

**From CEO Jane Cutler**

Continued growth of the Australian offshore industry requires high safety performance which in turn depends on the active participation of operators, the workforce and the regulator.

Operators are responsible for the safety of their facilities and the people working with them. To work safely the workforce must be properly trained and competent. An independent, well resourced and experienced regulator is required to provide robust challenge to gain assurance that operators are meeting their safety commitments.

This week I attended the launch of the Australian Oil and Gas Industry Common Safety Training Program, the culmination of two years work, initiated by the APPEA CEO Safety Leadership Forum. This program is important for both operators and workers as it focuses on the demonstration of industry-established safe behaviours for all new personnel entering offshore drilling and producing sites. Analysis of accidents and incidents world wide continues to emphasise the importance of proper training and safe behaviours in preventing accidents and incidents.

The Common Safety Training Program provides a practical example of the progress that can be made through strong safety leadership by industry at the highest levels.

## Industry matters

**Risk perception examined in conference presentation**

Attitudes to risk and the way these affect decision-making were examined in a presentation delivered by NOPSA to delegates at an International Association of Drilling Contractors (IADC) conference recently.

The presentation highlighted research that shows that the majority of people surveyed were loss-averse and this had the capacity to distort their decision-making. This approach may lead people to focus more on remediating more definite near-term losses than a potentially larger but less likely loss some time further in the future.

Delegates were asked to consider the following scenario in the light of the research on loss aversion: *If the quality of the cement job is uncertain and you are faced with a sure loss of four days, compared with a small chance of a loss of well integrity sometime in the future...WHAT WOULD YOU DO?*

This was followed by statistics showing that cementing was a factor in 46 per cent of well blowouts in the US. Delegates were advised to consider framing an activity in a different manner to manage people's risk preferences. The full [presentation](#) is available for download on the NOPSA website.

### **Common weaknesses seen in safety cases**

Some common deficiencies seen in safety cases presented to NOPSA for assessment were outlined in a NOPSA [presentation](#) on regulatory trends made to industry recently. These include:

- lack of alignment of the facility, formal safety assessment and safety management system descriptions
- insufficient level of detail
- failure to address all safety case content requirements
- insufficient detail in the emergency response plan description
- recycled or 'cut and paste' submissions
- confusion between preventative and mitigative controls
- a lack of workforce involvement
- As Low As Reasonably Practicable (ALARP) demonstration statements that do not relate to control measures and their alternatives
- failure to detail the likelihood and consequences of each major accident event

Since 2005, 11 per cent of new safety cases and six per cent of revised safety cases have been rejected by NOPSA (20 per cent of new diving safety management systems have also been rejected).

### **Safety training for new workers launched**

A major new safety training [program](#) has been introduced for all new employees working on offshore petroleum facilities.

The 'Common Safety Training Program' requires all new workers to complete industry approved training and demonstrate critical safety behaviours in their workplace to earn a 'Common Safety Training Card'.

The program is an initiative of the APPEA CEO Safety Leadership Group made up of over 80 CEOs across the Australian oil and gas industry. The program will be extended to all workers in the industry over the next two years.

### **Lessons from man-riding incident**

NOPSA has issued a [safety alert](#) following an incident which had the potential to cause serious injury where a person man-riding fell to the rig floor while being lowered after a carabiner locking gate failed. The person was holding a cement hose at the time which slowed his descent and he landed feet first and rolled to absorb the fall.

Examination of the carabiner showed a considerable amount of dirt around the latch pin and between the latch yokes which may have impeded full gate closure. A key lessons from the incident was that potential hazards associated with the use of the carabiner had not been identified.

The routine planned maintenance instructions did not identify the carabiner on the man-riding harness as an item for inspection therefore the carabiner was overlooked during inspections.

### **Industry contributes lessons from incidents**

High potential incident alerts are distributed by the Australian Petroleum Production and Exploration Association (APPEA). You can access a [full list of alerts](#) with key lessons derived from offshore incidents during 2009 on the APPEA website. Incidents range from dropped a drill collar to a crane tipping incident and entanglement in a lathe.

### **Survey to gauge response to our newsletter**

NOPSA seeks your input by completing a five-minute survey to give us valuable information on how useful you find this newsletter and your ideas for improvements. Complete the survey by April 9 and you will go in the draw to win an Ipod Nano. Click on the [survey link](#) now to take part.

