DROPS Seminar
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Dropped Objects – The Regulators Perspective

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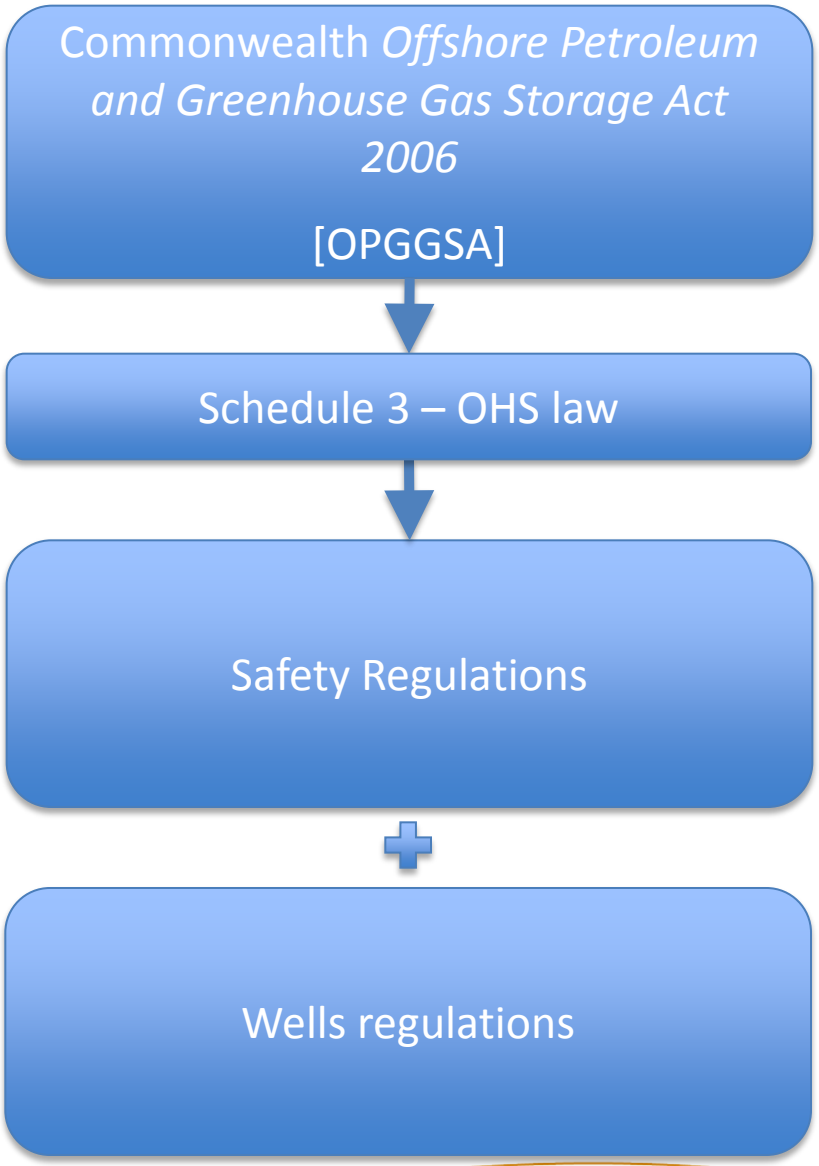
What I will cover

- NOPSA Legislated Functions
- NOPSA Operational Functions
- What the Regulator does
- 2010-2011 Activities
- Accident & Dangerous Occurrence Analysis
- What is working and areas for improvement

Legislation administered by NOPSA

- Schedule 3 to Cth OPGGSA
- Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009
- Part 5 of the OPGGS (Resource Management and Administration) Regulations 2011 [Wells regulations]

Commonwealth Attorney-General's website: comlaw.gov.au



NOPSA's functions

What does the regulator do?

Challenge the Operator

- Thorough Safety Case assessments - targeted
- Rigorous facility inspections – sampled verification scope
- Comprehensive incident investigation – depending on severity
- Principled Enforcement – verbal / written and prosecutions

Independent assurance

- Facility health and safety risks are properly controlled by Operators of facilities through securing compliance with OHS law
- Titleholders of wells through wells regulation

What else does the Regulator do?

