

the **REGULATOR**

National Offshore Petroleum Safety and Environmental Management Authority



NOPSEMA

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ABOUT NOPSEMA

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is Australia's independent expert regulator for health and safety, environmental management and structural and well integrity for offshore petroleum facilities and activities in Commonwealth waters.

By law, offshore petroleum activities cannot commence before NOPSEMA has assessed and accepted detailed risk management plans that document and demonstrate how an organisation will manage the risks to health and safety to as low as reasonably practicable (ALARP) and the risk to the environment to ALARP and with acceptable environmental impacts.

For more information visit our website at www.nopsema.gov.au.

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FEEDBACK

NOPSEMA welcomes feedback from our stakeholders. Please direct all enquiries about this publication to communications@nopsema.gov.au.

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Message from the Chief Executive

As the national regulator for the Australian offshore petroleum industry, NOPSEMA holds a privileged position in that we have insight into the operations and performance of our duty holders.

NOPSEMA uses this insight to promote and advise on good industry practice and prevent and deter poorer practices. To improve industry performance, we will share lessons learned and draw attention to the performance areas our insight shows require greater focus. We do this through one-on-one meetings, presentations, workshops and publications like *the Regulator* magazine and *Annual offshore performance report*. To prevent and deter practices that pose an unacceptable risk to the health and safety of the offshore workforce and the environment, NOPSEMA also takes direct action where appropriate through our assessments, inspections and enforcement actions.

NOPSEMA has used our insight into the operations and performance of our duty holders to identify four key focus areas that will guide our regulatory activities and our promotion and advisory functions. These focus areas are: 1) preventing major accident events; 2) preventing and managing a loss of well control; 3) improving incident response and spill source control; and 4) improving oil spill preparedness arrangements. NOPSEMA will be exploring these focus areas through three lenses: past (preventing old accidents), present (find one, fix many) and future (emerging trends). In this and future issues of *the Regulator*, NOPSEMA will share lessons and provide advice on each of the identified focus areas. I encourage all duty holders to read and consider the material, and provide NOPSEMA with any suggestions or feedback you may have to communications@nopsema.gov.au.

NOPSEMA's insight also extends to the performance of the international offshore petroleum industry, which we gain as an active member of the International Regulators Forum (IRF) and the International Offshore

Petroleum Environment Regulators (IOPER) group. Members share regulatory practice and experience from their respective jurisdictions to identify and implement work-streams that seek to improve industry performance globally. NOPSEMA is participating in a number of these work-streams such as the continuous improvement of international well integrity standards and establishing a common set of environmental performance indicators to allow for global benchmarking on oil spill prevention and produced water discharges.

I am pleased that in this issue we have published the perspective of three leading international regulators and members of the IRF and IOPER on 'the value of the regulator'. Whilst government, industry and the offshore workforce recognise and understand the value of the regulator, collectively we haven't done enough to shape the community's understanding of the benefits of regulation. To explore this issue, each regulator has provided their own perspective on what is needed to maintain and improve a 'social license to regulate' and how they add value in their own jurisdictions.

NOPSEMA recognises that a valuable regulator builds the community's confidence by being an independent and trusted source of advice and by acting in support of community expectations for the industry. Since 2016, NOPSEMA has implemented a series of initiatives to address community expectations for greater transparency and improved consultation with duty holders with many of these initiatives gaining momentum. For example, NOPSEMA recently established a Community and Environment Reference Group (CERG) and I am pleased to announce that, following expressions of interest, I have appointed eight members to the group. The first meeting of the CERG has now been held, providing NOPSEMA with a better understanding of the varying perspectives on the Australian offshore petroleum regulatory regime as well as NOPSEMA's administration of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations). Advice from the CERG supplements input received by NOPSEMA through other avenues such as the NOPSEMA Advisory Board and bilateral meetings with industry, eNGOs and the union movement.

NOPSEMA also recognises that a valuable regulator is committed to enabling better workforce participation as it is a central element to the safety risk management on an offshore facility. Workforce participation during the development of a safety case helps identify risks and control measures from a perspective honed by practical experience. It also provides the workforce with greater ownership of the safety case and confidence that robust arrangements are in place to protect them. NOPSEMA places considerable emphasis on workforce participation during its planned offshore inspections. Opening and close out meetings include Health and Safety Representative (HSR) participation and our inspectors make every effort to hold separate meetings with HSRs.

The OHS regime administered by NOPSEMA provides the Australian offshore petroleum workforce with a strong degree of assurance of continual improvement and high performance. These features of the regime will be considered as part of the current Senate Standing Committee *Inquiry into work, health and safety of workers in the offshore petroleum industry*. NOPSEMA has provided a submission to this important inquiry which has been published by the committee and is available at aph.gov.au.



Stuart Smith, CEO

NOPSEMA prevents major accident events

NOPSEMA's primary focus is the prevention of major accident events (MAE) to protect the safety of people at facilities and the environment. It is important to remember that the duty to prevent MAEs remains a shared responsibility across operators, titleholders and equipment suppliers. However, NOPSEMA's role is often highlighted as our regulatory activities continue to identify situations where inadequate or failed barriers and systems are likely to lead to a MAE.

In 2017, NOPSEMA's compliance monitoring and investigation of incidents involving failed barriers identified more than 1358 non-compliances that are being corrected through inspection recommendations. Subsequent inspections have sought to verify the follow-up and completion of all recommendations to ensure a return to compliance. Where there have been more serious breaches, such as those that pose a significant threat, NOPSEMA took enforcement action including the issuing of 32 improvement and prohibition notices by NOPSEMA inspectors. These enforcement tools are well recognised as highly effective in driving a return to compliance as they represent a timely and targeted action against non-compliance when compared with more punitive-focused measures such as prosecution.

The enforcements actions have ensured the correction of underlying issues in barriers and systems that were in place to prevent MAEs and/or major loss of containment events. These issues have covered areas such as inadequate testing of critical equipment to ensure integrity and control ignition sources, control of work systems to ensure personnel do not contact energised electrical systems, containment of hydrocarbons in pressured systems used for well testing and maintenance of safety critical equipment. Importantly, NOPSEMA's wider promotion and communication of identified issues has served to prevent MAEs in a number of areas outside of NOPSEMA's jurisdiction. This impact has been achieved by sharing and coordinating compliance actions with our regulatory counterparts through the International Regulators Forum (see *Global communications on tolerance of DP systems to human error* on page 7).

Maintaining a goal of zero MAEs and preventing loss of containment events is critical to delivering a safe and environmentally responsible offshore industry. Unfortunately, operators have failed to prevent accidents resulting in injury to workers on several occasions across the last year. This performance follows an otherwise outstanding record in 2016 and into 2017 of zero serious injuries and declining dangerous occurrences. The failures highlight the need for operators to remain vigilant on MAE prevention and at the same time personnel safety. NOPSEMA's 2018 OHS inspection program will include aspects that relate to personal safety and will be informed by NOPSEMA's investigations into the four major injuries of which equipment design and human performance were the root cause. Fortunately, the workers injured in these incidents are recovering and avoided more serious outcomes.

NOPSEMA will release its *Annual offshore performance report* in mid-2018. This publication will provide an annual overview of the offshore industry's OHS and environmental management performance with more details on compliance and enforcement outcomes in 2017.



Global communications on tolerance of DP systems to human error

Since 2016, NOPSEMA has been raising concerns with the offshore petroleum industry about the susceptibility of dynamic positioning (DP) systems to human error. This concern originated from an incident in Australian Commonwealth waters where a vessel unintentionally drifted off-location. Although no-one was injured, the lives of divers working on the seabed nearby were put at risk.

In highlighting this issue, NOPSEMA drew the attention of our international regulatory counterparts. This resulted in the International Regulators Forum (IRF), of which NOPSEMA is a member, agreeing to highlight the issue (if relevant) in their respective jurisdictions to ensure manufacturers take steps to ensure DP systems are tolerant to human error. The IRF also published NOPSEMA's *Dynamic positioning must be resilient against human error* article on their website at irfoffshoresafety.com.

