NOPSEMA

the REGULATOR

Issue 5: 2012

From the CEO

Every worker on a facility should value, and be valued for, the crucial role they play in helping to make their shift, their fellow crew members and the facility they work on as safe as possible.

NOPSEMA's processes and functions relate specifically to offshore workers in a number of ways. The responsibilities of industry and the regulator to the workforce are articulated in legislation. The law imposes a duty of care on an operator relating to the safety of a facility and work carried out on the facility. There are regulatory requirements to comply with relevant documentation, such as a safety case. There are specific references to offshore workers regarding workplace arrangements, health and safety committees and representatives (HSRs), inspections and compliance measures and emergency arrangements in Schedule 3 to the *Offshore Petroleum and Greenhouse Gas Storage Act 2006.*

Recently at NOPSEMA, we've posted photographs on our intranet of NOPSEMA staff at work before they joined the authority: on shift in control rooms or clad in diving gear, researching marine life or de-briefing with the crew. The photo collection is a vivid reminder that our team comprises specialists with expertise in the marine environment, exploration and production processes and pipeline function and design, who also have a first-hand understanding of the challenges of being an offshore worker.

NOPSEMA inspectors form a key interface between all the workers on a facility and the regulator in assessing how systems and processes may be affecting the health, safety and welfare of the crew. NOPSEMA's inspection policy states that OHS inspectors will communicate with all levels of the workforce on a facility. Further, issues relevant to the workforce are included as part of NOPSEMA's established assessment and compliance processes.

NOPSEMA provides comprehensive information and services accessible to all offshore workers, including the HSR handbook, subscription services for Safety Alerts and *the Regulator* and a mechanism to notify NOPSEMA of concerns or complaints (including anonymously) through its accident and dangerous occurrence notification line – (08) 6461 7090.

NOPSEMA is consulting the workforce on the development of the Safety Case Guidance Note - Involving the Workforce. The content of this guidance note draws on findings and recommendations of the inquiry into the Piper Alpha explosion in the North Sea in 1988, which helped inform the current processes and arrangements for regulating Australia's offshore industry.

Any offshore worker is welcome to provide feedback on our approach and systems, or seek further information, by emailing communications@nopsema.gov.au. We look forward to hearing from you.

Contents

"Working on an oil rig involves a lot of things – the most important thing there is trust."

Michael Burrell, survivor, BP Macondo
Source: Financial Times, April 2011

Jane Cutler, CEO

Investigation into fatalities on the Stena Clyde drilling rig, Bass Strait, 27 August 2012

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is continuing its independent investigation into a major accident involving two fatalities on the Stena Clyde mobile offshore drilling unit (MODU) facility in the Bass Strait on Monday 27 August 2012.

Pending the conclusion of its investigation, NOPSEMA would like to draw the attention of those working in the Australian offshore oil and gas industry to the following considerations in support of providing a safe place of work.

Preliminary considerations

1. An appropriate risk assessment system should be implemented for all stages of work. Workers involved should have an opportunity to contribute to this assessment, including consideration of factors such as: stored energy; equipment design limits; and, impact of external conditions.
2. Communication is a key part of any work offshore. Supervisors should verify that all workers involved in any task understand their role and any associated risks.
3. All equipment utilised in planned work should be fit for purpose and in good working order. If the equipment is not working correctly, a reassessment of the risks associated with the work or task should be conducted.

Chronology of events

24 August 2012 – drilling operations were underway on the Stena Clyde MODU when the drill pipe string became 'stuck in the hole'.

27 August 2012 – instructions were given to rig up for a wire line operation to sever the stuck pipe in the well. The drill crew was preparing for the downhole cutting and removal of the stuck pipe when the accident occurred. While attempting to unscrew the top drive from the drill pipe string, to facilitate the wire line operation, two workers were struck by a manual tong that rotated at speed. Shortly afterwards, the two workers died. After the operator, Stena Drilling (Australia) Pty Ltd, notified NOPSEMA of the accident, the authority initiated an investigation and commenced mobilisation of its investigation team.

Contributing factors

NOPSEMA will further examine the following contributing factors, as part of its investigation into the fatalities on the Stena Clyde:

Command and control: Operator and Titleholder decision-making and organisational authority in the context of well bore, met-ocean and surface rig equipment factors, work planning and communication of plans to the workforce.

Equipment rigging arrangement: The rigging arrangement of the break out tong at the time of the accident was a change from the usual arrangement, apparently arising from the circumstances of the stuck pipe, inclement weather and the consequential heaving motion of the rig.

Management of change: The investigation will address whether the changes to proposed operations were properly considered and communicated to the workers involved.

Risk assessment: As noted above in relation to the equipment rigging arrangement, change associated with the chosen arrangement including snatch blocks and the tugger winch under the prevailing met-ocean conditions may have warranted additional risk assessment. The investigation will address the implementation of risk assessment processes as part of its investigation.

Equipment failure: The rig was fitted with a top drive and integral pipe torque connector. The torque connector could not provide the necessary torque to disconnect the pipe, which led to the decision to use the manual break out tong. The investigation will focus on understanding these circumstances, integrity of the equipment and any other course of action that might have been taken.

