

**From CEO John Clegg**

Feedback from visitors completing a NOPSA quiz on Australia's offshore health and safety regime at the recent Australian Oil and Gas exhibition indicates that many people still hold the mistaken belief that NOPSA as the regulator has the principal duty of care for OHS on offshore petroleum facilities.

This is a crucial misunderstanding as Australia's modern health and safety regime, like many around the world, is built on the principle that the primary responsibility for ensuring health and safety lies with those who create risks and those who work with them.

This safety regime is performance-based, imposing general duties of care on parties to the regime, with the safe operation of a facility being the responsibility of its operator.

The role of the regulator (ie NOPSA) in a performance-based regime is to provide independent assurance that health and safety risks are properly controlled by the operator. This is done by challenging the commitments made by the operator in its safety case and then sampling the operator's safety management systems through planned inspections (audits).

This approach is the same as that used by the offshore health and safety regulator in Norway (PSA) and the United Kingdom (HSE).

Industry matters

Location vital consideration in cyclone planning

A potential serious incident in which a construction vessel was unable to evacuate in time to avoid a cyclone in the Timor Sea, has prompted NOPSA to issue a [safety alert](#)¹ warning operators to consider location specific cyclone scenarios in their Cyclone Response Procedure (CRP).

In the case of the Timor Sea, cyclones typically form there from tropical low pressure systems and the area is sometimes known as the cyclone "nursery". For facilities in this area, the CRP must identify and address the risk of tropical lows rapidly developing into cyclones.

In other locations, such as the North West Shelf, sometimes known as cyclone "alley" it is typically easier to predict the track of cyclones as they are already established by the time they reach this location.

Timely safety case assessment

While NOPSA is continually seeking ways to streamline and add further efficiency to its own processes, currently the main reasons for extended assessment times rest with the operator. They include:

- The operator has not provided all the information required by the Management of Safety on Offshore Facilities Regulations
- The operator has not provided the safety case validation documents
- The operator has not responded to a request for further written information within the prescribed period.

NOPSA urges operators to ensure both the completeness of their safety case submissions and that they have the necessary validation documents available to support their safety case.

If NOPSA does not have sufficient information to enable it to make an acceptance or rejection decision, it will advise the operator that it is 'unable to make a decision', as allowed for under the legislation. It will then provide a period for the operator to remedy the situation.

NOPSA recognises that this issue is of concern to the industry and it is addressing these matters through the development and release of safety case guidance in collaboration with industry.

Australian inspectors lend support to Timor Leste's petroleum regulators

NOPSA has co-operated with Timor Leste's National Petroleum Authority (ANP) to provide opportunities for experience and training in different aspects of offshore petroleum health and safety regulation for ANP inspectors.

Inspectors from the Timor Leste National Petroleum Authority have acted as observers to NOPSA's offshore facility inspections and safety case assessments. More recently some ANP inspectors took part in statutory compliance training in conjunction with NOPSA inspectors.

Learn from Baker Report – Recommendation 1

The Baker Report, produced after a devastating process accident at the BP Texas City refinery in 2005, looks at safety culture and contains valuable lessons for industry today. The report called on the operator to give process safety the same priority it had historically given personal safety and environmental performance. Ten milestone recommendations were made by the Baker Report. Each recommendation will be examined in a separate issue of this newsletter. We begin with recommendation 1: **Process Safety leadership:**

- *Management must provide effective leadership on and establish appropriate goals for process safety. Those individuals must demonstrate their commitment to process safety by articulating a clear message on the importance of process safety and matching that message both with the policies they adopt and the actions they take.*

Promotion of offshore safety regime to exhibition visitors



NOPSA was among the exhibitors at the recent Australasian Oil & Gas Exhibition held at the Perth Convention and Exhibition Centre. NOPSA's extensive range of information leaflets proved popular and many visitors took part in NOPSA's quiz to test their knowledge of the occupational health and safety regime for the offshore petroleum industry.