### **Plan now for annual safety 'stand together'**

[Stand Together for Safety](#) is a 'stop work' safety event held annually across the Australian oil and gas industry, contributing to improved and sustained safety performance. This year, participating organisations have been asked to register for the event which is held in May. A new website has been established to accept registrations and provide resources for the event. 'Stand together' is a significant national initiative facilitated by APPEA that deserves support from all sectors of the industry.

**Alert on boiler furnace explosion risk**

Recent incidents on floating production storage and offtake (FPSO) facilities in Australian waters have highlighted the dangers of unignited fuel accumulating in boiler furnaces. In two cases there were explosions in a boiler furnace resulting in structural damage to the boiler. Fortunately no one was injured. NOPSA has issued an [alert](#) on this topic.

Even small amounts of accumulated combustible mixture in a boiler furnace can, on ignition, cause explosions with serious consequences. Key lessons from the incidents highlight the need for appropriate maintenance and procedures.

Under provisions of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, operators of facilities have a duty of care to ensure that plant and equipment at the facility are safe and without risk to health. Manufacturers and suppliers of plant also have a duty to ensure that plant, when properly used, is safe and without risk to health.



*The picture shows furnace casing damage*

### **Comments sought on new radiation standards**

Stakeholders in Australia's offshore petroleum industry are invited to comment on an update of international safety standards for radiation protection which is being prepared by the International Atomic Energy Agency.

The update [\*International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources \(BSS\)\*](#) including document preparation profile is available online.

The aim of the basic safety standards document is to establish baseline requirements for the protection of people and the environment from the harmful effects of ionizing radiation and the safety of radiation sources.

The new update intends to take into account developments in radiation safety since 1996. The IAEA has requested comment in relation to:

- Relevance and usefulness – are the stated objectives appropriate?
- Scope and completeness – is the stated scope appropriate and is it adequately covered in the document?
- Quality and clarity – do the requirements/guidance in the document represent the current consensus among specialists in the field?

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is collating comments from Australia and requires these by May 21. Any comments should be forwarded to: [secretariat@arpansa.gov.au](mailto:secretariat@arpansa.gov.au). Any queries can be made to: Keith Dessent , Standards Development & Committee Support Section Regulation and Policy Branch ARPANSA Tel (03) 9433-2261.

## **International**

### **The journey from prescriptive to performance safety regulation**

The Petroleum Safety Authority Norway (PSA) has provided an [overview](#) of the historical development of its offshore safety regulation from a prescriptive, rule-based type to performance-based regulation.

Many safety regulators worldwide have moved their regimes over the years towards a greater degree of performance-based regulation. The prescriptive, rule-based approach was seen to encourage a passive attitude among companies and a culture of minimal compliance.

In contrast, the PSA overview explains that the requirements of a performance-based system can be more challenging for all participants. This system demands more of industry, employees and the regulating agency in terms of expertise, management and flexibility.

In Australia, NOPSA regulates under a duty of care regime which is largely performance-based using the safety case as a 'permissioning' tool.

### **Three new safety alerts from IADC**

The International Association of Drilling Contractors (IADC) has issued three new safety alerts which provide valuable lessons for offshore petroleum operations personnel:

- [a large container](#) was lifted by a helicopter downdraft over the handrails where it fell about 10 metres to the deck below. No injuries occurred but there was significant potential for serious injury
- [near misses](#) involving rig braking systems
- [employees struck](#) by falling rubber guides from Top Drive Back-up Wrenches (BUW).

### **OECD 'golden rules' in chemical accident prevention**

The Organisation for Economic Cooperation and Development (OECD) has produced a set of 'Golden Rules' for chemical accident prevention, preparedness and response. The OECD is an international economic research and discussion organisation which aims to help governments tackle the economic, social and governance challenges of a globalised economy. It has 30 member countries and active relationships with 70 other countries.

The OECD 'Golden Rules' are included in its publication: [OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response - Guidance for Industry \(Including Management and Labour\), Public Authorities, Communities, and other Stakeholders.](#) These highlight the responsibilities of major stakeholders - management, labour and public authorities and are summarised here:

#### **Role of all stakeholders:**

- Make risk reduction and accident prevention, as well as effective emergency preparedness and response, priorities in order to protect health, the environment and property
- Communicate and co-operate with other stakeholders on all aspects of accident prevention, preparedness and response.