Background information

At the time of the fatalities, the Stena Clyde MODU was located in Commonwealth waters of the Bass Strait, approximately 100 kilometres south of Port Campbell in Victoria. The Stena Clyde was contracted by Origin Energy Resources Ltd (the Titleholder) to undertake drilling activities for the Geographe Development campaign (as part of the overall Otway Basin drilling campaign) in exploration permit VIC/L23. Stena Drilling (Australia) Pty Ltd was the Operator and drilling contractor for the Stena Clyde.

NOPSEMA is Australia's national regulator for safety, well integrity and environmental management of offshore petroleum activities in Commonwealth waters. The authority performs its functions under the ***Offshore Petroleum and Greenhouse Gas Storage Act (OPGGSA) 2006*** and subsidiary Regulations.

NB: This announcement was published on the NOPSEMA website on 17 October 2012.

Comments welcome on new draft guidance note

NOPSEMA continues to progress its safety case guidance notes project aimed at assisting operators with the planning and development of facility safety cases.

A new draft guidance note, Involving the workforce, is now available on our website for comment.

This guidance note addresses effective involvement of the workforce in the development of new and revised safety cases.

We would welcome your suggestions and feedback by email to: safetycaseguidance@nopsema.gov.au. Comments can be provided electronically, via a marked up copy of the draft document, or preferably via the comment template available at nopsema.gov.au. To access published guidance notes and details about the safety case guidance notes project visit the safety case guidance page.

Diesel exhaust emissions – a group one carcinogen

Following a recent planned inspection, NOPSEMA made a number of recommendations to the operator of a MODU facility relating to the potential for workforce exposure to diesel exhaust emissions and the control of subsequent exposure. These recommendations were aimed at compliance with duty of care requirements under the OPGGSA 2006.

As of 12 June 2012, the International Agency for Research on Cancer (IARC), which is part of the World Health Organisation, classifies diesel engine exhaust as carcinogenic to humans (Group 1), based on sufficient evidence that exposure is associated with an increased risk of lung cancer. This most recent classification represents a significant change from the 1988 IARC classification, *probably carcinogenic to humans* (Group 2A).

Clause 9(2)(a) of Schedule 3 of the OPGGSA requires the operator of a facility to take all reasonably practicable steps to provide and maintain a physical environment at the facility that is safe and without risk to health. In addition, Clause 9(2)(g) requires the operator of a facility to take all reasonably practicable steps to monitor the health and safety of all members of the workforce and keep records of that monitoring. Consequently, if there is a diesel exhaust fume hazard on a facility, the operator of that facility should take all practicable measures to reduce exposure to members of their workforce and to monitor the health of workers who may be exposed.

‘Off the shelf’, operational and scientific environmental monitoring programs

The Montara Commission of Inquiry found major deficiencies with respect to the environmental monitoring that was conducted in the wake of the PTTEP AA Montara blowout in 2009 and made recommendations to address those deficiencies. One of the recommendations included putting in place operational and scientific monitoring programs (OSMPs) that could be rapidly implemented in the event of a hydrocarbon spill, specifically in order to address deficiencies around the lack of baseline data and delayed implementation of the environmental monitoring program for the Montara accident.

The Commonwealth Government response to this recommendation identified NOPSEMA to lead the implementation of OSMPs, which is to be achieved through the Environment Regulations and be supported by regulatory advice on how operators may prepare a fit-for-purpose OSMP as part of the environment plan process, including:

- updates to the environment plan preparation guidance note
- detailed information for consideration when developing OSMPs.

This will provide useful information to operators on overarching principles and possible approaches to a monitoring program’s design and implementation that will assist operators to meet their oil spill monitoring-related legislative requirements. For example, compliance with OPGGS Environment Regulations and also *Environment Protec.on and Biodiversity Conservation Act 1999* (EPBC Act) approval conditions could be met with a single monitoring document. NOPSEMA is consulting with the Department of Sustainability Environment, Water, Population and Communities (SEWPaC) with the aim of minimising the regulatory burden on operators and government alike.

As with other NOPSEMA advice, the OSMP information will be non-prescriptive to afford operators flexibility in application of monitoring scope and method appropriate to nature and scale. This also encourages consideration of latest innovations and continual improvement in monitoring programs to reflect any advances in technology, sampling methodologies and knowledge. It will also cover advice on assessment of the environment’s response to, and recovery from, the impacts of an unplanned marine oil spill. Operators will then develop and be ready to implement, fit-for-purpose and up to date OSMPs which are relevant to the environmental sensitivities and values of individual locations. These OSMPs would be assessed, along with other monitoring, as part of an environment plan for a petroleum activity.

