# Australian Government Report on the implementation of the recommendations from the Montara Commission of Inquiry September 2017

# Background

On 21 August 2009, during activity being undertaken by a drilling rig in the Timor Sea, an uncontrolled oil and gas release was observed at the Montara oil field, operated by PTTEP Australasia (Ashmore Cartier) Pty Ltd (PTTEP AA). The resulting uncontrolled discharge of oil and gas was stopped on 3 November 2009.

On 5 November 2009, a Commission of Inquiry into the Montara Incident was announced, to look into the likely cause of the incident and the adequacy of the regulatory regime.

On 24 November 2010, the Montara Commission of Inquiry Report (the Report) was publicly released<sup>1</sup>. The findings of the Inquiry highlighted a number of operational and regulatory failures. The Report contained 100 findings and 105 recommendations with wide-ranging implications for government, regulators and the offshore oil and gas sector. The Australian Government released its Final Government Response to the Montara Commission of Inquiry on 23 May 2011<sup>2</sup>. The Australian Government accepted 92 recommendations, noted 10 and did not accept three. A progress report on implementation of the recommendations was released in September 2012, at which point 81 of the 92 accepted recommendations were complete<sup>3</sup>.

This is a final report into the implementation of the Government's accepted Montara recommendations and provides an overview of the suite of initiatives undertaken by governments, regulators and industry to progress the recommendations of the Montara Commission of Inquiry since the previous update in September 2012. There has been a continuous cycle of improvement for regulatory and operational practices impacting and undertaken by the offshore oil and gas sector in Australia. These changes recognise the increased and ongoing interest from, and involvement of, the community, associated industry sectors, regulators and governments in improving the safety of operations and the protection of the marine environment.

# Objective-based regulation and NOPSEMA

Australia's objective-based regulatory regime is regarded as leading practice for high hazard, technically complex industries, including the offshore oil and gas sector. The evolution from prescriptive-based regulation to objective-based regulation stemmed in large part from the 1988 disaster in the North Sea where the Piper Alpha offshore oil and gas platform suffered an explosion, resulting in 167 fatalities. That incident led to a fundamental worldwide reassessment of how to best regulate the offshore oil and gas sector.

<sup>&</sup>lt;sup>1</sup> http://www.industry.gov.au/resource/UpstreamPetroleum/MontaraInquiryResponse/Pages/default.aspx

 $<sup>^2\ \</sup>text{http://www.industry.gov.au/resource/UpstreamPetroleum/MontaraInquiryResponse/Pages/default.aspx}$ 

http://www.industry.gov.au/resource/UpstreamPetroleum/MontaraInquiryResponse/Pages/ProgressReport.aspx

Objective-based regulatory regimes are based on the principle that the legislation sets the broad safety and environmental goals to be attained. Those undertaking operations or activities must develop the most appropriate methods of achieving those goals. It places the onus and duty of care for the safety of people and environmental protection on those seeking to undertake offshore oil and gas operations and activities. In Australia, it also requires those with that duty (titleholders or operators) to demonstrate to the offshore petroleum regulator, the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), that the impacts, hazards, and risks of an operation will be reduced to a level that is as low as reasonably practicable. Environmental impacts and risks must also be of an acceptable level.

As one of the primary regulatory reforms in Australia with respect to offshore petroleum, NOPSEMA was established as the single national offshore oil and gas regulator, following the Montara incident in the Timor Sea and the Macondo incident in the Gulf of Mexico (also referred to as the Deepwater Horizon Incident). This reform expanded the responsibilities of the former National Offshore Petroleum Safety Authority (NOPSA), creating one independent authority responsible for regulating the safety of Australia's offshore oil and gas workers, the structural integrity of oil and gas facilities and wells, and environmental management of petroleum activities, from exploration through to decommissioning. This ensures consistent, appropriate and effective administration of a high risk, technically complex industry, where the consequences of incidents may be significant.

NOPSEMA is staffed by highly trained, qualified technical risk management experts with extensive experience in offshore oil and gas operations and environmental management. NOPSEMA's functions extend beyond approvals and involve extensive compliance monitoring and enforcement measures to ensure the necessary safety and environmental safeguards are maintained. NOPSEMA's regulation of Australia's oil and gas sector has been subject to numerous independent statutory reviews; in every review, NOPSEMA has been found to be a robust, rigorous and competent regulator.

# Regulatory reforms

Since the Montara incident, the regulatory and operational environment for the offshore oil and gas sector has undergone a continuous cycle of improvement. This provides for optimal resource recovery through timely commercial development and the effective long-term management of Australia's oil and gas resources, with a regulatory framework that ensures stringent health, safety and environmental protections based on the principles of safe and sustainable development.