NOPSEMA has written to global DP manufactures to secure confirmation on the steps they have taken regarding the tolerance of their systems to human error. This communication included the message from the IRF meeting and an updated timeline of events and regulatory actions on the issue. NOPSEMA has similarly written to the International Maritime Organisation, International Association of Drilling Contractors, International Marine Contractors Association, International association of Oil and Gas Producers, Energy Institute and the Marine Technical Society, seeking any input they may have on the issue.

NOPSEMA is now considering the responses it has received and will summarise and publish those responses in the next issue of *the Regulator* magazine.

False alarms during maintenance of safety-critical equipment

PREVENTING MAJOR
ACCIDENT EVENTS

NOPSEMA often receives notifications of false alarm incidents at offshore facilities.

False alarms initiate unnecessary muster, which forces personnel to hurry towards the assembly and introduces the risk of minor injury. They also add to personnel fatigue which could influence work performance.

A review of data from January 2015 to January 2018 identified that, of the 372 alarm/muster notifications NOPSEMA received during that period, 115 of these represented false alarms during maintenance. These false alarm incidents are common during maintenance of safety-critical equipment, with override systems being one of the main issues.

A closer break-down of override related incidents showed that a significant proportion (62%) of overrides have not been applied prior to maintenance. The top root causes of these incidents, as identified by operators, involve problems with following procedures. NOPSEMA found that there are notable instances where work instruction steps were not followed correctly when implementing an override.

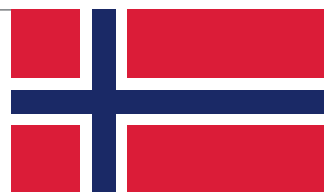
Operators are advised to ensure that overrides are successfully placed before conducting maintenance activities. Furthermore, it is always beneficial to keep the maintenance procedures clear, simple and unambiguous to avoid any potential confusion that may escalate to a false alarm incident.

The value of the regulator

The International Regulators' Forum (IRF), is the representative body for offshore petroleum safety regulatory organisations. Formed in 1993, the IRF exists to drive improvements in health and safety through shared knowledge, perspectives and collaboration on joint program initiatives. NOPSEMA is Australia's representative on the IRF and plays an active role, including membership of the IRF Management Committee.

The 2018 Annual General Meeting of the IRF is being held during June 2018 in Aberdeen to coincide with the Safety 30 - Piper Alpha Legacy Conference. The Conference includes an IRF program that will explore global trends and developments in the regulation of petroleum safety. In preparing for the conference, NOPSEMA has sought the perspectives of the Chief Executive Officers of three of its leading international counterparts on the value of the regulator. The CEO of NOPSEMA will also lead a session on this topic at the Conference.

Anne Myhrvold, Director General, Petroleum Safety Authority, Norway



How does the regulator add value to the petroleum industry in your country?

Pursuing petroleum operations is about managing value – and values. Our role as the regulator involves setting parameters for the industry and supervising that the players are maintaining a high standard of health, safety, the environment and emergency preparedness, and thereby also contributing to creating the greatest possible value for society. We see that the priorities we set have an effect. The areas or challenges we put on the agenda attract greater attention from the industry. We supervise that the companies comply with the regulations and accept the responsibility they are given. We contribute to developing new expertise, encourage sharing of knowledge between the companies, facilitate learning from incidents and prompt the various players in the industry to collaborate. At the same time, it is important to emphasize that value for both society and our industry is created through many conditions which are not related to the economic aspect. Petroleum operations are complex, working life is complex, and these complexities will present many dilemmas and choices. The point is how the industry weighs its values against each other, how it actually chooses safety – how it fulfils the ambition of putting safety first. This is also the starting point for our main issue in 2018: valuing safety choices. We have hereby invited the industry to a broad debate on how the overarching value concept is to be understood, and the place of safety within it.

How do changing community attitudes affect the petroleum industry and the regulator?

The petroleum sector ranks today as Norway's largest industry measured by value creation, government revenues, investment and export value. Support for the industry is relatively stable in both political circles and society as a whole. Paying great attention to health, safety and the environment is fundamental for this. Taking care of safety is crucial for the whole industry. But that calls for a long-term commitment, constant attention and solid attitudes. The industry's most important job is to conduct its operations in a way which avoids harm to people, the environment and material assets.

What is needed to maintain and improve a social license to regulate?

We must continue to be a clear and independent regulator, be perceived as credible in our role, and discharge our responsibility in the best possible manner. Norway's Storting (parliament) has set very ambitious goals for work on health, safety and the environment in the Norwegian petroleum sector. The companies are responsible for taking care of safety and for ensuring continuous improvement, and it is crucial that they continue to work actively on maintaining and continuing to develop today's level of safety so that serious accidents and incidents are avoided. It is crucial that we use our resources and powers in a positive way, and supervise that the companies are living up to their responsibility.

Scott Tessier, Chair & Chief Executive Officer, Canada-Newfoundland and Labrador Offshore Petroleum Board, Canada



The Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) is one of three Canadian regulators of its kind, providing oversight since 1986 of an area of more than 1.8 million square kilometres off the east coast of Canada, from which 25% of Canada's conventional light crude is produced. Scott Tessier has served as the Board's Chair and Chief Executive Officer since 2013.

How does the regulator add value to the petroleum industry in your country?

First and foremost, the C-NLOPB adds value through the effective regulatory oversight of the industry's offshore petroleum-related activities, with a view to reducing risks to people, the environment and facilities to levels that are as low as reasonably practicable. An efficient and effective regulator is critical to the global competitiveness of the local industry, which is a significant contributor to the provincial and Canadian economies. In the Canada-Newfoundland and Labrador Offshore Area, we serve as trusted "eyes and ears" for tightly-knit community that has seen more than its share of tragedy in the offshore petroleum and fishing industries. Because of this, confidence in the regulator is integral to public support for the oil and gas industry offshore Newfoundland and Labrador.

How do changing community attitudes affect the petroleum industry and the regulator?

The Ocean Ranger tragedy and two catastrophic helicopter crashes have been formative to the culture of the Canada-Newfoundland and Labrador Offshore Area, with considerable public scrutiny and an understandably deep focus on offshore safety. More recently in Newfoundland and Labrador, the economic and fiscal situation has been fairly dire, due in part to low oil prices. This has affected local petroleum industry and spinoff activities, government royalties and the ability of Newfoundlanders and Labradorians to find good jobs in Alberta's oilsands. For the C-NLOPB, regulating through the industry downturn has meant increased focus on corrective and preventative maintenance by operators, along with continued emphasis on industry training and competency. As oil prices rebound, offshore Newfoundland and Labrador's significant resource potential is continuing to draw a high degree of interest. Governments are transitioning from a highly prescriptive regulatory regime to a more performance-based approach, which is expected to be fully in place the next couple of years. This will require careful management of change, engagement with operators, the workforce and the public, and updated guidance from Canada's offshore petroleum regulators. The Canadian government is also placing an unprecedented priority on the rights of Indigenous peoples, with the Duty to Consult rapidly evolving through government policy and priorities, along with court decisions. Many Canadians are also looking for real action in the fight against climate change, with increased awareness of the gradual transition away from fossil fuels towards renewable energy sources. All of these factors constitute the current external and authorizing environments for the C-NLOPB and other Canadian regulators.

What is needed to maintain and improve a social licence to regulate?

Maintaining and improving a social licence to regulate first requires a recognition that it is important to do so, then putting in the time and effort to ensure how we deliver our mandate is well understood by stakeholders and the general public. The social licence to regulate is grounded in public engagement, transparency, accountability and competence on the part of regulators. As the saying goes, "the main thing is to ensure that the main thing remains the main thing", meaning regulators must maintain unwavering focus on safety and environmental protection, while at the same time being more sensitive and adaptive to changes in the external environment than ever before, as the world becomes more accessible and the pace and scope of change is shaped through social media. In the C-NLOPB's case, we also have regulatory responsibility for land tenure, resource management and local benefits, all of which are also very important to the public, in whose interest we serve.

Wendy Kennedy, Chief Executive, Offshore Petroleum Regulator for Environment and Decommissioning, United Kingdom



How does the regulator add value to the petroleum industry in your country?

