 81% in total national traffic
- Small commercial vessels assumed to remain at present levels
- Offshore drilling assumed to remain at current levels
- Offshore oil production to reduce by 89%
- Condensate production to increase by 73% (overall decline by 35%)
- Shore based oil consumption to increase by 14%

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GREAT BARRIER REEF – QLD Government

IN PORTS (OTHER THAN TERMINALS) – State/NT Authority

OIL/CHEMICAL TERMINAL – Relevant company

3 nm

OUTSIDE 3 NAUTICAL MILES – AMSA

RIGS, PLATFORMS & PIPELINES – Relevant oil company

WITHIN 3 NAUTICAL MILES – State/NT Authority
Management structure
Equipment

- Tier 2/3 stockpiles
- Tier 1 located in Ports
- AMOSC & Industry
- Overseas resources
- Manuals
Fixed Wing Aerial Dispersant Capability
Training

► Senior Management
  - Marine Pollution Controller

► Middle Management
  - Oil Spill Management, Chemical Spill Response, Environment & Scientific Coordinator

► Operator
  - Equipment, Shoreline Cleanup, Finance & Administration
Support resources

► OSTM
► OSRA
► MOSES
► Chemical Spill Tools
► Oil Pollution Risk Analysis
Questions?
Session 2:
Offshore arrangements
National Plan
New National Plan governance arrangements

- AMSA
- DRET/NOPSEMA (Obs)
- Industry Advisory Forum Chair (Obs)

- DRET & NOPSEMA
  - AMSA
  - AIMS
  - CSIRO

- APPEA
  - AMOSC
  - AIP

- Prevention Technical Group
- AMOSC
  - NOPSEMA
  - CSIRO
  - AIMS

- AMOSC
  - NOPSEMA
  - CSIRO
  - AIMS
Response arrangements

**ORGANISATION ARRANGEMENTS**

- **Government Crisis Coordinator**
  - Government Crisis Coordination Team
  - Relevant Commonwealth Agencies
  - Relevant State Agency
  - Industry Advisor/Representative
  - Regulator(s)

**SHIPPING INCIDENTS**

- **Shipping incidents whilst undertaking offshore petroleum activities that are not a facility**
  - (e.g. seismic & supply vessels and off-take tankers)
  - **Lead Agency:** AMSA
  - **Gov't Coordinator:** AMSA
  - **Reporting To:** Minister for Infrastructure and Transport
  - **Group Name:** AMSA Crisis Management Team
  - **Mode of Coordination:** Consultation and coordination across the whole of Government
  - **Enabling Legislation:** AMSA Act & POTS Legislation
    - OPGGS Act
    - OPGGS (Environment) Regulations
  - **Planning Documents:**
    - National Plan
    - AMSA CMP

- **Regulators:**
  - AMSA
  - NOPSEMA

- **Responsible Party:** Spiller
- **Control Agency:** AMSA
- **Incident Controller:** AMSA
- **Group Name:** Incident Management Team
- **Planning Documents:**
  - SOPEP
  - AMSA OSCP
  - Environment Plan & OSCP
- **Modes of Control:** AMSA has control for combat of marine pollution

**NOTE:** At all times the Spiller remains legally responsible to fund, and bear the liabilities of, the spill and associated response actions.
The role of the Regulator

- **PLAN**
  - Assess

- **PREPAREDNESS**
  - PREVENTION
    - Inspect compliance
    - Enforcement

- **RESPOND**
  - Assess
    - Intervention
    - Investigation
Control agency

Marine Pollution Incident Response Arrangements

**MODE A**
Operator retains combat responsibility and uses supporting agencies as required

**MODE B**
Operator engages third-party to provide resources to meet their combat responsibilities

**MODE C**
Operator engages AMSA to provide resources to meet their combat responsibilities

**MODE D**
Australian Government

Regulator intervention and engagement of response resources

**NOPSEMA**
AMSA Functions

- To combat pollution in the marine environment.
- To provide a search and rescue service.
- To provide, on request, services to the maritime industry, the Commonwealth and States and Territories on a commercial basis.
Other legislation administered by AMSA

- Protection of the Sea Legislation
  - MARPOL (MARPOL (includes specific provisions for platforms and FPSOs))
  - Intervention
- Navigation Act
The Plan covers all operations undertaken by AMSA in response to a pollution incident, including:

- Where AMSA is the designated combat agency.
- Where AMSA is a support agency.
Consultation

- AMSA is the designated combat agency for vessel activities within the Commonwealth jurisdiction. *(Subject to the application of the Navigation Act)*

- AMSA does not require consultation on OSCPs for Seismic Surveys or the operations of offshore supply vessels.
AMSA does not require operators to consult on OSCPs for operations where non-persistent (Group I) hydrocarbons are being produced.

