

Issue 1 : 2019

the REGULATOR

National Offshore Petroleum Safety and Environmental Management Authority



NOPSEMA

nopsema.gov.au

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 nopsema.gov.au.

SUBSCRIPTIONS

Subscribe to receive the latest news from NOPSEMA covering the regulation of health and safety, well integrity and environmental management. Visit nopsema.gov.au/news-and-media today!

ORDER HARD COPIES

NOPSEMA encourages duty holders to share the Regulator within their organisations and with the offshore workforce. To facilitate this action, NOPSEMA is happy to provide free hard copies of the magazine for distribution. To order, please email communications@nopsema.gov.au.

FEEDBACK

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

CONTACT DETAILS

Head office — Perth
Level 8, 58 Mounts Bay Road
Western Australia
p: +61 (0) 8 6188 8700
GPO Box 2568
Perth WA 6001

The information provided in this publication is intended to provide its reader with general information only and should not be relied on as advice on law, nor treated as a substitute for legal advice in any situation. NOPSEMA's assessment of regulatory permissioning documents, compliance monitoring, and enforcement activities, are undertaken in accordance with the relevant legislation and associated regulations.

Contents

Message from the Chief Executive	4
Science and evidence informs best-practice environmental management	5
A big year of inspections and assessments for the Seismic and Production Operations Team	7
Inaugural Tripartite Health and Safety Representative Forum	9
Premier Source Control Workshop	10
Effective testing of oil spill response arrangements	12
Insight into the public comment process for exploration environment plans	14
Better practice approaches to consultation	15
What does NOPSEMA take into account in its decision making?	16
Increasing regulatory transparency in enforcement	17
Moving towards a common language in well integrity	19
Is safety, or safety collaboration, a competitive advantage?	20
Referring to supporting documentation in published environment plans	23
Adapting to changing well conditions	24
NOPSEMA online resources	25
Upcoming events	26



Message from the Chief Executive

Welcome to the first edition of the Regulator for 2019. This year is shaping up to be a very busy year ahead, with various key initiatives nearing completion, and numerous notable events already scheduled for the first half of the year. These events include the Transitioning to Transparency information session, the inaugural Health and Safety Representatives (HSR) Forum and the premier Source Control Workshop at the Spillcon Conference.

NOPSEMA believes offshore energy plays an important role in Australia's energy mix, and welcomes the increased interest in associated issues from the community at large. We are pleased that our assessment processes and broader expertise are standing up to this scrutiny. From a regulatory perspective, integrated management and continuous improvement are critical to achieving positive safety and environmental management outcomes. These principles must form the basis of work by the industry, and carry great weight in decisions and measures by both the players and the government.

NOPSEMA has always been an advocate for greater transparency and welcomes the Minister for Resources and Northern Australia's recent announcement that all environment plans for offshore oil and gas activities will be published, and draft environment plans for offshore seismic and exploratory drilling activities will be open for public comment under changes to the Environment Regulations. These amendments to the regulations are part of a suite of changes to improve consultation and increase transparency of offshore oil and gas activities. NOPSEMA believes added benefits such as lifting industry performance through facilitating the sharing of knowledge, assisting with community acceptance and building a better understanding of petroleum activities offshore will stem from these changes. In the spirit of transparency, NOPSEMA welcomed Equinor's decision to voluntarily publish their draft environment plan for public comment, for proposed drilling activity in the Great Australian Bight.

NOPSEMA notes there continues to be significant community and political interest in proposed areas for offshore oil and gas exploration, however, as the independent regulator, NOPSEMA has no role in this process. Rather it is NOPSEMA's role to ensure that oil and gas activities are carried out by companies in a responsible manner, protecting both workers and the environment.

Engaging with the community, industry, government representatives and the offshore workforce will continue to be a key priority for NOPSEMA in 2019. There are numerous events and industry workshops on the horizon, including a two day HSR Forum in June. This forum provides an opportunity to bring HSRs together to share safety related experiences and build on their current knowledge. Importantly, it also provides a platform to recognise their hard work, commitment and integrity in keeping their fellow offshore workers safe.

NOPSEMA will be playing a role in a world first Source Control Workshop on 20 May as part of this year's Spillcon Conference in Perth. We appreciate and recognise that helping to facilitate these events is important in creating international benchmarks for environmental performance, and is key to promoting continuous improvement in industry performance.

In the previous editions of the Regulator, I touched on late life assets, and how decommissioning is becoming an increasing trend as our offshore industry continues to develop and mature. Looking at the preliminary data from 2018, NOPSEMA observed a rising trend in low level hydrocarbon gas releases reported that often are attributable to late life assets. NOPSEMA is continuing to allocate resources and efforts to ensure strong safety and environmental outcomes are not compromised.

Stuart Smith, CEO



Science and evidence informs best-practice environmental management

In-house scientists who have dedicated most of their working lives to understanding the diverse intricacies of marine ecology are among the highly-qualified experts advising NOPSEMA on next generation environmental monitoring and management practices.

NOPSEMA's Environmental Effects Team is comprised of six specialists who play an important role in considering the scientific evidence that underpins the environmental impact assessment, monitoring and management aspects of offshore oil and gas activities. The Environmental Effects Team also plays an integral role in securing industry's compliance with Commonwealth environmental legislation, for activities that have permission to proceed, through inspection and enforcement activities.

Team Manager, Dr Christine Lamont says staff have mixed disciplinary backgrounds with specialist skills and advanced qualifications in areas such as fish and coral ecology, whale communication and behaviour, sea turtle ecology, marine plant ecology, water and sediment quality monitoring, threatened species recovery, marine biosecurity, seabird ecology and terrestrial biology in addition to considerable experience in the field of environmental impact assessment.

"When the team was set up in 2012 we made a point of making sure that we had people with the range of necessary disciplines and skills to bring to the table. This make up allows us to dig deep into our individual disciplines but also share information across the team to foster consistent understanding and knowledge application. Each member is responsible for maintaining NOPSEMA's knowledge base for their particular discipline and new disciplines that they're picking up along the way so that we make sure that we're staying on top of the latest research and keeping abreast of new scientific developments from Australia and overseas," Dr Lamont said.

Dr Lamont explains that the Environmental Effects Team at NOPSEMA has a focus on ensuring that high levels of protection are afforded to all aspects of the marine environment, particularly those matters protected under the *Environment Protection and Biodiversity Conservation Act 1999* like whales and turtles. “What we’ve been working on over time is making sure that titleholders are using scientific evidence, from published literature and from environmental monitoring programs, to support their impact predictions and then once operating, demonstrations that the marine environment is being protected. Recognising that the broader community is becoming more and more engaged and informed about the technical details of oil and gas activities, we believe that providing scientific evidence to support their conclusions will give the community greater confidence that the right environmental outcomes will be achieved”.