Developing and measuring process safety key performance indicators

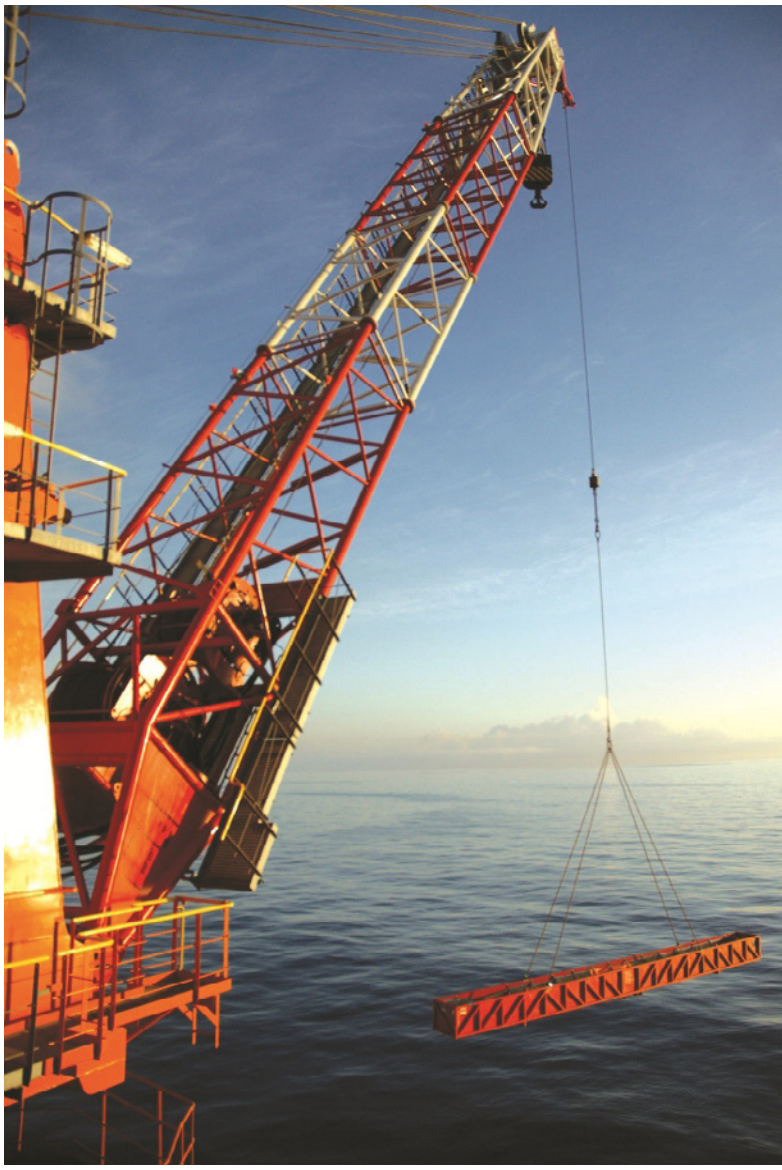
Process safety key performance indicators (KPIs) can be a combination of leading and lagging indicators which can assist with the assessment of an operator's safety management system.

Part two of this series on process safety focuses on developing a performance management tool using KPIs to help prevent unplanned hydrocarbon, or other hazardous material, releases which could result in a major accident event (MAE). This uses the operator's existing framework for managing the integrity of operating systems and processes for handling hazardous substances on a facility.

Process safety lagging indicators are retrospective and outcome-based, and will generally be set to show critical deviations from desired outcomes. They may describe a failure of risk controls or safeguards which has led to a dangerous occurrence. For example, an operator may record the number of loss of containment (LOC) events, the number of times a safety system has been activated and when equipment process parameters approach, or exceed, established alarm levels or safe operating limits.

On the other hand, process safety leading indicators are forward looking and input-based reflecting that fundamental controls and safeguards are in place to signal defects or weaknesses prior to any failure. For example, an operator may monitor the effectiveness of controls by performing timely inspections on safety-critical equipment, maintaining a minimum maintenance back-log on safety-critical equipment and tracking the actions of process audits.

In certain situations, a KPI can be both a leading and a lagging indicator. For example, the reporting of dangerous occurrences (often referred to as 'near misses'). Dangerous occurrences provide leading information on the likelihood of accidents occurring and also provide lagging information on weaknesses in existing controls. Comprehensive investigations of dangerous occurrences can contribute significantly to continuous improvement in asset integrity and process safety, whether used to identify weaknesses in controls or as a warning of a potential MAE.



Process safety requires the facility operator to be proactive and predictive in the development of comprehensive KPIs. Leading and lagging indicators can be used to help drive performance improvements and prevent LOC events.

The development and measurement of adequate leading and lagging KPIs requires that an operator assess their engineering design, implemented inspection, maintenance and repair regimes and any changes made under the management of change process.

Process safety KPIs (both leading and lagging) should generate relevant data which can be analysed to inform preventative actions, such as management system revisions, procedural changes, training opportunities and facility engineering improvements. KPIs should be selected and implemented only if they will generate statistically-relevant performance data that is specific to the safety-critical controls of a facility.

The next article in the process safety series will focus on identifying critical barriers and selecting KPIs.

Safety-critical valve testing

A recurring theme of pipeline facility inspections relates to the testing of safety-critical riser emergency shutdown valves (RESDV). NOPSEMA views the testing of safety-critical valves against defined performance standards to be crucial in demonstrating the ongoing functionality of risk mitigation measures described in the safety case for a facility.