Over half of the 56 participants achieved a perfect score which showed a pleasing level of knowledge of the safety regime. However, the question most frequently scored wrong was "Who has the principal duty of care in ensuring that an offshore petroleum facility is operated safely?" Participants chose the incorrect response "NOPSA" instead of the correct response "The operator of the offshore facility".

(Pictured above, NOPSA inspector, Michael Chapman with a visitor at the NOPSA booth).

Development of International Standards

A workshop on international standards in the oil and gas industry organised by the The International Association of Oil and Gas Producers (OGP) in association with the Australian Petroleum Production and Exploration Association (APPEA), Standards Australia and NOPSA was held in Perth recently. Topics considered included:

- Recent developments in International Standards for materials and equipment for the petroleum and natural gas industries; participation in the development of International Standards in ISO and IEC
- The establishment of national mirror committees for ISO/TC67 and IEC/TC31 in Standards Australia.
- National mirror committee to:
 - a) review the suite of ISO/TC67 and IEC/TC31 standards for potential adoption as, or reference in, Australian Standards (AS/ISO; AS/IEC);
 - b) develop a plan for Australian oil and gas industry participation in the ISO/TC67 and IEC/TC31 activities.

(ISO – International Organisation for Standardisation; IEC – International Electrotechnical Commission; AS – Australian Standards; TC – Technical Standards)

Operator consults with contractors

An initiative by operator Woodside Limited to hold a Contractor Safety Forum championed by the CEO and senior executives brought together over 100 senior leaders from Woodside and 35 major contracting companies to focus attention on improving safety across all worksites.

The Minister for Resources and Energy, the Hon Martin Ferguson attended the forum with other key industry figures.

At the forum, Woodside CEO, Don Voelte committed to having the Health and Safety function of the company reporting directly to him.

Five functional groups were established at the forum, comprising Woodside and contractor representatives to be the focus for bringing greater leadership and commitment to safety within their particular areas. Each group will develop action plans. A Safety Commitment Group chaired by CEO Don Voelte and comprising Woodside functional group 'champions' and a similar

representation from Contractors, will oversee the delivery of safety improvement actions and be the focus for recommending new safety initiatives.

NOPSA commends such senior executive involvement in the management of health and safety as studies have shown this is one of the key factors in an effective safety culture.

Workshop on safety case guidance proves popular

The first of a series of consultative workshops to focus on a new range of guidance notes on the safety case has been held in Perth. The notes are being [developed by NOPSA](#)² to provide clarity on the regulatory expectations under the legislation. The current Guidance Notes being prepared are *The Safety Case in Context*, *Safety Case Lifecycle Management* and *Safety Case Content and Level of Detail*.

Comments are being sought on a further Guidance Note, *Safety Management Systems*, which will be available on the website as a draft discussion document from March 6 until April 17. Further consultations and workshops are expected to be held throughout the year on more Guidance Note topics including hazard identification, supporting safety studies, risk assessment and ALARP. The development of the guidance provides for high levels of consultation with industry and NOPSA encourages feedback. You are encouraged to check the [schedule](#)³ of consultations and workshops planned on our website.



Participants at the recent safety case guidance note workshop (left to right): Matt Horton (Clough), Tim McGrath (Chevron), Dave Foster, Dan Dunne (Coogee), Peter Bell (NOPSA), Gordon Rutter (IRC), Ted Kirkbride (NOPSA), Kerry Gordon (NOPSA), Steve Ramsey (Atwoods), Martin Main (ENI).

Stakeholder relations

AMSA and NOPSA working together

A new Memorandum of Understanding between the National Offshore Petroleum Safety Authority and Australian Maritime Safety Authority is part of a continuing coordination of safety regulation.

Under the memorandum, the agencies will cooperate in areas including audits, inspections and incident investigations of offshore facilities.