OPRED's parent department (the Department for Business, Energy and Industrial Strategy) aims to deliver an economy that works for everyone by delivering an ambitious Industrial Strategy, promoting responsible business practices and ensuring that the UK has a reliable, low cost and clean energy system. Through its regulatory activities, OPRED helps to deliver these aims by working collaboratively with the petroleum industry to promote good practice and enable compliance. Routine engagement with industry (both nationally and internationally), the communication of lessons learned and the provision of up to date and useful guidance, policies and procedures ensures that OPRED creates a stable environmental regulatory regime which provides Industry with certainty; allowing them to operate and invest in the sector, secure in the knowledge of what is expected of them.

How do changing community attitudes affect the petroleum industry and the regulator?

The BEIS Energy and Climate Change Public Attitude Tracker provides an insight into public attitudes towards the use of fossil fuels, and by extension, the petroleum industry. It reveals that public concern in relation to climate change is high, with 71% of respondents saying that they were very or fairly concerned about climate change. It also reveals significant opposition to fracking and significant support for the use of renewables. Combined with wider public concern about pollution and damage to the environment as a whole, which is reflected in the environmental legislation being issued at a national and European level, OPRED is required to perform a delicate balancing act to regulate industry without stifling it. It must take account of legitimate public concerns regarding the environment, while still operating in a pragmatic, proportionate and consistent manner, which aligns with the Department's industrial strategy and maintains a UK offshore oil and gas industry that works for everyone.

What is needed to maintain and improve a social license to regulate?

Maintaining a social licence to regulate is crucial if the public is to have confidence in the government bodies established to effectively oversee the activities of oil and gas activities. Key to maintaining the social licence to regulate is considering the needs and interests of stakeholders at the very outset of an oil and gas project through open and transparent consultation. It also requires OPRED to clearly explain the standards that are expected of companies; the regulatory oversight that is in place to ensure projects provide benefits to the local communities while preventing or minimising the negative consequences; and where regulations are contravened, being seen to take effective enforcement action to deter recurrences.

Preventing and managing loss of well control: A study of well integrity failures in offshore Australia

Where there is damage to, or failure of, well-related equipment that has led or could lead to a loss of well integrity, a titleholder is required by the legislation to report the incident to NOPSEMA. In 2018, a NOPSEMA focus is to review these reports and perform inspections to identify, analyse and share information on the prevalence, management and remediation of well integrity failures across the Australian offshore petroleum industry.

NOPSEMA's objective is to:

- determine the prevalence and causes of different well integrity issues (e.g. tubing leaks, casing leaks, sustained casing pressure, failures of downhole safety valves)
- understand how titleholders manage their ageing well inventory
- examine the different ways companies respond to well integrity issues – for example by applying a well failure model (WFM) and/or conducting risk assessments on a well-by-well basis
- share results with industry (without identifying individual titleholders) to help inform well integrity decision-making and encourage improvements in technology and practices.

NOPSEMA's findings so far have already identified opportunities for improvement. For example, titleholders may wish to consider using a WFM to streamline their response to a well integrity issue and simplify the reporting process of well incidents. A WFM should list the common modes of well failure with corresponding action plans and response periods. When a well incident occurs, a titleholder would simply quote to NOPSEMA the number of the mode of failure of that particular incident. Ideally, a description of the WFM should be included in the titleholders well operations management plan to be assessed by NOPSEMA.

ISO 16530-1: 2017 Petroleum and natural gas industries — Well integrity — Part 1: Life cycle governance provides a generic WFM that titleholders may wish to consider as a starting point. NOPSEMA has accepted this international standard as 'good industry practice', for more information see the *Continual improvement of well integrity standards* in [Issue 2: 2017 of the Regulator](#).

To promote good industry practice, NOPSEMA will continue to share its findings and lessons learned with the industry through a workshop later in 2018 and further articles in this magazine. To stay up-to-date subscribe to well integrity news and *the Regulator* at nopsema.gov.au/subscribe.





HOW NOPSEMA ENGAGES WITH HSRs



BEFORE AN INSPECTION



Prior to a planned inspection, NOPSEMA inspectors confirm the dates of the inspection with the facility operator, issue an inspection brief and hold an onshore meeting with the facility operator.



All HSRs have the power to request NOPSEMA to conduct an inspection at their workplace.

IN 2017, NOPSEMA INSPECTORS MET WITH HSRs 80 TIMES, IN 100% OF FACILITY-BASED OHS INSPECTIONS

DURING AN INSPECTION



During an inspection, NOPSEMA inspectors hold entry and exit meetings with the facility operator, meet privately with HSRs, and prepare an exit brief for the facility operator.

Inspection scope items include major accident event and OHS control measures, previous inspection recommendations and enforcement actions, reported incidents and dangerous occurrences, and requests and/or complaints.

Where necessary, NOPSEMA inspectors will initiate enforcement action.

Where available, HSRs are expected to attend the entry and exit meetings with NOPSEMA and the facility operator, and to meet privately with NOPSEMA inspectors.



HSRs have the power to accompany NOPSEMA inspectors during any inspection and to be present at interviews between NOPSEMA inspectors and work group members.

AFTER AN INSPECTION

After an inspection, NOPSEMA inspectors prepare a draft inspection report and hold an onshore feedback meeting with the facility operator. NOPSEMA must issue a copy of the final report to the facility operator and any other relevant parties.

The facility operator must provide a copy of the inspection report to the health and safety committee or, if there is no committee, to the HSR for a designated workgroup.

HSRs can contact the NOPSEMA focal point inspector for their facility to raise any concerns they may have, or for assistance/advice on understanding the legislation, using their powers and engaging with facility management.



IN 2017, NOPSEMA INSPECTORS MADE 11 RECOMMENDATIONS* RESULTING FROM THEIR MEETINGS WITH HSRs.

Three to address safety issues raised during the meeting, three to ensure all HSRs receive training, four to post/update a list of HSRs on the facility noticeboard, one to implement workplace arrangements

*A recommendation requires the facility operator to implement corrective actions and report action progress to NOPSEMA.

Improved consultation and transparency gains momentum

In November 2017, efforts to improve consultation and transparency were boosted when the Minister for Resources and Northern Australia, Senator the Hon Matt Canavan, announced a series of changes to implement the recommendations of the Offshore Petroleum Consultation and Transparency Review. The changes include the full publication of environment plans that propose exploration activities for a period of public comment.

Since the announcement, NOPSEMA has been providing support to the Department of Industry, Innovation and Science to develop amendments to the Environment Regulations that will facilitate the implementation of the changes. NOPSEMA will continue to work with the Department and industry partners to support these changes and whilst continuing to progress its own initiatives to improve transparency. To stay up-to-date with the department's progress, visit industry.gov.au.

Following an expression of interest, eight members have been appointed to NOPSEMA's recently established Community and Environment Reference Group. This group will provide NOPSEMA with an improved understanding of the varying community's views on offshore petroleum environmental management and NOPSEMA's administration of the Environment Regulations.

Since July 2017, NOPSEMA has also been coordinating a Transparency Taskforce. Comprised of government, industry and community stakeholders the taskforce seeks to align cross-jurisdictional efforts to improve transparency and community confidence in the offshore petroleum regulatory regime. This year, the taskforce will begin publishing its meeting records and work-stream updates on NOPSEMA's website to communicate its progress and achievements.

The NOPSEMA-initiated Reference Case Project has progressed with the National Energy Resources Australia (NERA) agreeing to become the interim coordinator. NERA will be working closely with industry and other stakeholders to determine a sustainable model for the ongoing review, maintenance and development of environmental reference cases whilst NOPSEMA will focus on its role providing regulatory advice on reference cases that are relevant to offshore petroleum environment plans. Updates on the project will be available on NERA's website at nera.org.au.

NOPSEMA recognises that whilst there has been good progress to date there are further improvements, some of which are already underway, that are necessary to improve community confidence in the regulatory regime. In 2018, NOPSEMA will continue to progress transparency initiatives and encourage others to do the same. To stay up-to-date with NOPSEMA's efforts subscribe to environmental management news at nopsema.gov.au/subscribe.

