At a recent industry event I spoke about the importance of collecting and analysing industry performance data to inform decision-making and improve safety and environmental outcomes. I encouraged all duty holders to use their own data, alongside industry performance data published by NOPSEMA on its website, to identify any emerging trends and areas where resources may be best directed. I asked that duty holders be candid and share their learnings with industry, even if it casts their systems in a poor light. By learning from each other’s experiences we can expand our knowledge, enable innovation and save lives.

To coincide with the industry event, NOPSEMA published a suite of new charts on industry performance. An extensive analysis of this data is now being conducted by NOPSEMA and the findings will be made available to industry in May. The analysis includes a review of safety and environmental performance during past periods of declining oil and gas prices. I am pleased that the preliminary results do not suggest a correlation for operations in Australian waters. Instead, it appears that duty holders typically remain vigilant to ensure market conditions do not affect the delivery of strong safety and environmental outcomes.

NOPSEMA is continuing to seek a reduction in regulatory burden through the removal of unnecessary and inefficient regulation. This objective is being pursued via several initiatives including the conferral of OHS and environmental management regulatory powers on NOPSEMA from the states and the Northern Territory. I am encouraged to see some jurisdictions actively considering conferral. I am also pleased with the willingness of other jurisdictions to cooperate in seeking alignment of approaches and practices where conferral is not being considered at this time.

NOPSEMA is working to strengthen partnerships with other federal and state/territory regulators. An example is the delegation I recently led to Canberra with representatives from the National Offshore Petroleum Titles Administrator (NOPTA) and the Western Australian Department of Mines and Petroleum (DMP). The delegation met a wide range of organisations including the Australian Petroleum Production & Exploration Association (APPEA), the Australian Marine Oil Spill Centre (AMOSC), the Commonwealth Department of Industry and Science, the Commonwealth Department of the Environment, and Geoscience Australia to enhance alignment in our regulatory approaches and practices.

I am also encouraged to see partnerships being strengthened between the offshore petroleum industry and other stakeholder interests. The recent formation of a joint research project between the offshore petroleum industry and the commercial fishing industry to address issues associated with mutual marine use is a good example which should improve consultation outcomes for both parties. The authority’s Environment Division also recently met with recreational and commercial fishers to discuss consultation requirements in the Environment Regulations. As a result of this meeting and NOPSEMA’s advice these stakeholders are better equipped to participate in consultation on petroleum activities in their region.

As we all know, the offshore petroleum industry is fast moving and dynamic in nature and only by working together can we meet the challenges of the future and find ways to deliver improved safety and environmental outcomes. I look forward to working with the Australian offshore petroleum industry and other stakeholders in 2015 to achieve safe and environmentally responsible outcomes.

Stuart Smith, CEO
Standards, continuous improvement and ALARP as a dynamic concept

Reducing risks to a level that is as low as reasonably practicable (ALARP) and continuous improvement are core concepts of the goal-setting, performance-based, safety case regime under the Offshore Petroleum and Greenhouse Gas Storage Act (OPGGS Act) and its associated regulations. That which is considered to be ALARP, continuously changes as a result of improvements to industry knowledge, equipment and practices. NOPSEMA reminds operators that risk control measures should be regularly reviewed to ensure they continue to meet the objective of managing risks to ALARP.

The effective implementation of the principles of continuous improvement and ALARP is dependent on the correct identification of all hazards with the potential to lead to a major accident event (MAE) and proper selection and application of the necessary control measures for each MAE. This includes demonstrating that any codes and standards used are appropriate and sufficient. Whatever code or set of standards is used, the operator should take care to assure themselves of their applicability and to recognise the limitations of those codes or standards.

