NOPSEMA:
The regulatory regime

AMMA Policy meeting – 27 Feb 2014

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GM Safety and Integrity
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

Schedule 3 – OHS law

Safety Regulations

Wells Regulations

Environment Regulations

Commonwealth Attorney-General’s website: comlaw.gov.au
NOPSEMA’s jurisdiction

Commonwealth Waters

Western Australia

Northern Territory

South Australia

Queensland

New South Wales

Australian Capital Territory

Victoria

State Waters

Relevant State/NT Minister or NOPSEMA where powers conferred
Regulatory functions

Monitor and Enforce
Investigate

Compliance

Promote
Advise

Improvement

Co-operate
Report

Governance

NOPSEMA
2013 Activities

**INDUSTRY**
- 29 Operators
- 149 Facilities
- 428 Assessments submitted
- 577 Incidents Notified

**NOPSEMA**
- 86 Regulatory Staff
- 26 Support staff
- 455 Assessments Notified
- 128 Facilities Inspected
- 79 Enforcement actions

13 Accidents
357 Dangerous Occurrences
34 Environmental Incidents
8 Complaints
Other (NRs, Exercises)
## Active Facilities

<table>
<thead>
<tr>
<th>Facility Group</th>
<th>Based on Current data 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platforms</td>
<td>31</td>
</tr>
<tr>
<td>FPSOs</td>
<td>11</td>
</tr>
<tr>
<td>MODUs</td>
<td>12</td>
</tr>
<tr>
<td>Vessels</td>
<td>12</td>
</tr>
<tr>
<td>Pipelines</td>
<td>83</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>**149 ***</td>
</tr>
</tbody>
</table>

*Numbers fluctuate slightly as facilities enter and leave the regime e.g. mobile facilities and inactive facilities*
Legal framework

• A ‘General Duties’ regime
• Performance-based, but with prescriptive elements
• An independent Safety and Environmental Management Authority
• A duty holder’s management plan, accepted by government is used as a permissioning document:
  – Safety case, well operations management plan, environment plan are required in order to undertake activities
Safety Regulations

- 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
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
What does the regulator do?

• **Challenge the operator**
  – Assessments – rigorous & targeted
  – Inspections – thorough & sampled
  – Incident Investigation – depending on severity
  – Enforcement – verbal / written and prosecutions
  – Provide a level of assurance that facility health, safety, integrity and environmental risks are properly controlled through securing compliance with the OPGGSA
Approach to Decisions

• Independent and Professional
  - Transparent, coherent policies and processes, shared with industry and consistent with the requirements of the regulations, administered by a critical mass of skilled professionals that focus on ensuring duty holders, and the regulator, comply with their obligations specified in law

• Respect for “due process”
  - Timely and competent decisions based on criteria set out in the regulations
  - Processes outside the regulatory requirements are not created
  - Requirements and interventions by the regulator are not arbitrary
• Vessels/structures being used/prepared for:
  – recovery, processing, storage and offloading of petroleum and injection, storage, compression, processing, pre-injection storage, offloading, monitoring of storage of greenhouse gas
    • 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
      – licensed pipelines
• Ceases when returned to a navigable form or can be towed
• OPGGSA s640: Commonwealth maritime legislation does not apply in relation to facilities
Vessels that are NOT facilities

• OPGGSA Sch3 Cl4:
  – Off-take tankers & AHTSVs

• OPGGS (Safety) Regulation 1.6
  – supporting particular ROV & diving operations;
  – laying an umbilical or cable or installing short flexibles;
  – Laying clump weights or rock dumping (pre-hydrotesting);
  – Placing support structures or subsea pipe manifolds or attaching cp anodes without welding; and
  – Undertaking pipe trenching & burial (pre-hydrotesting)
  – Dumb barge
Questions?
Safety case life-cycle

- **Entry to Regime**
- **Exit Regime**
- **Decommission**
- **30 days**
- **90 days**

1. **Operator Registration**
2. **Agree Scope of Validation (SoV)**
3. **Validation Statement**
4. **Safety Case Submission**
5. **Safety Case Acceptance (commence activities)**

Sub-processes:
- **Outdated technical knowledge**
- **Modification/decommissioning**
- **Significant change in overall risk**
- **Significant change in SMS**
- **Different Activities**
- **Different fluid composition in pipeline**

- **Cease Operation**
- **Submission of Revised Safety Case**
- **Agree SoV (for modification or decommissioning)**
- **Proposed change, request by NOPSEMA, or 5-yearly revision**

** NOPSEMA **
**Scope of Validation**
- Overview of facility/ modification & process for Safety Critical Element (SCE) selection
- Codes & standards for each SCE
- Validator selection process
- Appropriateness of codes and standards
- Deliverables

**Validation Statement**
- Codes and standards are appropriate
- If codes and standards are applied the facility will incorporate measures to protect Health & Safety
- Consistency with Formal Safety Assessment

**Agreed by NOPSEMA**

**Safety Case Decision-making**
Safety case contents

Facility Description
- Activities and Operating Parameters
- General Description (the layout of the facility)
- Machinery and Equipment

Formal Safety Assessment Description
- HAZID
- Risk Assessment
- Emergencies (EEAR, FERA)

Safety Management System Description
- Scope (Activities)
- Comprehensive and Integrated
- Description of Procedural Controls including:
  - OHS Risk Management
  - Maintenance
  - Communication
  - Safety Measures
  - Emergencies

Identification of Control Measures (Necessary to reduce the level of risk to ALARP)

Monitor, Audit and Review
- Implementation and Improvement of the SMS
- Corrective & Preventative action
- Implemented & Functional?
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
NOPSEMA approach to regulation

• **Independent and professional**
  - Transparent, coherent policies and processes, shared with industry and consistent with the requirements of the Regulations, administered by a critical mass of skilled professionals that focus on ensuring duty holders, and the regulator, comply with their obligations specified in law

• **Respect for due process**
  - Timely and competent decisions based on criteria set out in the regulations
  - Processes outside the regulatory requirements are not created
Petroleum safety zones

- **Objective**: Protect wells, structures and 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