The Australian Government has implemented a package of regulatory reforms to strengthen Australia's offshore petroleum legislative framework. The most significant of these include:

- The regulation of safety, environment and well operations and the administration of titles
  were separated to avoid any potential or perceived conflicts between resource development
  and safety, environment and well operations objectives. As well as the establishment of
  NOPSEMA, this resulted in the centralised administration of titles under the National
  Offshore Petroleum Titles Administrator (NOPTA).
- Amendments to the Offshore Petroleum and Greenhouse Gas Storage (Resource
   Management and Administration) Regulations 2011 (the Resource Management
   Regulations), that took effect from April 2011, which gave the former NOPSA responsibility
   for regulation of well operations management plans and approval of well activities.

- Regulation of environmental management activities in Commonwealth waters was added to the former NOPSA's remit from 1 January 2012. The change in name, from NOPSA to NOPSEMA, reflected these additional regulatory responsibilities.
- The Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures No. 2) Act 2013 received Royal Assent on 28 May 2013. This Act incorporated amendments into the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGS Act) to provide for an express polluter pays obligation and an associated third party cost recovery mechanism, as well as clarifying insurance requirements to ensure that maintenance of sufficient financial assurance is compulsory without a direction being given.
  - Consequential amendments to the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Environment Regulations) ensure sufficient financial assurance (to meet the costs of an incident) is required as a pre-condition to acceptance of an environment plan.
- In February 2014, NOPSEMA became the sole Commonwealth environmental management regulator for offshore oil and gas activities when the Commonwealth Minister for the Environment endorsed NOPSEMA's environmental management authorisation process (the Program) under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).
  - In 2015, an independent review of NOPSEMA's compliance with the Program
    determined that NOPSEMA is meeting all of its commitments under the Program.
    NOPSEMA continues to report to the Minister for the Environment on its compliance
    with the requirements of the Program in accordance with administrative
    arrangements established for the Program.
- Following a comprehensive review, the Government amended the Environment Regulations in February 2014. The changes simplify and clarify regulatory requirements and the duties and responsibilities of titleholders. Key amendments included:
  - reinforcement of the 'polluter pays' principle by making the titleholder responsible for all environmental compliance
  - increased public disclosure of information related to NOPSEMA's environmental management assessment processes
  - an Offshore Project Proposal for new development activities, including a mandatory minimum public comment period
  - clarified and strengthened requirements for environmental performance and incident reporting.
- In 2011, the Government undertook a review of compliance and enforcement measures in the OPGGS Act and its associated regulations, which concluded that the enforcement mechanisms, sanctions and penalties available at that time were insufficient to provide an effective and meaningful deterrent against non-compliance. As a result, the Government introduced a broader range of graduated enforcement tools for NOPSEMA to use, including civil penalties, infringement notices, injunctions and adverse publicity orders. The criminal penalty levels for a number of offences were also substantially increased, consistent with high-hazard industry legislation. The relevant measures in the two Acts amending the OPGGS Act commenced on 1 October 2014.
- Amendments to the well-related regulations in Part 5 of the Resource Management
  Regulations commenced on 1 January 2016, to implement the findings of a review of those
  regulations. The amendments ensure that regulation of the integrity of offshore petroleum
  and greenhouse gas wells and well activities in Commonwealth waters reflects leading
  practice, objective-based regulation.

In addition, the Commonwealth commissioned a consultancy to develop a National Legislative Compliance Framework (NLCF) to support a consistent best practice approach by regulators of Australia's offshore petroleum industry in the areas of well operations, environment and structural integrity. The NLCF was finalised and published on the then Department of Resources, Energy and Tourism website in November 2011.

# Industry response

The Australian offshore oil and gas sector has re-evaluated its operational practices and response preparedness in light of the Montara incident and the 2010 Macondo incident in the Gulf of Mexico (also referred to as the Deepwater Horizon Incident). The Australian Petroleum Production and Exploration Association (APPEA) established an industry taskforce to improve the capacity and readiness of the Australian oil and gas sector to respond to a major oil spill. The taskforce has worked with governments and overseas operators to improve well integrity, employee competencies, and preparedness and response capability in the event of loss of control at an offshore well.

- The International Oil and Gas Producers Association's Global Industry Response Group established a Subsea Well Response Project (SWRP), which includes a complete subsea incident response package of well capping equipment and a Subsea First Response Toolkit (SFRT) for use anywhere in the world. The SWRP is a non-profit joint initiative between several major oil and gas companies that enhances the industry's capacity to respond to subsea well-control incidents.
  - The SWRP has developed four capping stack systems, with one system delivered to Singapore, enabling the industry to cap most subsea oil wells in water depths up to 3000m around the world, as well as providing flexibility for various contingencies.
     The capping system is negotiated by individual companies on a commercial and global basis.
  - In addition, the Australian SFRT is compatible with the global SFRT and contains equipment to clean around the wellhead, enable intervention and prepare for relief well drilling and installation of a capping device. This project, funded by an industry consortium, provides a locally-based subsea debris clearance system including mechanical clearance tools and a subsea dispersant injection capability for immediate use at the start of a subsea well control event. It includes a 500 cubic metre stockpile of dispersant established for use as part of a well-source control system. The Australian SFRT is owned by the Australian Marine Oil Spill Centre (AMOSC) and stored and maintained by Oceaneering (a multi-national provider of engineered products and services).
- The Australian oil and gas sector developed a mutual-aid memorandum of understanding that set up a framework for 'best endeavours' mutual assistance arrangements in emergency conditions such as drilling relief wells and sharing equipment.