In line with changes announced by the Australian Government to improve the transparency of offshore petroleum environmental management, the regulatory regime is being amended to provide greater opportunity for this community involvement and understanding of proposed exploration activities and their interactions with the marine environment.

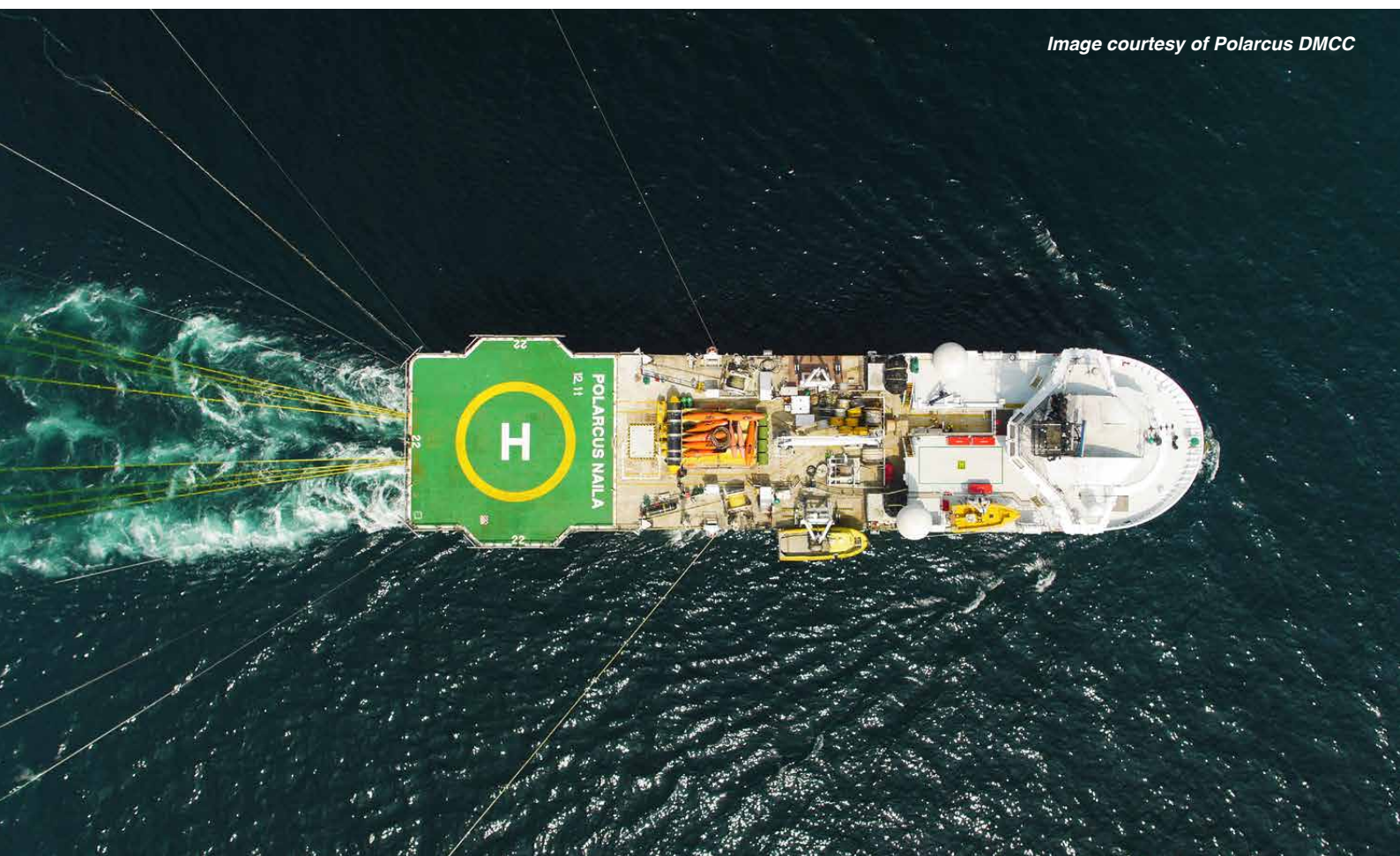
Under the changes, environmental regulations will be broadened to include the full publication of environment plans and there will be an avenue for the public to comment on environment plans for seismic and exploratory drilling activities. This is in addition to current requirements for titleholders responsible for proposed offshore petroleum activity to consult with ‘relevant persons’ throughout the planning, decision-making and implementation stages of their project. A ‘relevant person’ includes anyone whose functions, interests or activities may be affected by a proposed activity.

NOPSEMA supports measures to ensure greater transparency of the regulatory regime it administers, as disclosing more information about assessment processes will allow for improved community understanding of NOPSEMA’s assessments and decisions, which are informed by contemporary science and research.

NOPSEMA has been advocating regulatory change in this area since 2015 and continues to strive to improve outcomes and increase community confidence in the offshore petroleum regulatory regime by requiring improved stakeholder consultation, facilitating transparency and ensuring that environmental impact assessments are based on credible science and the principles of ecologically sustainable development.

To prepare for the transparency changes that will take effect from 25 April 2019, NOPSEMA is establishing a new online public comment platform to allow the public to review and comment on seismic and exploratory drilling environment plans, and amending guidance for titleholders to understand new requirements.

Image courtesy of Polarcus DMCC



A big year of inspections and assessments for the Seismic and Production Operations Team

2019 is shaping up to be one of the busiest for the national regulator, with a large number of titleholders expected to submit their five-year proposed revisions to environment plans in the coming months.

By law, offshore energy activities cannot commence before NOPSEMA has assessed and accepted detailed risk management plans including safety cases, well operations management plans, offshore project proposals and environment plans where relevant.

On average, NOPSEMA receives about 40 environment plans for assessment each year. Manager of the environment division's Seismic and Production Operations Team, David Christensen says that number is set to increase this year as the majority of existing plans approach a five year milestone, marking the maximum time that an environment plan can be in place before it is formally reviewed and revisions assessed by the regulator.

"We're looking at a big second half of the year with most production facilities required to submit a revised environment plan 14 days before the five year anniversary," Mr Christensen said.

"The peak in submissions is a product of the commencement of NOPSEMA where revisions to environment plans were submitted in 2013 and 2014." Regardless of whether it is a short term activity like a seismic survey or a longer term production operation, the focus of the team's work in assessing environment plans is ensuring that sound environmental practices are implemented to ensure protection of the environment.

