NOPSEMA

the REGULATOR

Issue 4 : 2015

# From the CEO

**A little over a year ago, in my first issue of *the Regulator*, I noted the high regard in which NOPSEMA is held for its technical competence and capacity to deliver outcomes-based regulation. In that issue I also flagged some priority areas for attention. This final issue for 2015 provides an opportunity to reflect on NOPSEMA's performance across those priorities. We achieved a great deal during the year and our plans for 2016 are no different, with many initiatives already well underway.**

Reducing regulatory burden has been a priority for NOPSEMA, with an emphasis on pursuing opportunities for further environmental streamlining and the conferral of regulatory responsibilities from the states and Northern Territory (NT). The independent review of NOPSEMA's environmental management authorisation process, endorsed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), was completed in 2015. Positive findings from that review support further streamlining, as do findings from the independent triennial review of NOPSEMA that was also completed during 2015.

NOPSEMA has been working closely with the Federal Department of Industry, Innovation and Science to progress strategic assessments in South Australia and the NT. Those assessments support streamlined environmental management regulation in the event of the conferral of powers. Additional states have also expressed interest in conferral and, while Western Australia is not currently advocating conferral, they have been proactive in ensuring alignment of their regulatory responsibilities with NOPSEMA. We welcome this collaboration which reduces uncertainty and regulatory burden and we look forward to further cooperation in 2016.

In 2015, NOPSEMA pursued various communication and engagement activities to better advise industry and promote compliance with *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGS Act). These activities included meetings and workshops with stakeholders, participation in industry conferences and open days, appearances before public hearings and initiatives to improve transparency in decision-making processes.

NOPSEMA also reinforced its international standing and access to leading regulatory practise through participation in key international regulatory forums. NOPSEMA continued to chair the International Offshore Petroleum Environment Regulators (IOPER) forum and was elected as one of three members (along with the United States and Norway) to the new International Regulators Forum (IRF) Management Committee. NOPSEMA will continue to engage with international regulatory counterparts during 2016 to share insights, benchmark performance, and discuss new technology and approaches for regulation in support of regulatory best practice in Australia.

Where necessary, NOPSEMA pursues prosecutions to address serious breaches of the OPGGS Act. During 2015, these prosecutions included resolution of an action in the Magistrates' Court of Victoria which saw a criminal penalty of $330,000 imposed on Stena Drilling (Australia). The penalty was in relation to an accident on the *Stena Clyde* mobile offshore drilling unit on 27 August 2012, which claimed the lives of two offshore workers. Another action in the Magistrates' Court of Perth resulted in a criminal penalty of $20,000 being imposed on Hammelmann Australia Pty Ltd in relation to an accident on 30 March 2011 in the offshore area of WA. That accident involved a diver suffering a serious arm injury whilst operating high-pressure water blasting equipment subsea.

NOPSEMA views prosecutions, however, as a last resort for compliance activity and prefers to direct most of its efforts to other activities such as education campaigns and direct interaction through assessment and inspection processes. Among the subjects targeted for compliance attention by NOPSEMA during 2015, has been the maintenance performance of operators while they deal with the challenge of declining global oil and gas prices. NOPSEMA has been pleased with the general performance of operators in regard to maintenance performance and will look to see a continuation of this performance in 2016 as pricing pressure persists.

In reflecting on the past year and looking to the challenges that next year holds, I wish to acknowledge the support of the NOPSEMA Board, the professional and diligent efforts of NOPSEMA's staff and the considerable efforts of industry to ensure sound safety and environmental outcomes.

I wish all a safe and happy Christmas and a successful year ahead.

**Stuart Smith, CEO**

## In this issue



# MODU mooring systems in cyclonic conditions

On 20 August 2015, NOPSEMA hosted a workshop with industry to develop and disseminate lessons learned from a recent mooring failure incident. To reflect industry feedback, NOPSEMA has updated and published its 'MODU mooring systems in cyclonic conditions' information paper on its website.

# New well integrity guidance

Amendments to Part 5 of the Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011 will commence from 1 January 2016. NOPSEMA is publishing a series of guidance notes to assist titleholder's to comply with their well integrity responsibilities under the amended regulations. To view this series of guidance notes see the Well Integrity Resources page.

# Comments welcome on new draft guidance note

**NOPSEMA continues to progress its safety case guidance notes project to assist operators in the planning and development of facility safety cases. As part of this project, NOPSEMA has published a draft guidance note on 'Emergency Planning' on its website for comment.**

The 'Emergency Planning' guidance note aims to assist operators in developing an emergency response plan that addresses the requirements of the Safety Regulations whilst ensuring every type of emergency that could occur at a facility has been identified and appropriately planned for. The guidance note will be of use to those responsible for planning and developing the facility safety case, and those involved in safety case implementation, maintenance, and ongoing risk management.

