Montara Incident and Response

On 21 August 2009, during drilling operations at the Montara Wellhead Platform an uncontrolled release of oil and gas occurred from the H1 well. All 69 personnel at the Wellhead Platform were safely evacuated.

On 1 November the leaking well was successfully intercepted, however during operations to complete the 'well kill', fire broke out on the West Atlas rig and the Montara Wellhead Platform. On 3 November 2009, the fire was extinguished.

Located in the Timor Sea, the Montara Wellhead Platform is 254 kilometres north-west of the Western Australian coast and 685 kilometres from Darwin. The Montara Wellhead Platform is approximately 157 km from the Ashmore Reef National Nature Reserve & Cartier Island Marine Reserve.

The Montara Wellhead Platform is part of the Montara Development Project which is owned by and operated by PTTEP Australasia (Ashmore Cartier) Pty Ltd, an Australian subsidiary of PTT Exploration and Production Public Company Limited (PTTEP) a publicly listed company on the Thai stock

exchange. The Montara Development Project comprises Production Licences AC/L7 (Montara) and AC/L8 (Skua and Swift/Swallow).

Fact sheet 6 provides a map of the Montara Development Field.

Montara Fact Sheets

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- 2 Australia's Offshore Petroleum Regulatory Framework
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What is the Montara Development Project?

The Montara Development Project proposes nine producing wells, and a gas injection well, four (+ the gas injection well) in the Montara field; two in the Skua field and three in the Swift/Swallow field. PTTEP Australasia (Ashmore Cartier) Pty Ltd has stated that the oil reserves from the four fields that comprise the Montara Development Project are approximately 37 million barrels.

Following the Montara incident the PTTEP AA was directed by the Government to review the integrity of the remaining suspended wells at the Montara Wellhead Platform. In addition, all future activity to be undertaken by PTTEP AA on the Montara Wellhead Platform, including integrity and compliance testing of the other suspended wells and the removal of the damaged West Atlas drill rig, will require separate regulatory approvals.

On direction from the Minister, the Department of Resources, Energy and Tourism has instigated an independent review of the Action Plan presented by PTTEP to the Commission of Inquiry. The independent review is to be completed before the end of this year. The independent review process will provide advice to the Minister for Resources and Energy on whether the Action Plan, once implemented, will ensure that PTTEP's operational and procedural measures meet industry best practice standards. It will also identify whether PTTEP has the organisational culture and capability to properly implement the Action Plan.

What caused the spill?

The source of the uncontrolled release (well blowout) is largely uncontested. The Inquiry has determined that the most likely cause was that hydrocarbons entered the H1 Well through the 95% cemented casing shoe and flowed up inside of the 95% casing.

The Inquiry in determining what caused the uncontrolled release found that the primary well control barrier of the H1 well (9%" cemented casing shoe) failed. The Inquiry further noted that the 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.

How was the incident brought under control?

Consistent with advice from Geoscience Australia and other industry experts as to the safest and quickest course of action to stop the leak, the operator engaged a suitable drill rig, had it towed to site and commenced operations to drill a relief well to enable the leaking well to be stopped.

This was a technically complex operation which required the relief well to be drilled and steered to a depth of 2.6km below the seabed to intersect a pipe only 25 centimetres in diameter. International drilling experts advised that it was usual for at least 3-4 attempts to be made before a successful intercept would be achieved.

On 1 November 2009, on the 4th attempt, the West Triton successfully intercepted the leaking well however fire broke out on the West Atlas drilling rig and the Montara wellhead platform. Operations to stop the leak were under way at the time but were suspended and non-essential personnel were evacuated from the West Triton as a precaution. On Tuesday, 3 November 2009, the fire was extinguished, and the leak was successfully contained.

On 13 January 2010 the H1 well was permanently sealed.

What role did the Australian Government have in stopping the uncontrolled release and/or clean up?

The Government's response effort to this incident was rapid and consistent with international best practice and was very successful in minimising the impact of the oil spill.

The ongoing response effort in the weeks following the start of the incident was highly effective, with excellent cooperation between the company, the broader petroleum industry through the Australian Marine Oil Spill Centre, and governments at all levels. The effectiveness of the response is evidenced by the containment of the spill area, success in avoiding the highly sensitive Ashmore Reef Marine National Nature Reserve, limiting the flow of oil and what appears to have been a minimal impact on the marine environment as represented by the potential loss of marine life and damage to the marine industry.