Continuous regulatory and operational improvement reflects the nature of the high hazard, technically complex offshore oil and gas sector and evolving social, economic and environmental issues that impact the sector. The long-term contribution of the sector to the Australia's prosperity is a reflection of the balance between optimal resource recovery through timely commercial development and a regulatory framework that ensures stringent health, safety and environmental protections.

# Implementation of the recommendations

# Chapter 3 of the Montara Report - The circumstances and likely cause(s) of the blowout

Chapter 3 of the Report focused on the circumstances and technical causes of the Montara incident. The Report identified 'direct causes' and 'systemic contributory factors'. The chapter also considered employee competency and the level of compliance by technical staff with the regulatory obligations for well activity.

The Report concluded that the source of the blowout was largely uncontested and was a result of the primary well control barrier failing. The Report further noted that initial cementing problems were compounded by the fact that only one of the two secondary well control barriers – pressure containing anti-corrosion caps – was installed.

#### Recommendations 1-65

The Australian Government accepted 59 recommendations, noted three recommendations (recommendations 3, 10 and 62) and did not accept three recommendations (recommendations 8, 20 and 38).

In response to the recommendations, on 15 July 2010, the then Minister for Resources and Energy tasked the then Secretary of the Department of Resources, Energy and Tourism with the responsibility for commissioning the preparation of a Commonwealth response to the report. The Secretary established the Montara Response Team to progress the Commonwealth's response to the Report and give effect to the Report's recommendations as appropriate.

The OPGGS Act is largely an objective-based regime. It is a permissioning regime within which the titleholder must demonstrate, to NOPSEMA's satisfaction, that all risks have been identified and addressed systematically through appropriate processes and systems.

## Review of Part 5 of the Resource Management Regulations

The regulation of wells, including well control barriers, is considered under Part 5 of the Resource Management Regulations. In 2015, the Department of Industry, Innovation and Science completed a review of this part of the regulations. The objective of the review was to ensure the regulation of the integrity of offshore petroleum and greenhouse gas wells and well activities in Australian waters reflects leading practice and objectives-based regulation.

Amendments to Part 5 of the Resource Management Regulations to implement the outcomes of the review commenced on 1 January 2016. These amendments included requirements for:

- titleholders to demonstrate, to the reasonable satisfaction of the regulator, that all risks
  have been identified and addressed systematically through appropriate processes and
  systems. A titleholder must demonstrate, to the satisfaction of NOPSEMA, that well control
  measures are in place for all activities, that will reduce the risk of the activity to as low as
  reasonably practicable.
- a well operations management plan to include a description of the measures used to ensure that contractors and service providers undertaking well activities are aware of their responsibilities in relation to the maintenance of the integrity of the well, and have appropriate competencies and training
- a well operations management plan to include a description of the monitoring, audit and well integrity assurance process that will be implemented to ensure that well integrity

performance outcomes and performance standards are being met through the life of the well.

These changes strengthened the regulatory regime and complemented existing measures that fulfilled the requirements of the Report recommendations. These measures included the following requirements:

- Any deviation from the approved drilling, completion or testing program must be considered through a formal management of change process. This process incorporates an appropriate level of risk assessment, hold points, and review (where appropriate) of the risk control strategy.
- An accepted well operations management plan and environment plan must be in force prior to undertaking a well activity.
- Well operations management plans must include a description of measures and arrangements that will be used to regain control of the well if there is a loss of integrity.
- Environment plans require titleholders to demonstrate that all things reasonably practicable are being done to prepare for their specific oil pollution risks.
- Environment plans must contain an oil pollution emergency plan which includes adequate arrangements for responding to and monitoring oil pollution.
- Well operations management plans must include the performance outcomes and control
  measures in place to ensure that risks to the integrity of the well will be reduced to as low as
  reasonably practicable.
- A particular well operations management plan may only apply to more than one well if the
  risks to the integrity of each well are similar. If the risks are different, separate well
  operations management plans must be prepared, with separate assessment of the specific
  risks for each well.
- As part of the well operations management plan application, NOPSEMA advises titleholders
  to submit a detailed barrier diagram for every well the plan covers. Titleholders can link this
  to notifications of incidents so that NOPSEMA is aware of the barrier status of a well through
  its entire lifecycle.

#### Other measures

Following the Montara and Macondo (Deepwater Horizon) incidents, international well integrity guidance has been updated to reflect lessons learned from these incidents. NOPSEMA encourages the adoption of these practices and international standards through its regulatory activities, including through its assessment and inspection activities.