NOPSEMA welcomes your suggestions and feedback by email to safetycaseguidance@nopsema.gov.au by Friday, 19 February 2016. Comments should be provided via the comment template or in a marked up copy of the draft document. The draft guidance note, comment template and other published safety case guidance notes are available on the Safety Case Guidance Notes page at nopsema.gov.au.

# Managing scientific uncertainty in environmental impact assessments for seismic surveys

**NOPSEMA has increased efforts to address scientific uncertainty in environmental impact assessments (EIA), with a particular focus on marine seismic surveys. This focus was a result of a number of environment plans submitted to NOPSEMA that failed to demonstrate acceptable levels of impact for proposed seismic activity in environmentally sensitive areas, which has also led to heightened stakeholder concern.**

At a recent conference, NOPSEMA delivered a paper on scientific uncertainty, which broadly covered the sources of scientific uncertainty commonly identified during seismic environment plan assessments, the implications of this uncertainty and options to address. The nature of the scientific uncertainty identified is primarily a result of relevant information either missing from, or incorrectly applied, in the EIA process. Scientific uncertainty of this nature is commonly present at all stages of the EIA process, including the:

- description of the environment, such as incomplete baseline data for key receptors
- evaluation of impacts and risks, for example limited referencing of relevant peer-reviewed literature on biological effects
- implementation strategy, such as the lack of validation of sound exposure predictions.

Scientific uncertainty in predictions of impact or effectiveness of controls resulting from sources such as those outlined are likely to limit a titleholder's ability to demonstrate acceptable levels of impact. In such cases, this scientific uncertainty can result in the regulator needing to apply a precautionary approach in decision-making. As a result, titleholders will experience protracted assessment timeframes and additional conservatism in controls, including limiting the extent of seismic surveys. In some cases, failure to demonstrate that impacts will be of acceptable levels has resulted in NOPSEMA refusing to accept environment plans.

In order to address the challenges presented to titleholders by scientific uncertainty, NOPSEMA encourages the application of a thorough EIA process with scientifically sound application of the best available data. Where there is a genuine gap in data, there may be a need for the titleholder to take a precautionary approach in the consideration of controls, such as excluding sensitive locations and/or times of year, until such time that new scientific data becomes available.

As the entity ultimately responsible for environmental management of petroleum activities, the titleholder is best motivated and well placed to understand where data gaps are creating problems in terms of environmental approvals. NOPSEMA continues to encourage industry to work together to address these gaps collaboratively.

For more detail, please refer to NOPSEMA's Implications of scientific uncertainty in seismic environmental impact assessments presentation on the Presentations page at nopsema.gov.au.

# Thermal and overpressure protection for TEMPSC and muster stations

**During safety case assessments and facility inspections, NOPSEMA inspectors have found that some lifeboats (TEMPSC) and muster stations have not been afforded protection from potential flame impingement or explosion overpressure; from credible incidents identified by the operator that could occur at the facility. These lifeboats and muster stations would be susceptible to damage as a result of such incidents and rendered unusable during the emergency.**

Generally, lifeboats are nominated as the primary means for evacuating the facility during an emergency. They are also commonly located adjacent to the accommodation area. Structural shielding of lifeboats and their associated muster stations afforded by the accommodation block often provides protection from thermal and overpressure risks arising from fire and explosions from well blowouts or process incidents.

Structural shielding, however, is not always intrinsic to the original design of a facility. Deficiencies identified during NOPSEMA's safety case assessments and facility inspections have led to a number of offshore facilities retrofitting thermal and overpressure protection for lifeboats and muster stations by installing additional bulkheads and/or water deluge systems.

During a recent facility inspection, NOPSEMA inspectors identified two out of the three lifeboats and muster stations were not protected as stated in the facility's safety case; assumptions made in the safety case's formal safety assessment were found to be incorrect.

NOPSEMA inspectors will continue to check the fitness of facility emergency response and evacuation equipment during assessments and inspections. Enforcement action will be considered where operators are unable to demonstrate that the emergency response equipment remains fit-for-purpose in all credible emergency scenarios at the facility.

# Risks associated with electric storage batteries

## What happened?

Recently, NOPSEMA was notified of a fire that occurred in the battery room on a production facility. This incident has highlighted the potential for thermal runaway events, specifically, when there is short circuit between two or more battery banks of uninterruptible power supply (UPS). This incident was likely caused by leaking electrolyte fluid contacting a conductive metal cabinet frame in the UPS battery room. There were no injuries caused as a result of this incident. However, containing the fire, albeit relatively small, presented challenges.