RESDV functional and seat leakage rate testing is generally scheduled, with defined frequencies, within the facility planned maintenance system. Planned functional tests are frequently recorded as complete due to opportunistic valve operation/activation coinciding with planned process shutdowns or process trips. While this in itself is not a problem, crucial performance data can be overlooked or omitted if not captured by the maintenance system.

Operators held incomplete records of RESDV testing, with minimal data relating to valve time-to close and seat leakage rates. This lack of data will prevent meaningful comparison against defined performance standards, or accurate assessment of any deterioration in valve performance. While valve time-to-close and seat leakage rate performance standards were generally specified, they were often applied generically across all pipes and pipelines associated with a facility. It is considered good practice to ensure that maximum tolerable time-to-close and seat leakage rates are identified for individual valves based on:

- duty
- location
- product
- size
- blow-down rates
- isolated inventory volume and justified by a risk assessment process.

Inspection findings of greatest concern were those which indicated that test procedures did not always reflect real life service and, therefore, produced false or misleading outcomes. Inspections identified poor practices, such as operating the valve repeatedly prior to the test or shock loading the valve seats to ensure tight closure.

NOPSEMA has issued recommendations to the operators addressing these matters and will continue to monitor operator performance in relation to safety-critical valve testing in future inspections.

NOPSEMA raises Australia's international profile

NOPSEMA's schedule of events shows that activities in September had a distinctly 'regulatory' flavour. Just as the authority encourages the offshore workforce to share lessons from accidents and dangerous occurrences to promote a better understanding of risk mitigation, so do regulators benefit from exchanging experiences and information to promote international best regulatory practice.

As part of NOPSEMA's engagement with regulatory counterparts in Australia and overseas, NOPSEMA is an active member of the International Regulators' Forum (IRF). Since the IRF was formed at the Houston Offshore Technology Conference (OTC) 19 years ago, its membership has grown to ten member countries which cooperate on practical and strategic projects aimed at improving safety in the offshore industry, prioritising: measuring safety performance, safety culture, fitness to operate, international standards and improvements in blowout prevention and well integrity.

In September, NOPSEMA CEO, Jane Cutler, attended the IRF annual meeting in Brazil and chaired a session on major offshore incidents. IRF members examined the root causes identified in offshore accidents, including:

- a hydrocarbon leak at the Total Elgin platform in the North Sea commencing in March 2012, which prompted the evacuation of 238 offshore workers;
- the sinking of the Pemex Jupiter residential platform in the Gulf of Mexico, from which more than 700 offshore workers were rescued in April 2011.

During the discussion, NOPSEMA raised the independent investigation into the death of two workers on the Stena Drilling (Australia) Pty Ltd Stena Clyde facility in the Bass Strait in August (see NOPSEMA's preliminary considerations in this issue). NOPSEMA emphasised to IRF members the need to share information about offshore accidents and dangerous occurrences across jurisdictions in the interest of saving lives. The group also shared technical insights into the 2010 BP Macondo blowout in the Gulf of Mexico, which claimed the lives of 11 offshore workers, and the recent oil leak from the Chevron Frade field operation off the Brazilian coast. The IRF Conference and AGM will be held in Perth in October 2013.

Also in September, NOPSEMA hosted an annual meeting between regulatory counterparts in the Australasian region, including, Timor Leste and New Zealand, to identify the key challenges and opportunities. The group examined lessons and recommendations for improved regulatory arrangements arising from the PTTEP AA Montara and BP Macondo blowouts.

Image courtesy of CSIRO Australia

Managing the risk of marine pests

The introduction of marine pests is a potential environmental risk associated with offshore petroleum activities. Marine pests can result in significant impacts to the marine environment and it is important that operators consult with all relevant agencies regarding their marine pest management responsibilities. Marine pests are introduced flora and fauna with invasive characteristics that can result in significant adverse effects to marine industries, the environment, human health and/or amenity. The primary vectors for marine pest translocation, relevant to the offshore industry, include ballast water and biofouling.

Ballast water is water carried in ships' ballast tanks to alter stability, balance and trim and may harbour marine flora and fauna as adults or early life stages. Ballast water risks are managed through legislated controls under the *Quarantine Act 1908*, which is administered by the Department of Agriculture, Fisheries and Forestry (DAFF). This legislation prohibits the discharge of high risk ballast water in Australia's territorial sea. Furthermore, there may be additional legislation that applies to individual states and the Northern Territory and should be considered where applicable in an environment plan submitted under the Regulations.

Biofouling refers to the growth of marine organisms on hard surfaces that are regularly submersed such as ships' hulls, seismic streamers, anchors and internal seawater pipes. Biofouling risks are generally managed through industry guidance produced under the National System for the Prevention and Management of Marine Pest Incursions, as well as various guidelines and legislation that apply to individual states and the Northern Territory.

For example, in Western Australia, the Department of Fisheries WA has released guidelines to assist industry in complying with the Fish Resources Management Regulations 1995, which prohibit the transport of non-native species into WA waters. The Department has biosecurity management responsibilities extending 200 nautical miles from the WA coast to allow management on an appropriate spatial scale for environmental protection.