AMSA expects formal engagement with operators on OSCPs for operations addressing spills of persistent hydrocarbons (Group II – V).
Other considerations …

- EPBC Act
- AMSA may be consulted by SEWPAC on a case by case basis
- Needs to be considered when engaging with AMSA
AMSA agreement to response role

- Meeting the consultation requirements
- Written agreement/formal notification
- Receipt of Plan!!!
Conditions—Support Agency

AMSA requires written agreement when support from National Plan arrangements is requested by offshore operators.

This agreement covers:

- the re-imbursement of AMSA costs
- the application of National Plan and AMSA Plan Arrangements to the response
- the cooperative nature of AMSA’s engagement (NOT a service provider)
- the operator’s OPGGS responsibilities and liabilities.
AMSA will respond in the public interest only.

AMSA will respond consistent with the National Plan and AMSA Marine Pollution Response Plan.

AMSA will not assume any of the operators responsibilities or liabilities.
Other emergency response considerations

- Search and rescue
- Maritime Casualties
  - Intervention Act
  - MERCOM
  - Directions powers
Thank you …
Session 3: The offshore petroleum regime
The Offshore Petroleum Regime

Offshore Petroleum Forum: Spill Preparedness and Response
Cairns, 8 April 2013

Martin Squire
General Manager, Offshore Resources Branch
Resources Division
Presentation Outline

1. Australia’s offshore regulatory regime
   • Administrative arrangements
   • Policy
   • Regulation

2. Spill preparedness and response
   • Offshore Incident Coordination Framework
   • Titleholder/operator responsibilities
Petroleum Exploration and Development in Australia

- Shared administration between Commonwealth and State/Territory governments

- Impact of the Montara Incident

- Reforms implemented 1 January 2012:
  - Designated Authorities (DAs) abolished: DA functions allocated to the National Offshore Petroleum Titles Administrator (NOPTA)
  - Single national regulator for health & safety, environmental management, integrity and day-to-day activities: the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)
The Department of Resources, Energy and Tourism

  - Sets out basic framework of rights, entitlements and responsibilities of governments and industry  
  - Key functions as delegate of the Joint Authority

- Responsible for management offshore petroleum regulation policy  
  - *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009*
Objective-based regulation

- The onus is on the petroleum industry to identify and evaluate risk and achieve fit-for-purpose design to prove to the regulator that their operations are safe and effective.

- The regulator assesses whether the operator’s proposed measures are appropriate and, if it accepts the operator’s proposed measures, monitors and enforces compliance with duties of care.

Operators and titleholders are responsible for ensuring risks are reduced to as low as reasonably practicable
Offshore Petroleum Environmental Management Regulation and Oil Spill Preparedness

- NOPSEMA: National regulator for occupational health and safety, integrity, environmental management and day-to-day activities

- Environmental management and spill preparedness
  - Environment Plan
  - Oil Spill Contingency Plan
Spill response

- Reforms in light of Montara

- National Plan
  - Review
  - Resources Portfolio role
  - Industry role
Spill response (2)

- Key factors for incident response
  - OSCP
  - Control agency
  - Regulator

- Offshore Petroleum Incident Coordination Framework
  - The central coordinating body, chaired by RET, to facilitate interaction and communication between stakeholders and the public.
  - The central coordinating body will not assume any aspect of the Combat Agency role as designated under the National Plan.
Titleholder duties in the event of a spill

• The Better Regulation Ministerial Partnership

• Legislative reform to clarify titleholder duties

  – Statutory duties:
    • Eliminate or control an escape of petroleum
    • Clean-up the escaped petroleum
    • Remediate damage to the environment
    • Monitor environmental impacts of the incident
Titleholder duties in the event of a spill (2)

- Legislative reform to clarify titleholder duties (cont)
  - ‘Polluter pays’: third party cost recovery mechanisms
  - Financial assurance: requirement for petroleum titleholders to maintain sufficient financial assurance to meet costs of expenses and liabilities
Conclusion

The onus is on industry to conduct petroleum activities in a safe, environmentally sustainable manner, and act appropriately in an emergency response situation.