## What could go wrong?

Lead acid batteries are capable of delivering an electric charge at a very high rate and, when charging, can release flammable hydrogen gases. As such, when these hydrogen gases are combined with oxygen, they have the potential to cause an explosion.

Valve regulated batteries described as 'maintenance free' are less likely to release hydrogen than conventional flooded electrolyte batteries in normal operational conditions. However, it is still important to take care when charging valve regulated batteries. Hydrogen can be released through the pressure relief valves if the battery charging current or voltage are exceeded, which can also lead to a potential explosion.

Batteries can contain significant stored energy. Under certain circumstances this energy may be released very rapidly. This can occur during short circuit faults, for example, when the terminals are short-circuited. In the event of a short circuit condition, very large fault currents can be generated, which can result in rapid heat rise. Explosions associated with the fault can result in a shower of molten metal, which can cause serious injuries and ignite explosive gases present around the battery.

Most battery cells produce low voltages and therefore there is limited risk of electric shock, however, some large battery banks produce more than 120 volts DC. Personnel should be protected from the dangers of electric shock by ensuring that:

- live conductors are effectively insulated or protected
- access to areas where there are dangerous voltages is controlled
- appropriate warning signage is displayed.

*Figure 1 – First entry into the battery room post incident.*

*Figure 2 – Battery cabinet with doors removed. Damage within left cabinet.*

## Key lessons

Battery installations should be designed to eliminate or reduce the risk of fault currents associated with battery terminals or short circuits to the battery stands or trays. Battery stands or trays should be insulated and access to battery terminals, inspection caps, or charge indicators should be sufficient to allow effective maintenance to be conducted safely.

- Store batteries in a cool, well-ventilated area away from ignition sources. Where batteries are arranged in two or more tiers, adequate circulation of air should be provided.
- Large battery banks should be located in a dedicated battery room with minimal other equipment and services.
- Dedicated battery rooms should consider potential explosive gas (hydrogen) release under both normal

charging and fault conditions and should consider utilising explosive protected electrical equipment within the space.

- Battery room ventilation systems and ducts should be separated from other ventilation systems and lead to safe open-air locations.
- Battery rooms should be provided with smoke and/or heat detection. In addition, provision of gas detection should also be considered for battery rooms.
- Battery rooms not provided with fixed active fire protection systems such as carbon dioxide (CO2), Inergen or other inert gas should be provided with portable CO2 or dry powder fire extinguishers.
- Batteries should be fixed to prevent any movement arising from the motions of any floating facility.
- Battery storage design should consider containment of potential electrolyte leakage and should be spill proof.
- Lead acid and alkaline batteries should not be placed in the same space unless separated by suitable screens.
- Follow all instructions and manufacturers recommendations and check the manufacturer's specifications on battery storage and battery charging thresholds. Record date of manufacture, installation, and the maximum end of life of batteries.

Ensure procedures are in place for undertaking regular visual inspections including checking for cleanliness, corrosion, electrolyte levels leaking electrolyte, charge indicators, charging current, system voltage, charger status and alarms, and earth fault indication.

Regular load testing of battery banks should be performed and the discharge duration and accepted voltage drop should be identified in the performance standards. Thermography testing while battery banks are subjected to load conditions should be considered to identify any loose connections that can lead to a supply loss or result in a potential fire.

Battery maintenance should consider the effects of battery sulfation, which can lead to a number of battery faults, for example, cell short circuit, excessive voltage drop or lead to casing damage and electrolyte loss.

Battery charger fault indication and alarms should be considered and appropriately monitored to ensure effective battery charging is maintained.

Battery earth fault detection systems should be provided for larger battery installations to provide warnings of low levels of insulation resistance.

The facility performance standards should clearly identify the operational performance required for the battery systems. Operational performance may include:

- the minimum operating duration required for the battery emergency loads
- the maximum accepted voltage drops for the battery system
- the key minimum testing and inspection periods that ensure an effective emergency supply is ready on demand.

Battery replacement by failure is generally not considered appropriate for batteries supplying safety critical or emergency loads that are required to function on demand. Batteries should be replaced before they reach their end of life condition.

Battery fire is a credible event; these hazards (fire hazard and stored energy) should be assessed as part of the safety case for the facility.

Operators should prepare a mitigating emergency response procedure for responding to a battery thermal runaway event or battery room fire. The emergency response procedure should cover containing the event, firefighting, training, and emergency preparedness drills.