The various states and the Northern Territory have differing requirements for marine pest management in their respective jurisdictions and it is, therefore, important that petroleum operators consult with all biosecurity management agencies relevant to a petroleum activity.

These agencies may also be relevant persons under the OPGGS (Environment) Regulations 2009 and measures adopted as a result of any consultations may assist operators of activities to demonstrate that their marine pest risks are reduced to ALARP and acceptable.

Ageing facilities – maintenance management

Part three of the ageing facilities series of articles focuses on maintenance management.

During NOPSEMA's topic-based planned inspections on ageing facilities, OHS inspectors examined operators' maintenance management systems. The inspections found that all operators had established maintenance management systems which drew on information from a variety of sources, including codes and standards, original equipment manufacturer (OEM) guidance, industry practice and operational knowledge. This information was used by operators to define maintenance management by specifying the types of maintenance or inspections to be conducted, the frequency of these activities and the planning required.

NOPSEMA's inspections found that most maintenance management systems appeared appropriate and the associated processes and procedures generally appeared sufficient to provide a robust maintenance regime.

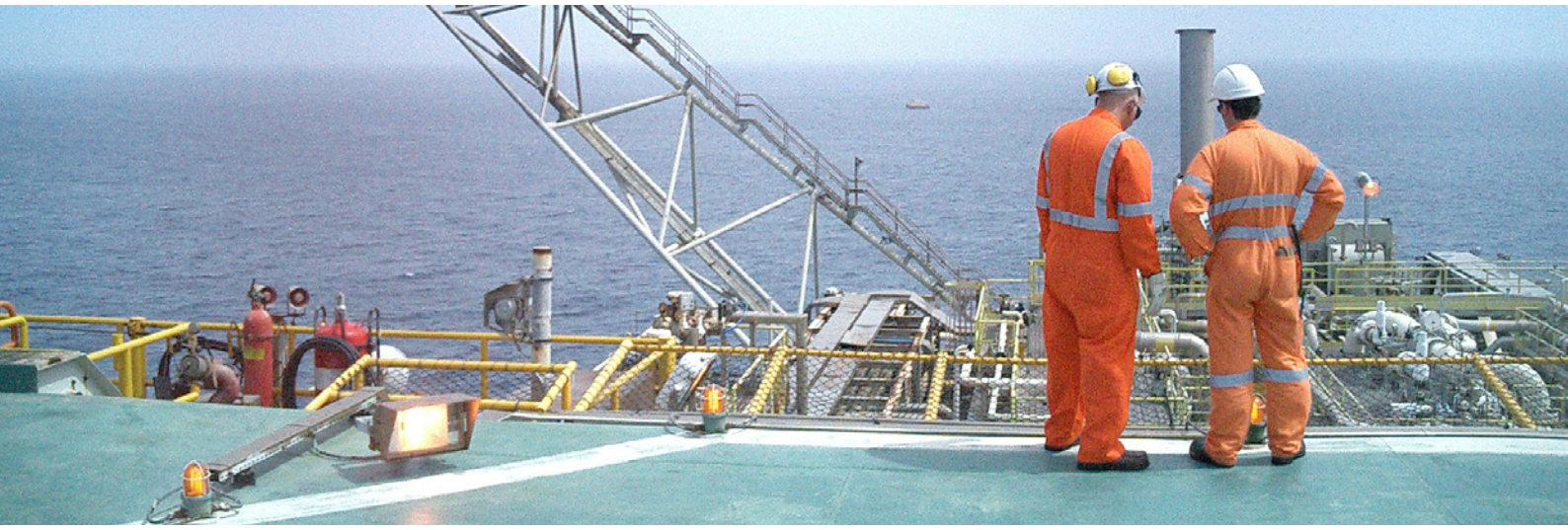
The inspections also identified, however, deficiencies following detailed examination of the computerised maintenance management system (CMMS) applications used on all of the facilities inspected:

- equipment missing entirely from the maintenance regime
- equipment identified for maintenance or inspection, but not included in the CMMS
- equipment located in the CMMS, but with no accompanying work instruction, or inadequate work instructions
- incomplete work signed off as being complete
- faults and failures identified, but no follow-up work orders raised
- safety-related/critical equipment not identified correctly
- inappropriate priorities and timescales assigned to corrective work
- failure to evaluate any increase in risk due to faults and failures
- repairs and changes implemented without appropriate technical input
- due dates changed without following the appropriate process (including risk assessment)
- failure to review completed work
- lack of monitoring of planned versus completed work
- failure to audit the CMMS.

While all operators, therefore, had maintenance management systems in place which appeared to be robust and functional, in reality none of the maintenance management systems was considered to represent good practice. This shortcoming was further compounded by a lack of auditing identified across most operators' systems. While most operators accessed reports from the CMMS to demonstrate an effective maintenance management system, relying on a system which reported on itself was clearly inappropriate and inadequate. More rigorous review and auditing was required to demonstrate effectiveness.