• Further information

Department of Resources, Energy and Tourism: www.reت.gov.au

National Offshore Petroleum Safety and Environmental Management Authority: www.nopseма.gov.au

Australian Petroleum Newsletter: petroleum.exploration@reт.gov.au
Session 4: State preparedness and response arrangements
Marine Pollution Response Arrangements in Victoria – An Industry Perspective

Sean Moran, Security and Emergency Management Division, Department of Transport
Oil Spill Response Coordination

State Emergency Management Arrangements

Emergency Management Act 1986

Emergency Management Manual Victoria (EMMV)
  - Part 3: State Emergency Response Plan
  - Part 7: Agency roles & responsibilities

Marine Pollution Arrangements

Marine (Drug, Alcohol and Pollution Control) Act 1988
  - Defines powers to prepare and respond to marine pollution
  - Powers of Direction
  - Defines “Prohibited Discharge”

Pollution of Waters by Oil and Other Noxious Substances (1986)
  - Implements MARPOL
  - Defines illegal discharge and allows for prosecution

Victorian Marine Pollution Contingency Plan

Regional & Local Plans

Department of Transport
The Department of Transport (DOT) is the **State Control Agency** for marine pollution incidents that occur in Victorian State Waters

Supported by:
- NATPLAN stakeholders
- Regional Control Agencies
- VICPLAN stakeholders
Victorian Marine Pollution Contingency Plan (VICPLAN)

Aim:
The aim of VICPLAN is to provide a COORDINATED approach to marine pollution preparedness and response arrangements within State waters.

Key Objectives:

• Describes the organisations involved, their responsibilities and procedures for the preparation and response to, marine pollution incidents.

• Describes the integration between DOT and State/National arrangements.

• Provide marine pollution preparedness and response guidelines.
The Consultation Process

What does DOT expect from operators?

**Planning & Preparedness Phase**
- Type of activity and potential risks to State
- Your capability and capacity to respond to these risks
- Details for notification and transfer of control
- Consider State participation during exercises designed to test OSCP

**Response Phase**
- Early notification to DOT
- EMLOs
- Appropriate transfer of control
- Industry will continue to support State (IMT and operator level)

*DOT does not require fine detail of OSCP*
The Consultation Process

What assistance can operators expect from DOT?

**Planning & Preparedness (for potential impacts to State waters)**

- Details of State-owned equipment and resources
- Access to risk assessments
- Advice on State emergency management arrangements

*Note: DOT will not conduct detailed reviews of OSCPs*

**Response Phase (outside State waters)**

- State-owned equipment and assets
- Access to State Response Team personnel
- Access to stakeholders consistent with State Emergency Management Arrangements

**Response Phase (inside State waters)**

- Response as per State Emergency Management Arrangements
Response arrangements for spills that originate within State waters

- Oil spill from industry facility/vessel
  - Can spill be managed in line with operator OSCP?
    - Yes
      - Spill managed in accordance with operator OSCP
    - No
      - Is State satisfied with response?
        - Yes
          - Combined Gov & Industry response
        - No
          - State assumes incident control

Department of Transport
Tiered response arrangements for spills that originate outside State waters

- Oil spill from offshore activity in Commonwealth waters
  - Is spill likely to impact State waters?
    - Yes
      - Activate pre-agreed arrangements (OSCP)
        - Early notification
        - Appoint EMLO
        - Access to State and Industry resources
        - Industry manage Commonwealth waters
    - No
      - State assumes incident control
      - Response consistent with State arrangements
      - Combined Industry/Gov response

- Spill managed in accordance with operator OSCP

Department of Transport
Oil Spill Response in Western Australia
Department of Transport Marine Safety

Oil Spill Response Coordination

24hr Marine Pollution Reporting 9480 9924
Oil Spill Response Coordination

Oil Spill Response Coordination Unit (OSRC)

- Coordinator
- Environment Officer
- 2 Training Officers
- Operations Officer
- Research Officer
Oil Spill Response Coordination

- Emergency Management Act 2005
- Hazard Management Agency (HMA)
- 27 WestPlans 9 HMA
- DoT Marine Oil Pollution (MOP)
- DoT Marine Transport Emergency (MTE)
Regulation 15: Events, situations and conditions prescribed as hazards

_r15(i)  MTE_

actual or impending event involving a ship that is capable of causing loss of life, injury to a person or damage to the health of a person, property or the environment;

_r15(j)  MOP_

actual or impending spillage, release or escape of oil or an oily mixture that is capable of causing loss of life, injury to a person or damage to the health of a person, property or the environment;
AIM:

• The aim of WestPlan-Marine Oil Pollution (MOP) is to detail the management arrangements for preparation and response to a MOP incident in order to minimise the effects of oil pollution in State Waters.

