

REGULATOR

Issue 6 : 2014

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"High achievement always takes place in the framework of high expectation"

Charles Kettering

From the CEO

As 2014 draws to a close and with the New Year looming I find myself reflecting on what NOPSEMA has achieved during a busy and eventful year.

This year NOPSEMA has worked hard to implement legislative changes designed to reduce the regulatory burden on industry and strengthen the regulatory regime. These changes have included the endorsement of NOPSEMA as the sole environmental regulator for petroleum activities in Commonwealth waters in February, additional enforcement powers provided to NOPSEMA in October and the introduction of new financial assurance arrangements which will take effect from 1 January 2015.

The scope of these changes to NOPSEMA's remit has prompted a fresh approach to communication and engagement. NOPSEMA is now taking a more proactive approach to engagement by seeking meetings with industry and taking up invitations to participate in forums such as hearings for the *Western Australian Parliamentary Inquiry into Safety Related Matters to FLNG*. These activities are helping NOPSEMA meet its obligations to advise industry and promote compliance with the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*. The engagement with stakeholders is also producing plenty of constructive feedback which is being used to plan further NOPSEMA activities for 2015.

An issue that has been at the forefront of discussion for many industry participants has been the decline in global oil and gas prices. NOPSEMA has been monitoring this trend to ensure that it does not come to be reflected in any deterioration in safety or environmental performance. The evidence to date is encouraging with the annual rate of accidents (including major and lost time injuries) reported through to September, reaching its lowest level of 0.46 per million hours since 2005. However, it is not all good news with an increase in the rate of hydrocarbon gas releases continuing over recent years. Nearly 90% of these releases have been at the lower 1-300kg release category but all are potential indicators for more serious events and should not be disregarded. Accordingly, the results serve as a reminder that we all need to remain vigilant and ensure that increasing economic pressure does not affect commitments made in safety cases, well operations management plans and environment plans.

Recently I attended, on behalf of NOPSEMA, the second ministerial meeting of the Council of Australian Governments (COAG) Energy Council. NOPSEMA was able to contribute to the intergovernmental discussion on priority issues in the energy and resources sector including measures to reduce the regulatory burden on the industry. NOPSEMA will continue to seek opportunities to work with industry and government to ensure good regulatory outcomes in 2015.

The New Year will bring many challenges but by working together and staying focused on our priorities we can all make sure every offshore worker returns home safely and the environmental impacts of oil and gas activities are minimised.

I wish you all a very merry Christmas and best wishes for 2015.

All

Stuart Smith, CEO

Timely provision of proposed actions to address inspection recommendations

NOPSEMA has identified some recent cases where the details of action to be taken in relation to inspection report conclusions and recommendations are not being provided by the responsible parties within the timeframe specified in NOPSEMA's request.

NOPSEMA regularly conducts occupational health and safety (OHS), well integrity and environmental inspections in relation to offshore facilities and activities. The aim of an inspection is to determine if the responsible parties are meeting the requirements of the legislation and the commitments made in the relevant safety case, environment or well operations management plan.

On completion of an inspection, a NOPSEMA Inspector will prepare an inspection report, which will include their conclusions, the reasons for those conclusions and any recommendations. The inspector will then issue that report to NOPSEMA for review and as soon as reasonably practicable NOPSEMA must provide a copy of the report to relevant parties.

For environment inspections and well-related inspections the relevant party is the titleholder. For OHS inspections the relevant party is generally the facility operator, but may include a range of other parties including an employee, a contractor, or a manufacturer.

NOPSEMA would like to remind relevant parties that under clause 80(4) of Schedule 3 (for OHS and well integrity inspections) and clause 13(6) of Schedule 2A (for environment inspections) of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, a relevant party **must** provide details of any action proposed to be taken as a result of the conclusions or recommendations contained in an inspection report as requested and **within the timeframe** specified by NOPSEMA.



If circumstances arise that prevent a relevant party from providing the requested details within the specified timeframe then NOPSEMA should be contacted as soon as possible.

For more information please see the respective Inspection pages under the Safety and Environment tabs at nopsema.gov.au.

Monitoring of impacts to the environment from oil pollution

In line with the government's response to the Montara Commission of Inquiry recommendation to establish 'off the shelf' monitoring plans, NOPSEMA has targeted arrangements for the monitoring of impacts to the environment from oil pollution and response activities within an environment plan (EP).

Pre-determined post-spill monitoring arrangements are the principle tool for enabling identification of the extent, severity and persistence of environmental impacts from an oil spill, and are necessary to focus remediation efforts. Amended environmental regulations which commenced on 28 February 2014 clarified the content requirements of EPs for post spill monitoring.