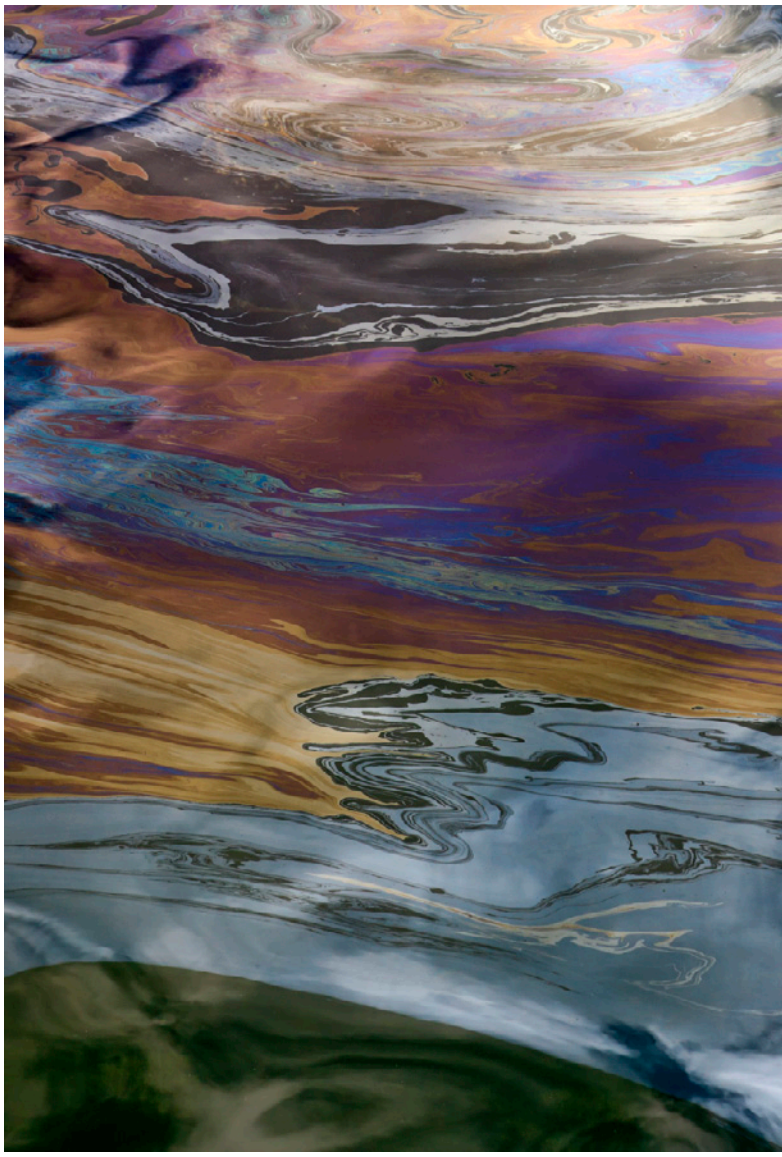
NOPSEMA will conduct more planned inspections over 2012-13 that focus on maintenance management systems, with a specific focus on operators' CMMS. The authority would expect that operators rigorously apply their maintenance management processes, including regular audits of their systems.

Management of change in relation to ageing facilities will be discussed in the next issue of *the Regulator*.



Progress towards international collaboration on environment regulation

Since assuming responsibility for environmental management in January, NOPSEMA has joined efforts with Canada, the United States, United Kingdom and Norway to formalise interaction on environmental regulation of the offshore petroleum industry, in line with the model adopted by the International Regulators' Forum (see the separate article on the IRF in this issue)**.**



As a member of the International Offshore Petroleum Environment Regulators forum (IOPER), NOPSEMA and other regulators aim to promote best environmental management regulatory practice of the offshore petroleum industry to raise environmental performance.

In addition to strategic priorities already identified by the IRF, the IOPER forum is exploring the potential for collaboration on issues including emergency (spill) response capacity, operator ability to meet financial responsibility obligations, and impact issues arising from increasing exploration and development activity in sensitive areas.

At its fourth meeting in September, IOPER members discussed common challenges and opportunities, as well as differences between the regimes administered in each of their jurisdictions. Observations included, for example, that almost all jurisdictions other than Australia continue to enforce prescriptive legislation and arrangements to regulate offshore petroleum activities. Members recognised the impact of this approach on industry, and associated resource demands on regulators, compared to the flexibility offered by an effectively-administered, objectives-based regime (such as that offered under the OPGGSA and Regulations).

Hazards – keeping the workforce informed

Many, if not all operators, have a master register to record potential or actual hazards on a facility. The register may list items ranging from OHS hazards, such as those posed by sunlight (UV radiation), to MAEs such as total collapse or loss of the facility.

Master hazard registers are often created as part of the safety case development process, with hazards that form potential MAEs included in the formal safety assessment. The 'lesser' hazards may not necessarily be subject to the same structured processes of the formal safety assessment, but control measures should be developed for each.