SMOOTHING THE TRANSITION TO INCREASED TRANSPARENCY



David Christensen¹, Dr David Strom¹ and Matthew Smith²

¹ National Offshore Petroleum Safety and Environmental Management Authority ² National Energy Resources Australia

1. DEFINING THE PROBLEM

The offshore petroleum regulatory regime has not kept pace with the expectations of the community.

When NOPSEMA was established in 2011, the bar was raised for the environmental management of offshore petroleum activities.

NOPSEMA has worked closely with industry to help them adjust to the regime. However, the regulatory approval process has not kept pace with ever-growing community expectations regarding transparency and accountability.

The purpose of this poster is to describe a new, cross-jurisdictional approach to simultaneously increase transparency whilst reducing unnecessary regulatory burden.

COLLABORATION

Engagement between the regulator, industry, community and other government agencies to solve the problem.

ADAPTATION

Continuously revisiting our understanding of the problem to develop truly effective solutions for eliminating or mitigating the problem.

2. IDENTIFYING THE STRATEGIES AND TOOLS

THINKING DIFFERENTLY

Adopting a problem-solving approach based on tailor-made solutions that were informed through regular stakeholder feedback.

ENABLING PEOPLE

Establishing dedicated project teams and resources to enable efficient diagnosis and solution development independent of existing team structures and responsibilities.

3. MEASURING THE OUTCOMES

AMENDING THE ENVIRONMENT REGULATIONS TO GIVE EFFECT TO INCREASED TRANSPARENCY

RESTORING COMMUNITY CONFIDENCE IN THE AUSTRALIAN OFFSHORE PETROLEUM REGULATORY REGIME

REDUCING THE SIZE AND COMPLEXITY OF ENVIRONMENT PLANS

Stakeholder Engagement & Transparency Work Program

- NOPSEMA introduced this work program to improve community confidence in the offshore petroleum regime and the environmental consultation practices of oil and gas companies.
- Following extensive consultation with a diverse range of stakeholders, 18 initiatives were identified as priority actions including access to information, clearer guidance and more engagement opportunities.



Policy Change

- NOPSEMA worked closely with the Department of Industry, Innovation and Science to review the consultation and transparency requirements in place under the Environment Regulations.
- The Government recently announced policy changes arising from the review which will further assist the community's understanding of the process used to decide where, when and how offshore petroleum activities take place.



Offshore Petroleum and Greenhouse Gas Storage Act 2006



2015

2016

2017

2018

Transparency Taskforce

- NOPSEMA established a cross-jurisdictional taskforce to align efforts between government agencies, relevant stakeholders and offshore petroleum titleholders.
- The taskforce aims to improve both community confidence and reduce regulatory burden in the offshore petroleum regime.

Reference Case Project

- The Reference Case Project is a novel concept which aims to identify and capture common environment plan content and typical environmental management practices. Reference cases will establish a knowledge base that titleholders may refer to when preparing an environment plan.
- Reference cases can form part of an environment plan without the need to duplicate its content. This will allow focus to be given to aspects of the activity that are different, innovative or more challenging to manage.

BENEFITS OF 'REFERENCE CASES'



BETTER DECISIONS



REDUCED BURDEN FROM CONSULTATION



FASTER EP DEVELOPMENT PROCESS



FOCUS ON KEY ISSUES



REDUCED ASSESSMENT TIMEFRAMES



Qualification of offshore medics

Personnel employed as medical service providers (i.e. ‘medics’) on offshore petroleum facilities serve a safety critical function in the event of a medical emergency or major accident event (MAE). Medics provide medical care to injured and sick personnel whilst awaiting the arrival of medical evacuation (medivac) services. In remote offshore locations and during inclement weather such as cyclones, medics may be required to maintain medical care of injured or sick personnel for a lengthy period. Medics require qualifications and experience which enable them to preserve life and prevent escalation of injury or illness.

Facility operators have a duty of care to ensure that the risks associated with medical emergencies are reduced to a level that is as low as reasonably practicable (ALARP). The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGG Act) and associated Offshore Petroleum and Greenhouse Gas Storage Safety Regulations 2009 (Safety Regulations) stipulate that operators must provide appropriate medical services at a facility, and that personnel must have the necessary skills, training and ability to undertake routine and non-routine tasks.

Following a public comment period, NOPSEMA has finalised and published a new guidance note on offshore medic qualifications. NOPSEMA considered feedback from a variety of stakeholders, including facility operators and medical service providers, and actively sought feedback from the following organisations:

- Australasian College of Emergency Medicine
- Australian College of Emergency Nursing
- Australian College of Rural and Remote Medicine
- Australian Petroleum Production and Exploration Association
- Council of Remote Area Nurses of Australia
- International Association of Drilling Contractors
- International Marine Contractors Association
- Institute of Remote Healthcare
- Paramedics Australasia
- St John Ambulance

The *Qualifications of medical personnel on offshore petroleum facilities* guidance note (nopsema.gov.au/assets/Guidance-notes/A550270.pdf) is available on NOPSEMA’s website.

Summary: Qualifications of medical personnel on offshore petroleum facilities guidance note

Offshore medical personnel should possess a current medical professional registration with a relevant regulatory body, and have work experience in emergency or remote medical settings.

In determining the required number of medical personnel and the qualifications they should possess, operators should apply a risk-based approach that considers:

- potential MAEs and occupational injuries
- possible illnesses and health concerns
- number of personnel on-board
- medical evacuation response times in the range of expected conditions (including storm/cyclone and night flights)
- risks associated with medical evacuations.

Report: Safety improvement initiatives

In 2012, NOPSEMA collected survey data from a number of facility operators regarding the types of safety performance improvement initiatives being implemented on their facilities at the time. NOPSEMA readministered a modified version of the survey in 2017, in consultation with the Australian Petroleum Production and Exploration Association, the International Association of Drilling Contractors, and the International Marine Contractors Association. NOPSEMA received responses from facility operators and wells titleholders representing 85% of the facilities and 98% of the wells active in Commonwealth waters at the time the survey was administered.

NOPSEMA has published the results of the survey in the *Safety improvement initiatives in the Australian offshore petroleum industry* report (nopsema.gov.au/assets/Safety-resources/A576907.pdf) on its website. The report provides an overview of the data collected from the 2017 survey, excluding identifying information. Comparative responses from the 2012 survey are also included where available, however it should be noted that the industry profile changed significantly between 2012 and 2017, so changes in aggregated responses should not be taken to reflect changes in the practices of individual organisations.

The survey report provides a broad view of safety improvement initiatives across the industry, with the aim of sharing practices as an opportunity for all of industry to learn and drive continuous improvement. NOPSEMA will use the survey results to identify potential promotion and advice topics that are of most benefit to industry.

Participation in the survey was voluntary, and NOPSEMA would like to thank the 32 operator and titleholder organisations that chose to collaborate in this continuous improvement opportunity.

New and updated environmental management guidance

PROMOTION
AND GUIDANCE

INCIDENT RESPONSE &
SPILL SOURCE CONTROL

NOPSEMA has recently published new and revised guidance relating to considerations for five-year environment plan revisions and oil pollution risk management. This guidance provides titleholders with advice on the regulatory requirements for spill risk management and is an important reference when preparing new or revised environment and oil pollution emergency plans.

In the *Considerations for five-year environment plan revisions* information paper, NOPSEMA identifies key assessment and compliance focus areas for the next five years, highlights some recent updates to the legislation and provides guidance of which titleholders should be aware when preparing a five-year revision. Advice is also provided on the scoping of an environment plan as broadly as possible, so that it remains relevant throughout its maximum five-year period and as a result does not require additional revisions.

The *Oil pollution risk management* guidance note has also been updated to address feedback received following industry and stakeholder consultation on the first revision of the guidance which was published in February 2017. Whilst NOPSEMA has incorporated suggested improvements and clarifications from industry and other stakeholders into the guidance, it has also been updated to further improve the clarity of NOPSEMA's communication on key focus areas relevant to oil pollution risk management. In particular, NOPSEMA's strategic focus on oil spill preparedness arrangements including the control and treatment of a spill at its source, the protection of priority receptors and improvement to response capability and timeliness through further cooperative industry arrangements.

To access the new and updated guidance see the Environment Resources page at nopsema.gov.au.