The definition of 'good oilfield practice' was independently reviewed by Noetic Solutions Pty Ltd. The review found that the definition was satisfactory for use in an objective-based legislative regime. However, it noted the definition could be supplemented by the development of guidance material. Consistent with these findings, the Australian Government developed guidance material on the underlying concepts and practical interpretation of 'good oilfield practice'. This guidance is currently under review.

In August 2011, the International Offshore Petroleum Regulators and Operators Summit (the Summit), organised by the Australian Government, was held in Perth, Western Australia. The Summit provided a global platform for governments, industry and regulators to review the collective lessons arising from the Montara and Gulf of Mexico incidents. It also provided an opportunity for international collaboration to identify best practice arrangements to strengthen existing offshore petroleum regulatory frameworks.

Topics included culture, leadership and management; incident response and preparedness; environmental impacts and management; and innovation and R&D in deep sea drilling. Over 400 delegates attended the Summit, comprising government representatives, regulators, operators and industry professionals from the United States of America, Europe, South America, Indonesia, Papua New Guinea, Timor-Leste, China, New Zealand and Singapore. The outcomes of the Summit focussed on themes of "Cooperation, Commitment, and Prevention", under the broader headings of Government, Regulation, and Industry, and is available on the Department of Industry, Innovation and Science website:

(http://www.industry.gov.au/resource/UpstreamPetroleum/InternationalOffshorePetroleumRegulatorsandOperatorsSummit/Pages/default.aspx).

## Industry Response

The Australian offshore petroleum industry, through the Australian Petroleum Production and Exploration Association (APPEA), has developed an Australian Offshore Oil and Gas Self-Audit Tool which provides guidance to companies for the management of well operations. The Australian Well Integrity and Safety Committee of APPEA was established with the aim of increasing information sharing and collaboration within the Australian offshore drilling industry, as well as promoting implementation of leading practice procedures and operations (<a href="http://www.appea.com.au/wp-content/uploads/2013/05/Prevention-intervention-response.pdf">http://www.appea.com.au/wp-content/uploads/2013/05/Prevention-intervention-response.pdf</a>).

During the International Offshore Petroleum Regulators and Operators Summit, the industry, through APPEA, entered into a Memorandum of Understanding (MOU) on Mutual Aid. The MoU sets up a framework for 'best endeavours' mutual assistance arrangements, under which parties to the Memorandum have agreed to assist each other and share equipment and personnel in responding to a significant offshore petroleum incident. The MoU recognises that emergency conditions arise that necessitate urgent response and assistance by the industry to minimise adverse impacts on the environment. More information on the MOU on Mutual Aid is available on the APPEA website: (http://www.appea.com.au/wp-content/uploads/2013/05/Prevention-intervention-response.pdf).

# Chapter 4 of the Montara Report - The regulatory regime: well integrity and safety

Chapter 4 of the Report concluded that the existing regulatory regime supporting offshore petroleum activities provides sufficient powers to the regulator to enable the effective monitoring and enforcement of offshore petroleum-related operations. The inadequacies identified by the Inquiry primarily related to the implementation of this regime.

Despite the deficiencies in the administration by the Northern Territory Department of Resources (DoR) of its Designated Authority functions, the Report concluded that the incident could have been avoided if PTTEP AA had adhered to the well control practices approved by the regulator and its own well construction standards.

The Report recommended pursuing regulatory reform through the establishment of a single, independent regulatory body looking after safety as a primary objective, well integrity and environmental management. The Commonwealth noted that the performance/objective-based regulatory regime will be further enhanced by the establishment of a single national regulator for offshore petroleum, mineral and greenhouse gas storage activities.

# Recommendations 66-77

The Australian Government accepted 10 of these recommendations and noted two (recommendations 70 and 77).

# Establishment of NOPTA and NOPSEMA

The Australian objective-based regime places the onus on the industry to ensure and demonstrate to regulators that the risks of an incident relating to oil and gas operations are reduced to 'as low as reasonably practicable'. The regime ensures flexibility in operational matters to meet the unique nature of different projects. Industry must demonstrate to regulators — and regulators must assess and accept or not accept — that it has reduced the risks of an incident to as low as reasonably practicable, in order to gain permission to conduct operations.

NOPSEMA was established to ensure an independent regulator is responsible for regulating the safety of Australia's offshore oil and gas workers, structural integrity of facilities and wells, and the environment, from exploration through to decommissioning. This ensures appropriate and effective administration of a high risk industry, where the consequences of incidents may be significant. NOPSEMA's functions extend beyond approvals and involve extensive compliance monitoring and enforcement programs to ensure the necessary safeguards are maintained. NOPSEMA's regulation of Australia's oil and gas sector has been subject to numerous independent statutory reviews and in each review NOPSEMA has been found to be a robust and competent regulator.

Also on 1 January 2012, NOPTA, a single national titles administrator in Commonwealth waters, commenced operations.