The memorandum amends the previous agreement between the two agencies to reflect recent changes to the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* and developments in the offshore industry relating to occupational health and safety.



Signing the new Memorandum of Understanding are (left to right): Graham Peachey, CEO of the Australian Maritime Safety Authority and John Clegg, CEO of NOPSA.

International

Trends in hydrocarbon releases – HSE

Piping systems including flanges and valves continue to be a major source of hydrocarbon releases (HCRs), according to a [report](#)⁴ released by the UK Health and Safety Executive.

The report notes that instruments (ie small bore tubing systems) contribute the second largest single source of HCRs while gas compression is the operating system having the highest number

of HCRs. Incorrectly fitted equipment is the most widespread operational cause followed by improper operation (human factor issues) where operational failures are reported. Non-compliance with procedure (human factors issue) is the most common procedural cause where procedural failures are reported.

These findings are generally consistent with the findings of NOPSA's facility integrity national programme where, at a systems level, the key findings continue to be deficient management by the facility operators of:

- equipment maintenance
- maintenance backlog
- systems implementation
- systems auditing

The [results](#)⁵ from the [programme](#)⁶ to date can be viewed at NOPSA's website.

Puma helicopter ditches in North Sea– all 18 on board rescued

A Super Puma helicopter carrying 18 people went down in the North Sea near a BP oil platform in the ETAP field more than 250km east of Aberdeen according to a recent [BBC news report](#)⁷.

The helicopter is reported to have landed upright and floated with the aid of flotation bags. All passengers were able to escape into rubber dinghies equipped with locator beacons. They were rescued shortly after by a helicopter and autonomous rescue recovery vessel.

An investigation is underway by British authorities into the cause of the incident which was seen by people on board the BP platform who raised the alarm with the coastguard.

Authorities have commented on the rapid rescue response and the safety training of the helicopter passengers which are believed to have contributed to all on board escaping without significant injury.

Annual look at safety signals by Norwegian Authority

An annual report in magazine format, [Safety Status and Signals 2008-2009](#)⁸, reviewing offshore safety issues and priorities has been issued by the Norwegian Safety Authority (PSA).

Topics highlighted by the PSA for operator attention include:

- Higher safety risks faced by contractor personnel compared to employees of offshore operators
- The relationship between the type of decision-making by top management and major accident risk faced by particular operators
- The need for robust safety critical barriers
- The rate of occupational hearing injuries – with a need to insulate and quieten equipment and facilities rather than relying solely on ear protection

Report into gas leak

An [investigation report](#)⁹ on one of the largest gas leaks to occur in petroleum processing areas on the Norwegian shelf in recent years has been released by the Norwegian Safety Authority (PSA).

The gas leak on the Oseberg C last September occurred in connection with maintenance on a valve. The leak was estimated at 26kg/s with the total volume of hydrocarbons estimated at 1500kg. The gas detection system triggered an automatic shutdown. No one was injured in the incident, but there were four people present in the area who would have died had an explosion occurred.

The underlying causes of the incident outlined in the report include inadequate risk assessments in connection with planning of the work, as well as a lack of competence in dealing with the hydraulics system by the personnel involved.

Safety alert on control valve actuators

An [alert](#)¹⁰ on the safety section of the Oil and Gas Producers (OGP) website draws readers' attention to a control valve package which appears to have no 'fail-safe' protection

Safety alert on explosion protected electrical heaters

The UK safety regulator, the Health and Safety Executive has issued a [safety alert](#)¹¹ based on a recent incident on an offshore installation where there was an explosion in an open drains tank containing oily water. The tank contained an electric heater which was Ex certified, but the sheath on the electric heating element had corroded, exposing the conductor. Although the incident is still being investigated, it is thought that this fault led to ignition of flammable material in the tank.

It has also been found that duty holders do not necessarily have a complete list of such heaters, and so cannot be in a position to manage their inspection and maintenance.