Industry's obligations to meet community expectations

To quote Mr Jaggers in *Great Expectations*, “take nothing on its looks, take everything on evidence. There is no better rule.” The evidence before the offshore petroleum industry and government is that community expectations continue to grow, the pace of technological change is increasing, and new risks associated with petroleum operations are emerging. How industry and government respond to this evidence and the degree to which the industry is able to adapt through continuous improvement, will ultimately determine its future success.

As a technically complex industry, offshore petroleum faces challenges across its operations to raising the bar through continuous improvement. Despite the various community misgivings of ‘big oil’ one might see flash across our screens via Twitter and Facebook, progress has been made. The driver of this success has been one simple question, what more could be done? At the most basic level, this question forms the basis of an objective-based regulatory regime, the very type adopted by Australia with the introduction of the safety case approach in 1996.

From tragic beginnings following the 1988 *Piper Alpha* disaster in the North Sea, objective-based regulation of offshore petroleum was established in the hope that such a disaster would never be repeated. Objective-based regulation is centred on continuous improvement, and recognises that the party creating the risk is best placed to manage and mitigate the risk, by having the knowledge, decision-making authority, and on-the-ground control and resources.

As Australia's national offshore petroleum regulator, NOPSEMA administers the objective-based regulatory regime under the *Offshore Petroleum and Greenhouse Gas Storage Act* and associated Regulations. The regime is administered by highly experienced and qualified experts from specialised backgrounds including safety, engineering, and environmental science. Strengthening NOPSEMA's position is the independence from political and economic concerns, provided through the legislation.

Our regulatory approach recognises that no two petroleum activities are the same, just as no two operating environments are the same. Through permissioning documents, duty holders make commitments specific to their activities, which are assessed by NOPSEMA as to their appropriateness. If accepted, these commitments act as conditions of approval, to which duty holders are held to account through NOPSEMA's targeted inspection and compliance programs.

While NOPSEMA seeks to bring about positive change through advice and promotion, recent actions confirm that the issuance of general directions and notices also have an important role in bringing about significant improvements relatively quickly. Prosecutions always remain an option, but an objective-based regime should seek the most effective compliance actions to ensure risk and impact are minimised as quickly as possible.

It is no longer good enough to tick a box and be content that all is well. Just as the UK determined that another *Piper Alpha* type incident was a risk too great to take, the Australian community does not, and offshore petroleum should not, accept anything less than a regulatory approach that seeks every opportunity to improve worker safety, reduce environmental impact, and demonstrate a genuine commitment to achieving this by continually raising the bar.

Great expectations they may be, but anything less is simply unacceptable.

What is a permissioning document?

A permissioning document under the *Offshore Petroleum and Greenhouse Gas Storage Act* is an Environment Plan, a Safety Case or a Wells Operations Management Plan. A permissioning document defines the range of activities that are allowed to be conducted, and specifies the control measures that must be applied to each activity. Such arrangements include:

- the control measures that are implemented to reduce risk to as low as reasonably practicable
- the performance standards used to ensure control measures perform their required function
- the design standards and specifications that have been adopted
- the features of activities or facilities that constrain the extent of the operational boundaries.

Regulation in operation

Australia's objective-based regulatory regime sets high-level requirements that responsible parties must demonstrate can be achieved, but does not prescribe how those requirements must be met. Rather the *Offshore Petroleum and Greenhouse Gas Storage Act* (OPGGs Act) prescribes the content requirements of permissioning documents, and imposes general duties upon the various parties.

Titleholders and facility operators describe how they will achieve the objectives under the OPGGS Act through the commitments made in their permissioning documents, along with reasoned and supported arguments as to how these commitments meet the objectives established in the legislation.

Such commitments could be described as a set of 'rules' that titleholders and operators set to facilitate compliance. The OPGGS Act requires that NOPSEMA must be satisfied the objectives or 'rules' will be met through the commitments or risk management and mitigation approaches provided for through the permissioning documents.

NOPSEMA's enforcement policy is available at <https://www.nopsema.gov.au/safety/enforcement>.



Effective frontline hazard identification tools

Frontline hazard identification tools such as the 'Take 5 for safety' and 'STOP for safety' are commonly used in the offshore petroleum industry as one of the layered defences to prevent accidents and dangerous occurrences. These types of tools are typically used as a final check for hazards prior to the commencement of a task. The contents of such tools vary widely, ranging from a few open-ended prompts through to exhaustive checklists.

Anecdotal evidence suggests frontline hazard identification tools are most effective when members of the workforce have ownership of their development, implementation and use. Health and Safety Representatives (HSRs) are ideally situated to engage with the workforce and facilitate the development and implementation of these types of tools, provided they have sufficient resources (e.g. time, budget) and interest in doing so. When members of the workforce are able to collaborate in developing, implementing and refining the tool, take-up is likely to be stronger and sustained over time. This is particularly true where the tool is designed to be dynamic and able to evolve in response to learnings and changes.

NOPSEMA warns against the enforcement of daily targets or key performance indicators (KPI) for frontline hazard identification tools. This approach risks workforce disengagement and perception of the tool as a performance management device. In such situations, the objective of the tool can be diluted, changing from effective frontline hazard identification to 'counting cards'. This impact can be made worse if accident investigations focus on an individual's 'failure' to use the frontline tool correctly as a means of assigning blame, rather than exploring potential weaknesses in higher-level control measures. Such bureaucratic use of these tools discourages proactive behaviours to the detriment of the intended process (hazard identification) and outcome (risk reduction).

The use of frontline hazard identification tools can prove to be a valuable layer of defence against accidents and dangerous occurrences. They are most successful when members of the workforce have been involved in their development, implementation, and ongoing refinement, and when they have not been co-opted into a performance management tool or perceived to have been reduced to a KPI. Their design should be dynamic and adaptable to ensure that they remain relevant over time.

What role do titleholders play in safety case acceptance?

As we all know, registered operators of facilities have legal responsibilities for safety cases under the Safety Regulations. However, when it comes to oil spill response and recovery, NOPSEMA believes that titleholders for drilling activities have a role to play in ensuring the facilities involved in the oil spill response and recovery have in place, as far as practicable, relevant safety case acceptances.

Titleholders for drilling activities will often make commitments in their environment plan, which contains an Oil Pollution Emergency Plan (OPEP), for vessels to be engaged in installing capping stacks on wells following a blow-out, and drilling one or more relief wells in response to a loss of well control event. Vessels engaged in installing capping stacks, and drilling rigs engaged in drilling relief wells, would be considered to be ‘facilities’ under the definition given in Clause 4 of Schedule 3 to the OPGGS Act. As such, these vessels and structures would require an accepted safety case that adequately addresses oil spill response or recovery activities before they begin such activities.

A titleholder will also typically make commitments in the environment plan and OPEP for timely oil spill response and recovery. It is therefore incumbent on that titleholder to make sure the facilities that will be engaged for oil spill response and recovery activities can do so in a timely manner. A significant part of this is ensuring that, where practicable, relevant safety case acceptances are either in place, or acceptance can be reasonably achieved, within the timeframes committed to in the OPEP. Not only does this apply to drilling rigs and capping stack installation vessels, but it could also apply to the drilling rig involved in the oil spill if, as part of the oil spill response, other vessels are engaged in activities which would make them an ‘associated offshore place’ to that facility (e.g. vessels conducting diving activities, or vessels that may be exposed to risks from the host facility other than normal marine risks). It should be noted that other vessels which are neither facilities nor associated offshore places do not require a safety case e.g. vessels involved in oil spill clean-up activities outside the impact distance of credible fires and explosions.

