Introduction to NOPSEMA
Safety, Integrity & Environmental Management Regulation

North West Gas and Infrastructure Build
27 June 2012
Simon Schubach, General Manager Regulatory
Immediate Cause:
Primary cementing integrity failure

Root Cause:
Systemic failure of management systems, non-compliance with operating procedures
Offshore Petroleum and Greenhouse Gas Storage Act

Regulating safety

Regulating well integrity

Regulating environmental management
The object of the OPGGSA includes the provision of an effective regulatory framework for petroleum exploration & recovery.

The Act provides for the grant of titles including:
- exploration permit
- retention lease
- production licence
- infrastructure licence
- pipeline licence

Generally, the Act is administered by the Joint Authority (JA).

NOPSEMA administers safety, well integrity & environmental management.

NOPTA is responsible for assisting & advising the JA & responsible Commonwealth Minister.
NOPSA to NOPSEMA

2005

NOPSA established for regulation of safety (1 January 2005)

2009

Productivity Commission
Review of the regulatory burden on the offshore petroleum industry

2011

Montara Commission of Enquiry
Australian Government response to establish single national regulator

2012

NOPSEMA established including addition of environmental management regulation (1 January 2012)
On 1 January 2012 the *Offshore Petroleum and Greenhouse Gas Storage Amendment (National Regulator) Act 2011* commenced:

- Two new regulatory bodies replaced the Designated Authorities:
  - NOPSEMA: an expanded version of NOPSA with functions including regulation of environmental management
  - NOPTA: titles administration by an officer within RET
- There was no change to the Joint Authority arrangement with respect to petroleum titles
• JA - Commonwealth Minister and relevant State/NT Minister

• No diminishing of existing JA functions or powers

• JA remains decision maker for all key petroleum title decisions

• Technical advice from NOPTA

• Policy advice from Commonwealth Department of Resources, Energy and Tourism (RET) and State/NT agencies
• NOPTA a statutory position (not an independent agency)
• Provides advice to JA
• Administers titles, data, resource management
• NOPTA a branch of RET
• Co-located with NOPSEMA in Perth, Melbourne
• Around 30 public service staff – 20 in Perth
• Option to contract for advice or services with State/NT Governments
• NOPSA expanded (i.e. NOPSA not abolished)
• NOPSEMA remains a statutory authority
• Receives environmental management and day-to-day operations
• Governance unchanged
• Headquarters in Perth – regional office in Melbourne
• Increase to around 90 staff
• Where conferred, functions under State/NT PSLA
• Provide services on cost recovery basis
NOPSEMA’s coverage

• **Operations**
  – Offshore petroleum operations
  – Offshore greenhouse gas storage operations

• **Scope**
  – Occupational health and safety at facilities
  – Structural integrity of facilities and wells
  – Environmental management of petroleum activities
Scope of regulation – jurisdiction

NOPSEMA

Relevant State/NT Minister or NOPSEMA where powers conferred
1. OPGGSA

- Commonwealth Offshore Area
- Coastal Waters
- Internal Waters

Note: State Waters = Internal Waters + Coastal Waters

- 3 Nm Limit of State Coastal Waters
- Baseline

**PETROLEUM ACTS**

2. WA - Petroleum Submerged Lands Act 1982
3. WA - Petroleum & Geothermal Energy Resources Act 1967
4. WA - Petroleum Act 1936
NOPSEMA operates under legislated functions

<table>
<thead>
<tr>
<th>Monitor &amp; Enforce</th>
<th>Investigate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote</td>
<td>Advise</td>
</tr>
<tr>
<td>Co-operate</td>
<td>Report</td>
</tr>
</tbody>
</table>

- Compliance
- Improvement
- Governance
Legal framework

- Performance, objective-based regime with some prescriptive elements
- An independent Safety and Environmental Management Authority, funded by levies on industry
- An operator’s or title-holder’s management plan, accepted by NOPSEMA, is required to commence activities:
  - Safety case (SC)
  - Well operations management plan (WOMP)
  - Environment plan (EP)
Regulatory activities

Assessment
  – Sampled evaluation of an operator’s plan against the regulations: “Are your plans appropriate?”

Inspection
  – Sampled inspection against the accepted SC, WOMP, EP and regulations: “Are you doing what you said you would do?”

Investigation
  – Independent inspection to determine what went wrong and determine whether enforcement/prosecution is require: “What wasn’t done? What can we learn?”