Identified deficiencies, remedial solutions and new improvements to equipment, procedures and standards continuously re-define that which is reasonably practicable and as such should be considered an integral part of review processes to assure the ongoing management of risk to ALARP. When relevant new or updated codes, standards, or improved industry practices are introduced they cannot be dismissed merely because the plant or facility was built prior to their introduction, yet nor should they necessarily be automatically adopted. A risk assessment process should be undertaken to consider the change in relation to the specific facility, taking into account the basis for the change to the code or standard. Such changes are often improvements in response to identified failures or weaknesses of plant, equipment or procedures not addressed by the previous code or standard.

As an example, in November 2012 the American Petroleum Institute (API) Recommended Practice 53, for ‘Blowout Prevention Equipment Systems for Drilling Wells’, was replaced by API Standard 53 subsequent to the identification of deficiencies in blow out prevention equipment systems following the 2010 Deepwater Horizon well blowout in the Gulf of Mexico. The new API Standard 53 was developed in conjunction with the global oil and gas industry to assist in promoting personnel safety, public safety, integrity of the drilling equipment, and preservation of the environment for land and marine drilling operations and as such can be considered ‘good industry practice’.

Two key improvements addressed in the standard are:

- well defined periodic maintenance and inspection requirements
- detailed shear ram considerations, configuration and spacing.

Where adopting improvements would result in a reduction of risk compared to the status quo, an operator should consider the adoption of the improvements in the context of managing risks to ALARP and in relation to meeting the general and specific duties imposed on an operator by Clause 9 of Schedule 3 of the OPGGS Act which includes the requirement 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.

Further information on the interaction between standards, continuous improvement, and ALARP can be found in NOPSEMA’s ALARP Guidance Note on the Safety Resources page under the Safety tab at nopsema.gov.au.
Environmental management focus

NOPSEMA has identified the following focus areas for environmental management of offshore petroleum activities in 2015:

- Oil pollution emergency plans
- Transparency and consultation
- Environmental performance standards

These focus areas have been informed through inspection and assessment findings, incidents, NOPSEMA’s Annual Operating Plan, the continuation of topics from 2014 where necessary and issues raised with the authority by industry and community stakeholders.

Oil pollution emergency plans

Environment plans must contain an Oil Pollution Emergency Plan (OPEP) that includes adequate arrangements for responding to and monitoring oil pollution. Adequacy includes the timely implementation of control measures identified as necessary to manage impacts and risks to as low as reasonably practicable (ALARP) and to acceptable levels. NOPSEMA’s promotion, assessment and inspection activities in 2015 will continue to focus on ensuring titleholder arrangements described in an OPEP are being implemented, maintained and suitable to deal with the consequences that may arise from credible spill scenarios.

Transparency and consultation

In 2014 NOPSEMA observed increasing stakeholder dissatisfaction in relation to environmental consultation processes undertaken by some titleholders. Under the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009, titleholders are required to consult with relevant persons throughout the planning and implementation stage of a petroleum activity. Appropriate consultation is not only a key requirement to achieve acceptance of an environment plan, but is necessary to gain stakeholder confidence that the environmental impacts and risks of petroleum activities are being properly considered and reflect the potential for impacts on those stakeholders.

NOPSEMA will be focusing on ensuring titleholders engage with community stakeholders in areas of community interest and cooperatively address and manage any concerns identified by stakeholders during the consultation process. Where required, NOPSEMA will provide advice to assist stakeholders in securing more effective consultation outcomes. Other NOPSEMA initiatives to better utilise existing mechanisms include the publishing of information about submitted environment plans, including activity descriptions required to be published by the authority under sub-regulation 9(8) (see the ‘Improved transparency for environment plan submissions’ article on page 6).

Environmental performance standards

NOPSEMA’s inspection findings to date have highlighted the need for titleholders to set well defined performance standards that are SMART – specific, measurable, appropriate, realistic and timely. NOPSEMA will continue to examine, via its planned inspection program, the implementation of performance standards via titleholders implementation strategies (environmental management systems). NOPSEMA will also promote greater focus on significant impact and major risk management through assessments and associated guidance.
OHS inspection priorities

NOPSEMA is focusing on the following areas in its OHS inspections at facilities during 2014-15:

- Performance standards
- Management of change
- Blow out preventers and associated well control equipment
- Workforce involvement.

