

## Panel Session 3: Asset Integrity Management and Life Extension

Peter Bell

Manager – Assessment and Inspection

Safety and Integrity Division

NOPSEMA

# NOPSEMA's Functions



## Regulator's Perspective – Asset Integrity Management and Life Extension

- Risks associated with asset integrity (including life extension) need to be reduced to as low as reasonably practicable (ALARP)
- Regime is performance-based giving the facility operator the freedom to choose how they manage risk
- Primary aim is to prevent loss of containment – ‘keeping it in the pipe’ and prevention of structural failures – reduce the risk of major accident events (MAEs) to ALARP

## Asset integrity – What is it?

- Outcome of good design, construction and operation (including maintenance) practices
- Achieved when facilities are structurally and mechanically sound and safe to perform the processes and produce the products for which they were designed



## What have we seen recently? (1)

- Backlogs in maintenance of safety-critical equipment (SCE)
- Drop off in 3rd party verification activities
- Deferrals – safety-critical inspection, maintenance and repairs
- Performance standards:
  - not establishing appropriate performance standards or not measuring compliance with performance standards; or
  - SCE not meeting performance standards e.g. valves not fully closing, leaking, etc. and poor analysis of root causes to prevent a recurrence.
  - Assurance tasks not aligned with maintenance management system.

## What have we seen recently? (2)

- Temporary deviations becoming permanent
- Removal of, or reduction in, standards being applied
- Risk assessments conducted with pre-determined outcomes – genuine?
- 3<sup>rd</sup> party inspection anomalies not evaluated by Technical Authorities or carried forward to the maintenance management system
- Reverse ALARP – MoC processes used to justify fewer controls and higher level of risk

## What have we seen recently? (3)

- Over-reliance on modelling to assess internal condition of pipelines (internal inspection either not considered practicable or not desirable)
- Cost reduction – loss of experienced personnel
  - less likely to question
  - poorer quality submissions
- Delays in updating documentation (drawings and P&IDs)

Any questions?