Recently, NOPSEMA has identified that some titleholders are submitting EPs that contain post-spill monitoring arrangements in which components for monitoring impacts to particular receptors (for example water quality, sediments, coral reefs, mangroves, seagrasses and fish) are excluded based on a risk assessment at the planning stage.

Predictions and risk assessment may provide good information with which to prioritise monitoring arrangements, however, titleholders should take care not to interpret these so rigidly as to inappropriately exclude certain arrangements. This is particularly important when uncertainty, such as oil type and characteristics or likelihood of contact with sensitive receptors, exists.

Well-developed post-spill monitoring arrangements can be made suitably flexible by including a suite of monitoring programs, each measuring a specific receptor, that are activated on an 'as needs' basis in the event of a spill. These monitoring arrangements can accommodate a range of spill outcomes because they have been designed to cover a variety of receptor types that may be affected by different spill risks.

Individual monitoring programs which include rational and logical activation arrangements mean that, in the event of a spill, only the modules that need to be implemented are activated. For example,



the results of water quality information gathered during the operational response phase in an area over seagrass meadows may be used to activate monitoring of seagrasses.

To ensure appropriate monitoring arrangements are in place, titleholders should have access and commitments to implement monitoring of impacts to the environment from oil pollution and response activities. Provisions for an entire range of monitoring will ensure that the appropriate components are activated and that titleholders will be able to meet the requirements of the Environment Regulations.



Electronic submission of documents to NOPSEMA

NOPSEMA is transitioning towards an 'electronic submissions only' approach, for certain regulatory submissions, to improve submission efficiency and reduce unnecessary handling of hard copy documents.

This transition is a result of recent changes to the Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011, which now allow NOPSEMA to nominate its preferred method of receiving documents that are required or permitted to be given under the Offshore Petroleum and Greenhouse Gas Storage Act 2006 or the Regulations, including by electronic submission.

NOPSEMA has published a notice on its website detailing the method by which certain regulatory submissions must be made to NOPSEMA. The notice outlines that from 8 December 2014, Secure File Transfer and email are the only methods to be used for the following submissions:

- Proposed scopes of validation
- Safety cases
- Environment plans
- Offshore project proposals
- Diving safety management systems
- Well operations management plans
- Applications for approval to undertake a well activity.

Relevant parties should be aware that if NOPSEMA receives hard copies of the above regulatory submissions after this date, these copies will be returned to the sender and an electronic submission will be requested.

Submissions of smaller documents of no more than a few pages, such as letters, diving start-up notices and monthly environment/OHS reports on incidents/injuries may still be received and accepted in hard copy.

For more information, or to view the notice, see the <u>Submissions page</u> under the Contact tab at nopsema.gov.au.

Referring to information previously submitted

On 28 February 2014, amendments to the Environment Regulations introduced Regulation 31 which provides for titleholders to refer to information that was previously submitted to NOPSEMA for another purpose. The aim of this provision is to remove unnecessary duplication and improve procedural efficiency for titleholders.

Referring to information that was previously submitted may be appropriate, for example, when a submitted environment plan (EP) includes an identical spill scenario to that of an accepted EP. In this instance, a titleholder could refer to the spill response and/or post-spill monitoring program in the accepted EP rather than duplicating the information in a new EP submission. The provision may also apply to aspects of the description of the environment for a new activity in the same location.

Further explanation and examples can be found in the explanatory statement for the Environment Regulations at comlaw.gov.au.

When a titleholder refers to information that was previously submitted, NOPSEMA will assess that information as though it is part of the EP submission. Titleholders should ensure that the specific location of the referenced information (document title; identification, revision, section and page numbers) is provided and its relevance to the current submission clearly explained. It would also be useful for titleholders to clearly identify when the document was submitted to NOPSEMA and the associated assessment ID number.

Titleholders should be aware that whilst information may have been sufficient or adequate for its original purpose, NOPSEMA may not accept the same information as sufficient or adequate for the new submission.

Prior to deciding if it would be appropriate to refer to previously submitted information titleholders should consider if their internal compliance systems can effectively accommodate monitoring compliance with requirements set out in multiple documents, including those that may have been developed for other purposes. Particular care should also be taken where information is referred to in EPs that were submitted and accepted prior to the commencement of amendments to the Environment Regulations in February 2014 and to EPs that are currently under assessment and have not yet been accepted by NOPSEMA.



Fatigue avoidance guidance note

Fatigue is an occupational health and safety hazard and is known to facilitate human error, which can contribute to accident and dangerous occurrence causation.