## The legislation

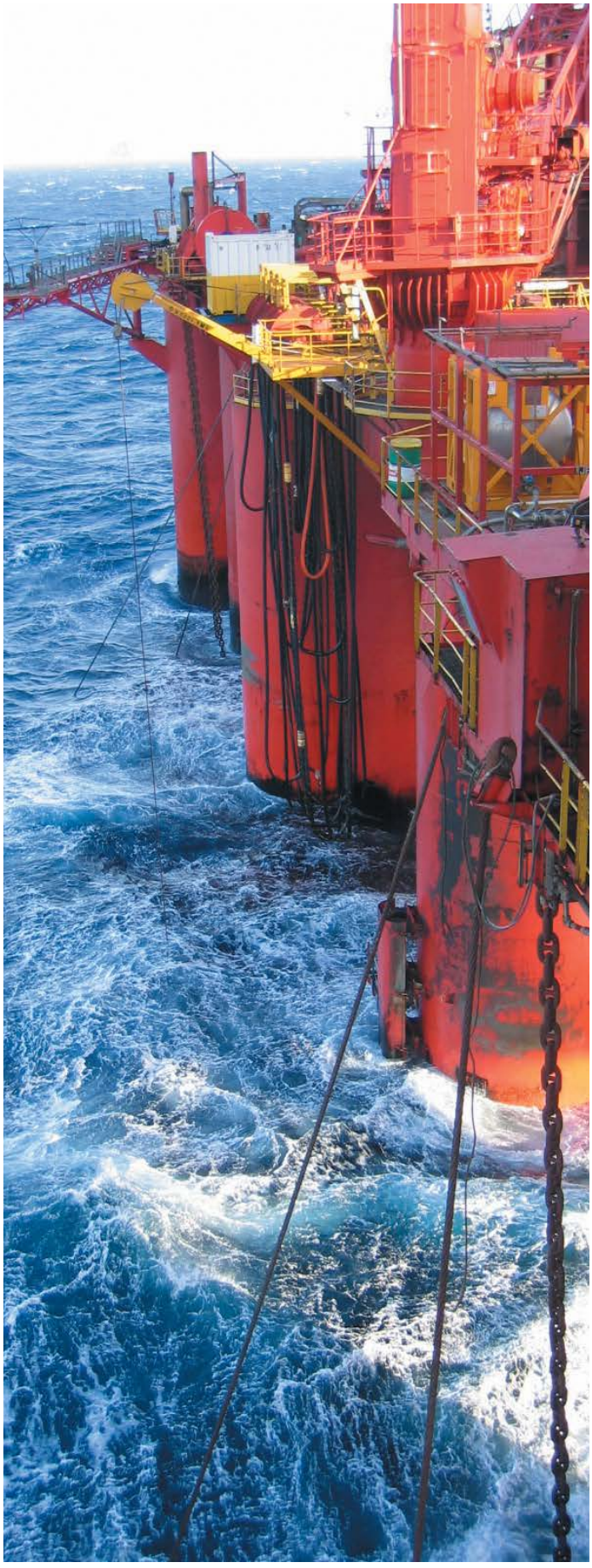
Schedule 3 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* places specific duties on the operator of a facility to take all reasonably practicable steps to ensure that:

- any plant, equipment, materials and substances at the facility are safe and without risk to health and
- to implement and maintain systems of work at the facility that are safe and without risk to health.

Facility operators, employers, and persons in charge of work activities should review their practices for the use of battery banks, particularly banks of batteries storing 120 volts DC and above, with regard to the above information.

## Contact

For further information email alerts@nopsema.gov.au and quote Alert 61. NOPSEMA safety alerts are published at nopsema.gov.au, on the Safety Alerts page under the Safety tab.



# NOPSEMA participates in offshore oil and gas open days

**In December, NOPSEMA joined other Commonwealth and South Australian agencies in a series of offshore oil and gas open days held in Adelaide, Port Lincoln, Ceduna and Kangaroo Island. Jointly organised between the two governments, the open days sought to provide the South Australian community with an opportunity to learn more about the administration and regulation of Australia's offshore oil and gas industry.**

As Australia's national independent regulator of oil and gas and activities in Commonwealth waters, NOPSEMA provided interested community members an overview of where the regulator's role and functions fit within the offshore oil and gas lifecycle. Subjects covered by NOPSEMA's representatives included environment plan consultation processes, regulatory decision-making processes, access to information on environment plan submissions, *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) streamlining, regulatory consideration of EPBC Act protected matters as well as impacts on social, economic and cultural features of the environment. NOPSEMA also provided fact sheets, guidance material relevant to specific queries and assistance in subscribing to NOPSEMA's environment plan submissions search and notification tool.