"Our team comprises specialists with advanced qualifications in research-based disciplines and many years of experience working for regulatory, fisheries and natural resource bodies along with industry and environmental management consultancies. These specialists work closely with NOPSEMA's in-house scientists (for more, refer to the [Science and innovation dictates best-practice environmental management article](#)), spill response experts, and where relevant, other engineering or technical staff from NOPSEMA's safety and integrity division to make sure titleholders are adequately managing their impacts and risks. Not only do we do this through assessments, we also check titleholders are doing what they said they would do in accepted permissioning documents. This check involves specialists going offshore to undertake inspections and if a titleholder is found to not be adequately managing their impacts and risks we will intervene with the appropriate enforcement tool," Mr Christensen said.

Mr Christensen welcomes changes announced by the Australian Government to amend the Environment Regulations which will result in the full publication of environment plans and include a public comment period for exploration activities.

"I think it's a really good move. Transparency promotes accountability and that's certainly something the team recognises and supports. We're on track with work to ensure our supporting policy and systems are reflective of the regulatory amendments. We are updating our environment plan assessment policy to provide guidance to industry and non-industry stakeholders. This includes guidance regarding what they need to do if they would like to provide a comment on an environment plan that has been published and then ensuring we have supporting systems to facilitate this process."

While NOPSEMA recently accepted an environment plan for seismic activity in the Great Australian Bight, Mr Christensen is not expecting an influx of seismic-related risk management plans this year.

"With seismic activities, it really depends on the external context and the drive for exploration and development in new frontiers. That's part of the reason they are quite complex; they are in the new, next frontier areas. These are areas that have been explored to only a small extent," Mr Christensen said.

"One of the other challenges with seismic activities is that science is constantly evolving along with the expectations of the community. In the recent case regarding the Great Australian Bight, we sought external expert advice from organisations such as the Australian Antarctic Division. Input from relevant external expertise is taken into account in NOPSEMA's assessment decisions as well as other compliance activities. In the case of the seismic survey decision in the Great Australian Bight, to ensure the most contemporary science was taken into account, we considered input from scientists and experts regarding whales in that particular region and best practice mitigation measures to supplement existing in-house knowledge."



Inaugural Tripartite Health and Safety Representative Forum

The Australian offshore oil and gas industry relies on dedicated, trained, experienced and competent personnel to ensure continued safe operations and optimal performance of its offshore facilities. Critical to this is the role Health and Safety Representatives (HSRs) play in keeping the offshore workforce safe and healthy.

The Australian Government along with peak industry and union bodies the Australian Petroleum Production and Exploration Association, the Australian Council of Trade Unions, and Australia's offshore regulator NOPSEMA, believe that ongoing development of HSR skills can contribute to improved offshore safety.

In recognition of this important contribution a **two-day HSR Forum is planned to take place on 12-13 June, 2019**. The HSR Forum will encompass one day of formal HSR training, complemented by a day of facilitated discussions. The HSR Forum is being organised by a tripartite committee, led by NOPSEMA, with representatives from government, industry, and unions.

All HSRs, whether experienced or only recently appointed are expected to contribute and benefit from this event. It is intended that all sectors of offshore work will be represented to establish a cross-section of industry work and individual perspectives. HSRs from across industry will share learnings, hear about industry developments and direction, and discuss the continuous improvement of workforce health and safety.

This event will provide an ideal opportunity for HSRs to engage with their peers, regulatory authorities, and industry safety bodies. The format of the event will comprise:

Day One – Pilot HSR refresher training. To follow on from the established five-day HSR training, this pilot HSR refresher will be accredited by NOPSEMA as training for the purposes of generating workforce involvement in the content, style, and focus of the proposed *HSR Refresher*. The pilot is planned to allow existing HSRs to build upon their prior five-day HSR training with an opportunity for skills development and peer learning. As this training is accredited by NOPSEMA, the employer must permit HSRs the necessary time off work without loss of remuneration or other entitlements, as is necessary to undertake the training.

Day Two – HSR facilitated discussions. HSRs will have the opportunity to provide feedback on the pilot refresher training, and share insights on current industry issues and challenges. It is intended that HSRs will be informed and challenged, and leave inspired by new opportunities to take back to their work force for improved safety outcomes.

Broad industry support is required to ensure that the forum is well attended and is of value to the pan-industry workforce. We strongly encourage all companies operating in the oil and gas sector to make available HSRs working on offshore facilities, and staff interested in becoming a HSR, to attend the forum. Costs for registration will be covered by the tripartite committee member organisations with companies of participating HSRs expected to cover where appropriate, travel, accommodation and salary costs.

HSRs representing a variety of stakeholders, operators, contractors and labour hire providers are required to attend to ensure a diversity of views and learnings are shared. NOPSEMA encourages the participation of HSRs from tier two and tier three contractors. It is vital that industry senior leadership support this inaugural event to ensure it's a success. For more information about the event or to nominate your HSRs to attend, email communications@nopsema.gov.au. Expressions of interest should be provided to NOPSEMA by no later than 5 April 2019.

Premier Source Control Workshop

In May 2019, the Australian Petroleum Production and Exploration Association (APPEA) and NOPSEMA in collaboration with International Offshore Petroleum Environment Regulators' Forum (IOPER) will host a world first source control workshop in Perth as part of this year's Spillcon event.

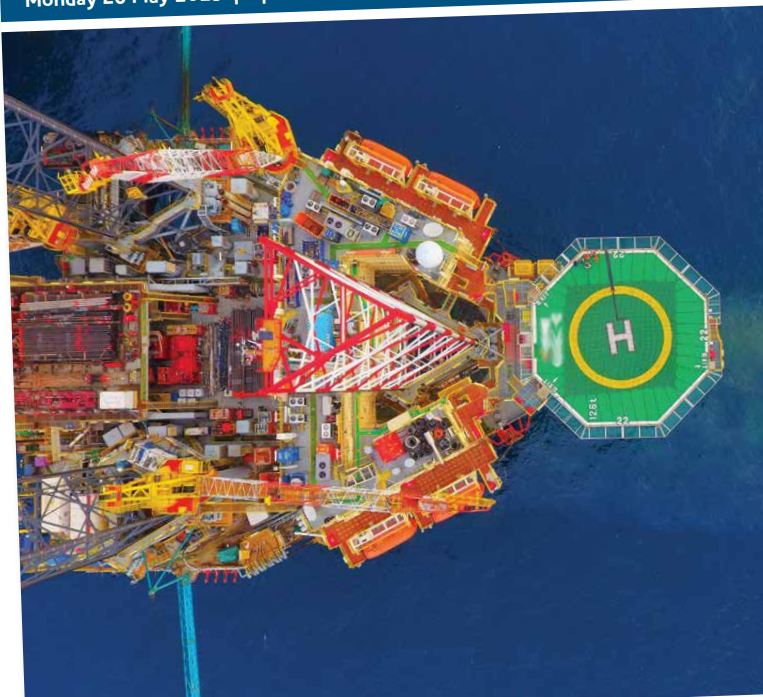
Attracting oil spill professionals and experts from around the world, this unique one day workshop is an opportunity to bring together multi-disciplinary teams to discuss best practice and identify the next steps in improving subsea wells source control emergency response planning.