Performance standards

The Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009 (Safety Regulations) require that a facility operator’s safety management system specify the performance standards that apply. Performance standard means a standard (established by the operator) of performance required of a system, item of equipment, person or procedure which is used as a basis for managing the risk of a major accident event (MAE). The description of the safety management system, required in the safety case for a facility, should show how it will support and maintain the performance standards within an integrated management framework. For more information see NOPSEMA’s Control Measures and Performance Standards Guidance Note. NOPSEMA’s compliance monitoring in this respect is focused on the integration of performance standards into the operator’s testing, inspection and maintenance regimes.

Management of change

The failure to manage change appropriately can be a major contributor to MAEs. NOPSEMA’s focus is on inspecting operators change management processes including associated risk assessment requirements, particularly with respect to temporary deviations affecting required risk control measures.

Blow out preventers and associated well control equipment

Blow out preventers (BOP) and associated well control equipment are critical to safety on a drilling facility; failure to control the well can result in fire or explosion and consequent loss of life. In 2010 a catastrophic well blowout and explosion in the Gulf of Mexico resulted in the loss of 11 lives and the sinking of the Deepwater Horizon drilling rig. Following this event, in which the effectiveness of BOP equipment was a factor, the American Petroleum Institute (API) developed API Standard 53 in conjunction with the global oil industry and this standard is well regarded with respect to the installation, testing and maintenance of blow out prevention equipment systems. NOPSEMA’s inspection focus in this area aims to verify operators compliance with their specific duties regarding the management of this safety critical system.

Workforce involvement

The Safety Regulations require that the safety case ‘provides adequately for effective consultation with, and the effective participation of, the members of the workforce, so that they are able to arrive at informed opinions about the risks and hazards to which they may be exposed on the facility’ [r. 2.11 (1) (b)]. NOPSEMA’s focus is to verify operators compliance with the commitments made in the safety case for the facility with respect to workforce involvement in hazard identification, risk assessment (e.g. JSA/JHA) and implementation of risk controls, as well as the effectiveness of consultation processes on their facility.
Recent environmental inspections have shown that some titleholders are using chemicals which no longer meet the standard of environmental performance required of their accepted environment plan. NOPSEMA encourages titleholders to regularly review the chemicals used in their petroleum activities to ensure environmental performance objectives are met and that impacts and risks to the environment remain at a level that is acceptable and as low as reasonably practicable (ALARP).

Chemical products are used in the oil and gas industry for many functional applications. For example, production facilities which discharge treated wastewater may require chemical additives to regulate emulsification, reduce scaling, scavenge oxygen and prevent corrosion. While criteria for selecting chemical products will include considering the desired level of engineering performance, an ongoing challenge for titleholders is balancing this need with the environmental consequence associated with usage; otherwise known as evaluating the ‘environmental performance’ of a chemical product.

Several international management systems have been established to assess the environmental performance of chemical products to inform the chemical selection process. The Offshore Chemical Notification Scheme (OCNS), managed by the Centre for Environment, Fisheries & Aquaculture Science (Cefas) in the United Kingdom, is one such example. The OCNS provides a framework and updated register which ranks the environmental performance of chemicals used in offshore petroleum activities. Many titleholders in Australia specify control measures in their environment plan that are linked to the OCNS system to ensure environmental impacts and risks associated with chemical use are managed to a level that is acceptable and ALARP.

In keeping with OSPAR Recommendations, the UK Department of Energy and Climate Change has been promoting a reduction and phase-out of hazardous chemicals through a program of identification and substitution with less hazardous chemicals. When a chemical is identified for substitution it must be either replaced, or any discharge to the marine environment must be eliminated, or its continued use and/or discharge formally justified. Substitution target dates for priority chemicals range from 31 December 2010 to 31 December 2016, depending on the assigned substitution priority level.