The establishment of NOPSEMA and NOPTA (as the advisor to the Joint Authority), with their separate roles and responsibilities, avoids any potential or perceived conflicts of objectives or priorities between the regulation of offshore petroleum activities and resource development. NOPTA can seek advice, to assist with its advisory functions, from NOPSEMA as to compliance by titleholders with regulatory requirements, where the information is relevant or required for title decision-making.

# Review of Part 5 of the Resource Management Regulations

Several of these recommendation were considered during the review of Part 5 of the Resource Management Regulations. The review was completed in 2015 and amendments to those regulations commenced on 1 January 2016.

In reference to managing risks, a well operations management plan must demonstrate how the risks to the integrity of a well will be reduced to as low as reasonably practicable. Failure to comply with the well operations management plan is an offence. A titleholder must submit a proposed revision of a well operations management plan to the regulator for assessment as soon as practicable if the integrity of a well becomes subject to a significant new risk or a significantly increased risk.

One of the key objectives of the amendments is for the well operations management plan to function as the sole permissioning document for the life of a well. To ensure the well operations management plan can effectively function as the sole permissioning document, amendments were made to strengthen the content requirements for a well operations management plan.

# Compliance and enforcement measures

In 2011, a review of the Offshore Petroleum and Marine Environment Legislative regime was undertaken which, among other matters, included a review of compliance and enforcement measures in the OPGGS Act and its associated regulations. Norton Rose Australia, an independent law firm, was engaged to support the review.

Drawing on the public consultation and findings by Norton Rose during the course of the review, the Government agreed that the existing enforcement mechanisms, sanctions and penalties available

under the OPGGS Act and its regulations were insufficient to provide an effective and meaningful deterrent. The Government agreed it would introduce a broader range of graduated compliance tools for NOPSEMA to use and a substantial increase to the criminal penalty levels for a number of offences. Specifically:

- criminal penalty levels under the OPGGS Act were increased, consistent with major hazard industry legislation
- the OPGGS Act was amended to introduce a range of alternative enforcement mechanisms (e.g. infringement notices, civil penalties, adverse publicity orders, and injunctions) broadly consistent with those provided for in like legislative regimes, as a supplement to existing criminal penalties
- penalties, including custodial penalties, for occupational health and safety offences under the OPGGS Act were harmonised with, or greater than, the Work Health and Safety Act 2011 (WHS Act) (Cth), as appropriate in the context of a major hazard industry
- the OPGGS Act was amended to allow for cumulative penalties for ongoing non-compliance with continuing offences and civil penalty provisions; and
- NOPSEMA's inspectorate powers were redrafted to provide greater clarity and consistency between the various powers of each category of inspector (principally by creating one category of inspector (NOPSEMA inspectors) in place of the existing two categories of inspectors (petroleum project inspectors and OHS inspectors)), and to remove unnecessary procedural requirements that were likely to impede NOPSEMA's ability to effectively perform its enforcement functions.

Two legislative packages implemented the review's findings as amendments to the OPGGS Act:

- 1. Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures) Act 2013 (Compliance Measures Act), which received Royal Assent on 14 March 2013.
- 2. Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures No. 2) Act 2013 (Compliance Measures No. 2 Act), which received Royal Assent on 28 May 2013.

The Compliance Measures Act also specifically extended the circumstances in which NOPSEMA can issue a Prohibition Notice to include when an activity *may* occur at a facility that would involve an immediate health or safety risk to a person.

The final stage of implementation of the alternative enforcement mechanisms and increased criminal penalties in the associated regulations is underway.

# Chapter 5 of the Montara Report - Arresting the blowout

Chapter 5 of the Report concluded that, in considering the initial response to the incident at the Montara wellhead platform and the steps taken by all parties involved in arresting blowout, it commended the response efforts by PTTEP AA and AMSA as the Combat Agency, the former NOPSA as the offshore petroleum safety regulator (now NOPSEMA), and the former Department of Environment, Water, Heritage and the Arts (now the Department of the Environment and Energy) as the environmental regulator.

The Report did, however, recommend changes to the Commonwealth's response to future incidents involving the offshore petroleum industry under the *National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances* (the National Plan). The recommendations were aimed at improving the operation of the National Plan, including matters regarding the environmental response to future incidents. It has also recommended there be greater clarity

regarding the roles and responsibilities of agencies in responding to future incidents under Australia's current incident response framework, which has been accepted by the Commonwealth.

# Recommendations 78-85

The Australian Government accepted five of these recommendations and noted three (recommendations 78, 79 and 80).

Engagement with stakeholders, including industry, government and the public, is crucial for NOPSEMA's effective regulation of the objective-based regime.

In its response to the Inquiry, the Government noted that a commitment to consultative engagement is not the responsibility of the regulator alone. Industry should continue to maintain focus on addressing key hazards and risks, in conjunction with the regulator and the workforce, recognising that continued improvement in safety requires commitment to a strategic partnership by employers, the workforce and government.