DoT Oil Spill Contingency Plan

AIM:

• To ensure that DoT can mount an appropriate response to oil pollution incidents in WA state waters.
Objectives:

Integrate WestPlan-MOP with:

- National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (the ‘National Plan’ or ‘NATPLAN’)
- WestPlan-HAZMAT,
- WestPlan-Marine Transport Emergencies (MTE),
- Port and Maritime Export Facility Oil Spill Contingency Plans and Industry Oil Spill Contingency Plans.
Oil Spill Response Arrangements Outlined In Westplan-MOP

**Legend**
- HMA – Hazard Management Agency
- SA – Statutory Agency
- CA – Combat Agency
- DoT – Department of Transport
- PA – Port Authority
- DFES – Department of Fire and Emergency Services
- DMP – Department of Mines and Petroleum
- AMSA – Australian Maritime Safety Authority
- NOPSEMA – National Offshore Petroleum Safety and Environmental Management Authority

**Outside of 3 Nautical Miles**
- Ship – AMSA is SA & CA
- Facility – NOPSEMA is SA
  - Relevant Company is CA

**Spill within 3 Nautical Miles**
- DoT is HMA
- Facility – DMP SA
  - Relevant company CA

**Port Authorities**
- Spills within Port Limits
  - DoT is HMA
  - PA is SA & CA
  - Facility – DMP SA
  - Relevant company CA

**Oil Facilities**
- Oil / Chemical Terminals
  - DFES is HMA
  - Relevant Company is CA
Oil Spill Response Coordination

Industry Consultation Guidance

• Industry Guidelines

• Dispersant Guidelines
Oil Spill Response Coordination

Questions?

Oil Spill Response Coordination

24hr Marine Pollution Reporting 9480 9924
Session 5:
Panel session
Panel session

- Opportunity to ask questions of panel members on matters in scope
  - Offshore petroleum operations and operators
  - Oil spill preparedness and response
  - The National Plan as it relates to offshore petroleum activities
  - Regulation of oil spills from offshore petroleum operations
- Questions and answers will generate focus areas to be discussed in session 10 later in the day.
Panel session

- AMSA – Jamie Storrie
- NOPSEMA – Cameron Grebe
- RET – Martin Squire
- DoT Victoria – Sean Moran
- DoT WA – Matt Verney
Session 6: Offshore petroleum arrangements
The Australian Oil and Gas Industry: Operational Response Arrangements

Miranda Taylor
Director
Environment & Safety
APPEA

Offshore Petroleum Forum
Achieve timely, transparent, efficient access to oil and gas resources for exploration on attractive commercial terms.

Maximise Australia’s attractiveness as a destination to develop oil and gas resources, including for example:

- Promote the economic, social and environmental benefits associated with the development of petroleum resources to the community and governments.
- Advocate a policy framework that promotes free markets, free trade and the rule of law.
- Develop and promote science based, efficient, cost effective resource management and environmental regulatory regimes.
- Promote carbon reduction policies that maintain international competitiveness and reduce emissions at least cost.
Support the achievement of excellence in Industry health, safety and environmental performance.

Take a leading role in enhancing trust in the oil and gas industry with Governments and key communities.
APPEA has a seat on the National Plan Strategic Industry Advisory Forum. APPEA Board has a Critical Incident Management Plan for responding as an Industry to a major offshore petroleum incident, and this is supported by a Memorandum of Understanding for sharing response equipment and expertise. APPEA Board can set up e.g. equivalent of the APPEA Montara Taskforce. Run a number of key policy committees working on e.g. spill preparedness and response. APPEA is a member of the International Organisation of Petroleum Producers and has close links to UK Oil and Gas.
Offshore Petroleum OPERATORS
Coordination with National Plan
Industry’s Resources and Efforts

- Prevention, Planning & Preparedness, Response and Recovery

- Bow Tie - We need to get the balance right
Global Industry

- The oil and gas industry has long had extensive well control technology - but there is always more we can and should do.