A key focus of the workshop includes preparedness planning and deployment of a subsea response toolkit and capping stack in a loss of well control incident. To set benchmark considerations in the event of a real well control emergency, the first session of the workshop is a capping stack deployment simulation. Attendees will have the opportunity to get involved in this step-by-step scenario, and work together with other international and local experts in the industry.

In addition to providing critical hands on practice, there will be a series of presentations on pre planning, mobilisation and deployment by representatives from leading global source control equipment and service organisations.

The workshop will conclude with a panel session, providing an avenue for the audience to ask presenters questions about key topics discussed throughout the day.


This event is appropriate for drilling and completion engineers and managers, emergency and oil spill response professionals, logistics managers and coordinators, safety professionals, risk managers, well containment equipment and service suppliers, source control consortium coordinators and offshore oil and gas regulators. For more details or to register for the 2019 Source control workshop, visit appea.com.au/source-control-workshop.




Source Control Workshop
Examining source control technologies and arrangements for a timely response

Showcasing latest improvements, stimulating discussion, uncovering assumptions and promoting deep thinking on response arrangements for timely source control

Monday 20 May 2019 | Spillcon, Crown Conference Centre, Burswood

 **NOPSEMA**

 **SPILLCON**
20 – 24 May 2019
Perth, Australia

 **appea**



Effective testing of oil spill response arrangements

A major oil spill arising from a petroleum activity in Australian Commonwealth waters will never be acceptable, but in the rare event of a spill occurring, consequences can be reduced through a well-planned and coordinated response. Practising and regularly testing individual response arrangements is fundamental to ensuring effective oil spill response capability, and helps to identify areas for improvement.

The Environment Regulations specify the requirements of testing response arrangements, including the frequency of testing, but it remains up to the titleholder to design a testing program that will meet its needs.

Testing response arrangements can take place in a number of ways, however oil spill exercises are the most common form of testing utilised in the oil and gas industry. Oil spill exercises can range from short desktop drills involving a few key incident responders, to large-scale exercises running over several days across multiple locations and may include field-deployment of response equipment.

Since 2015, NOPSEMA has conducted 24 environment inspections across 13 titleholders, which included examining oil pollution emergency plan (OPEP) testing arrangements. Some 40 recommendations have been made in relation to testing of response arrangements and can be classified into five main categories as shown below.

Recommendation categories	No. of Recommendations	%
1. Schedule or frequency of tests	11	27.5
2. Scope of testing – testing external spill response service providers	9	22.5
3. Scope of testing appropriate to response arrangements	8	20.0
4. Mechanisms to address actions and recommendations from exercises	7	17.5
5. Exercise evaluation and reporting	5	12.5
Total	40	100

NOPSEMA's inspections found that in many cases, oil spill exercise programs conducted were not consistent with training commitments made in a titleholders environment plan or did not meet regulatory requirements. For example, titleholders were found to have not tested their response arrangements frequently enough. NOPSEMA also identified a number of exercise scopes had limitations, for example, failing to include testing of critical spill response arrangements provided by external service providers. In addition to this, the focus of some exercises were too narrow and were not appropriate to the range of response arrangements identified for the activity.

Limitations in systems to record recommendations or actions from oil spill exercises, as well as a failure to track them were also identified. In other cases, the evaluation or reporting on the exercises was ineffective. Together, these can restrict lessons learnt and opportunities for future improvement.

Oil spill exercises often have a dual purpose to test response arrangements and train spill responders. In these circumstances, the exercise design should clearly identify what parts of the OPEP are being tested, define clear objectives and set appropriate performance indicators that differentiate between testing and training components.

It is also important to recognise that the planning, scheduling, design and evaluation stages of an oil spill exercise are just as important as the execution of the exercise.

There are a number of government and industry resources available for titleholders on emergency response exercises, including the Australian Disaster Resilience Handbook 3: Managing Exercises and IPIECA & OGP's 2014 Oil spill exercises - Good practice guidelines for the development of an effective exercise programme.



Insight into the public comment process for exploration environment plans

On 26 March, the Minister for Resources and Northern Australia, Matthew Canavan announced changes to the Environment Regulations that will take effect from 25 April 2019. The changes will introduce a public comment period for seismic and exploratory drilling proposals. Members of the public will now have the opportunity to have their say on the proposed environmental management of seismic and exploration drilling activities, before NOPSEMA's environment plan assessment process commences.

The public will be able to submit comments via NOPSEMA's online platform, which will be accessible via the homepage of NOPSEMA's website. NOPSEMA will publish guidance to assist stakeholders with making public comment submissions and will also issue guidance outlining how titleholders should take public comments into account.

When the public comment period is underway, seismic and exploratory drilling environment plans will be published in full on NOPSEMA's website, along with a summary of key information, maps of the proposed activity and contact details for the titleholder.

Members of the community who submit a public comment will be strongly encouraged to provide contact information. By providing this information, commenters will contribute to the transparency and accountability of the public comment process while also providing a direct avenue for NOPSEMA and/or the titleholder to follow-up with individuals who raise issues that require further discussion or clarification.

The public comment process provides an opportunity for members of the community to raise any environmental management issues they think should be considered by NOPSEMA and the titleholder in planning for the proposed activity. The titleholder will have the opportunity to change the environment plan after considering information received from the public, and will also need to prepare a report responding, in general terms, to the comments received. This report, along with a new version of the EP, will be published on NOPSEMA's website when the EP is submitted for assessment and neither NOPSEMA nor the titleholder will be obliged to respond to each comment individually.

If a relevant consideration is raised through the public comment process, the issue must then be addressed within the environment plan regardless of where it comes from. If thousands of individuals supply exactly the same comment, it will be regarded as one matter for consideration, and does not gain priority through repetition. Information that is irrelevant to NOPSEMA's decision making criteria cannot be considered, this includes statements of fundamental opposition to oil and gas activity, submissions containing profanities and personal threats to NOPSEMA personnel.