Operational response

Within fifteen minutes of notification of the incident, the Australian Maritime Safety Authority (AMSA) was able to mobilise equipment and personnel to ensure operations could begin as quickly as possible. Once the situation was assessed, AMSA aircraft began applying dispersant to accelerate the natural evaporation and weathering of the oil. This was very successful in minimising the impact of the oil spill.

Further, in a world first, recovery and containment operations with boom and skimmer vessels were also deployed to remove the oil. This was the most effective method of removing the spilled oil from the environment and minimising its impact in the broader environment. In total AMSA advised that 844,000 litres of product (oil/water mix) were recovered during the containment operations of which an estimated 493,000 litres was oil, significantly reducing the amount of oil which escaped into the broader environment.

The success of the operational response was enabled by AMSA assuming responsibility, in accordance with the *National Plan to Combat Pollution of the Sea by Oil and other Noxious and Hazardous Substances*, as the "Combat Agency" for coordinating and responding to the incident and for taking charge of the clean-up operations. PTTEP Australasia (Ashmore Cartier) Pty Ltd, as the owner and operator of the Wellhead Platform, retained responsibility for the incident response and measures relating to stopping the leak.

Environmental Response

The Government in conjunction with the operator of the Montara Wellhead Platform PTTEP AA developed and implemented a PTTEP AA-funded long term environmental monitoring plan. To ensure the monitoring program was appropriate, comprehensive and transparent, the Government brought together a range of scientific experts to form a Technical Advisory Group (TAG). The TAG provided advice during the program's development and peer review for each scientific study proposal before it was approved and implemented.

The Monitoring Plan for the Montara Well Release Timor Sea consists of five operational monitoring studies, which were implemented during the response to the incident and seven scientific monitoring studies. Implementation of the scientific studies is determined by information provided by the operational studies and components of other scientific studies.

Four reports under the environmental monitoring plan have been finalised. They are:

- Wildlife impact monitoring;
- Shoreline Ecological Assessment Aerial and Ground Surveys;
- Oil fate and effects assessment: spill trajectory analysis; and
- Oil fate and effects assessment: modelling of chemical dispersant operation.

All four reports are available from the Department of Sustainability, Environment, Water, Population and Communities at: www.environment.gov.au/coasts/oilspill

Technical Response

In recognition of the uniqueness of the situation for the Government and the Designated Authorities more generally, the Government facilitated the streamlining of approvals by the Northern Territory Designated Authority to enable the relief well drilling activities to commence promptly. To maximise the likelihood of success, the Government encouraged joint assessment of PTTEP AA's revised well operation drilling plans, drawing on additional expertise from Geoscience Australia and the Victorian Department of Primary Industry. The Government, through the Department of Resources, Energy and Tourism (DRET), also initiated and led the facilitation of the efficient transit of the West Triton drilling unit into Australian waters to undertake relief well drilling operations.

Incident and Response Coordination

A Government Incident Coordination Group was established under the National Plan to manage/coordinate issues associated with the incident response and was able to provide real-time information to the Government on the actions being undertaken. The Incident Coordination Group met daily. During this time, the Government, through the Department of Resources, Energy and Tourism undertook a number of detailed discussions with the offshore petroleum operators in matters including alternative rigs, potential availability, and financial and commercial implications.

Furthermore, independent technical advice was provided to the Government by Geoscience Australia on drilling actions; rig types and availability; and assessment of options for arresting the blowout and more broadly of the potential effect on the well and reservoir.

Legislative Response

Immediately following the Montara incident and upon becoming aware of the significance of the incident (in relation to the scale and technical complexity in bringing it under control) the Government obtained legal advice on the "direction powers" available to the Designated Authorities to use under the OPGGS Act. Based on this advice, the Government initiated an urgent amendment to the OPGGS Act to provide the Minister with general powers to initiate an investigation into offshore petroleum incidents particularly for the Montara incident. The legislative amendment package was arranged, introduced and came into force within two weeks reflecting the Government's determination to ensure that governments, regulators and industry understand and learn from the Montara incident.