- The Montara and Macondo offshore incidents have identified a need for the global oil and gas industry to develop and test new intervention and response solutions, including capping and containment.

- One major change is the development of a coordinated global industry intervention and response strategy. Companies are today working toward industry-wide solutions, rather than solely pursuing individual risk management approaches.

- Australian operators are mostly global companies and directly integrated into this global industry collaboration.

- APPEA and AMOSC are both integrated into global networks on behalf of the Australian oil and gas industry.
**Australian Industry Actions - Immediate**

- Strong and immediate action by industry - pulled together to provide peer review, specialist personnel and support.
  - Individual Companies
  - Nationally through APPEA
  - Internationally

- APPEA’s members carried out in depth reviews of design, integrity and operations of all their wells, their communication and verification protocols and emergency response preparedness.
APPEA Montara Taskforce and Global Collaboration

- Self-Audit Tool to guide integrating titleholders’ and contractors’ drilling and well operations
- Memorandum of Understanding on Mutual Aid for responding to offshore well incidents
- Competency for Well Operations Personnel (OGP and UK Oil and Gas well competency work – Guide for Australian Well Operations)
- Source Control - Development of Intervention and Response Capability for Australia - global collaboration - Expanded oil spill response capability – collaboratively between operators and also through AMOSC and globally.
MoU for Mutual Assistance

- Sets up a framework for ‘best endeavours’ mutual assistance arrangements in drilling relief wells.
- The Parties acknowledge that emergency conditions may arise that require drilling relief wells.
- This would necessitate an urgent response and assistance by industry to minimise adverse impacts.
- For timely response, the general principles of the MoU will form the basis for arrangements with the Drilling Operator, drilling unit(s) and contractor personnel, equipment, materials, consumables and other well-site services.
The Australian oil and gas industry is committed to having world-class capability to respond rapidly and effectively to offshore subsea well control incidents.

The international oil and gas industry’s intervention and response capacity, including a capping stack system, will be called on immediately in the event of an offshore well control incident.

Time to mobilize a global capping stack is anticipated to be 9-11 days. However, a capping stack cannot be deployed at the wellhead at the incident site until the site has been cleared and made safe.

Time to prepare the well for capping stack is estimated to be 14-21 days; time to mobilize a global capping stack is 9-10 days.

There is not a “one size fits all” capping stack that will be ideal for all Australian wells - but the Australian industry have access to several capping stacks that would fit multiple needs globally.
Australian Source Control Solution

- Australia is putting in place the equipment needed to make the surface area of the sea around a subsea drill centre safe, and prepare the well for an intervention (capping stack) if appropriate.

- This is the Australian Subsea First Response Toolkit.

- The SFRT is owned by AMOSC on behalf of the industry with Oceaneering providing the equipment and expertise for mobilization and deployment.

- It will greatly enhance the intervention and response capacity for offshore subsea operations and help protect the offshore marine environment.

- It is designed to fit on any work class ROV and would also enable the application of subsea dispersant where there is a need to make surface safe for work.
Australian Industry Actions

Australian Subsea Response Toolkit – will be in place in Australia by September 2013

The tasks for the SRFT:

- Specialty ROV tasks
- Intervene on existing Blow-Out Preventer (BOP) and function them hydraulically
- Area surveys, maps, and video recordings
- Set sonar arrays for equipment guidance during deployment
- Ability to apply subsea dispersant at the well to make the surface of the sea safe for work
- Clear debris and equipment from the wellhead area to allow intervention tooling to be deployed (i.e. capping stack engagement.)
Two Questions

• Would this equipment have been usable at Montara?

• What would the industry do if there was another blow-out at a well similar to Montara?
A number of key reviews, including the Montara Inquiry, identified issues with the regulatory disconnects between regulation of petroleum activities - including safety and environmental management, well design and operation and integrity of facilities.

As a result, the Australian Government established NOPSEMA in 2012, as a single integrated independent authority, responsible for safety, integrity of facilities, well operations and environmental plans in Commonwealth waters.

Regulations administered and enforced by NOPSEMA include the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009*. 
Industry is committed to understanding the potential risks and impacts to the marine environment from our offshore oil and gas activities – and this is a key point – this means we have to be activity and environment specific.

It includes the risks of and impacts from an oil spill.