After NOPSEMA has completed its assessment of the environment plan, NOPSEMA will publish a report describing how information received during public comment was taken into account. This report will be published on NOPSEMA's website.

NOPSEMA will continue to provide more information to explain how the transparency amendments will be implemented, and any questions regarding the public comment process can be directed to environment@nopsema.gov.au.

NOPSEMA in collaboration with the Department of Industry, Innovation and Science hosted an information session on 27 March in Perth to explain the transition to transparency in more detail. A copy of the presentation is available on NOPSEMA's website at nopsema.gov.au/presentations for interested stakeholders.



Better practice approaches to consultation

Consultation with relevant persons is not just a fundamental requirement for NOPSEMA's acceptance of an environment plan, it is a process that is crucial to understanding the risks and potential impacts of a proposed offshore petroleum activity and gaining stakeholder confidence that the environmental impacts and risks of petroleum activities will be of an acceptable level.

In one instance, a titleholder proposing to conduct a marine seismic survey established an 'advisory panel' comprised of fishing peak body representatives, independent experts and government representatives. The advisory panel was used to provide specialist advice to the titleholder on a range of key issues. This included insight on the existing state of fish stocks in the proposed survey area, reviewing the titleholder's proposed control measures for reducing impacts to fishing values, and reviewing proposed methods for monitoring the impacts of the seismic survey.

While not always achievable, implementing and utilising an advisory panel has many benefits including providing transparency to members of the panel and to the organisations they represent. It also improves the accountability of all parties involved, encourages professional behaviour during the consultation process and can serve to improve relationships through building trust. Titleholders considering the use of an advisory panel should ensure the panel is utilised throughout the planning and operations phases of an activity. This demonstrates to stakeholders that titleholders are undertaking consultation to genuinely understand the risks and potential impacts of a proposed offshore petroleum activity and give proper consideration to genuine issues of substance or fact.

As reported in previous issues of the Regulator magazine, NOPSEMA has noticed an increase in issues being experienced between the offshore petroleum industry and the commercial fishing sector primarily due to varying and poor consultation practices, misunderstanding and rushed timeframes, which often cause stakeholder fatigue and confusion. NOPSEMA has been advocating for improved consultation practices and greater consistency in consultation methods for some time now, but is only partially able to influence this part of the environment plan process. This is primarily because consultation is conducted by the titleholder often months or years prior to NOPSEMA receiving an environment plan submission. NOPSEMA encourages titleholders to continue to utilise innovative, effective and collaborative consultation processes to ensure mutually beneficial and appropriate outcomes are achieved.

What does NOPSEMA take into account in its decision making?

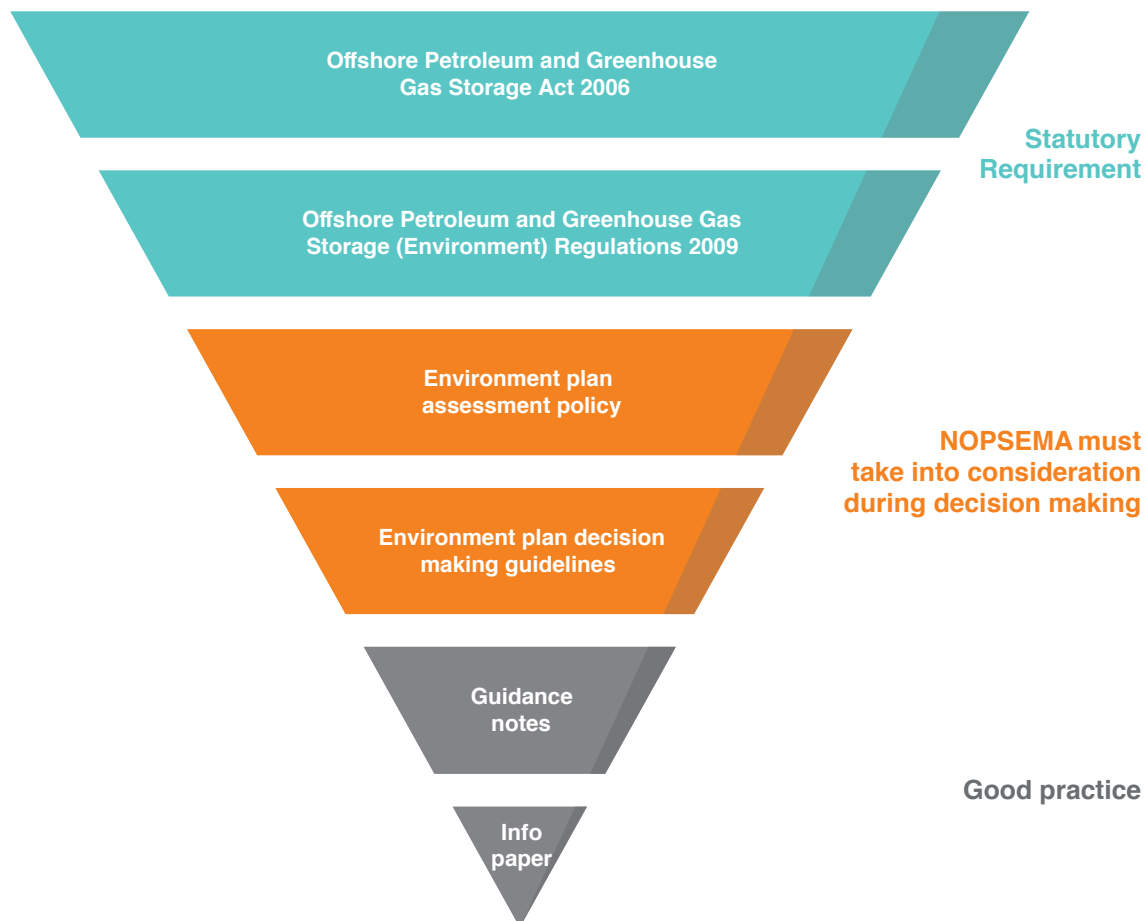
NOPSEMA recognises that increased transparency in the approvals process and its decision-making on environment plans is necessary to address feedback from titleholders, environmental non-governmental organisations, public engagements, parliamentary processes, and stakeholder consultation.

NOPSEMA is continuing to implement greater transparency initiatives to increase community confidence in the offshore petroleum regulatory regime.