Enforcement
  – Action within powers in the law to secure compliance
Petroleum Safety Zones

- **Objective**: Protect wells, structures & equipment from vessels and ensure the safety of navigation
- **Mechanism**: Petroleum safety zones published in the Gazette by NOPSEMA
- **Criteria**: A petroleum safety zone may extend to 500m around the well, structure or equipment
- **Process**:
  - Established via application by Operator or by NOPSEMA directly
  - NOPSEMA also assesses applications for entry
• NOPSEMA has general and remedial direction-giving powers

• March 2012 the *Offshore Petroleum and Greenhouse Gas Storage Amendment (Significant Incident Directions) Act 2012* commenced:

  – If there is a significant offshore petroleum incident in a petroleum title area, NOPSEMA may give a specific direction to the titleholder to deal with the escape of petroleum resulting from the incident, whether within or outside the title area.
Cost Recovery

- **Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Act 2003:**
  - Safety case levy: annual levy payable by operator of facility with safety case in force
  - Annual well levy: payable by titleholder for eligible wells (non-abandoned) plus well activity levy: submission of WOMP
  - Environment plan levy: on submission of EP and payable by titleholder
  - Values worked out in accordance with the Regulations
## NOPSEMA regulatory scope

<table>
<thead>
<tr>
<th>Terms &amp; functions</th>
<th>Safety</th>
<th>Well Integrity</th>
<th>Environmental Management</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dutyholder</strong></td>
<td>Operator</td>
<td>Titleholder</td>
<td>Operator of petroleum activity</td>
<td>Titleholder</td>
</tr>
<tr>
<td><strong>Key approvals/submissions</strong></td>
<td>Safety case</td>
<td>Well operations management plan</td>
<td>Environment plan (incl. oil spill contingency plan)</td>
<td>Notifications, safety zones, directions, compliance support to NOPTA</td>
</tr>
<tr>
<td><strong>Compliance monitoring</strong></td>
<td>OHS inspectors</td>
<td>OHS inspectors</td>
<td>Petroleum project inspectors</td>
<td>Petroleum project inspectors</td>
</tr>
<tr>
<td><strong>Inspector powers</strong></td>
<td>OHS-related entry, seizure and notices</td>
<td>OHS-related entry, seizure and notices</td>
<td>Entry and search</td>
<td>Entry and search</td>
</tr>
<tr>
<td><strong>Funding</strong></td>
<td>Safety case levies</td>
<td>Well levies</td>
<td>Environment plan levies</td>
<td>Reimbursement for NOPTA-related matters</td>
</tr>
</tbody>
</table>
Regulating safety
Objectives of the Health & Safety Schedule

• To secure the health, safety and welfare of persons at or near facilities
• To protect people from risks of activities at facilities
• Schedule 3 contents:
  1. Facility definition
  2. General duties
  3. Workplace arrangements, including HSRs
  4. OHS inspections
  5. Accident and Dangerous Occurrence reporting
• **Vessels/structures being used/prepared for use**

• **Activities:**
  - recovery, processing, storage and offloading of petroleum, includes any wells, associated plant, equipment used, and any pipes, or secondary lines connected to the facility
  - accommodation, drilling or servicing a well, laying pipes, erection/dismantling of a facility
  - licensed pipelines
Duties of the Operator

• The operator of a facility must take all reasonably practicable steps to ensure that:
  — the facility is safe and without risk to the health
  — all work and other activities are carried out in a safe manner and without risk to the health

• Specific duties include implementation and maintenance of safe system of work and procedures and equipment for control of emergencies
• Facility must have a registered operator
• A safety case must be in force (accepted by NOPSEMA) to conduct activities
• Work at a facility must not be contrary to the safety case in force for the facility
Standards in the regime

• Standards applied must be listed in the safety case and the operator must comply with these standards
• Validation:
  – independent confirmation that appropriate standards selected and applied for design, construction and installation
  – part of safety case assessment
• Performance standards must be specified (e.g. for emergency preparedness)
• Standards can take the form of prescriptive requirements e.g. development of an OHS policy
• Standards can be called up directly by the regulations e.g. hazardous substances, noise
Regulating well integrity
• NOPSEMA replaced the State Regulator as the regulator for wells in Commonwealth waters

• NOPSEMA decides:
  – WOMP acceptance/rejection
  – individual well activities approval/rejection

• Part 5 of the Resource Management and Administration Regulation (RMAR) is a listed OHS law => NOPSEMA powers apply
Wells Regulatory framework

• Performance-based regime that requires the titleholder to control well integrity hazards or risks where integrity means:
  – under control in accordance with an accepted WOMP
  – able to contain reservoir fluids
  – subject only to risks that have been reduced to a level that is as low as reasonably practicable

• Risks managed in accordance with sound engineering principles, standards, specifications and good oil field practice
Regulating environmental management
Scope - what requires an Environment Plan?