The open days were set up as a mini-exhibition of agencies to ensure community members were able to find the most relevant agency to address their queries directly. In most locations, the open days were well attended with agencies and organisers receiving positive feedback. NOPSEMA will consider participation in similar events in the future on a case-by-case basis to ensure the community is provided with further opportunities to interact directly with the regulator.

# What changes require an operator to revise their safety case?

**Recently, some operators have used their internal management of change (MoC) processes to change standards and procedures of which they have committed to in the safety case for the facility. Often, such changes can significantly modify the way an operator manages health and safety risks and, in some cases, weaken the controls put in place to reduce those risks to as low as reasonably practicable (ALARP).**

NOPSEMA recognises that changes in standards may occur and that facility operators are required to have effective means in place to ensure continual and systematic improvement of their safety management systems [reg. 2.6(c)]. However, operators should recognise that such changes may be a significant modification of the arrangements that formed the basis for NOPSEMA's acceptance of the facility's safety case, thereby triggering the requirement for the safety case to be revised and resubmitted to NOPSEMA [reg. 2.30] regardless of the application of the operator's MoC process.

A significant component of NOPSEMA's planned inspections is devoted to verifying an operator's compliance with the facility's safety case. In several recent inspections, NOPSEMA inspectors have identified inadequate implementation of operators' MoC processes in making changes to the arrangements they have described in their safety case. In some cases, operators have not conducted the MoC process prior to changing their arrangements. NOPSEMA considers there is some potential for misuse of the MoC process to arrive at a pre-determined outcome without either appropriately assessing the risk or ensuring the change reduces risk to ALARP.

Similarly, it has come to NOPSEMA's attention that some operators are effectively de-rating certain items of equipment from being controls for a Major Accident Event despite the safety case for the facility specifying the equipment is 'safety-critical'. Such a change may constitute a change in the technical knowledge relied upon to formulate the safety case and therefore may require a revised safety case submission to NOPSEMA under regulation 2.30(1)(a).

Operators should note that making changes in accordance with MoC processes does not provide an exemption from their obligation to:

- revise and resubmit the safety case in accordance with the triggers for safety case revision in Regulation 2.30 of the OPGGS (Safety) Regulations 2009
- ensure that risks are reduced ALARP in accordance with the duties of the operator under Schedule 3 to the OPGGS Act 2006.

Further guidance on when MoC should trigger a safety case revision is available in sections 3.6 and 3.7 of NOPSEMA's Safety Case Lifecycle Management guidance note (N-04300-GN0087).

# Improving stakeholder engagement and transparency

**In 2014, NOPSEMA was endorsed as the sole environment regulator for offshore oil and gas activities in Commonwealth waters through a streamlining process under the *Environment Protection and Biodiversity Conservation Act 1999*. This brought about increased community interest in the consultation practices of titleholders proposing offshore oil and gas activity and in NOPSEMA's decision-making processes.**

In response, NOPSEMA commenced regulatory research throughout 2014 and into 2015 to explore the causes of this increased concern. This work resulted in the development of NOPSEMA's Stakeholder Engagement and Transparency work program. NOPSEMA designed the work program to improve processes implemented by titleholders to comply with the regulatory requirements for consulting with relevant persons, and build community confidence in offshore petroleum environmental management.

In August 2015, NOPSEMA announced the work program to stakeholders along with the next series of initiatives that will seek to improve NOPSEMA's policies, procedures, and guidance on environment plan assessment processes.