In January 2019, NOPSEMA published information, including an interactive graphic on its website (pictured below) to clarify NOPSEMA's decision making to accept or refuse to accept an environment plan. NOPSEMA must take into account the OPGGSA Act and Environment Regulations, regulatory policies and guidelines and other information and advice such as industry good practice as described in guidance notes, information papers, environment alerts, and environment bulletins.

It's important to note that the graphic is not necessarily in order of importance, but has been categorised to distinguish between legal requirements and other information and advice such as a NOPSEMA requirement and good practice. Each tier of the graphic also has a short description for background. For more information or to view the graphic visit nopsema.gov.au/environmental-management/assessment-process/environment-plans/decision-making-guidelines.

NOPSEMA welcomes feedback on this initiative and comments can be directed to environment@nopsema.gov.au.





Increasing regulatory transparency in enforcement

From March 2019, NOPSEMA will publish directions as part of its regulatory functions under the OPGGS Act as a matter of public interest and to increase transparency.

Under Part 6.2 of the OPGGS Act, NOPSEMA and the responsible Commonwealth Minister have powers to issue directions to petroleum or greenhouse gas titleholders. NOPSEMA can issue three types of directions: general directions, significant incident directions and remedial directions. The directions powers are generally used by NOPSEMA for enforcing compliance with the OPGGS Act and associated regulations. Failure to comply with directions is an offence.

NOPSEMA's powers to issue general directions are broad; as they can be given to titleholders as to any matter in relation to which regulations may be made. The decision to issue a direction is an administrative decision and therefore NOPSEMA applies principles of good administrative decision making when issuing directions. In some circumstances, general directions may also be expressed to apply to other parties, including employees, agents or other persons performing work for the titleholders. In these circumstances, the titleholder is required to notify these parties.

For more information on directions, and NOPSEMA's enforcement powers, see the [NOPSEMA Enforcement Policy](#) at nopsema.gov.au.

Engaging with HSRs on offshore facilities

NOPSEMA's OHS inspections provide the best avenue for in-depth engagement between Health and Safety Representatives (HSRs) and the regulator, and are intended to ensure HSRs are empowered to support positive safety outcomes in the workplace.

NOPSEMA recently announced changes (see Issue 4: 2018 of the Regulator) to also hold HSR meetings at the start of environment and well integrity inspections at offshore facilities. This change was introduced to ensure HSRs are aware of the purpose of these inspections, and can be directed to the facility inspector to raise any issues with NOPSEMA. During OHS inspections, the NOPSEMA inspector sits down to engage with HSRs, puts aside the immediate inspection topics, and listens to what the HSRs have to say.

So what does this mean in reality? A HSR may feel as though NOPSEMA is only focused on compliance and that input from HSRs is not a priority. However, this is certainly not the case. NOPSEMA recognises that HSRs are dedicated professionals who have genuine investment in offshore safety offshore, demonstrated by commitments to voluntarily represent their fellow workers. It is NOPSEMA's view that safety is not just about compliance, it's about leadership, culture and learning in everyday operations and changing circumstances.

As a HSR, you can expect NOPSEMA OHS inspectors to support and encourage you to explore all available options to reach positive safety outcomes. In those instances where safety concerns are not being appropriately addressed, NOPSEMA OHS inspectors will work with the operator to ensure there is a safe work place.

Although NOPSEMA OHS inspectors have in-depth knowledge of HSRs powers under the OPGGS Act, it is not NOPSEMA's role to control the HSR process, rather it is NOPSEMA's role to assist in the promotion of safety within the workplace and to guide HSRs in the performance their role. HSRs can at any time, contact the NOPSEMA OHS inspector for their facility should they wish to raise any concerns or seek advice. More information for HSRs is available on NOPSEMA's website at nopsema.gov.au/safety/health-and-safety-representatives.



Moving towards a common language in well integrity

In Issue 4: 2018 of *the Regulator*, NOPSEMA summarised the outcomes of an industry workshop on well integrity. Workshop participants identified the need for more consistent terminology for describing the status of a well. In particular, there are currently multiple and sometimes conflicting definitions for terms related to well status, for example 'suspended'. NOPSEMA intends to publish new guidance on this topic, based on existing international published guidance and standards.

A preliminary review of international practices suggest the UK and Norway are good starting points for NOPSEMA developing good practice guidelines for Australia.

The UK regulator Oil and Gas Authority (OGA) and the trade association Oil and Gas UK are good sources of definitions for well status. OGA has recently published *Guidance for applications for suspension of inactive wells* which defines the following mechanical statuses for non-operational wells: shut-in, plugged and abandoned phase one, two and three (summarised below). According to the OGA, 'suspended' is not a mechanical well status, but rather an operational category relating to suspension of the activity or well operation. A suspended well corresponds to any of the three statuses of plugged or abandoned phase one and two; OGA does not consider a shut-in well to be suspended.

The OGA Guidance for applications for suspension of inactive wells also stipulates consent periods for well suspension. The general period of consent for well suspension is two years, but this may be extended to five years subject to submission of a detailed well abandonment plan. NORSOK Standard D-010 *Well integrity in drilling and well operations* states a similar time frame - a maximum of three years for a well that is 'temporarily abandoned without monitoring' (whereby the wellbore is abandoned with the wellhead still in place and the well barriers not continuously monitored). ISO standard 16530-1 *Well Integrity Life Cycle Governance* similarly states that a well should not remain suspended indefinitely. NOPSEMA's future well integrity guidance will include similar guidelines on the duration of well suspension. To stay up-to-date, subscribe to well integrity news and *the Regulator* at nopsema.gov.au/subscribe.

SUMMARY OF OGA AND OIL & GAS UK DEFINITIONS RELATED TO WELL STATUS

Shut-in - A completed wellbore that is shut-in either at the tree valves or subsurface safety valve.

Oil & Gas UK Well Life Cycle Integrity Guidelines Issue 3 (OGUK WLCIG) Section 12.1 adds that reinstatement of the operation of the shut-in well should be possible at any time without the requirement for intervention or the reconnection of facilities or control systems.

Plugged - Plug(s) provide mechanical barriers in the active wellbore between reservoir and wellhead to provide reservoir isolation. OGUK WLCIG Section 12.2 expands further to say that the mechanical barrier may be an object or material (such as cement).

Abandoned phase one - The reservoir has been permanently isolated.

Abandoned phase two - All intermediate zones with flow potential have been permanently isolated.

Abandoned phase three - The well origin at the surface has been removed and will never be used again.

Abandoned phase three is equivalent to Well Decommissioning Phase 3 in Oil & Gas UK Well Decommissioning Guidelines (June 2018), which states that the well is considered fully decommissioned after removing the wellhead and conductor.