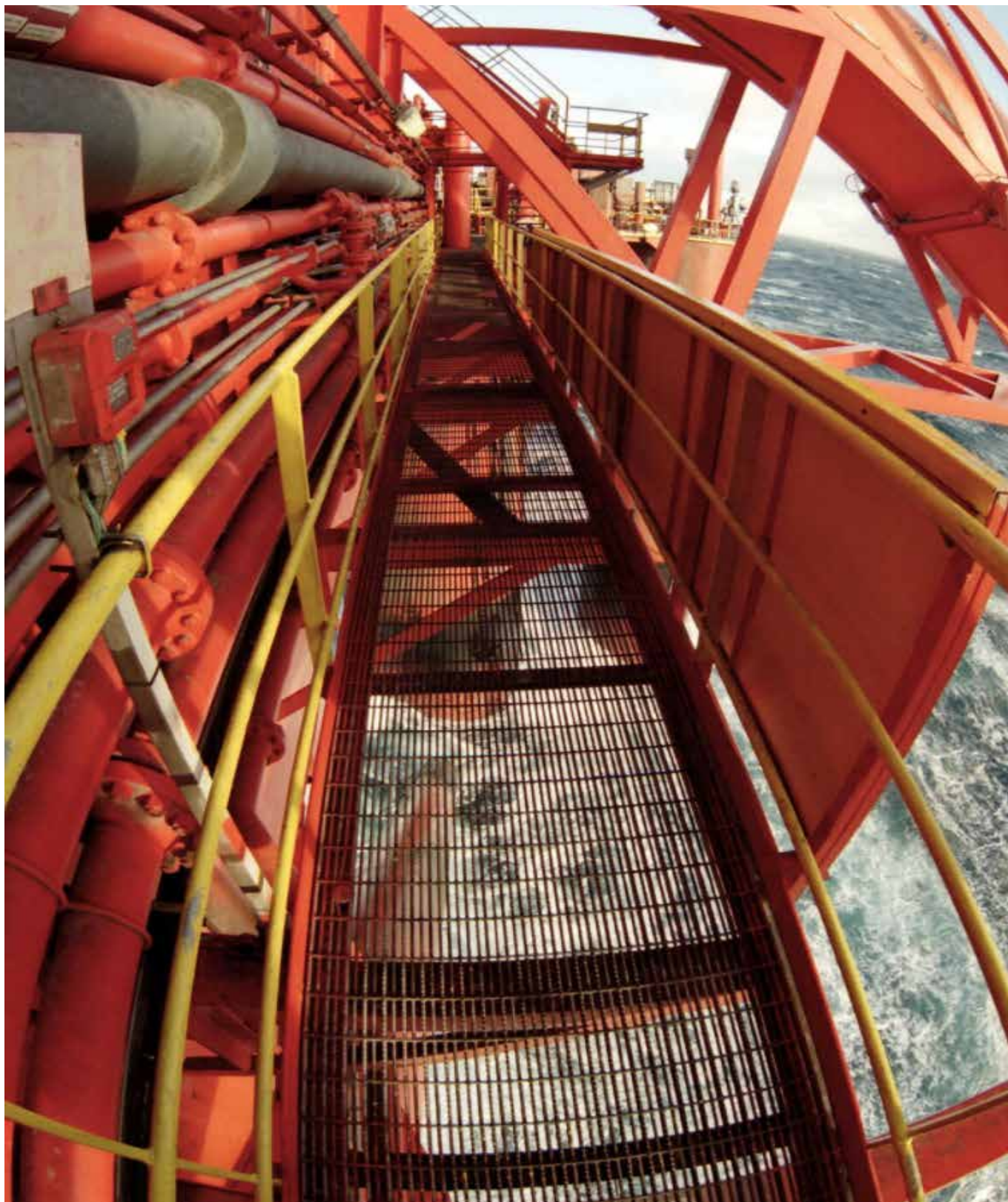
For NOPSEMA’s interpretation of the requirements, under the Environment Regulations, for an OPEP submitted as part of an environment plan, please refer to the *Oil pollution risk management* guidance note (nopsema.gov.au/assets/Guidance-notes/A382148.pdf).

For guidance on vessel facilities subject to external hydrocarbon hazards, including guidance on potential risk control measures, please refer to the *Vessel facilities subject to external hydrocarbon hazards* guidance note (nopsema.gov.au/assets/Guidance-notes/A533582.pdf). Please note that vessels that are not considered to be ‘facilities’, but which may be an ‘associated offshore place’ to the host facility (i.e. exposed to hazards other than ordinary marine hazards), may also need similar risk control measures to those described in this guidance e.g. gas detection and alarm systems, ignition prevention controls, fire and explosion protection systems and essential services.

NOPSEMA recognises that it may not always be practicable for titleholders to plan for every possible specific emergency response activity. However, NOPSEMA expects titleholders to factor in relevant regulatory approvals (e.g. safety case acceptances) into the oil spill response and recovery timeframes committed to in their environment plan. NOPSEMA also expects that titleholders will ensure that the operators of those facilities have as much detail in relation to conducting relief well drilling and/or capping stack installation as is practicable, such that the timeframe needed for any safety case assessment is minimised.

Given operator registration, scope of validation and safety case assessment requirements, the acceptance of a safety case for a new facility will often take well in excess of 90 days. Also, for revised safety cases, safety case acceptance will often take at least 30 days from when the revised safety case is submitted, particularly if the validation of any physical modification of that facility is proposed. Consequently, titleholders have a significant role to play in ensuring operators of associated facilities either have safety case acceptances in place, or have as much detail as practicable already included in the accepted safety case so as to minimise the potential time delays associated with seeking safety case acceptance. NOPSEMA encourages titleholders to work together to develop collaborative arrangements for vessels and structures which may be called upon to participate in oil spill response and recovery activities.

In November 2017, NOPSEMA discussed the role titleholders play in the safety case acceptance with a range of industry titleholders at the Spill Risk Cooperative Forum, and detailed its expectations of titleholders in relation to ensuring a timely and comprehensive OPEP is in place. NOPSEMA will be inspecting oil spill response and recovery arrangements, including the measures titleholders have taken to ensure, as far as reasonably practicable, that relevant regulatory approvals are in place or can be obtained in a timely manner. NOPSEMA's objective from conducting these inspections is to achieve a safe and environmentally responsible Australian offshore petroleum and greenhouse gas storage industry.



Effective control of work systems critical to preventing incidents and injuries

During 2017, NOPSEMA was notified of four dangerous occurrences involving workforce interaction with a cable or pipe. In each occurrence, personnel interacted with a cable or pipe which was thought to be safely isolated. Each occurrence had the potential for death or serious injury, and two could have resulted in a major accident event. While the circumstances surrounding each occurrence are unique, NOPSEMA's investigations have identified some common contributing factors.

Positive identification

Immediately prior to each interaction, personnel did not positively identify the target cable or pipe. In three of the occurrences, an adjacent cable/pipe had been isolated and the live cable/pipe was mistakenly thought to be the isolated cable/pipe. In the fourth occurrence, the cable/pipe had been inadvertently skipped during the isolation process.

In each of the dangerous occurrences, the need to isolate the target cable/pipe was identified during job planning and performed as required prior to the commencement of the work. However, a variety of job-level factors contributed to the misidentification of the target cable/pipe. Some of these factors included supervision of work, communication, fatigue, and the physical layout of the job site. Following each occurrence, the responsible operator identified that the inclusion of drawings and schematics in the work documents would have likely assisted personnel in positively identifying the target cable/pipe.

Permit to work

In each of the dangerous occurrences, ambiguities and inconsistencies were identified within the permit to work (PTW) system. The PTW system is one of the main tools used to control work on a facility and operators typically identify it as a preventative control measure in their facility safety case. Deficiencies in the PTW system were identified following the *Piper Alpha* disaster in 1988—highlighting the importance of having a robust PTW system in place. The ambiguities and inconsistencies identified in these occurrences included:

- poor quality of PTW system training and lack of refresher training
- inappropriate permit type for the task
- incorrect or missing information from the permits and attached job hazard analysis and/or risk assessment
- discrepancies between the permits and job hazard analysis and/or risk assessment.

As an administrative control measure, a PTW system is susceptible to the same fallibilities as other administrative controls. As such, PTW systems should be subject to rigorous auditing and quality assurance to ensure they remain a robust control measure. Similarly, appropriate competence assurance processes should be implemented to ensure members of the workforce understand which situations require the application of the PTW system and their role and responsibilities in its application.