Titleholders should be aware that the schedule for substitution has already resulted in the reclassification or removal of several chemical products previously ranked in the OCNS database. In recent inspections, NOPSEMA has observed some titleholders using chemical products which no longer comply with the required level of environmental performance under OCNS that has been specified in their accepted environment plan.

NOPSEMA encourages titleholders to regularly review the updated OCNS chemical ranking database to ensure compliance is maintained and the discharge of hazardous chemicals to the environment is progressively reduced. Further information regarding substitution warnings may be found at cefas.defra.gov.uk.
Improved transparency for environment plan submissions

Enhancements to NOPSEMA’s environment plan (EP) submissions and summaries web page will increase the accessibility and transparency of information about petroleum activities. Assistance and cooperation of titleholders to enable publication of more detail in relation to the activities contained within an EP is expected to streamline and reduce the efforts required to achieve appropriate stakeholder consultation outcomes.

Changes to the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 that took effect on 28 February 2014 require NOPSEMA to publish the name of the titleholder, details of the titleholder’s nominated liaison person, a description of the petroleum activity, and the location of the activity soon after a submission is received (sub-regulation 9(8)).

Consistent with NOPSEMA’s commitment to transparency and accountability, the authority is implementing a staged project to improve its EP Submissions and Summaries web page. Feedback from a range of stakeholders identified key areas for improvement that will feature in the upgraded system, they include:

- provision of a tool to search and filter a range of fields to identify relevant EP submissions and summary documents
- a subscription function to receive notifications about particular submissions via various criteria
- provision of additional information about the petroleum activity including activity description, location and maps.

The first stage of the project is now live and enables search and filtering of EP submissions. The second stage will provide improved layout, additional information and subscription functionality; this is expected to be available in April 2015. More information will be published including how existing ‘Environment alert’ subscribers will need to make additional registrations to the EP subscription system to access EP alerts.

From 30 March, updates to the NOPSEMA submission guidelines and EP guidance will be introduced to enable a streamlined approach for titleholders to provide additional information for publication. This additional information will be limited to a brief description of the activity and an activity location map; which would preferably be extracted from the EP submission to ensure no unnecessary additional burden.

A cooperative approach between NOPSEMA and titleholders will contribute to enhancing transparency of submissions for stakeholders in a timely and effective manner. Updated resources will be available in March to assist titleholders with making submissions and the new publication process administered by NOPSEMA.

NOPSEMA encourages any questions and feedback on this approach to be directed to information@nopsema.gov.au.
Inspecting titleholders environmental consultation performance

Throughout 2014 NOPSEMA received a significant increase in enquiries and complaints from stakeholders in relation to poor consultation practices by some titleholders, particularly in relation to proposed seismic survey activities.

In response to the increase in stakeholder concern and as a part of its legislated function to implement effective monitoring and enforcement strategies, NOPSEMA conducted a program of compliance inspections. The purpose was to gather information and determine the extent to which titleholders were complying with consultation requirements of petroleum environmental law.

The inspections were conducted over a three month period and covered seven seismic activities and six different titleholders across locations in Commonwealth waters adjacent to South Australia, Victoria and Western Australia. The inspections took place at various stages of the activity including before, during and following completion of the seismic survey.

While there were many areas of good practice being observed, a relatively common finding was the failure to provide responses to titleholders during and after planning stage consultation; as well as poor or in some cases no implementation of ongoing consultation plans. NOPSEMA’s inspection process includes making recommendations on findings as a means to encourage compliance. Consultation provisions of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 are important parts of ensuring proper management of social and economic components of the environment. Enforcement may therefore be warranted in situations where ongoing or more serious breaches are not addressed by titleholders through timely implementation of NOPSEMA’s recommendations.