Offshore petroleum operators are required to justify to an independent regulator – NOPSEMA - that they are managing these risk and impacts to an acceptable level and to as low as reasonably practicable - through the Environment Plan (including planning and capability for implementation of the EP and for oil spill response)

This requires a robust ‘case’ to be made and substantial and relevant evidence provided. It requires industry to go beyond minimum prescriptive standards and to demonstrate we have gone far enough in reducing the risks and impacts - taking into account a range of factors!
The NOPSEMA regime has moved closer towards a ‘strategic impact assessment’ style process for Commonwealth waters – but for an activity not region.

The OPGGS Environment Regulations require operators to consult with the States/NT where the activities are relevant e.g. activities carried out in Commonwealth waters may have risks/impacts in coastal waters or to the coastline itself. And stakeholders/interested parties, including AMSA.

In addition, activities that may significantly impact on ‘Matters of National Environmental Significance’ must be referred to SEWPAC under the EPBC Act, and conditions be placed on that activity – including for managing the risk/impact of oil spills.

The States and NT regulate all petroleum activities carried out in coastal waters – with similar requirements for environmental management plans and oil spill preparedness and response.
APPEA Oil Spill Working Groups

- Oiled Wildlife
- Use of Dispersants
- Oil Spill Modelling
- Operational and Scientific Monitoring
- Future role of APPEA and AMOSC
Session 7: Operational response arrangements
Operational Response Arrangements - Industry Perspective
provided by AMOSC

Forum Aim;
- strengthen & clarify offshore petroleum cooperation & coordination of spill preparedness and response under the National Plan

Session 7
Mon 8 April 2013
Who is AMOSC?

• Formed in 1991 as a subsidiary of the Australian Institute of Petroleum
• $10M start up cost and $2.5M operating cost funded by 28 Oil Industry companies
• National response equipment & personnel;
  ▫ 12 staff located in Geelong & Perth
  ▫ Available for all types of marine based oil spills
  ▫ Can call on 100 higher trained personnel from companies to further support government and industry based spill response (Core Group) trained at 3 levels – Operations, Management, Incident Control – 2 yr revalidation
• The industry facilitator of Mutual Aid
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.*
The ‘roots’ of response

- OPRC 90 Convention – but based on ship spills; single source and known quantity
- OPRC 90 tenets;
  - Trained people
  - Right equipment
  - Plans
  - Training regime & exercises
  - Mutual & regional cooperation

- But how does this doctrine help offshore based spills?
Combat/Statutory Agencies

- **GREAT BARRIER REEF**
  - QLD Government

- **WITHIN 3 NAUTICAL MILES**
  - State/NT Authority

- **IN PORTS**
  (other than terminals)
  - State/NT Authority

- **RIGS, PLATFORMS & PIPELINES**
  - Relevant Oil Company

- **OUTSIDE 3 NAUTICAL MILES**
  - AMSA

- **OIL/CHEMICAL TERMINAL**
  - Relevant company

**Australian Government**
**Australian Maritime Safety Authority**

**NOPSEMA**
The National Plan

- The way AMOSC and AMOSC member companies integrate with the National Plan is:
  - Provision of mutual aid in the form of people and equipment from AMOSC and individual companies
    - Including Core Group who undertake revalidation every 2 years
    - Including industry based assets (vessels) where required
    - Industry Advisor
  - Request aid from the National Plan via AMSA as the National Plan ‘manager’
  - Working closely with AMSA and the NRT maintaining mutual links and cooperation (on water display as example)
  - Individual company agreements with AMSA for access to the National Plan resources
Industry response capability and capacity

- AMOSC equipment & personnel (inc Core Group)
- AMOSC advice, knowledge & experience
- Contingent capability – surge resources
- Company specific depending on company resources & company corporate plan
- AMOSC and access into the Global Response Network members (fellow OSRO’s)

- Current capability has been proven!
International Links
International changes

• OGP – formed GIRG in 2011:
  ▫ 19 recommendations and 5 working groups formed including spill management, dispersant use, offshore ops, near/on shore ops, in-situ burning

• GRN formed operational teams (OT’s) on:
  ▫ In-situ burning
  ▫ Dispersant operations
  ▫ Near shore & onshore response
  ▫ Offshore response
  ▫ Remote surveillance
  ▫ Command & control
Sources of Oil in the Marine Environment

- **Natural Seeps**: 47%
- **Petroleum Extraction**: 3%
- **Petroleum Consumption**: 38%
- **Petroleum Transportation**: 12%
- **Transportation**:
  - Tanker spills: 8%
  - Tank washings: 3%
  - Pipeline spills: 1%
  - Terminal spills: 0.4%

Total: approx 1,300,000 tonnes/year
Offshore oil production is predicted to reduce by 89% by 2020, while condensate production is predicted to increase by 73%, giving an overall decline by 35% (Appendix I.5.2).