Is safety, or safety collaboration, a competitive advantage?

Are opportunities being missed for industry to share lessons and learnings from safety-related issues?

NOPSEMA routinely publishes information in *the Regulator* and facilitates collaborative workshops to share lessons and promote improvement in industry process and personal safety performance. Recent examples include the mobile offshore drilling units (MODU) mooring systems in cyclonic conditions and operational integrity of contracted equipment workshops where participants shared insights and experiences in the spirit of continuous improvement.

However, recent NOPSEMA interactions with facility operators suggest some operators may be missing opportunities to share safety-related issues, approaches and learnings outside of their organisations

In a recent example, an operator of a new project identified deficiencies in internationally sourced electrical equipment for hazardous areas (EEHA). Some of the equipment was found to allow the ingress of water following particular weather events. Another two operators in Australia also sourced electrical equipment from international suppliers and experienced similar deficiencies with the electrical equipment. However, when NOPSEMA asked the affected operators whether they had sought to discuss these EEHA issues more broadly, in particular with the other facility operators who had built their facilities in the same region, there was little to indicate opportunities to share lessons and insights has been realised. NOPSEMA discovered that each of the facility operators handled the electrical equipment issues in different ways resulting in different outcomes and levels of success.

In another example, an operator was asked during a meeting whether they share safety-related issues/learnings with other operators within Australia's offshore petroleum industry. The response received was that information was shared by virtue of personnel moving between projects over time and bringing that experience and those learnings with them. While NOPSEMA acknowledges that personnel moving between projects is a valuable but an informal way of information sharing, it is unlikely to be as thorough and efficient as direct sharing between facility operators.

This raises the question of whether some offshore petroleum facility operators treat safety-related information as a competitive advantage and NOPSEMA certainly hopes this is not the case. Safety leadership is paramount and operators are encouraged to openly share their safety-related experiences and learnings broadly with the offshore oil and gas industry. An excellent example of information sharing on safety-related issues occurred during the DrillSafe Forum in September 2018. Ensco shared their experiences and learnings from a dropped object incident involving the drop of an 850 kilogram engine part through a deck hatch to the engine room floor about seven metres below. While this was a significant incident, fortunately it did not result in any injuries. Ensco not only provided details of the actual incident, but openly shared their investigation findings, including the numerous contributing factors which led up to the incident. For more information about the DrillSafe forum see below.

Proactive and transparent collaboration between facility operators, contractors and suppliers demonstrates a commitment to safety stewardship and promoting the petroleum industry's social-license to operate. It is those that demonstrate social licence traits and behaviours that will ultimately yield a favourable reputation in the eyes of the community and the offshore industry. There is also a moral obligation and a reputational advantage for those operators who have the confidence to take this initiative.

Solutions to safety issues should not be considered a competitive advantage. Facility operators should proactively share information about incidents and raise safety-related challenges in collaborative forums so that the industry can develop safety management systems and strategies that reflect best practice, and continue to reduce the health and safety risks to as low as reasonably practicable.

DrillSafe – Leveraging safety sharing as a competitive advantage for our industry

DrillSafe is a tri-annual industry forum where drilling and production professionals come together to share information and insights about safety related issues and experiences related to offshore oil and gas wells.

The forum provides an opportunity for industry representatives to workshop health, safety and environment aspects of their projects and discuss lessons learnt from incidents offshore. Other presentation topics include safety and incident prevention, as well as a drill well technical workshop.

In the recent DrillSafe Forum in Perth, presenters discussed:

- crew resource management and human factors in incidents
- fatigue management and the importance that sleep plays in safety and workers long-term health
- deploying the emergency disconnect package and lower riser package (EDP/LRP) for the Ichthys project.

Health, safety and environmental performance is an essential advantage for the offshore oil and gas industry, and titleholders must continually prove they can operate responsibly. For more information about upcoming DrillSafe workshops visit drillsafe.com.au





Referring to supporting documentation in published environment plans

Ahead of the proposed amendments to the Environment Regulations taking effect, titleholders have raised questions how supporting information should be referenced in an environment plan to ensure there is sufficient information to adequately inform the public while also satisfying NOPSEMA's content requirements.

To clarify, the proposed amendments to the Environment Regulations do not involve any changes to the environment plan content requirements. Titleholders will continue to be required to provide appropriate content and level of detail in environment plans, as per current practice. It is common to draw on supporting literature or reference internal company documents in an environment plan, by using standard referencing, and this practice is expected to continue.

Titleholders have also queried whether publication of environment plans will now require publication of supporting internal company documents such as procedures or standards. Currently a number of companies refer to these documents for internal purposes. NOPSEMA advises that there will still be no requirement to publish these supporting documents, as long as the content requirements of the Environment Regulations are fulfilled by the descriptions included in the environment plan submission. That is, where a procedure is proposed as a control measure to manage environment impacts and risks, the environment plan describes the key features of that procedure; for example the limits it sets, or the criteria it applies. This practice of referencing internal company procedures is already used in environment plan assessments, and this practice will not change when the amended regulations take effect.

The proposed regulatory amendments include a change to the regulations that currently allow titleholders to refer to information previously provided to NOPSEMA. This provision is being retained, but the regulation will be amended to allow this where the previously-provided information is publicly available. The most common use for this provision will likely be when referring to oil pollution emergency plans (OPEPs) or oil spill monitoring plans (OSMPs), which are occasionally developed by titleholders on a region-wide basis and applied to multiple environment plans. After the amended regulations come into force, titleholders must be aware that OPEPs and OSMPs will need to be provided in full for new environment plan submissions, until these supporting documents are published on NOPSEMA's website as part of an accepted environment plan.



Adapting to changing well conditions

Exploration wells are drilled to confirm the presence of oil and/or gas in commercial quantities and to determine other characteristics of the reservoir.

The design and planning of an exploration well starts with a geological prognosis, to provide an estimation of the pressures and temperatures likely to be encountered during exploration drilling. The prognosis will also include information about the potential risks that may occur during drilling activity, such as possible loss zones or over pressured formations where the rock is weak.

Based on the risk evaluation, the well can be designed with appropriate contingency elements in place for any unexpected hazards encountered. An example of a contingency could be including an additional casing string, cemented into the wellbore, and used to prevent the collapse of a well.