NOPSEMA reminds facility operators that they must take all reasonably practical steps to implement and maintain systems of work that are safe and without risk to health. A key element of work planning and control includes a robust PTW system supported by thorough risk assessments and job hazard analyses. Members of the workforce should be engaged in proactive hazard identification and risk reduction and supported through supervision. The provision of user-friendly procedures and appropriate training, tools and equipment should aim to assist the workforce in task-based planning and safe execution of work. These layers of defence interact with and complement each other to facilitate safe outcomes. Operators should ensure that each layer of defence is well designed, appropriately implemented, and subject to regular review and improvement to maintain the integrity of the overall system of work.

Health surveillance: occupational contact dermatitis

From 2005–2017, NOPSEMA received 12 notifications of incidents (accidents or dangerous occurrences) relating to chemical exposure to the skin and eyes, five of which resulted in a medical emergency evacuation. Exposure to chemicals via the skin and eyes is a hazard to workers in the offshore petroleum industry, where exposure can lead to occupational contact dermatitis (OCD) or permanent damage.

OCD is caused by substances coming into contact with the skin that give rise to irritation or allergy. A number of chemicals used in the offshore oil and gas industry can cause OCD, including some muds used in drilling. Common symptoms, which may not appear immediately, include skin redness or soreness, itching, rashes, and cracking or peeling. If not adequately treated, subsequent exposure to even small amounts of chemicals can trigger severe reactions. If OCD is detected early, and where exposure to the substance responsible is stopped, the associated health consequences may be minimised.

Health surveillance for OCD should be provided to members of the workforce if there is risk of exposure to substances which could lead to irritation or allergy. This type of surveillance involves assessing the condition of the skin as soon as possible after starting work and periodically throughout employment whilst keeping the associated records. Generally, it is performed under the supervision of a registered or authorised medical practitioner who is adequately trained in the required testing or medical examinations for the hazardous substances used. The publication *Collecting Surveillance Data on Risks for Occupational Contact Dermatitis*, available at safeworkaustralia.gov.au, provides a practical guide to health surveillance.

NOPSEMA advises operators to identify members of their workforce who require health surveillance for OCD. Operators are also reminded of the requirement to keep health surveillance records in accordance with Clause 9(2)(g) of Schedule 3 to the OPGGS Act.

Industry workshop: Operational integrity of contracted equipment

NOPSEMA EVENTS
& INITIATIVES

NOPSEMA has recently conducted inspections on mobile offshore drilling units (MODU), where our inspectors assessed the processes and procedures for the safe management of contracted equipment installed at the facilities for well intervention activities. NOPSEMA found significant risk gaps in safety and took enforcement action against titleholders, rig operators and third party equipment/service providers. NOPSEMA's findings demonstrate a need for better planning and communication between all parties involved with respect to contracted equipment.

To further address this issue NOPSEMA, in collaboration with the Australian Petroleum Production & Exploration Association (APPEA), Drilling Industry Steering Committee and the International Association of Drilling Contractors (IADC), hosted an industry workshop in early April. The workshop was attended by representatives from titleholder, operator, and service-equipment supplier organisations. The workshop aimed to communicate lessons learned from recent inspections of contracted equipment on MODUs, and to identify and promote good industry practices and regulatory expectations on the issue.

NOPSEMA will provide an update on the workshop outcomes and subsequent progress in the management of contracted equipment on its website and in the second Issue of *the Regulator* magazine.

Quarterly performance dataset – Q4:2017

Data is correct at the time of publication and may be subject to change as further information becomes available.

INDUSTRY ACTIVITY AND PERFORMANCE

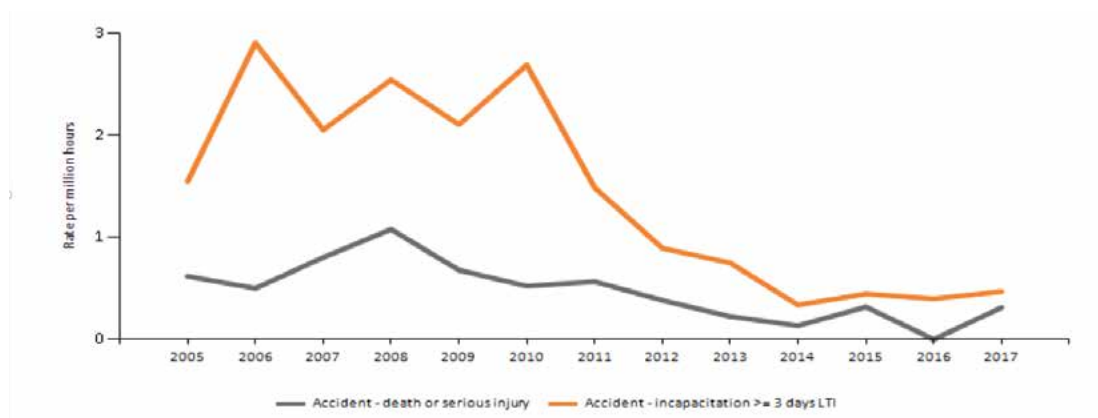
Submissions		
Category	Type of assessment	Number
Safety	Safety cases	18
	Scopes of validation	12
	Diving safety management systems	0
	Diving project plans	0
	Diving start-up notices	2
Well integrity	Well operations management plans	19
	Well activity applications	0
	Final abandonment reports	14
Environment	Environment plans	11
	Environment plan summaries	11
	End of an environment plan (regulation 25A)	17
Other	Petroleum safety zone application	0
	Area to be avoided access application	2
	National Offshore Petroleum Titles Administrator request for title related information	8
Total		115

Incidents		
Category	Type of incident	Number
People safety	Accidents	
	Death or serious injury	1 (serious injury)
	Incapacitation >= 3 days lost time injury	3
	Total accidents	4
	Total injuries	
	Major injury	1
	Lost time injury >=3 days	3
	Lost time injury <3 days	1
	Medical treatment injury	18
	Alternative duties injury	5
	Total injuries	28
	Dangerous occurrences	
	Could have caused death or serious injury	4
	Could have caused incapacitation >= 3 days lost time injury	3
	Total dangerous occurrences (people safety)	7
Process safety	Dangerous occurrences	
	Damage to safety-critical equipment	22
	Fire or explosion	4
	Other kind needing immediate investigation	5
	Uncontrolled hydrocarbon release >1–300 kg	2
	Uncontrolled hydrocarbon release >300 kg	1
	Uncontrolled petroleum liquid release >80–12 500 L	6
	Unplanned event – implement emergency response plan (including false alarms)	55
	Total dangerous occurrences (process safety)	97
Well integrity	Well integrity incidents	
	Loss of integrity – >1 kg gas released	0
	Failure of hydrostatic pressure – blowout preventer closure and positive well pressure	0
	Loss of integrity – well-related equipment damage or failure	5
	Potential loss of integrity – well-related equipment damage/failure	4
	Any other unplanned occurrence to regain control of the well	0
	Total well integrity incidents	9
Environment	Reportable environmental incidents	
	Hydrocarbon vapour/petroleum liquid release	2
	Chemical release	1
	Fauna incident	0
	Other	0
	Total reportable environmental incidents	3

Note: Uncontrolled hydrocarbon releases/spills may have been reported as an OHS incident and as an environmental incident. Injuries may have been reported as a total recordable case and as an accident.