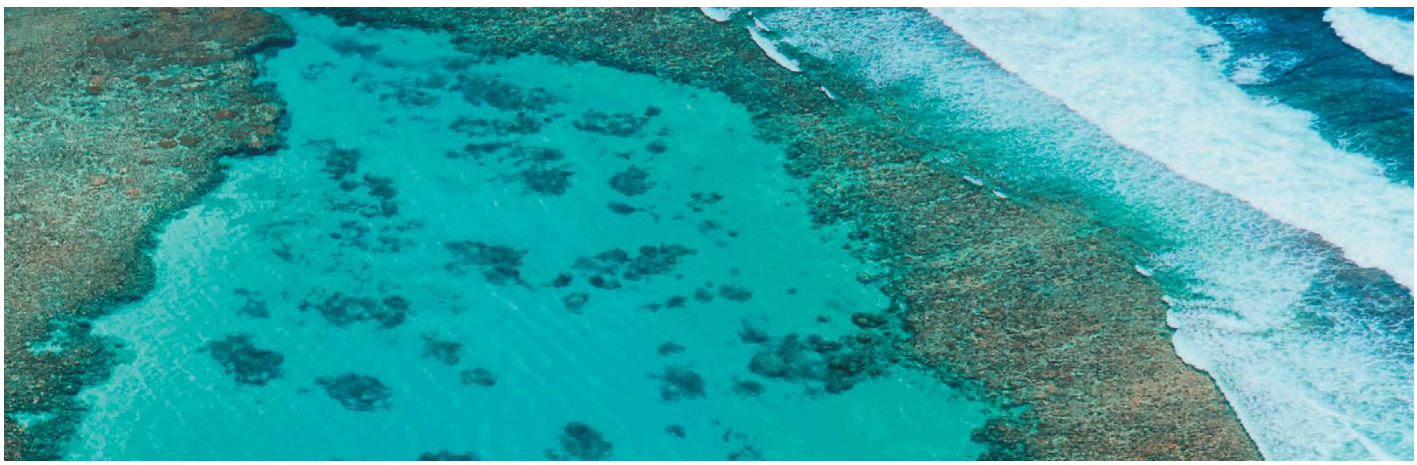
A key part of NOPSEMA's work program is engaging with stakeholders to seek feedback on proposed solutions to improve NOPSEMA's administration of the legislation as well as industry performance. NOPSEMA sought feedback through a range of mechanisms including information sessions, an online survey, face-to-face briefings, and an invitation for written submissions.

NOPSEMA has completed an evaluation of the stakeholder feedback received and will implement changes that reflect this feedback on 1 January 2016. These changes include publishing new guidelines that will assist titleholders to conduct appropriate consultation and clarify the detail from environment plans to be included in environment plan summary documents. The changes will also adjust the way in which NOPSEMA publishes notifications of decisions as well as the status of an assessment and petroleum activity on its website; this will assist stakeholders to understand what stage a petroleum activity has reached.

NOPSEMA will also commence work with the Department of Industry, Innovation and Science to explore the possibility of introducing a public comment mechanism for environment plan submissions. Stakeholder feedback consistently identified this as a means to improve the ability for stakeholders to be afforded natural justice in administrative decision-making by NOPSEMA.

NOPSEMA will continue to consult with all stakeholders as the broader work program is drafted. NOPSEMA plans to roll out the work program in a number of phases, commencing with extensive consultation and involvement of community stakeholders and the petroleum industry. Key features in early phases of the program include providing tailored guidance to non-industry stakeholders, facilitating consultation masterclasses and participating in community offshore oil and gas open days.

For more information on NOPSEMA's work program, an analysis of stakeholder feedback and NOPSEMA's proposed changes see the NOPSEMA's Stakeholder Engagement and Transparency page at nopsema.gov.au.



# NOPSEMA participates in IRF Offshore Safety Conference

**In October, NOPSEMA participated in the 2015 International Regulators' Forum (IRF) Offshore Safety Conference held in Washington, D.C. Hosted by the Bureau of Safety and Environment Enforcement, the conference attracted more than 200 participants from 21 countries. The conference challenged participants to move offshore safety from concepts discussed in the boardroom to effective implementation out in the field.**

The conference provided participants the opportunity to gain new insights into managing risk by asking them to examine risk-related best practices and share the differing approaches in identifying, understanding, and managing risk in their respective jurisdictions. Participants also explored the concept of a social license to operate and regulate, which is essential to both industry and regulators. NOPSEMA's CEO, Mr Stuart Smith, provided a regulators perspective through his presentation entitled 'A Social License to Regulate'. The discussion on this subject emphasised the importance of considering the needs and interests of local stakeholders at the onset of an oil and gas project.

A key message from the conference was the need for regulators and industry alike to make safety a central part of organisational culture, and understand that prioritising efficient sustainable production, corporate reputation, and long-term shareholder value will help to build a culture of safety.

Immediately following the conference, the IRF held their 22nd Annual General Meeting (AGM). At the meeting, IRF members formed three working groups to focus on performance measures, asset integrity, and culture over the coming year. The performance measures group will work towards better identification of risks, tighter focus on system risks, and improved root cause analysis. The asset integrity group will work to understand the factors affecting maintenance backlogs and investigate whether there is any identifiable effect on maintenance activity from current oil price levels. The culture group will aim to identify five key components of organisational culture that impact safety, and find factors that inspectors may observe in the field that are indicators of strong safety culture.

At the AGM, the IRF leadership elected NOPSEMA to the new Management Committee, which also comprises the United States' Bureau of Safety and Environmental Enforcement (Chair) and Norway's Petroleum Safety Authority. NOPSEMA welcomes this appointment and is looking forward to continuing its involvement with the IRF to drive improvements in offshore safety in Australia and globally.