NOPSEMA's risk assessment guidance note acknowledges that while not all members of a work group can be involved in the hazard identification and risk assessment processes, feedback about the risks from hazards and the controls in place to reduce risks is important. If inappropriate controls are used in any risk assessment, there is potential for the actual risk to be masked from, or underestimated by, the workforce.

A number of operators record the risk of each of the identified hazards for a facility both before and after control measures have been applied. Operators often use the residual risk to satisfy themselves that sufficient controls have been, or would be, applied to reduce the risk to a level that is as low as reasonably practicable (ALARP).

There have been instances, however, where NOPSEMA has found deficiencies in hazard registers, particularly regarding the estimation of residual risk. Often shortcomings in the estimation of residual risk stem from inappropriately using procedural controls to lower the consequence from any event occurring. While procedural controls, such as permits, procedures and work instructions, can reduce likelihood of occurrence, they will rarely reduce the consequences of an occurrence. Operators are encouraged to ensure that risk assessments appropriately gauge the effect of controls and reflect reality in determining residual risk.

Environment Regulations – notification of appointment of operator

Since 1 January 2012, NOPSEMA has been responsible for enforcing the requirements of the OPGGS (Environment) Regulations. The Environment Regulations provide for a specific process to be followed for instrument holders to notify NOPSEMA of the appointment of an operator for a petroleum activity.

Regulation 31(3) of the Environment Regulations provides that, "[t]he instrument holder must notify the Regulator in writing of the name and contact details of the operator before the first submission for an activity is lodged under these Regulations."

Under this Regulation, all instrument holders of a petroleum instrument must provide notification of appointment of an operator to NOPSEMA. This means, for example, that if there are five instrument holders that hold a title then all five instrument holders must notify NOPSEMA in writing of the name and contact details of the operator before the first submission for an activity is lodged.

Regulation 34 provides NOPSEMA with discretion to decline to consider an environment plan submission made by the operator where information on notification of appointment of an operator has not been provided under Regulation 31. As such, NOPSEMA may decline to commence an assessment of an environment plan until all instrument holders have notified NOPSEMA the name and contact details of the operator.

To assist instrument holders in implementing this requirement, NOPSEMA has issued a form entitled Appointment of operator of activity which is available at nopsema.gov.au. Use of this form is not compulsory but is designed to assist instrument holders in complying with the Environment Regulations. Please direct any queries to Karl Heiden, Environment Manager of Implementation and Regulatory Guidance, on (08) 6188 8857 or karl.heiden@nopsema.gov.au

Are you an offshore health and safety representative?

The legislative framework for offshore petroleum safety makes clear provision for workforce representation. There are specific references to health and safety committees and HSRs in Schedule 3 to the OPGGSA.

HSRs contribute to improving the safety of the offshore workforce by representing their fellow workers, understanding their health and safety concerns and assisting them to participate in decisions that affect them. Working in collaboration with their facility operator, fellow crew members and employer, an HSR helps to prevent incidents on a facility and make safety a top priority for Australia's offshore petroleum industry.

HSRs and those considering nominating for this role can find resources, such as the latest edition of the HSR Handbook, and training information on the HSR page at nopsema.gov.au. The authority invites HSRs to provide feedback and register their details with communications@nopsema.gov.au to receive updates pertinent to their role, and invitations to HSR-related events.

On 12 November, NOPSEMA will make presentations on offshore inspections and data on safety performance and workforce-oriented initiatives at the APPEA HSR and safety workforce forum, in Perth.

Technical report on Montara blowout

NOPSEMA has published a report prepared by an independent expert witness in relation to the Montara wellhead platform blowout on 21 August 2009 involving PTTEP AA. Colin Stuart, Managing and Technical Director of Stuart Wright Pte Ltd was engaged by NOPSEMA (then NOPSA) to provide an expert opinion to assist in the investigation of the incident and to support the brief of evidence referred to the Commonwealth Director of Public Prosecutions. The report provides comprehensive consideration and analysis of the events leading up to, and immediately following, the incident and has been published by NOPSEMA to allow industry to benefit from key lessons learned, in particular improving barrier integrity awareness.

The report is available for download in three volumes from nopsema.gov.au via the Safety resources web page.

PTTEP AA Montara Incident 2009

Activity and performance

As at 30 October 2012
Disclaimer: Data presented here may vary as further information becomes available.

Assessments

The number of assessments submitted in October increased significantly primarily due to a high number of well activity applications. Two safety cases were rejected in September and one diving safety management system was rejected in October 2012.

ASSESSMENTS		Submitted			Accepted / agreed / advised			Rejected / refused / returned / declined		
		2012			2012			2012		
Assessment type	Subtype	Aug	Sep	Oct	Aug	Sep	Oct	Aug	Sep	Oct
Diving safety management system	New	1	1	1			1			1
Diving safety management system	Revision	1		1	1					
Diving start-up notice	Not applicable	1		1	1		1			
Environment plan	New	6	13	3	7	2	1			
Environment plan	Revision		1	1						
PSZ application	New	1	1	1	1		1			
Safety case	New	1	1	5	3			2		
Safety case	Revision	8	7	7	18	3	7	5	2	
Scope of validation	Not applicable	7	2	5	6	2	4			
Title surrender advice to NOPTA	Not applicable	1	2	2	1	1	1			
Well activity application	Not applicable	14	11	24	9	20	9	1		
Well operations management plan	New	1	4	3	2	2	5			
Well operations management plan	Variation	1				1				
TOTAL		43	43	54	49	31	30	8	2	1

Note : In some instances, a single assessment may be submitted for multiple facilities.