Since the Montara incident there have been Operational Reviews of NOPSA (2011) and NOPSEMA (2015). Both reviews considered the regulator's relationship with, and engagement approach to, stakeholders. As a result, NOPSEMA continues to focus on stakeholder engagement through formal and informal processes and has developed a range of engagement initiatives as part of a strategic stakeholder liaison policy, including with industry bodies, health and safety representatives, union organisations and community groups on a range of safety and environmental issues.

Operational experience has revealed that further flexibility is required to enable the engagement with the regulator to address design phase issues in a more fulsome manner. In this regard, the Department of Industry, Innovation and Science continues to work with NOPSEMA and industry to consider how best to ensure safety considerations are addressed in facility design prior to safety case assessment, appropriate to the Australian offshore petroleum regime.

## Oil spill preparedness and response

Under the Environment Regulations, an environment plan must include an oil pollution emergency plan, which sets out adequate arrangements for responding to oil pollution, including the control measures necessary for timely response to an emergency that results or may result in oil pollution, and the arrangements and capability that will be in place for the duration of a petroleum activity to ensure timely implementation of control measures if required. NOPSEMA must assess the titleholder's proposed arrangements as part of its assessment of an environment plan.

On 6 March 2012, an amendment to the OPGGS Act came into force which provides NOPSEMA with the power to issue a direction to a petroleum titleholder in the event of a significant offshore petroleum incident occurring within the title area that has caused, or might cause, an escape of petroleum. The direction would require the titleholder to take an action or not take an action in relation to the escape or possible escape of petroleum and its effects, and may apply within or outside the titleholder's title area.

# Offshore Petroleum Incident Coordination Framework

The Commonwealth, through the Department of Industry, Innovation and Science, has developed the Offshore Petroleum Incident Coordination Framework, which sets out the Commonwealth Government's strategic response arrangements in the event of a significant offshore petroleum incident in Commonwealth waters. In early 2015 the Framework was finalised, in line with the Review of the National Plan to Combat Pollution of the Sea By Oil and Other Noxious and Hazardous

*Substances* (the National Plan), now known as the National Plan for Maritime Environmental Emergencies.

In the event of an offshore oil and gas incident, the Commonwealth may decide to stand up the Offshore Petroleum Incident Coordination Committee (OPICC), whose purpose is to draw together expertise and capability from across government to guide strategic Commonwealth Government leadership in responding to a significant offshore petroleum incident in Commonwealth waters. The OPICC does not have legislative powers, or the ability to direct the owner/operator of a facility. More information about the Offshore Petroleum Incident Coordination Framework is available on the Department of Industry, Innovation and Science website:

http://www.industry.gov.au/resource/UpstreamPetroleum/Pages/Offshore-Petroleum-Incident-Coordination-Framework.aspx.

The arrangements set out in the Offshore Petroleum Incident Coordination Framework were exercised as part of the 2015 National Plan Exercise, Exercise Westwind, which included standing up the Commonwealth cross-agency Offshore Petroleum Incident Coordination Committee. A range of agencies and response teams participated, from across the Commonwealth and Western Australian Governments, AMSA, Geoscience Australia, NOPTA, and a team from the petroleum industry representing a fictitious petroleum company.

# Chapter 6 of the Montara Report - Environmental response

Chapter 6 of the Report concluded that the protection and management of the marine environment is critical to the Australian community's confidence in the ability of the offshore petroleum industry to undertake operations in a safe and environmentally sound manner. The Inquiry considered those matters relating to the impact on, and remediation of, the surrounding environment during and post the response to the uncontrolled oil and gas release at the Montara Wellhead Platform.

The Report noted a lack of clarity regarding the implementation of the 'polluter pays' principle for costs associated with both preparedness and response capability for the offshore petroleum industry, as articulated through the National Plan. The Inquiry recommended amendments to the EPBC Act and the OPGGS Act to reaffirm the Commonwealth's support of the 'polluter pays' principle as it applies to the offshore petroleum industry.

# Recommendations 86-100

The Australian Government accepted all 15 of these recommendations.

#### Oil Pollution Preparedness and Response

The Environment Regulations require a titleholder to have an accepted environment plan in place for any petroleum activity or greenhouse gas activity. The environment plan must include an oil pollution emergency plan, which sets out the arrangements for responding to and monitoring oil pollution.

The Environment Regulations require the titleholder to have an environment plan accepted by NOPSEMA for all petroleum activities. The environment plan for an offshore petroleum activity must include an appropriate implementation strategy. This strategy must, among other things, provide for sufficient monitoring of the titleholder's environmental performance, and include an oil pollution emergency plan (OPEP). The OPEP must include adequate arrangements for responding to and monitoring oil pollution arising from an incident. The implementation strategy must also provide for monitoring the impacts to the environment from oil pollution and response activities (referred to as

'scientific monitoring' in the inquiry documents), which is sufficient to inform any remediation activities.