For more information see the IRF website at irfoffshoresafety.com

# Environmental management guidance updated

**As part of NOPSEMA's strategy to continuously improve regulatory practice and the offshore petroleum industry's management of environmental outcomes , the Environment Assessment Policy (PL1347) and Environment Plan Content Requirements Guidance Note (GN1344) have recently been updated. The updates address opportunities for improvement identified in the EPBC Streamlining Review and a number of other continuous improvement initiatives.**

The amendments to the policy and guidance note:

- consolidate and enhance existing guidance on NOPSEMA's streamlined environmental management authorisation process under the EPBC Act
- incorporate NOPSEMA's information paper on Streamlining environmental regulation of petroleum activities in Commonwealth Waters
- provide further clarity on NOPSEMA's environmental management decision-making processes.

The amendments will assist those responsible for the planning and development of environment plans, and those involved in environment plan implementation, maintenance, and ongoing impact and risk management.

In order to establish and maintain compliance under the streamlined environmental management arrangements, it is essential that titleholders continuously identify, evaluate and mitigate all environmental impacts and risks including those matters protected under the EPBC Act. An essential component in maintaining compliance is achieved through a titleholders' implementation strategy within the environment plan in force. The strategy requires titleholders to apply processes to monitor for and implement new or changed environmental requirements that apply to ongoing and future petroleum activities. As an example, NOPSEMA is aware that the Blue Whale Conservation Management Plan has recently been updated by the Department of Environment. Titleholders are reminded that this and other environmental requirements that apply to their activities must be identified and met on an ongoing basis.

To view the updated documents and other environmental resources visit NOPSEMA's website at nopsema.gov.au.

# International Offshore Petroleum Environment Regulators Meeting

**In October 2015, NOPSEMA continued its engagement as a member of the International Offshore Petroleum Environment Regulators (IOPER) by participating in the annual general meeting in Washington D.C.**

The IOPER is a collaborative group of national regulators whose members are dedicated to raising environmental performance standards within the offshore petroleum exploration and production industry, including standards applicable to the industry's normal operations, as well as environmental emergency prevention, preparedness and response.

NOPSEMA continues to work closely with member countries, including observers from Columbia, Seychelles, Guyana and Liberia. The recent meetings confirmed IOPER's commitment to establishing environmental performance indicators to enable global benchmarking of offshore petroleum jurisdictions on oil spill prevention and produced water discharges.

In addition, members agreed to progress oil spill preparedness principles and seismic and the effects of sound on marine life as two key focus areas.

The next stage in the area of principles of oil spill preparedness is likely to involve a joint workshop between regulators and industry on defining appropriate levels of preparedness at the Spillcon Conference to be held in Perth, Western Australia in May 2016.

IOPER members are also initiating discussions to explore common priority areas of interest around seismic activities and the effects of sound on marine life through an international working group and engaging with industry to better understand and manage effects of seismic sound on marine animals. Members are also planning active engagement in connection with the 4th International conference on 'The Effects of Noise on Aquatic Life' to be held in Dublin, Ireland in July 2016.

# Effective consultation and opposing views

**Consultation with relevant persons whose interests, functions, and activities may be affected by petroleum activities is fundamental to environmental management. While good consultation practices involve building relationships that may last months or years, NOPSEMA must determine the appropriateness of a consultation process at the point in time when an environment plan is submitted. This is made more challenging when titleholders and relevant persons hold opposing views on an aspect of the activity or the way it is intended to be managed.**

A recent decision of the New South Wales Supreme Court in the Australian oil and gas industry (*Metgasco Limited v Minister for Resources and Energy* [2015] NSWSC 453) highlights the challenges involved in regulating consultation on environmental management where parties continue to hold opposing views. In the Northern Rivers region of NSW, gas exploration company Metgasco was suspended from operations by the NSW Resources and Energy Minister, due to community opposition. The court found that the focus of 'effective consultation' should be the quality of the process of consultation, rather than the persuasive effect on those being consulted.

NOPSEMA's recognises that in some circumstances titleholders and relevant persons may be unable to reach agreement on an activity proceeding as proposed. In these situations, consultation should be complete to the point that the relevant person knows how any unresolved issues will be presented in the consultation report submitted as part of an environment plan to NOPSEMA.

NOPSEMA guidance on the regulatory requirements requires that consultation would have been carried out:

- iteratively to seek resolution to persistent objections or claims
- in such a way that explored all available options for resolving or lessening an affected person's objection or claim, particularly through control measures
- to the extent that an affected person is aware of how the titleholder is proposing to address their objections or claims
- to the extent that an affected person is aware of how the consultation and their objections or claims are going to be represented to NOPSEMA.