Initial analysis of the range of inspection findings identified the following areas for improvement that may assist titleholders in planning and implementing consultation in their petroleum activities:

• engaging with stakeholders earlier, more often, and with greater transparency in terms of information sharing
• illustrating how the concerns of stakeholders have been considered with particular attention to providing responses that explain how the titleholder is managing any impacts and risks of the activity on stakeholders functions, activities or interests
• providing meaningful responses to stakeholders who made objections or claims about the activity and allowing sufficient time for consideration and follow-up
• developing detailed plans for ongoing consultation with stakeholders
• implementing ongoing consultation plans particularly in the event of activity changes and where consultation is identified as a control measure
• maintaining systems for managing consultation records.

Insights from inspections across the remainder of the annual program will be utilised by NOPSEMA to update guidance material, support NOPSEMA’s engagement with stakeholders, and feed back into NOPSEMA’s assessment processes. Current consultation practices outlined in NOPSEMA’s Consultation requirements under the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 Information Paper provide further information regarding best practice consultation. The paper can be accessed on the Environment Plans page under the Environment tab at nopsema.gov.au.
Review of NOPSEMA’s environmental management authorisation process

The 28 February 2015 marks the one year anniversary of the endorsement of NOPSEMA’s environmental management authorisation process (the program) under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). In the coming months, an independent review of NOPSEMA’s compliance with the endorsed program under the streamlined arrangements will commence.

On the 28 February 2014, following a comprehensive strategic assessment of NOPSEMA’s environmental management authorisation processes, the Minister for the Environment endorsed NOPSEMA as the sole regulator for petroleum activities in Commonwealth waters. Under the streamlined arrangements, NOPSEMA has assessed and accepted 48 environment plans that qualified for the EPBC Act class approval under the endorsed program.

As a part of the Minister’s endorsement of NOPSEMA’s program, the authority committed to a review of its performance in meeting the objectives of the program following the first 12 months of operation. A key component of the review, to be conducted by an independent reviewer appointed under terms of reference agreed with the Department of the Environment, will include feedback from various titleholders, environment non-government organisations and various community representatives. NOPSEMA encourages all stakeholders who are contacted by the reviewer to actively participate in the review process.

The review is scheduled to commence in March and completed in August. NOPSEMA will publish the review findings on its website upon completion of the process.

Commonwealth marine reserves review

The Australian Government has commissioned an independent review to consider what management arrangements will best protect the marine environment and accommodate activities conducted in Commonwealth marine reserves. The values identified from the review and final management plans form an important part of NOPSEMA’s compliance role in ensuring environmental risks and impacts are managed to levels that are acceptable and as low as reasonably practicable.

Following NOPSEMA’s endorsement as the sole regulator for petroleum activities in Commonwealth waters under Part 3 of the Environment Protection and Biodiversity Conservation Act 1999, NOPSEMA has a key role in ensuring the values identified in marine reserves are protected from offshore petroleum activities. Titleholders are reminded to have due regard to these values and the management plans that are in place and should note that NOPSEMA will not accept an environment plan for petroleum activities that contravene any plan of management for a Commonwealth marine area.

Stakeholders are invited to provide the review with their ideas and suggestions on how marine reserves should be managed. Opportunities to provide feedback include completing an online survey, providing a written submission and/or attending a regional forum. For more information about the review and how to participate visit marinereservesreview.gov.au.
Informing community stakeholders about consultation requirements

NOPSEMA recently met with representatives of the fishing and local government sectors in Newcastle, New South Wales, to explain the current regulatory regime. The meeting was prompted by stakeholder enquiries to NOPSEMA about a proposal by one titleholder, Advent Energy Limited, to conduct petroleum exploration in the area.

Petroleum activities occur only rarely in the Sydney Basin; the last activity was conducted in 2010, prior to NOPSEMA’s commencement as the national environmental management regulator for petroleum activities in 2012. For this reason, NOPSEMA took the opportunity to engage with stakeholders to explain the requirements of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (the Environment Regulations).