The Offshore Petroleum and Greenhouse Gas Storage Act 2006 requires duty holders to implement and maintain systems of work that are safe and without risk to health. To the extent that fatigue is a hazard with the potential to adversely affect the health or safety of members of the workforce or other persons at or near the facility, duty holders must take all reasonably practicable steps to ensure that their systems of work, appropriately and effectively, address the hazard of fatigue.

During routine inspections at offshore facilities, NOPSEMA has identified some members of the workforce at risk of experiencing fatigue. NOPSEMA has also found that fatigue management plans, and the risks associated with shift work, are not always clearly understood, identified or controlled by duty holders to ensure risks are reduced to a level that is as low as reasonably practicable (ALARP).

In light of these findings, NOPSEMA has published an Avoiding Fatigue guidance note to assist duty holders in meeting the requirements of the legislation with regard to fatigue avoidance. The guidance note provides



information about how duty holders can manage the risk in the workplace that is posed by fatigue through the application of controls and as a result effectively demonstrate the reduction of fatigue risk to a level that is ALARP. For more information or to access the guidance note see the <u>Safety Resources page</u> under the Safety tab at nopsema.gov.au.



Commencement of financial assurance requirements

From 1 January 2015, Part 1B – Financial Assurance will be incorporated into the Offshore Petroleum and Greenhouse Gas Storage (Environment)
Regulations. Regulation 5G of this new part will require titleholders to demonstrate to NOPSEMA that they meet the financial assurance requirements of section 571(2) of the Offshore Petroleum and Greenhouse Gas Storage Act 2006 as a prior condition of acceptance of an environment plan (EP) or a revised EP.

In <u>Issue 5 of the Regulator</u>, NOPSEMA announced the publication of a guideline on *Financial assurance for petroleum titles* (the guideline) to assist titleholders in complying with the financial assurance requirements for petroleum titles.

After an independent validation, NOPSEMA endorsed the Australian Petroleum Production and Exploration Association (APPEA) *Method to assist titleholders in estimating appropriate levels of financial assurance for pollution incidents arising from petroleum activities* (APPEA method) on 9 December 2014. Endorsement of the APPEA method is provided for in the finalised NOPSEMA guideline, which also allows for other approaches to estimate financial assurance subject to agreement by NOPSEMA and associated independent validation that may be required.

In the course of preparing an EP, titleholders should read the guideline and use the Financial Assurance Declaration and Financial Assurance Confirmation forms on NOPSEMA's website to ensure they comply with their financial assurance obligations. Titleholders are encouraged to engage with NOPSEMA in the planning stages of EP development if the APPEA method is not being applied for titles associated with the EP.

For more information or to access the guideline and forms see the <u>Financial Assurance page</u> under the Environmental Management tab at <u>nopsema.gov.au</u>.



Human factors – Safety culture and perception surveys

In 2012-13 NOPSEMA conducted a survey of facility operators with the aim of identifying safety improvement strategies currently implemented across the Australian offshore petroleum industry. In response to key survey results, NOPSEMA has developed two information papers, which address the use of safety culture improvement initiatives, and the use of safety culture/climate perception surveys.

The survey of facility operators identified that 92% of participating organisations had implemented a safety culture improvement strategy or were planning to do so in the near future. Further qualitative research revealed that there was no commonly accepted definition or model of safety culture used to frame safety culture improvement strategies across the industry. The result has been a highly diverse collection of safety improvement practices being labelled 'safety culture improvement'. To facilitate the development of robust and effective safety culture improvement strategies across the industry, NOPSEMA proposed a definition and model of safety culture, designed to

drive the development of better quality safety culture improvement strategies that are more likely to succeed in improving safety performance. NOPSEMA has recently published a <u>Safety Culture information paper</u> which expands on NOPSEMA's safety culture model and describes how it might be used to guide the development of safety improvement initiatives.

In the same survey of facility operators, 78% of participating organisations reported that they administer safety culture/climate perception surveys on a regular basis. In response to this finding NOPSEMA has also published a Perception Surveys information paper which provides information about the way that perception surveys are designed and used, and seeks to challenge the conclusions typically drawn from perception survey data in relation to safety performance outcomes. In particular, it addresses the practice of interpreting perception survey data as a measure of safety culture and as a predictor of safety outcomes. It provides information that organisations may wish to consider when determining whether to administer a perception survey as a means of safety culture analysis or as a leading indicator of safety performance.

For more information see the information papers on the <u>Human Factors Information Papers page</u> under the Resources tab at nopsema.gov.au.