Inspections

The number of planned inspections can fluctuate according to operator availability and activities. Multiple pipelines were inspected during an offshore inspection in August.

TYPE	2011						2012							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Facilities / activities inspected	4	12	11	6	5	7	11	7	13	19	5	50	5	12

PSZ–Petroleum safety zone

Complaints

Two complaints were received in July 2012 regarding a crack in the caisson and a dropped object incident.

TYPE	2011						2012							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Complaints	2	0	2	0	1	2	0	1	2	1	2	0	0	0

Injuries

Two fatalities on the Stena Clyde MODU in August are included in the LTI data below.

TYPE	2011						2012							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
INJURIES														
Lost time injuries (LTI >1 day)*	2	2	4	2	0	0	1	3	1	2	2	6	2	Data not yet available
Alternative duties injuries (ADI)	1	2	2	3	1	2	6	4	2	4	2	1	3	
Medical treatment injuries (MTI)	1	4	7	3	4	5	2	1	4	4	2	0	4	
Total recordable cases (TRC)	**4**	**8**	**13**	**8**	**5**	**7**	**9**	**8**	**7**	**10**	**6**	**7**	**9**	
* LTI incl. lost time injuries less than 3 days														

As reported under OPGGS(S) Regulation 2.42. (injury summaries submitted not less than 15 days after the end of each month)

Enforcements

25 enforcement actions were issued to two operators in October. Of the 23 improvement notices issued, 22 were for individual pipelines operating beyond their design life with no re-qualification process in place. The other improvement notice was issued for lack of meteorological equipment.

ENFORCEMENT ACTION TYPES	2011						2012							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Direction – general							4							
Do not disturb notice												1		
Improvement notice	10	5	1	11	4	2	1	2	6	3	0	1	5	23
Prohibition notice		3					1							
Request for revised SC											1			
Request for revised EP						2					1			
Verbal advice/warning								1						
Written advice/warning	1			1	1	1	3	2	1		1	1		2
TOTAL	**11**	**8**	**1**	**12**	**5**	**5**	**9**	**5**	**7**	**3**	**3**	**3**	**5**	**25**

SC – Safety case
EP – Environment plan

Accidents and dangerous occurrences

INCIDENT TYPE		2012		
		Aug	Sept	Oct
OHS Incidents	Accidents			
	Death or Serious Injury	(2 fatalities) 1	1	
	Incapacitation >= 3 days LTI	3		1
	Accidents Total	**4**	**1**	**1**
	Dangerous Occurrences			
	Could have caused Death or Serious Injury		6	2
	Could have caused incapacitation >= 3 days LTI	2	2	1
	Fire or Explosion	1		1
	Collision marine vessel and facility			
	Uncontrolled HC release >1 - 300 kg			1
	Uncontrolled HC release >300 kg			
	Uncontrolled PL release >80 - 12 500 L			
	Unplanned Event - Implement Emergency Response Plan	7	1	10
	Damage to Safety-Critical Equipment	8	6	6
	Other kind needing Immediate Investigation	17	14	7
	Pipeline - Kind needing Immediate Investigation			
	Dangerous Occurrences Total	**35**	**29**	**28**
OHS Incidents (Accidents and Dangerous Occurrences) Total		**39**	**30**	**29**
Environmental Incidents	EM - Hydrocarbon / petroleum fluid release	1	1	1
	EM - Chemical release	1		
	EM - Drilling fluid / mud release	1	1	
	EM - Fauna incident	1		
	EM - Other		1	
	EM Incidents Total	**4**	**3**	**1**
Not Reportable Incidents	OHS - Not notifiable		5	1
	OHS - Exercise			
	EM - Not notifiable			
	EM - Exercise	1		1
	Other non reportable		1	
	Not Reportables Total	**1**	**6**	**2**
	GRAND TOTAL	**44**	**39**	**32**

As notified under OPGGS(S) Regulation 2.41.

HC – Hydrocarbon
PL - Petroleum liquid
EM – Environmental management
OHS – Occupational health and safety

Upcoming Events

- 12 November 2012 APPEA HSR and safety workforce forum, Perth
- 27 - 29 November 2012 Deep offshore technology conference, Perth
- 4 December 2012 NOPSEMA Environmental management workshop, Perth





Feedback

NOPSEMA welcomes your comments and ideas on offshore health and safety regulation, NOPSEMA's role and your preferred communication methods and publications. Please direct media enquiries, requests for publications, and enquiries about NOPSEMA events to communications@nopsema.gov.au. Operators and other employers are encouraged to circulate this newsletter to their workforce. Past issues of this newsletter are available from NOPSEMA's website at nopsema.gov.au.

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