### Table 3.3 Overall National Oil Spill Risk

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

### Table 3.6 Overall National Environmental Risk Index

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERI (million A$ per year)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trading ships at sea</td>
<td>2.4</td>
<td>25.6%</td>
</tr>
<tr>
<td>Trading ships in port</td>
<td>4.9</td>
<td>51.8%</td>
</tr>
<tr>
<td>Small commercial vessels</td>
<td>0.1</td>
<td>1.1%</td>
</tr>
<tr>
<td>Offshore production</td>
<td>0.7</td>
<td>7.1%</td>
</tr>
<tr>
<td>Offshore drilling</td>
<td>0.3</td>
<td>2.9%</td>
</tr>
<tr>
<td>Shore-based</td>
<td>1.1</td>
<td>11.5%</td>
</tr>
<tr>
<td>Total</td>
<td>9.4</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The Toolbox of response options

- Mechanical Recovery: Booms & Skimmers
- In-Situ Burning
- Aerial Dispersants
- Subsea Dispersants
- Monitor and Evaluate
- Shoreline Cleanup

The goal is to design a response strategy based on Net Environmental Benefit Analysis.
So what am I getting at?

- (What if) Put the.....
  - oil source ... against
  - risk assessment &predictions... Against
  - the range of options available....against
  - operational efficiencies of response options .... Against
  - what we currently have ... and

- (So What) The challenges that present themselves are planning for the next spill – not the last one, through the OSCP process
- Needs to be threat and risk based
Response OFI’s (Opportunities for Improvement)

- Clarify State vs NOPSEMA obligations on near shore/onshore operations (OSCP)
- Clarify IAP responsibilities (should be IC & Stat Agency – not Regulator)
- Consistent [Commonwealth] authority approach to oil spill issues – collaboration around response, not worrying about spill source
- OFI1; exercise the coord function – what does the Regulator do?
- OFI2; SONS to fit at strategic level
- OFI3; maintain response strategies to a pragmatic & sensible level based on threat
Other response issues .... (forum aim)

- Ultimate collaboration would be one effort, in one common water-space with government & industry resources operated in unity
- Difference in a spill size of the response is only the order of response magnitude
- The solution does not include buying big bits of equipment and regionally locating the equipment without due regard to the Natplan equipment stocks
- Industry efforts since Montara/Macondo have significantly lifted
- But how mature was the International doctrine & Natplan system for industry needs? ie. Oiled Wildlife Response?
- Monitoring – who pays given the difference between a ship sourced spill and their level of liability (or tolerance) to long term monitoring of an effect of a spill?
- How does Australia maintain the impetus behind preparedness and response moving into the future? (3-5 year syndrome)
- Actual (Field) threat based trials – use condensate, IFWeathered crude, HFO
This is all AMOSC needs from OSCP’s …..

With permission from Vermilion Oil & Gas Australia
Not in Australia!
Session 8: Operator experience

Vermilion’s Experience
- Greater awareness of the capability and capacity requirements to respond
- Improved engagement between industry, Government and third party responders
- Processes to develop OSCP needs to be standardised by industry
- Clarity in State and Federal Government roles
Scenarios based on risk assessment outcomes rather than tiers

Established OSCP performance parameters required to mitigate the consequence

OSCP strategies based on spill scenarios considering:
- Time to impact
- Time response
- Likelihood of oil
- Oil quantity, thickness and concentration
- Toxic and smothering effect of oil
Our plan identified response strategies and the resources required to support each response strategy
- based on meeting performance objectives and standards of plan
- Output: performance standards for OSCP resources

Identified OSCP resources needs
- Formal response arrangements focused on the resource requirements for first 20 days
Response Capability Improvements

- **Oiled Wildlife**
  - Equipment
  - Trained personnel
  - Working Regional response facilities and plans

- **Post spill Environmental Monitoring**
  - Developed plan
  - Environmental data
  - Activation Plan
  - Resources