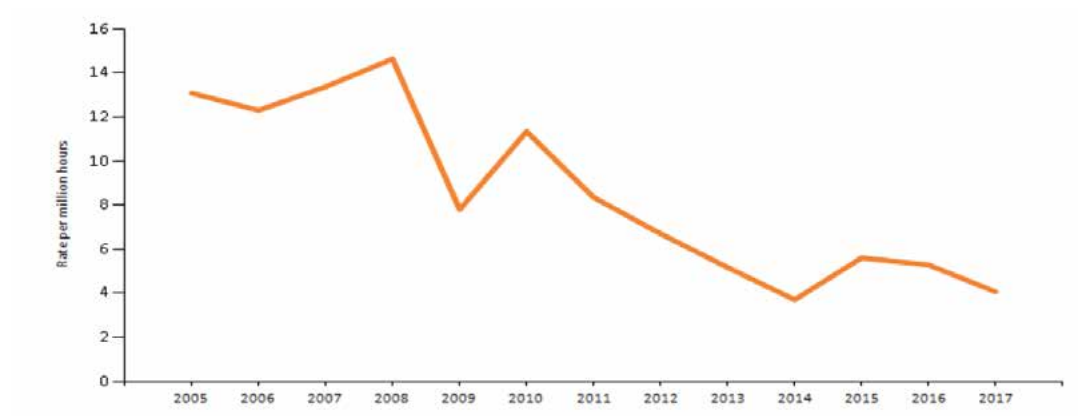
INDUSTRY PERFORMANCE INDICATORS

Accidents



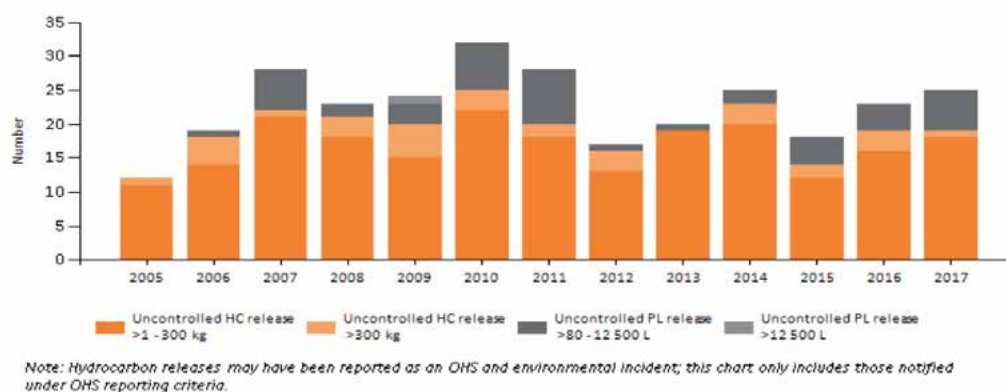
During the quarter, four accidents – including one serious injury – were reported to NOPSEMA.

Total recordable cases - injuries



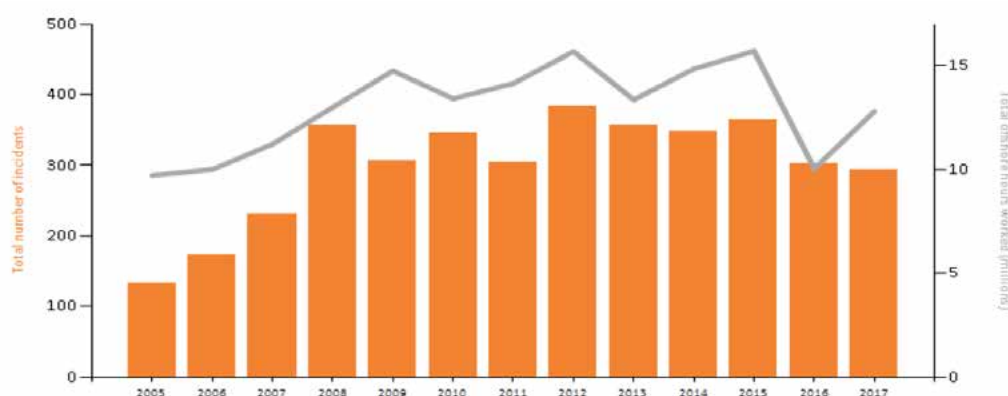
During the quarter, 28 injuries were reported to NOPSEMA including 18 medical treatment injuries (64.3%). The annual overall injury rate (based on total injuries reported to NOPSEMA on a monthly basis) declined from 5.47 in 2016 to 4.02 per million hours worked at the end of 2017.

OHS hydrocarbon releases



During the quarter, NOPSEMA was notified of two hydrocarbon gas releases, both of which were classified as low level (>1 – 300kgs).

Dangerous occurrences



During the quarter, 97 dangerous occurrences were reported to NOPSEMA, which is higher (30%) than the quarterly average of 74 for the last two years. The majority of these dangerous occurrences were unplanned events requiring emergency response plan implementation (56.7%) followed by damage to safety-critical equipment (22.7%).

NOPSEMA ACTIVITY AND PERFORMANCE

Improvement and compliance		
Type of activity	Category	Number
Inspections	Occupational health and safety	26
	Well integrity	2
	Environmental management	14
	Total inspections	42
Enforcement actions*	Occupational health and safety	11
	Environmental management	1
	Directions	1
	Total enforcement actions	14

*Excludes verbal warnings/advice, directions, investigation notices and inspection recommendations.

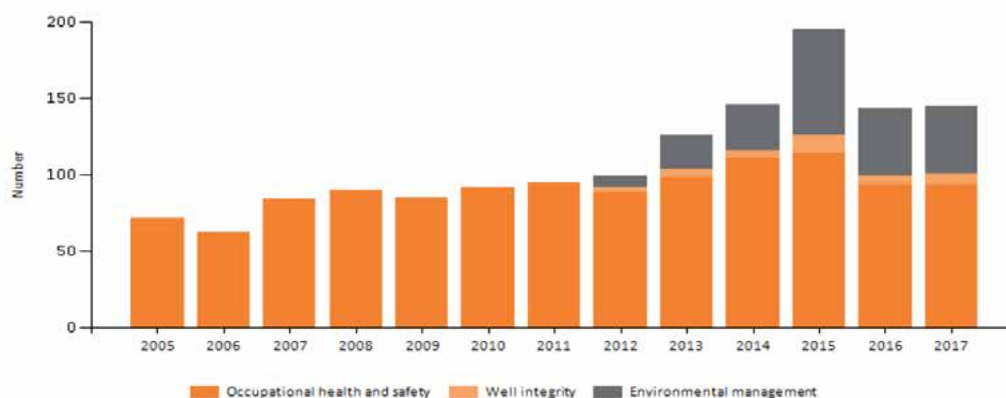
NOPSEMA PERFORMANCE INDICATORS

Notified assessments



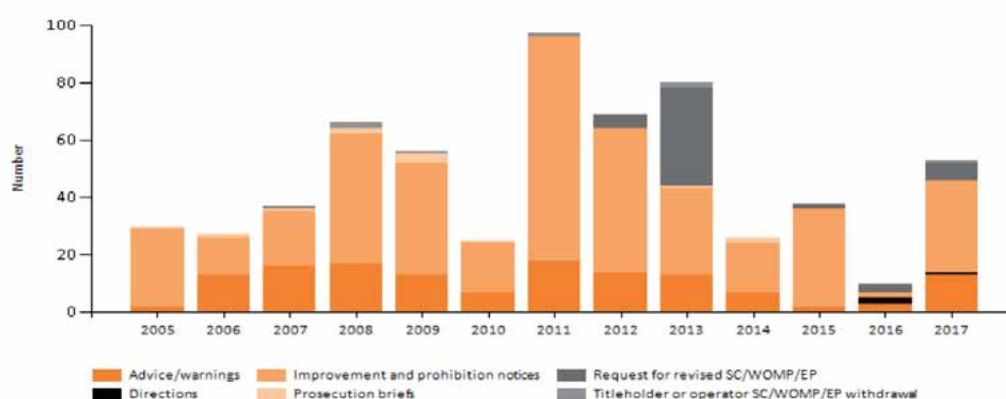
During the quarter, 100% of all assessments were notified within legislated timeframes. Only assessment types with legislated timeframes are included in the 'notified in time' data, however, it is NOPSEMA's policy to apply a specified timeframe on all assessment types.

Inspections



During the quarter, NOPSEMA conducted 42 inspections across 59 facilities and petroleum activities (a single inspection may cover multiple facilities). The largest number of inspections were related to OHS (26), followed by environmental management (14) and well integrity (2).

Enforcement actions



During the quarter, NOPSEMA issued 13 enforcement actions. The enforcement actions included six occupational health and safety (OHS) improvement notices, three OHS requests for a revised safety case, two OHS written advice/warnings, one environmental management (EM) written advice/warning and one direction – general.



Schedule of events

May 2018

30 April–3 May Offshore Technology Conference, Houston

14–17 May APPEA Conference and Exhibition, Adelaide

June 2018

5–8 June International Regulators' Forum Annual General Meeting and Conference, Aberdeen

Events listed are those at which NOPSEMA is presenting, exhibiting or has an organisational role.
For presentations at past events visit www.nopsema.gov.au/resources/presentations.