Website

240V hand tools – the risks

A background [information sheet](#)¹² has been prepared to provide further detailed information to accompany a safety alert on the topic of 240V hand tools earlier issued by NOPSA. The sheet is available on our website.

Regulatory activities

As at 25th February 2009

Disclaimer: Activity and incident quantities identified here may vary as further information becomes available. Statistics are prepared just prior to the last Friday of the month

Assessment

| February 2009 Assessment Type | Submitted | Accepted / Completed / Stopped | Rejected | Being Assessed |
|---|-----------|--------------------------------------|----------|-------------------|
| Safety Case NEW | | 4 | | 8 |
| Safety Case REVISED | 5 | 4 | | 5 |
| Pipeline SMP NEW | | | | |
| Pipeline SMP REVISED | | | | |
| Diving SMS | 1 | | | 1 |
| Diving Project Plan | | | | |
| Scope of Validation | 4 | | | 9 |
| Field Development Plan | 1 | | | 2 |
| TOTALS | 11 | 8 | 0 | 25 |

Inspections

Five inspections were completed in February. Some of the issues included:

- Workforce Consultation
- Ex equipment non compliances
- Diving from an FPSO

Incidents and complaints

There were a total of 15 incidents and one complaint reported in February. Incidents included 12 dangerous occurrences and three serious injuries.

The major incidents included:

- One gas release >300 kg – diaphragm failure
- Three serious accidents – fractured arm, cut leg and crushed hand.
- One collision between a marine vessel and facility – through wave action.
- Two fires
- Three that could have caused death or serious injury:
 - one man overboard
 - two dropped objects

The significant incidents included:

- One unplanned event – electrical equipment water ingress – general alarm
- Four damage to safety-critical equipment incidents:
 - lifeboat engine failure
 - fire pump failure
 - gas turbine fan failure
 - 3-phase power supply – failure to trip on ESD

The complaint was regarding cyclone preparedness and evacuation.

Enforcement

The following enforcement actions were issued in February:

- One Written Advice/Warning for cyclone response
- Two Improvement Notices related to:
 - failure to avoid cyclone
 - failure to ensure plant and equipment are safe
- One Prohibition Notice for use of electrical equipment without adequate protection

Subscribe

[Past issues of this newsletter](#)¹³ are available from the NOPSA website. Operators and other employers are encouraged to circulate this newsletter to their workforce. Please add your details to our [distribution list](#)¹⁴ to receive future copies of this newsletter.

Find out more

¹ <http://www.nopsa.gov.au/alert/alert28.asp>

² <http://www.nopsa.gov.au/projects.asp>

³ <http://www.nopsa.gov.au/projects.asp>

⁴ <http://www.hse.gov.uk/offshore/infosheets/is2-2009.pdf?ebul=hsegen/16-feb-2009&cr=16>

⁵ <http://www.nopsa.gov.au/presentation/Presentation%20-%20Facility%20Integrity%20-%20Accidents%20and%20Dangerous%20Occurrences.pdf>

⁶ <http://www.nopsa.gov.au/presentation/Presentation%20-%20Facility%20Integrity%20-%20Planned%20Inspection.pdf>

⁷ http://news.bbc.co.uk/2/hi/uk_news/scotland/north_east/7898093.stm

⁸ <http://www.ptil.no/getfile.php/PDF/Safety%2009.eng.indd%281%29.pdf>

⁹ <http://www.ptil.no/news/report-following-investigation-of-gas-leak-on-oseberg-c-article5321-79.html>

¹⁰ <http://info.ogp.org.uk/safety/>

¹¹ http://www.hse.gov.uk/offshore/notices/sn_01_09.htm

¹² <http://www.nopsa.gov.au/alert/Information%20Sheet%20-%20240V%20hand%20tool%20risks.pdf>

¹³ http://www.nopsa.gov.au/CEO_emails/index.asp

¹⁴ info@nopsa.gov.au