- **Logistics**
  - People
  - Transport
  - Housing
Stakeholder Engagement

- Development process opened up discussions
  - Neighbouring Operators
    - Formalise response support
    - Coordinated approach to solving regional challenges
    - Sharing baseline environmental data
  - Government and Local councils
    - State: improved understanding of dispersant approval process and oiled wildlife response capability within WA
    - Local Council: Approval processes for waste storage and access of land for temporary housing
  - Third Party support
    - AMOSC: awareness of our needs and response capabilities
    - DPA: Priority berth access for emergency response
    - Logistics services: Waste management, land and marine support
- Engagement overload with some stakeholder
State and Federal roles and approval responsibilities were not immediately clear
- Clarity in the AMSA-NOPSEMA
- Need a consistent approach between States

OSCP is a significant proportion of the EP submission
- No acceptance criteria for an OSCP
- OSCP no specific requirement to link it to EP risks
- OPGGS(E)Reg 14
  - EP requires an implementation strategy
  - Implementation strategy must contain OSCP
  - OSCP must be kept up to date, include ER arrangements and be tested
Continued collective industry response to address
- OSCP processes and standards
- Regional response plans

Opportunity to coordinate stakeholder engagement process

Collective industry response capability and arrangements based on meeting our performance standards and objectives and not tiers
- Manage our risks
- Share our Knowledge

State and Federal Government responsibility, capability and approval processes
Session 9: Panel session
• Opportunity to ask questions of panel members on matters in scope
  – Offshore petroleum operations and operators
  – Oil spill preparedness and response
  – The National Plan as it relates to offshore petroleum activities
  – Regulation of oil spills from offshore petroleum operations

• Questions and answers will generate focus areas to be discussed in session 10 later in the day.
• APPEA – Miranda Taylor
• AMOSC – Nick Quinn
• Vermilion – Bruce Lake
Session 10: Key priorities and implementation
General areas of agreement

- The need for fast, visible and coordinated action in response to oil spills
- The National Plan is a flagship framework for cooperation and coordination between industry and government.
- Each offshore petroleum operator is part of the National Plan.
- The National arrangements, through AMSA and AMOSC provides Australia with contingent response capability.
- The current National response capability meets a general risk presented by shipping and offshore petroleum.
- Offshore petroleum operations can provide more detail to inform specific risk assessments.
- There are areas of the National arrangements that need clarifying.
- There are areas of the National arrangements that can be strengthened.
<table>
<thead>
<tr>
<th>Group</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPEA</td>
<td>• Environment Committee</td>
</tr>
<tr>
<td></td>
<td>• Working Groups</td>
</tr>
<tr>
<td>AMOSCI</td>
<td>• Normal operations</td>
</tr>
<tr>
<td>Industry</td>
<td>• APPEA engagement in National Plan IAF</td>
</tr>
<tr>
<td></td>
<td>• AMOSCI engagement in National Plan IAF</td>
</tr>
<tr>
<td>AMSA</td>
<td>• National Plan Technical Groups</td>
</tr>
<tr>
<td></td>
<td>• National Plan Working Groups</td>
</tr>
<tr>
<td>States</td>
<td>• State planning committees</td>
</tr>
</tbody>
</table>
Emerging issues/priorities

• Consultation requirements
• Jurisdictional boundaries
• Clarity in roles and responsibilities
• Clarification of control
• Transfer of control and intervention
• Government intervention and triggers
• Necessary duplication of vessel-based regulation
• Harmonizing capability
Emerging issues/priorities

• OSMP requirements
• Demonstrating ALARP
• EPBC Act considerations
• Modes of response mode “C”
• Need for Titleholders to comply with plan (even in circumstances when AMSA is in control and working to its own plan)
• Access to AMSA equipment: prioritisation of resources
• AMSA cost recovery arrangements
• Acceptance criteria n relating to the OSCP
• Role of research and science organisations
The need for action

• What is the issue/problem?
• What do we need to do to progress and address the problem?
• What is currently happening?
• How can this be efficiently addressed?
• Who is going to take this initiative forward?
• How is this initiative going to be taken forward?
• When is this initiative going to be taken forward?
Session 11: Next steps
Next steps

• Focus areas taken away and progressed by relevant parties
  – Needs analysis
  – Scoping and consultation
  – Options analysis and ALARP decisions
  – Recommendation and implementation
Thank you to all speakers and attendees