NOPSEMA, in consultation with the Department of the Environment and Energy, has published comprehensive guidance for operational and scientific monitoring programs (OSMP) to assist titleholders in meeting relevant requirements of the Environment Regulations.

Under the Environment Regulations, a summary of a titleholder's environment plan is made publicly available on NOPSEMA's website. The summary must include material from the environment plan in relation to ongoing monitoring of the titleholder's environmental performance, and a summary of the response arrangements in the oil pollution emergency plan.

## Review of the Environment Regulations

In conjunction with implementation of the Government's response to the Montara incident, and following the establishment of NOPSEMA on 1 January 2012 as the national environment regulator for petroleum activities in Commonwealth waters, the department has undertaken a comprehensive review of the Environment Regulations.

The objective of the review was to ensure that the Environment Regulations are a suitable basis to ensure that any petroleum or greenhouse gas activity in Commonwealth waters is undertaken in a manner that is consistent with the principles of ecologically sustainable development, and by which the environmental impacts and risks of an activity will be reduced to as low as reasonably practicable and to an acceptable level.

The department undertook the review with the assistance of NOPSEMA and State and Territory authorities, as well as industry stakeholders. The Taskforce established to streamline environmental approvals for offshore petroleum activities implemented the outcomes of the review. The amendments improved and clarified the regulation of environmental management of offshore petroleum activities.

# Streamlining environmental regulation

On 28 February 2014, the then Minister for Industry and the then Minister for the Environment announced a new streamlined approach for environmental approvals for offshore petroleum activities, which made NOPSEMA the sole designated assessor for these activities in Commonwealth waters. In accordance with streamlined arrangements, the Minister for the Environment has approved all petroleum and greenhouse gas activities taken in Commonwealth waters assessed in accordance with NOPSEMA's environmental management authorisation process, subject to the exclusions described in the final approval decision notice.

The Minister's approval means that titleholders seeking to undertake offshore petroleum or greenhouse gas activities in Commonwealth waters no longer need to refer those actions for assessment under the EPBC Act.

# Cost sharing arrangements for oil pollution preparedness

Equitable funding arrangements between the offshore petroleum and shipping industries for oil spill preparedness costs, as articulated through the National Plan, are achieved through the sharing of costs for mutually required equipment and services. The National Plan states that funding arrangements to support the National Plan are based on the polluter pays principles. Response and recovery is funded on the basis that the polluter pays. For shipping, this is achieved through a specific levy on shipping for marine pollution response preparedness and the implementation of

relevant international conventions under the auspices of the International Maritime Organization. For the offshore petroleum industry, this is achieved through the OPGGS Act.

An efficient, capable and well managed preparedness regime is the key to a successful and rapid incident response. Since the Montara and Macondo (Deepwater Horizon) incidents, the offshore petroleum industry-funded Australian Marine Oil Spill Centre (AMOSC) has reviewed its preparedness and response equipment and strategies. Australian and international experts have examined all stages of Australia's oil spill preparedness and response, including planning, training, location and levels of oil spill response equipment, international engagement, monitoring and response strategies.

AMOSC's activities are integrated into the National Plan, which is managed by AMSA.

# Cost recovery - polluter pays

The Compliance Measures No. 2 Act incorporated amendments into the OPGGS Act to provide for an express polluter pays obligation and an associated third party cost recovery mechanism, as well as to clarify insurance requirements to ensure that maintenance of sufficient financial assurance is compulsory without a direction being given. These amendments included:

- a statutory duty in the OPGGS Act requiring titleholders to stop, contain, control and clean up a hydrocarbon spill, carry out appropriate monitoring of environmental impacts, and to remediate the environment
- clarifying arrangements for third parties to undertake measures to stop, clean up, and remediate and monitor the environmental impacts of a hydrocarbon spill if the titleholder fails to do so, and to recover costs from the titleholder.

Consequential amendments to the Environment Regulations ensure that sufficient financial assurance (to meet the costs of an incident) is required as a pre-condition to acceptance of an environment plan.

# National Plan for Maritime Environmental Emergencies

In January 2011, AMSA commenced a review of the National Plan and National Marine Emergency Response Arrangements (NMERA). The review was completed in July 2012 and the National Plan for Maritime Environmental Emergencies was released in March 2014.

As part of the Review, a report on assessment of the risk of pollution from marine oil spills in Australian ports and waters was completed by Det Norske Veritas and issued in December 2011. The Risk Assessment report is available on AMSA's website (<a href="https://www.amsa.gov.au/forms-and-publications/environment/publications/Other-Reports/documents/DNV">https://www.amsa.gov.au/forms-and-publications/environment/publications/Other-Reports/documents/DNV</a> Final Report.pdf).

The National Plan is exercised annually in conjunction with state and territory governments. All training in respect of the National Plan is, and will continue to be, provided by AMSA and the relevant National Plan stakeholders. Training for offshore petroleum personnel is provided by the Australian Marine Oil Spill Centre.