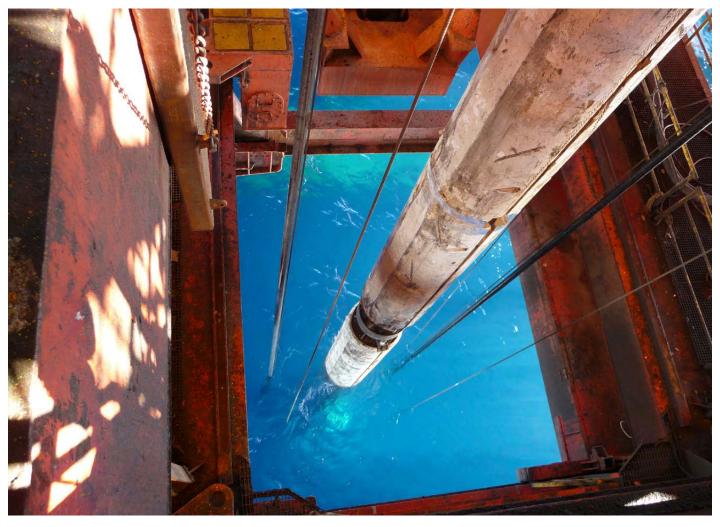
International Offshore Petroleum Environment Regulators

In 2014, NOPSEMA continued to engage international counterparts in the regulation of environmental management for offshore petroleum activities as a member of the International Offshore Petroleum Environment Regulators (IOPER).

The IOPER is a collaborative group of national regulators whose members are dedicated to raising environmental performance standards within the offshore petroleum exploration and production industry. Since re-forming in 2012, this group of independent environment regulators has collaborated on a range of initiatives to promote and share regulatory best practice, discuss common challenges and work to promote improvement in industry performance.

NOPSEMA is an active member of the IOPER and continues to work with jurisdictions in the UK, Norway, USA, Brazil, Canada, NZ and Mexico in order to assist global efforts to improve environmental outcomes in the offshore petroleum sector.

The 2015 Annual General Meeting was hosted by IOPER's newest member, Mexico and saw agreement by IOPER members to implement the Australian-led strategic priority project promoting oil spill preparedness principles, which will feature in the program of the Interspill Conference in Amsterdam in March 2015. Information on IOPER and the current strategic priority areas can be found at www.ioper.org.





International collaboration on global offshore safety initiatives

Offshore petroleum exploration and production is a technically demanding industry and regulation of its safety and environmental management practices demands equal rigour and expertise.

For its part, NOPSEMA is committed to open dialogue, sharing expertise and insights, and collaborating with its international regulatory counterparts in the development of regulatory good practice to achieve a safe and environmentally responsible offshore petroleum industry in Australia. NOPSEMA's active involvement in the International Regulators' Forum (IRF) is an example of this commitment.

The IRF comprises eleven offshore petroleum regulators and exists to drive forward improvements in health and safety in the oil and gas industry through collaboration in joint programs and through information sharing. Between 19-21 November 2014, IRF members, including

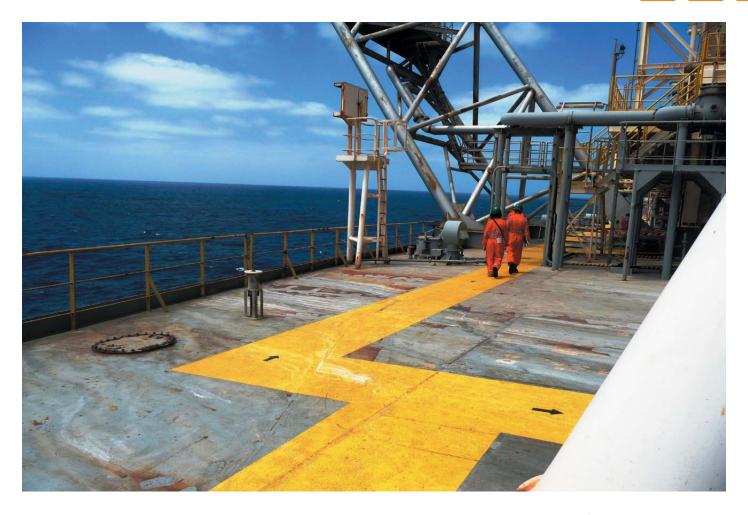
a representative of NOPSEMA, gathered for their annual general meeting hosted by the National Hydrocarbon Commission of Mexico.

Over the three days, IRF members discussed and considered issues including strategies to enhance safety performance outcomes by:

- optimising the IRF's influence on the industry's risk evaluation, prevention and mitigation processes
- focusing regulatory efforts informed by improved data sharing including BOP performance data sharing
- monitoring the international implementation of well source control capping and containment measures and contributing and driving the development of solutions to remaining challenges in this and other well control matters
- optimising the regulatory application of international standards whilst recognising differing legislative regimes and the challenges faced by those involved in maintaining the currency and validity of those standards.