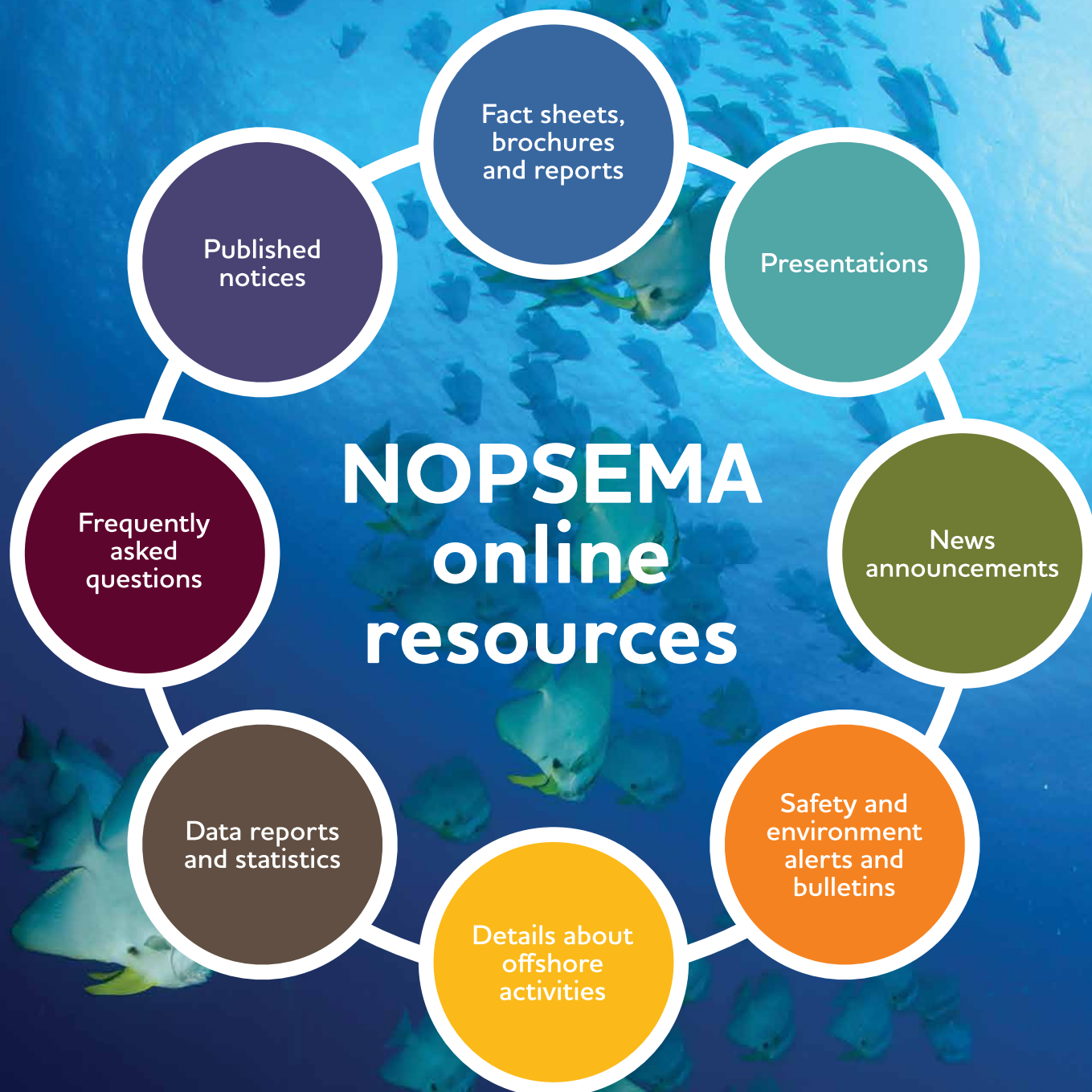
The geological prognosis as well as contingency plans identified to manage potential risks during drilling activities should be described in the Well Operations Management Plan (WOMP).

As outlined in the Regulations, a WOMP must include a description of the control measures in place to ensure integrity of the well. For drilling activities, performance standards are generally referred to as a 'well acceptance criteria', which are pre-defined checks of barriers/controls at each stage of well operations. An example of a well acceptance criteria is obtaining a high formation strength measurement during a leak-off test. Leak-off tests are commonly used to determine the pressure of exposed formations, to enable safe drilling of the next-hole-section. With this said, a useful addition to the WOMP is identifying 'hold points' at critical stages, where well conditions will need to be assessed before the next stage commences

At any point during drilling operations, if formation pressures and/or temperatures change are out of the estimated ranges, drilling should immediately cease and a risk assessment should be performed. If the risk assessment shows that the well design is not suitable for the new conditions encountered, the well should be plugged and abandoned or temporarily abandoned. Even if the risk assessment does show that it is possible to continue, a WOMP revision is required, as the integrity and risk profile of the well has significantly changed.

Recently, a titleholder reported to NOPSEMA that a small influx occurred during the drilling of an exploration well. Initial estimations indicated that the formation pressure was going to exceed the upper level anticipated. NOPSEMA required that the titleholder obtain acceptance of a revised WOMP prior to drilling a new formation. The titleholder determined that drilling new formation was not possible with the existing and planned well structure, and the well was subsequently plugged and abandoned. In NOPSEMA's view this was a prudent decision by the titleholder.

Whilst adapting to changing well conditions is not uncommon, titleholders should ensure their WOMPs incorporate planning for foreseeable contingency scenarios as well as hold points for critical stages of drilling.



There is a variety of information and resources available on NOPSEMA's website.

This includes publications on topics that may be of interest to the community, such as fact sheets on marine seismic surveys, oil spill modelling, oil spill response strategies and arrangements.

NOPSEMA also continuously collects and publishes data on the safety, well integrity and environmental management performance of the industry, as well as its own regulatory performance and activity. On the Data and statistics page, members of the public can view annual and quarterly data on industry performance indicators, such as incident rates, hydrocarbon releases and international benchmarks. There is also the option to view and compare data from previous years.

In addition to this, a subscription service is available for interested stakeholders to sign up to receive the latest media releases, news announcements and regulatory alerts. For more information, go to nopsema.gov.au.



Upcoming events

May 2019

- | | |
|------------------|--|
| 20 May | Source Control Workshop: Examining source control technologies and arrangements for a timely response, Perth |
| 20-24 May | Spillcon, Perth |
| 27-30 May | APPEA 2019 Conference and Exhibition, Brisbane |
-

June 2019

- | | |
|-------------------|--|
| 12-13 June | Health and Safety Representatives Forum, Perth |
|-------------------|--|
-

Events listed are those at which NOPSEMA is presenting, exhibiting or has an organisational role.
For more information about any of the events listed email communications@nopsema.gov.au.
For presentations at past events visit nopsema.gov.au/resources/presentations.