- Engage with Operators at all levels from management to members of the workforce:
  - Guidance material, operator liaison and workshops
  - Industry and Operator-specific performance feedback
  - National Programmes and themed audit inspections
  - Early engagement safety case assessment for complex facilities with a focus on inherent safety in design.
- Implemented by a critical mass of professional and skilled inspectors

Facilities

Facility Group	Based on Current (2011) data *
Platforms	60
FPSOs	15
MODUs	15
Vessels	10
Pipelines	110
TOTAL:	**210**

** Numbers fluctuate slightly as facilities e.g. mobile facilities and inactive facilities*

2010-11 Activities

INDUSTRY

33 Operators

210 Facilities

286 Assessments

365 Incidents

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33 OHS Inspectors

20 Support staff

218 Assessments

152 Inspections

43 Accidents

322 Dangerous Occurrences

1 Major Investigation
31 Minor Investigations
333 Incident reviews

78 Enforcement actions

7 Safety Alerts

Dropped Objects Statistics

- Reporting period from Jan 2010 – Oct 2011
  - Equivalent of 21 Months
- Total notifications (dropped objects) received = 44
- Gauging Potential
  - Death or Serious Injury = 27 (61%)
  - Incapacitation > 3 days = 14 (32%)
  - Conclusion = 41 (93%) of reported incidents had potential for harm

Dropped Objects By Facility Type

- MODU = 28 (64%)
- Fixed Platform = 8 (18%)
- FPSO = 5 (11%)
- Construction Vessel = 3 (7%)

- Total = 44 (100%)

Outcomes of Incidents

- Actual Harm to Personnel = 6 (14%)
- Operational Delays/Stoppages = 24 (55%)
- Damaged Equipment = 23 (52%)

Note – Some incidents may have more than one outcome!

Closer Analysis

- Root Cause Analysis 1
  - **Equipment Design** = 17 (39%)
  - Problems not anticipated
  - **Procedures** = 7 (16%)
  - Not followed/Wrong/Inadequate/None
  - **Management System Failings** = 5 (11%)
  - Corrective Actions Need Improvement/MOC needs Improvement

Closer Analysis

- Root Cause Analysis 2
  - **Work Direction** = 3 (7%)
  - Supervision/Preparation & Planning
  - **Training** = 2 (5%)
  - Understanding Needs Improvement
  - **Communications** = 2 (5%)
  - Misunderstood/No Communication

Example 1 – Fixed Platform

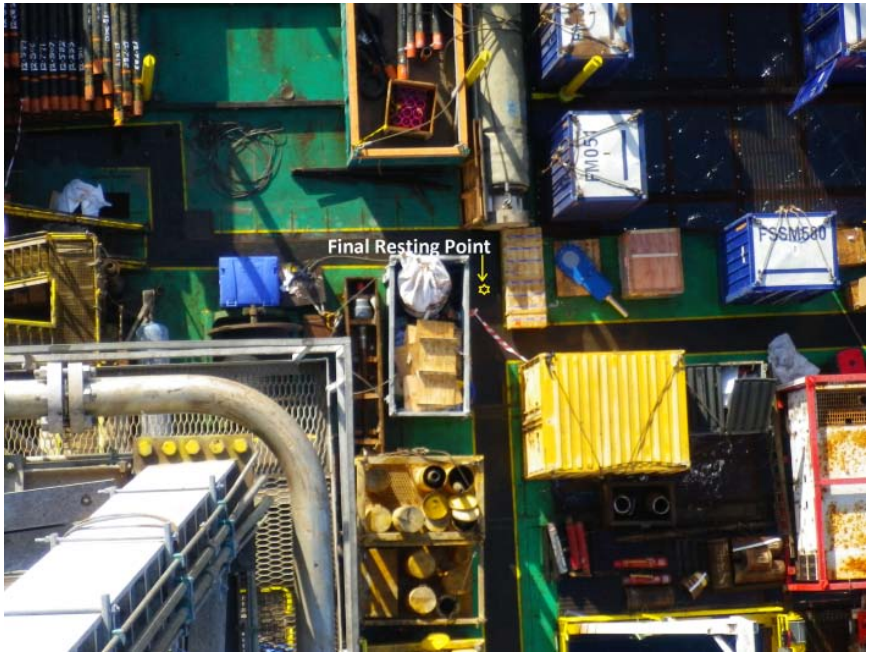
- Equipment – Wheeled Beam Trolley
- Weight – Approx. 12kg
- Height – 13 Metres to the deck
- Injury – No
- Potential - Death or Serious Injury
- Equipment Damage – Trolley Destroyed
- Production Stoppage – N/a
- Root Cause Analysis – Design Specs (problem not anticipated)

Example 1 - Pictures

Example 2 - MODU

- Equipment – 8” Pipe Wrench
- Weight – 330g
- Height – 30 metres to the drill floor
- Injury - No
- Potential – Death or Serious Injury
- Equipment Damage – N/a
- Production Stoppage – N/a
- Root Cause Analysis – Preparation & Lack of Supervision during work

