Piper Alpha – The Catalyst for Industry Regulation Change

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Pre-Piper alpha:
1967-88
Petroleum (Submerged Lands)

No. 118 of 1967

An Act relating to the Exploration for, and the Exploitation of, the Petroleum Resources, and certain other Resources, of the Continental Shelf of Australia and of certain Territories of the Commonwealth and of certain other Submerged Land.

[Assented to 22 November 1967]

WHEREAS in accordance with international law Australia as a coastal state has sovereign rights over the continental shelf beyond the limits of Australian territorial waters for the purpose of exploring it and exploiting its natural resources:

AND WHEREAS Australia is a party to the Convention on the Continental Shelf signed at Geneva on the twenty-ninth day of April, One thousand nine hundred and fifty-eight, in which those rights are defined:

AND WHEREAS the exploration for and the exploitation of the petroleum resources of submerged lands adjacent to the Australian coast would be encouraged by the adoption of legislative measures applying uniformly to the continental shelf and to the sea-bed and subsoil beneath territorial waters:
Commonwealth claims rights in relation to the continental shelf outside territorial waters and territorial and internal waters.
1975

- High Court challenge

- Commonwealth wins
• Vesting in the States the title to the seabed beneath the “coastal waters”
• States regulate coastal waters & Designated Authorities regulate adjacent “offshore areas”
• Major decisions made by Joint Authority (offshore areas)
• Consolidated

• Standing direction

• Commonwealth and State and Territory versions
• P(SL)A s97 – “A permittee or licensee ....shall secure the safety, health and welfare of persons engaged in those operations in or about the permit area or licence area.”

• Prescriptive requirements regarding OHS matters in the Schedule of Specific Requirements
Prior Notice

- Flixborough 1974 - Explosion & Fire, 28 Fatalities
- Seveso 1977 - Environmental Contamination
- Bhopal 1984 - Toxic Release, 4000+ Fatalities
- Sandoz 1986 - Environmental Contamination
- Kings Cross 1987 - Fire, 31 Fatalities

UK CIMAH Regulations 1984
European Seveso Directive 1982
US CCPS, UN/World Bank initiatives
European Seveso II Directive
UK Railway Safety Cases 1994
Post Piper alpha:
1988-05
• COSOP formed Oct 1988
• Reported in Feb 1991
• Considered Petrie and Cullen Reports
  – Initial Response
  – Guidelines
  – Cullen recommendations
• Key Recommendations:
  – Adopt safety case principle
  – Progress objective approach
  – 2 year transition period
  – Endorsement of Cullen recs
  – OHS provisions
  – Single point of contact for OHS (DAs)
  – DA resources and training
Schedule 7 – OHS

- General and specific duties
- Workplace arrangements
- Investigation
- Reporting
• OHS Regulations established
  – Primarily concerning HSR elections
• Schedule includes safety case
  – Single page covering:
    (a) HAZID & MAEs
    (b) SMS
    (c) provision for TR & EER, in the event of a major emergency.
  – Required by 1 July 1996
Safety Case Regulations

- Still includes some consents
- Establishes FD, FSA and SMS descriptions
- Detailed content requirements
- “Operator” (notification)

Barrel Review
- Implementation progress
1999-2001

- Review established in 1999
- Legislative overlap
- Lack of regulatory skills, capacity and consistency
- Legislative deficiencies
- Recommended a single expertise based, independent agency
Both later incorporated into the OPGGS (Safety) Regulations

- PMPs
- DSMSs
- DPPs
Establishing NOPSA

Petroleum (Submerged Lands) Amendment Act 2003

An Act to amend the Petroleum (Submerged Lands) Act 1967, and for other purposes

Offshore Petroleum (Safety Levies) Act 2003

An Act to impose safety investigation levy, safety case levy, and pipeline safety management plan levy, in relation to offshore petroleum facilities

Offshore Petroleum (Safety Levies) Regulations 2004

Statutory Rules 2004 No. 1

I, PHILIP MIKAEL JEFFERY, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the Offshore Petroleum (Safety Levies) Act 2003 and the Petroleum (Submerged Lands) Act 1967.

Dated 4 May 2004

By His Excellency’s Command

IAN MACARTLANE
Minister for Industry, Tourism and Resources

NOPSEMA®

2002-4
• Single Independent Regulator for safety in offshore areas (NOPSA)
  
• Safety cases
  – No consents
  – Operator nomination (by titleholder or owner)
Further drivers of regulatory change: 2006-18
• Recurring themes
  – Conferral
  – Jurisdiction
Report of the Montara Commission of Inquiry

Commissioner
David Borthwick AO PSM
June 2010

Offshore Petroleum and Greenhouse Gas Storage Legislation Amendment (Miscellaneous Measures) Act 2010
No. 118, 2010

An Act to amend the Offshore Petroleum and Greenhouse Gas Storage Act 2006, and for other purposes

Responsibly for regulation of well integrity in offshore areas transferred to NOPSA
Establishing NOPSEMA & NOPTA
Responsibly for regulation of environmental management in offshore areas transferred to NOPSEMA
• Single regulator for OHS, ENV, WI in offshore areas

• Objective based
  – Act with duties (OHS)
  – Regulations with permissioning documents

• Conferral only for OHS in Victorian state waters
**Industry**

- Belief that good business = safe & environmentally responsible
- Buy-in throughout industry
- Aspiring to be to “World Class”

**NOPSEMA**

- Believes that a “step change” is not just possible, but achievable, likely and can occur faster
- Our whole organisation working together
- Increasingly drawing on broader data sets
- Using of all our powers and functions to get there
Performance improvement framework

Increasing performance

High

Goal setting
National Stds
Minimal Prescription

Continual Improvement

Hearts & Minds

Leveraging:
Global Stds
Big Data
IRF

International Standards and Regulators

World Class

Information reach

Local

National

International

Global
Communicating Our Perspectives

Monitor and secure compliance

Assess permissioning documents

Inspections

Permissioning document commitments
Incident investigations

Enforcement

Promote
Advise
Knowledge
Pathways to Improvement

Past
Stopping old incidents

Present
Finding one, fixing many

Future
Responding to evolving trends

Preventing MAEs: loss of life, containment
Preventing loss of well control
Effective incident response & spill source control
Oil spill preparedness arrangements
An Example: DP Incidents

**2005:** “Two pushes of the stand-by button took place within the allowed 4 seconds through a clipboard being put on the DP console”

**2009:** “Main Cause Human error – Placing of logbook on surge switch”

**2013:** “a clipboard was placed on the DP desk which resulted in the fore/aft surge button being inadvertently pressed”

**2013:** “DPO inadvertently pressed the joystick button with the logbook he was reading from”

**2014:** “Initiating Event: Auto DP was deselected when the rough DP logbook was placed on the DP control desk”
Industry Action?

Increasing performance

Local | National | International | Global

High

Low

Utilising:
- Global Stds?
- Big Data?
- Industry Associations?
- …………?
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