**Role of industry (including management and labour)***Management*

- Know the hazards and risks at installations where there are hazardous substances.
- Promote a “safety culture” that is known and accepted throughout the enterprise.
- Establish safety management systems and monitor/review their implementation.
- Utilise “inherently safer technology” principles in designing and operating hazardous installations.
- Be especially diligent in managing change.
- Prepare for any accidents that might occur.
- Assist others to carry out their respective roles and responsibilities.
- Seek continuous improvement.

*Labour*

- Act in accordance with the enterprise’s safety culture, safety procedures, and training.
- Make every effort to be informed, and to provide information and feedback to management.
- Be proactive in helping to inform and educate your community.

**Role of public authorities**

- Seek to develop, enforce and continuously improve policies, regulations, and practices.
- Provide leadership to motivate all stakeholders to fulfil their roles and responsibilities.
- Monitor the industry to help ensure that risks are properly addressed.
- Help ensure that there is effective communication and co-operation among stakeholders.
- Promote inter-agency co-ordination.
- Know the risks within your sphere of responsibility, and plan appropriately.
- Mitigate the effects of accidents through appropriate response measures.

**Role of other stakeholders (eg communities/public)**

- Be aware of the risks in your community and know what to do in the event of an accident.
- Participate in decision-making relating to hazardous installations.
- Co-operate with local authorities, and industry, in emergency planning and response.

## Regulatory activities

*As at 24 March 2010*

### Assessment

The following assessment activity was undertaken in March.

March 2010	Submitted	Notified – waiting	Notified - Accepted / Agreed	Notified - Rejected	Stopped / Recalled	In Progress
Safety Case NEW	3	1	2			8
Safety Case REVISED	6		2			6
Diving SMS REVISED			1			
Pipeline SMP NEW*						3
Scope of Validation	3		3			3
	<b>12</b>	1	8	0	0	<b>20</b>

\* Pipeline SMPs currently only apply in state waters.

### Inspections

Seventeen facilities had planned inspections in March.

Scope items covered included:

- Permit to Work
- Loss of Containment
- Galley OHS risks
- Health Data
- Lifeboat management
- Emergency Response
- Vessel Collisions

Recommendations included:

- Review lifeboat testing
- Review lifeboat loading
- Implement system to identify hazards during diving activity
- Provide additional training to lifeboat pilots

## Incidents and complaints

Of the 22 notifications received from industry, 19 were classified as reportable incidents and three were non-reportable. There were no complaints. The incidents comprised the following:

MAJOR INCIDENTS	No	SIGNIFICANT INCIDENTS	No.
<b>Accidents</b> Death or serious injury		<b>Accidents</b> Incapacitation LTI >3 days	
<b>Dangerous Occurrences</b> Could have caused death or serious injury	1	<b>Dangerous Occurrences</b> Could have caused an LTI >3 days	
Fires or explosions		Hydrocarbon gas releases - 1 to 300 kg	2
Collision marine vessel and facility	2	Petroleum liquid releases - 80 to 12 500 L	
Hydrocarbon gas releases - >300 kg		Well kick >50 barrels	
Petroleum liquid releases - >12 500 L		Unplanned Event - Implement ERP	9
		Damage to Safety-Critical Equipment	3
		Other needing immediate investigation	2
<b>Major Sub-total</b>	<b>3</b>	<b>Significant Sub-total</b>	<b>16</b>
<b>MARCH 2010 TOTAL</b>			<b>19</b>

## Enforcement

There were five enforcement actions issued during March as follows:

Enforcement Actions Type	Issued for (reason)
<b>Written Advice / Warning (1)</b>	Fire pumps not working
<b>Improvement Notices (4)</b>	Electrical equipment unfit for use in hazardous areas
	Severe external corrosion of ballast system components
	Escape tunnel survivability not demonstrated as ALARP
	Failure to provide appropriate personal protective equipment

*Disclaimer: Activity and incident quantities identified here may vary as further information becomes available*

## Feedback

We seek your comments and ideas on offshore health and safety regulation, NOPSA's performance or this newsletter. Please send us feedback to: [publications@nopsa.gov.au](mailto:publications@nopsa.gov.au) or complete out current newsletter survey.

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