NOPSEMA has expressed the above view in its proposed consultation guidance, which has recently been the subject of public review. Following analysis of stakeholder feedback provided through this process, NOPSEMA intends to publish a 'Consultation requirements under the OPGGS Environment Regulations 2009' guideline on 1 January 2016. This will communicate NOPSEMA's interpretation that appropriate consultation comprises the implementation of an effective consultation process.

# Demonstrating that risks are ALARP; a key element for safety case acceptance

**Recently, a number of safety case submissions have failed to demonstrate that the risks to the health and safety of persons at or near the facility have been reduced to a level that is as low as reasonably practicable (ALARP). This failure has resulted in requests for further information and in some cases rejection of the operator's safety case.**

More specifically, operators have failed to demonstrate that risks have been reduced to a level that is ALARP in two ways:

1. Not providing an appropriately detailed description of their formal safety assessment that provides evidence that fundamental technical and other control measures (whether implemented or otherwise) have been identified. For example, NOPSEMA recently rejected a safety case revision in which the operator failed to identify and consider a viable control measure that would significantly reduce risk. In this instance, the operator proposed to repair a pipeline by isolating the section of pipeline using a single isolation device and numerous procedural controls. The operator failed to consider other risk reduction controls, such as replacing the hydrocarbons within the pipeline with water and reducing the pressure to ambient.

2. Not providing an appropriately detailed description of the formal safety assessment that provides evidence as to how the reasonable practicability of risk control measures is evaluated. For example, NOPSEMA recently requested further written information when an operator did not provide sufficient information to support the rejection of a specific control measure associated with construction-related heavy lifting activities, stating only:

   "…temporary shutdown of the wells during lifting activities, with potential to impact the well bay area has been evaluated and it is concluded that the safety benefits achieved is grossly disproportionate to the cost and practicality (e.g. multiple shutdowns) of implementation."

   In this instance, the operator did not provide sufficient supporting evidence to demonstrate that the gain in risk reduction was grossly disproportionate to the cost, time and resources associated with the controls implementation. This led to a request for further information by NOPSEMA.

It should be noted that in both examples the subject control measures were targeting removing a hazard at source, which is arguably the simplest and most effective means to reduce risk.

To avoid rejection or assessment delay, operators need to ensure their safety case submissions contain an appropriately detailed description of the formal safety assessment that adequately demonstrates how risks have been reduced to a level that is ALARP. Operators should consider a number of factors when identifying control measures necessary to reduce risks to ALARP, these may include:

- control measure hierarchy
- types of control – technical or other
- common mode failures between controls
- layers of protection
- operating circumstances
- focus of control
- effectiveness.

For further information, see NOPSEMA's 'ALARP' guidance note on the Safety Case Guidance Notes page at nopsema.gov.au.

## Hammelmann Australia Pty Ltd convicted and fined

On 14 December 2015, Hammelmann Australia Pty Ltd was convicted and fined $20,000 in the Magistrates' Court of Western Australia, for breaching their duty to comply with the duties of care owed by manufacturers of equipment under clause 12 of Schedule 3 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGS Act). The prosecution relates to an accident that occurred in March 2011 at a facility, where a diver was seriously injured whilst using an underwater high pressure spray gun manufactured by Hammelmann.

For more information see NOPSEMA's 'Hammelmann Australia Pty Ltd - convicted and fined' announcement on the News and Media page at nopsema.gov.au.

# Data reports and statistics

NOPSEMA continuously collects and receives data on the safety, well integrity and environmental management performance of the offshore petroleum industry, as well as its own regulatory performance. This data is regularly analysed and converted into a series of datasets. The latest datasets are published both quarterly and annually under the 'Resources' tab at nopsema.gov.au. They contain many familiar performance indicators such as incident rates, injury rates, hydrocarbon releases and international benchmarks.

# Schedule of events

Events listed below are those at which NOPSEMA is presenting or exhibiting or has an organisational role.

- 24-26 February 2016 — Australasian Oil and Gas Exhibition and Conference, Perth
- 22-25 March 2016 — Offshore Technology Conference, Kuala Lumpur
- 11-15 April 2016 — 18th International Conference and Exhibition on Liquefied Natural Gas (LNG 18), Perth
- 2-5 May 2016 — Asia-Pacific Oil Spill Prevention and Preparedness Conference (Spillcon 2016), Perth
- 5-8 June 2016 — 2016 APPEA Conference and Exhibition, Brisbane

## Feedback

NOPSEMA welcomes your comments and suggestions. 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 at nopsema.gov.au.

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