Topics of particular interest at the meeting included:

• NOPSEMA’s role and responsibilities, including our independence from government and the distinction in our role from that of the National Offshore Petroleum Titles Administrator (NOPTA)
• consultation requirements of the Environment Regulations, such as how ‘relevant persons’ are identified and how ‘objections and claims’ must be assessed
• opportunities to contribute to consultation in a meaningful way, which ultimately results in acceptable management of the petroleum activity.

Many of the issues raised by the stakeholders were similar to those discussed in other consultation meetings convened recently by NOPSEMA in Victoria, Tasmania and South Australia. Common themes include a strong preference for increased transparency in the assessment process, a desire for feedback from titleholders where objections or claims have been raised, and concerns over gaps in scientific knowledge of the impacts of seismic surveys on different species of marine fauna.

As a result of NOPSEMA’s advice at the meeting, these stakeholders are now better-equipped to participate in consultation on petroleum activities in their region. NOPSEMA will continue to encourage titleholders to engage effectively in consultation during the preparation of an environment plan by allowing ample time and ongoing feedback to relevant persons.

Promoting cooperative approaches

NOPSEMA welcomes improved cooperation between the offshore petroleum and fishing industries to collectively address issues associated with mutual marine use.

A research project is currently underway, funded by the Fisheries Research and Development Corporation (FRDC), to improve processes and policies to minimise business and operational impacts between the fishing industry and titleholders undertaking seismic exploration activities. NOPSEMA is assisting the project by providing a regulators perspective to discussions about improving consultation and the assessment of potential impacts on the marine environment.

NOPSEMA supports cooperative efforts that aim to improve environmental outcomes and is looking forward to providing a regulators viewpoint on resolving differences and exploring common interests. Industry and other stakeholders are encouraged to contribute to ensure all relevant input is taken into account in this important research.
Improving outcomes through data analysis

NOPSEMA CEO Mr Stuart Smith recently addressed an audience of industry stakeholders at the AIChE-CCPS Asia Pacific Conference in Perth. His keynote address spoke to the importance of data analysis to inform decision-making and improve safety and environmental outcomes in the Australian offshore petroleum industry.

NOPSEMA collects industry performance data from duty holder submissions, such as incident and injury reports, and through the exercise of its regulatory functions. The authority conducts an extensive analysis of the data to share with industry for discussion and consideration. NOPSEMA places a high premium on evidence-based data analysis because it can inform decision-making and improve safety and environmental outcomes.

NOPSEMA encourages the sharing of information and learnings amongst industry players and thanks those companies and industry organisations that are already publishing safety and environmental statistics. The authority shares industry performance data in a number of ways including annual operator and titleholder liaison meetings, industry presentations at conferences and forums, regulatory and statutory publications such as NOPSEMA’s Annual offshore performance report, and the NOPSEMA website.

Annual liaison meetings offer duty holders a unique insight to their performance as they get to see their individual performance data compared to industry-wide and similar facility type data. These meetings are valuable as they allow benchmarking, indicate trends, inform points of difference, and show where a duty holder should consider focusing their resources.

At the conference, Mr Smith announced that NOPSEMA will now be publishing a larger suite of charts along with quarterly and annual tables on the Data reports and statistics page of the NOPSEMA website. NOPSEMA encourages duty holders to use the industry performance data published on its website, alongside your own data, to guide your decision-making.

To access the ‘Improving safety and environmental outcomes through data analysis – a shared responsibility’ presentation see the Presentations page under the Resources tab at nopsema.gov.au.

2014 performance data released

NOPSEMA recently published industry and NOPSEMA performance data for 2014. This release includes an extended suite of charts that will be published quarterly along with accompanying data tables on the NOPSEMA website.

Some of the highlights of the data published include:

- injuries and complaints are both at the lowest levels since 2005
- the number of improvement and prohibition notices issued has halved from 30 to 15
- 7% decrease in the total number of reportable incidents
- 16% increase in the number of hydrocarbon releases overall
- 15% increase in the number of inspections undertaken by NOPSEMA.