As specifically recommended by the Inquiry, the Department of the Environment and Energy develops staff capability through appropriate training and participation in courses, and was involved in Exercise Westwind.

It is a requirement of the Environment Regulations that an environment plan demonstrate that the response arrangements in the oil pollution emergency plan are consistent with the national system for oil pollution preparedness and response, which is the National Plan for Maritime Environmental Emergencies (the National Plan).

AMSA is an important stakeholder for all offshore exploration and exploitation activities. To assist offshore petroleum titleholders to address their oil spill preparedness and response requirements, AMSA has invited them to enter into a Memorandum of Understanding (MOU). The MOU sets out an understanding of respective roles and responsibilities when responding to ship-sourced marine pollution incidents and non-ship-sourced marine pollution incidents. The MOU is the sole method through which AMSA consults on titleholder's environment plans.

# Chapter 7 of the Montara Report – Review of PTTEP AA's permit and licence at Montara and other matters

Chapter 7 of the Report details views regarding the conduct of PTTEP AA in respect of its interaction with the regulators and the Inquiry. The Report concludes that PTTEP AA, as operator of the Montara oil field, did not observe sensible oil field practices and that the company's widespread and systemic procedural shortcomings were a direct cause of the incident. Specifically the Report recommended that a review should be undertaken of PTTEP AA's permit and licence to operate through the issuing of a 'show cause' notice under the OPGGS Act.

The Report does note that PTTEP AA provided the Commission of Inquiry with a Montara Action Plan to address the technical and governance issues identified through the Inquiry process. The Montara Action Plan was also provided to the Commonwealth Minister for Resources and Energy. The Commissioner noted it was "comprehensive and impressive".

#### Recommendations 101-105

The Australian Government accepted three of these recommendations and noted two recommendations (recommendations 102 and 104).

During the course of the Montara Commission of Inquiry, PTTEP Australasia's parent company (PTTEP) developed the Montara Action Plan (the Action Plan), which detailed the changes that had to occur and how those changes could be achieved for PTTEP Australasia's operations to meet industry best practice standards. An independent review was commissioned and considered whether implementation of the Action Plan would ensure that the operations and procedures of PTTEP Australasia meet industry best practice standards.

The Independent Review Report: Review of PTTEP Australasia's Response to the Montara Blowout (the Independent Review) and the Minister's response were tabled in Parliament.

The Independent Review concluded that the Action Plan effectively responds to the issues identified by the Montara Commission of Inquiry and sets PTTEP Australasia on the path to achieving industry best practice standards for both good oilfield practice and good governance. In releasing the Independent Review report on 4 February 2011, the then Minister for Resources and Energy announced that he would not be issuing a 'show cause' notice to the company that could lead to the cancellation of its petroleum titles.

This decision was conditional on PTTEP and PTTEP Australasia entering into a binding Deed of Agreement with the Commonwealth in which it was agreed that the Action Plan will be implemented in full in respect of all of PTTEP Australasia's Australian operations, and that this implementation will be subject to an 18 month monitoring program undertaken by independent experts appointed by the then Department of Resources, Energy and Tourism. The Deed of Agreement was signed on 22 February 2011.

On 16 March 2011, Noetic Solutions Pty Ltd was engaged to independently assess and verify, including through site visits, PTTEP's progress in implementing the Action Plan. The then Minister for Resources and Energy, through various Joint Authority decisions, also applied additional conditions to all existing offshore petroleum titles held by PTTEP and its Australian subsidiaries, or those that it has an interest in.

PTTEP met its obligations under the Deed of Agreement, which ceased on 18 October 2012. Subsequently, the additional conditions which applied to all existing offshore petroleum titles held by PTTEP were removed.

The Commonwealth agreed that an audit of the other suspended wells at the Montara Wellhead Platform was required to ascertain the integrity of the suspended wells. PTTEP Australasia verified the integrity of the remaining wells at the Montara Wellhead Platform, and the results were reviewed by Geoscience Australia, providing the Commonwealth with confidence in the integrity of all wells at the Montara Wellhead Platform.

In addition to work undertaken with the NT Department of Resources, on 31 May 2010 the Commonwealth requested all other Designated Authorities to undertake a number of reviews to ensure the integrity of wells, in particular the status of all completed and suspended wells since 2005, and their assessment, approvals and monitoring of offshore petroleum activities were in accordance with the OPGGS Act. Designated Authorities advised the Commonwealth that rigorous regulatory practices were in place.

Amendments to the Resource Management Regulations that took effect from April 2011 gave the former NOPSA (now NOPSEMA) responsibility for regulation of well operations management plans and approval of well activities. In addition, amendments to the well-related regulations in Part 5 of the Resource Management Regulations commenced on 1 January 2016, to implement the findings of a review of those regulations. The amendments aim to ensure that regulation of the integrity of offshore petroleum and greenhouse gas wells and well activities in Commonwealth waters reflects leading practice, objective-based regulation.