- Petroleum and greenhouse gas storage activities
Scope - risks and impacts on environment

- Ecosystems & their parts including people and communities
- Natural and physical resources
- Qualities, characteristics of locations, places and areas
- Heritage value of places
  ...including the social, economic and cultural features of these matters.
Environment plan regulatory requirements

- Required before activity commencement
- Must contain an oil spill contingency plan
- Specific objectives-based acceptability criteria must be met, including:
  - Appropriate for nature and scale
  - Risks as low as reasonably practicable (ALARP)
  - Risks must be acceptable
  - Appropriate performance objectives and standards
  - Appropriate consultation
Consultation process in the offshore petroleum EP regime

**Operators**

1. **PLANNING STEPS**
   - **REVIEW THE LEGISLATIVE REQUIREMENTS & GUIDANCE**
   - **IDENTIFY THE RISKS, STAKEHOLDERS & STAKEHOLDER ISSUES**
   - **EVALUATE THE RISKS AND IDENTIFY POTENTIAL CONTROLS**
   - **CONSIDER FEEDBACK, RESPONSE & ACTIONS IN ABSENCE OF FEEDBACK**
   - **SUBMIT EP (&OSCP) TO NOPSEMA FOR ASSESSMENT**
   - **COMMENCE ACTIVITY AND REVISE**

**Stakeholders**

- Planning: communication with ‘relevant persons’ on impacts relating to functions, activities or interests
- Implementation: ongoing consultation

**NOPSEMA**

- Assessment of submission
- Monitor & enforce
NOPSEMA’s role: publication and notifications

- Publish information:
  - Environment plan submission data summary
  - Environment plan summary published after acceptance
- React to notifications by Operator:
  - Commencement/completion of activities
  - Reportable incidents notified to NOPSEMA
- Monitor & enforce compliance

www.nopsem.gov.au
Oil Spill Contingency Planning (OSCP) Framework

Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC90)

International

Australia

Offshore Petroleum and Greenhouse Gas Storage Act

Environment Regulations

‘Protection of the Sea Acts’

National Plan

Operator’s EP (with OSCP)
Organisational arrangements & NOPSEMA role (simplified)

Planning/Preparedness
- Operator/Titleholder
- Regulator: NOPSEMA
- National Plan Administrator: AMSA
- Major Hazard Agencies: State/NT

Response
- Commonwealth Agencies
  - Monitor and enforce compliance
  - Regulator and Statutory Agency: NOPSEMA
- Operator/Titleholder
- "Combat Agency": Operator or Nominated Combat Agency
- Oil Spill Response Organisation(s)
OSCP Approach: risks from response need to be managed

Environmental risks of operations

Proposed Activity

- Hydrocarbon Release
- Identify & Evaluate Impacts and Risks
- Performance Objectives, Standards & Measurement Criteria

Response Technique

- Identify & Evaluate Impacts and Risks
- Performance Objectives, Standards & Measurement Criteria

Implementation Strategy inc. OSCP

Environmental risks of operations for potential emergency conditions
Other environment regulation activities in 2012

• Consolidation of EM in NOPSEMA
  – Inherited environment plan review and requests for revision
  – Commencement of inspections
  – Operational and scientific monitoring program guidance
  – Other guidance in support of regulations and NOPSEMA policy (www.nopsema.gov.au/environmental-management)

• Review of Environment Regulations
  – Coordinated by Department of Resources, Energy and Tourism (www.ret.gov.au)

• EPBC Act streamlining
  – Identification and implementation of administrative and other opportunities to reduce duplication and improve regulation
**Scope of regulation - petroleum resource development life cycle**

- **Seismic / other surveys:** Environment Plan (EP)
  - **EPBC Act** referral(s) (and EIA)

- **Drilling:**
  - SC, EP, WOMP, AAUWA
  - **EPBC Act** decision

- **Construction, Production:**
  - SC, EP, PSZ

- **Decommissioning:**
  - SC, EP, AAUWA

**life cycle**

- **Exploration**
  - award title
  - acreage release & bid

- **Development**
  - field development plan
  - title surrender

- **Construction**
  - construction operations

- **Seismic / other surveys**
  - Seismic / other surveys: Environment Plan (EP)

- **NOPSEMA**
  - [OPGGS Act]

- **NOPTA/JA**
  - [OPGGS Act]

- **SEWPac**
  - [EPBC Act]

- **EPBC Act**

- **EPBC Act** conditions of approval/compliance

**A229252**
Thank you