A detailed analysis of the key findings of the 2014 data will be released in NOPSEMA’s Annual Offshore Performance Report in May 2015.

NOPSEMA publishes performance data on its Data reports and statistics page under the Resource tab at nopsema.gov.au. The authority appreciates stakeholder feedback to assist with identifying and targeting the appropriate areas for improvement in data reporting.

Please direct feedback to information@nopsema.gov.au.
NOPSEMA joins industry on RPH emergency response tour

In December 2014, NOPSEMA joined representatives from Apache Energy and the Australian Petroleum Production and Exploration Association (APPEA) on an emergency response familiarisation visit to the State Trauma Unit at Royal Perth Hospital.

The trauma services unit, led by Dr Sudhakar Rao, provides state-of-the-art multidisciplinary emergency trauma and critical care for patients suffering complex injuries. As the designated provider of major trauma services for adults in Western Australia, the trauma services unit treats approximately 80 per cent of the state’s major trauma cases; over 5000 trauma patients are admitted annually, with more than 500 of these patients classed as major trauma. The visit reinforced the critical importance of appropriate emergency response planning by operators of offshore facilities including consideration of the standard, location and availability of onshore medical support.

Operators should ensure that the emergency response plan described in their submitted safety case is specific to the facility, identifies major accident event (MAE) hazards and addresses the potential consequences of a MAE occurring. The emergency response plan along with any personnel and resources identified are treated as control measures under the Offshore Petroleum Greenhouse Gas Storage (Safety) Regulations 2009.

For further information about safety case requirements see the Safety Case page under the Safety tab at nopsema.gov.au.
Barrier systems for control of Legionella

Following a recent planned inspection, NOPSEMA made recommendations to a facility operator regarding the need for an effective management framework to ensure the periodic inspection, maintenance and monitoring of the drinking water system. One of the purposes of the recommendations was to ensure a robust system exists to prevent pathogens, such as Legionella, multiplying in the water system.

The bacterium, Legionella, is found naturally in fresh water systems. Legionella have also been isolated from artificial water systems such as evaporative condensers, hot and cold water systems, shower heads, emergency showers and treated sewage in which the organisms have been able to multiply because of warm conditions and the presence of nutrients. These water systems and conditions exist on offshore facilities.

The occupational respiratory disease known as Legionnaires’ disease (Legionellosis), commonly caused by the bacterium, is a serious illness (lung infection) resulting from inhalation of aerosolised water which contains the bacterium.

The Energy Institute’s Occupational Health and Hygiene Committee found it relevant to provide the oil and gas industry with appropriate guidance on how to manage the control of Legionella in its facilities following the 2012 outbreak of Legionnaires’ disease in Edinburgh, Scotland. The published guidance, entitled Legionellosis risk management and Legionella control – Guidance for oil and gas facilities, offshore platforms and refineries, is available at energyinst.org.

Prevention of Legionnaires’ disease requires the formal identification and assessment of risk, by a competent person, from sources known to cause the disease, in the water systems and associated equipment on an offshore facility. The formal risk assessment should document the multiple barrier systems employed on the facility to prevent, detect and control Legionella.

The barriers could include:

• identifying a competent and responsible person for inspection, maintenance and monitoring the water system
• performing periodic inspection, maintenance and monitoring on the water system e.g. filters, temperature, flow rates, disinfection, microbial testing
• recording results of the inspection, maintenance and monitoring performed
• performing a periodic audit of the water system.

Operators are encouraged to monitor, audit and review the multiple barrier systems which are used on the facility to ensure a robust system exists to prevent pathogens such as Legionella multiplying in water systems.
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.

- 5 March 2015  DrillSafe Forum, Perth
- 11-13 March 2015  Australasian oil and gas conference, Perth
- 24-25 March 2015  Interspill conference and exhibition, Amsterdam
- March 2015  (date to be confirmed)  Marine Safe Forum, Perth
- 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 subscription form. 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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