Example 2 - Pictures



Example 3 - FPSO

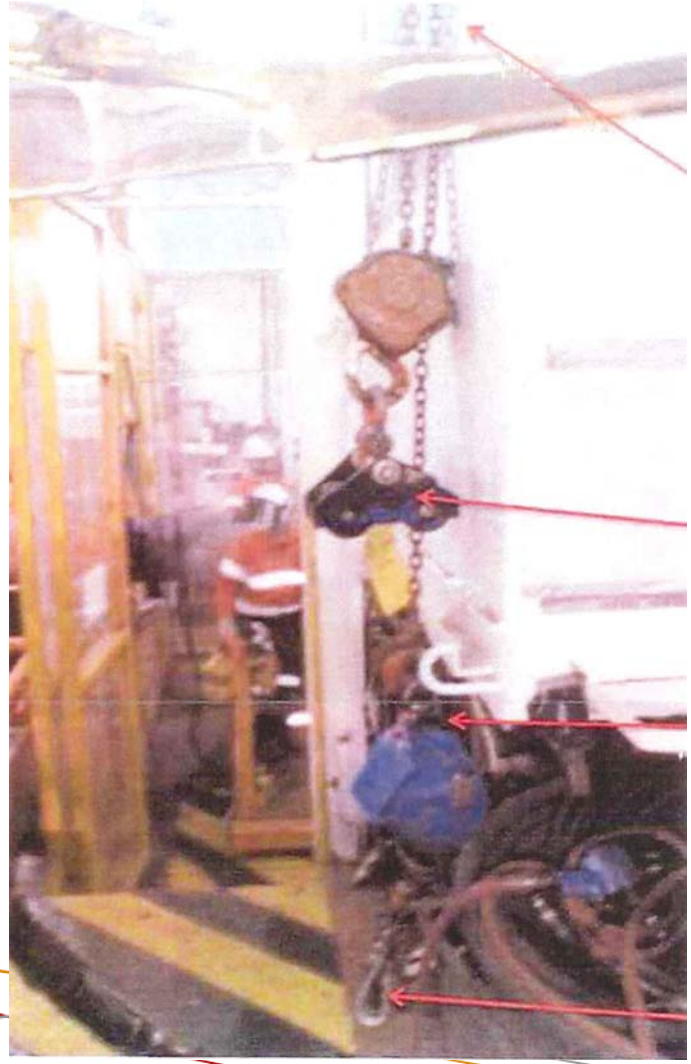
- Equipment – Pneumatic ‘rattle gun’
- Weight – 1 kg
- Height – 26 Metres to the bottom level of the turret space
- Injury - No
- Potential – Death or Serious Injury
- Equipment Damage – Gun destroyed
- Production Stoppage – N/a
- Root Cause Analysis – Work Direction – lack or supervision

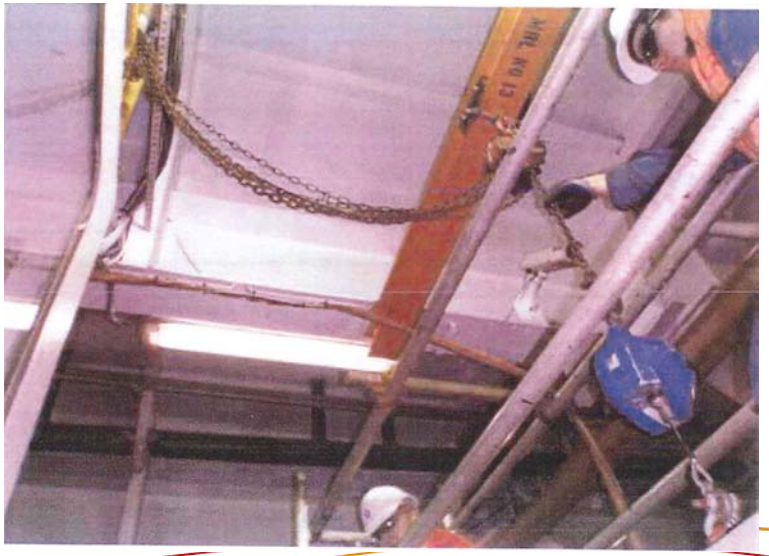
Example 3 - Pictures

Example 4 – Construction Vessel

- Equipment – Wheeled Trolley Beam
- Weight – 37 kg
- Height – 2.2 Metres to the deck
- Injury – Yes (Bruised shoulder)
- Potential – Incapacitation > 3 days
- Equipment Damage – Minor Damage
- Production Stoppage – N/a
- Root Cause Analysis – Design of Equipment & Procedures (no specific procedures for the task)

Example 4 - Pictures





What is working

- Consideration of dropped objects in risk assessments for working at heights
- Bunting off of areas below work activities
- Minimising personnel on drill floors to ‘essential only’
- Greater awareness of dropped objects and potential across the workforce
- Regular dropped object searches/audits in general
- Dropped objects searches after maintenance shutdowns

Areas for improvement

- Increased reporting of all dropped object incidents to management and NOPSA to raise awareness in industry
- Quality improvements in risk assessments (moving from generic dropped object potential to specific)
- Improvement in engineering risk assessments to address dropped object potential
- Management of change procedures to address dropped object potential
- Use of personnel unfamiliar with work areas in dropped object searches/audits
- Communication, communication, communication!

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Thank you