The IRF deliberations were assisted by the input of invited representatives of the International Association of Drilling Contractors (IADC), the International Association of Oil and Gas Producers (IOGP), the American Petroleum Institute (API) and the International Standards Organisation (ISO) in their respective areas of interest.

Minutes of the annual general meeting will be posted on the IRF website at irfoffshoresafety.com in due course.



Request for further information

On 28 February 2014, amendments to the Environment Regulations introduced Regulation 9A which provides for NOPSEMA to request further information from a titleholder about any matter in a submitted environment plan (EP) and for the information provided to be regarded by NOPSEMA as part of the submitted EP.

Prior to 28 February 2014, the only regulatory option for titleholders to provide additional clarification for an EP submitted for assessment was to modify and resubmit the EP. Regulation 9A has been in use since February to enable a more efficient and effective approach for titleholders to supply NOPSEMA with additional information that is then considered part of the EP. This reduces regulatory burden and improves timeframes for completion of EP assessments.

To ensure the timely completion of EP assessments, titleholders should provide clear information in their response that directly addresses the request for further information, and not consider the request as an opportunity to modify and resubmit certain parts of the EP. If the titleholder chooses to respond outside of the scope of the request and take action such as remove content from the EP when this was not requested, then this may generate additional findings in the assessment. This may lead to further requests for information or NOPSEMA deciding that the titleholder must modify and resubmit the EP, which will add to the overall duration and effort required for the submission to reach a final decision.

Requests for further information are made in accordance with NOPSEMA's assessment policies that clearly outline NOPSEMA's administration of submissions made under the Environment Regulations. To view NOPSEMA's assessment policies see the Environment Resources page under the Environment tab at nopsema.gov.au.

Quality of drinking water

Following a recent planned inspection, NOPSEMA made recommendations to a facility operator regarding the need for an effective management framework to ensure the maintenance of drinking water quality from small water supplies.

The recommendations originated from an obvious discolouration of the drinking water, insufficient chlorine in the water, water filters that were overdue for replacement, a lack of adequate water quality testing and the lack of an adequate preventative maintenance plan.

An effective management framework for the supply of drinking water from small water supplies should be based on a risk-management approach to maintaining drinking water quality as discussed in Issue 1 of the Regulator in 2012. A risk-management approach involves the use of multiple barriers to prevent the entry and transmission of pathogens. The effectiveness of these barriers should be regularly monitored based on operational characteristics and by testing for microbial indicators.

Clause 9 of Schedule 3 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* places a duty on operators to take all reasonably practicable steps to ensure that the facility is safe and without risk to the health of any person at or near the facility. This duty extends to water quality and may include:

- Identifying hazards that could lead to hazardous events including unsafe drinking water with the potential for adverse health consequences if consumed by the offshore workforce.
- Assessing the likelihood and consequences (risks) associated with the identified hazards.
- Identifying the technical (hardware) and other (procedural) control measures needed to prevent the hazardous event and mitigate the consequences (reduce the risk) to a level that is as low as reasonably practicable.
- Documenting day-to-day operational requirements, including how water quality will be monitored against mandatory water quality criteria; how operational and verification monitoring will be conducted; how associated equipment and systems are inspected, tested and maintained and the associated reporting and recording arrangements, to ensure safe drinking water at the facility.



photo by nkzs via www.freeimages.com

Data reports and statistics

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

Schedule of events

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

• 9-11 February 2015 American Institute of Chemical Engineers and

Centre for Chemical Process Safety Asia Pacific conference, Perth

• 23-25 February 2015 Safety in oil and gas conference, Brisbane

• 24-25 March 2015 Interspill conference and exhibition, Amsterdam

17-20 May 2015 APPEA National conference and exhibition, Melbourne







Feedback

NOPSEMA welcomes your comments and suggestions. Please direct media enquiries, requests for publications, and enquiries about NOPSEMA events to communications@nopsema.gov.au. Operators and other employers are encouraged to circulate this newsletter to their workforce. Past issues of this newsletter are available at nopsema.gov.au.

Subscribe

NOPSEMA has recently expanded its online subscription service. To receive the latest news and developments from Australia's national regulator for the oil and gas industry please complete the online <u>subscription form</u>. NOPSEMA's services include news and information on environmental management, HSRs, media releases, safety alerts and *the Regulator* newsletter.

The information provided in this publication is intended to provide general information and guidance only and should not be treated as a substitute for professional advice. Please read NOPSEMA's disclaimer.

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