Australian Government
Department of Industry, Innovation and Science

FOR OFFICIAL USE ONLY

Minister for Resources and Northern Australia Min ID: MB18-000155

Subject: PTTEP AUSTRALASIA MEETING - TUESDAY 20 MARCH 2018

Recommendation:

That you **note** the information provided for the meeting with PTTEP Australasia. **Noted / Please discuss**

s.22 ..... **Date: / /2018**

Comments:

Meeting Details:

Date: Tuesday, 20 March 2018
Time: 3:00 pm – 3:30 pm
Venue: M1.45, Parliament House, Canberra
Attendees: s.22

Key Points:

1. PTTEP Australasia (PTTEP AA) has requested this meeting with your office to provide an update on the progress of development of the s.22 and Montara gas fields in the Timor Sea.

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ATTACHMENTS

A: Biography of s.22
B: Background information

ATTACHMENT A

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ATTACHMENT B

BACKGROUND

PTTEP AA exploration and development activities

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PTTEP AA operates the producing Montara oil field s.22

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Montara Field

- PTTEP AA's development of the Montara field comprises two production licences (AC/L7 and AC/L8) located in Commonwealth waters in the Timor Sea, approximately 690 kilometres west of Darwin. Oil is extracted from a number of production wells in flow lines via the Montara Wellhead Platform to the Montara Venture Floating Production Storage and Offloading (FPSO) vessel.
- Following the Montara oil spill incident in 2009, PTTEP AA has been progressing with its development plans to bring the Montara field into full production.
- Following the successful completion of the Montara H5 ST-2 development well in October 2017, the National Offshore Petroleum Titles Administrator (NOPTA) advised that production has commenced and the well is contributing towards the Montara project.

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Montara oil spill

Montara incident

- The Montara wellhead platform drill rig, owned by PTTEP AA, suffered a wellhead accident on 21 August 2009. The resulting uncontrolled discharge of oil and gas from the Montara Field was stopped on 3 November 2009.
- The spill occurred in the Timor Sea, within Australian jurisdiction.

Montara Commission of Inquiry

- The Government's Montara Commission of Inquiry handed down its report in June 2010. The Final Government Response to the Montara Commission of Inquiry was released in May 2011.
- The response accepted 92 of the 105 recommendations, noted 10 and did not accept three as they were not considered technically feasible.
    - The Australian Government has completed implementation of the 92 accepted recommendations.

- Implementation of the Government's response included improvements to strengthen institutional arrangements through the establishment of the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) and NOPTA.

Legal action

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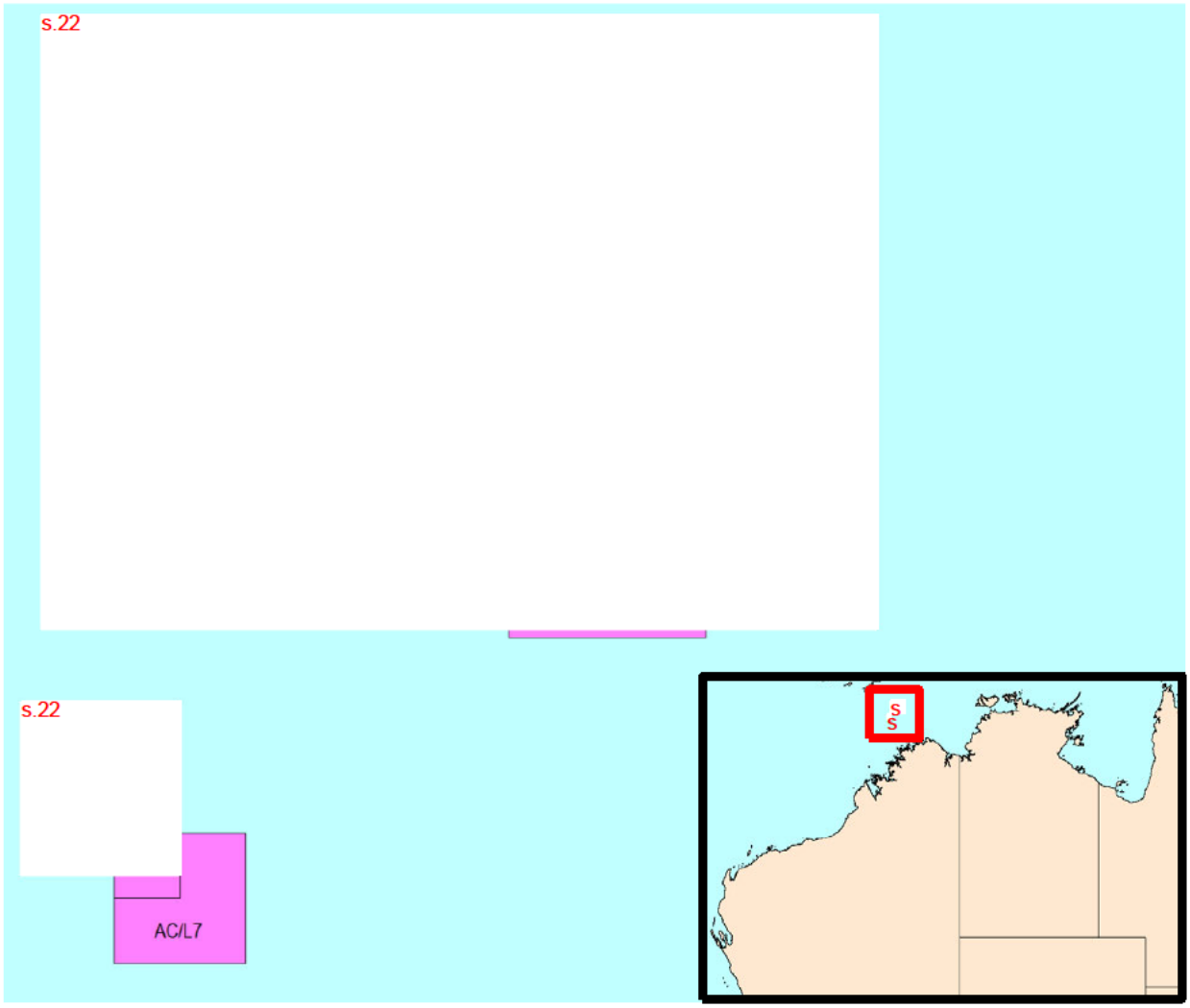
- In 2012, PTTEP AA was successfully prosecuted under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* and fined $510,000 in the Northern Territory Magistrate's Court for its responsibility in the 2009 Montara incident.

Recent NOPSEMA enforcement action

- On 21 June 2017, NOPSEMA issued PTTEP AA with an improvement notice relating to environmental management non-compliance associated with its Montara operations.
- Inspections undertaken by NOPSEMA at PTTEP AA's Australian headquarters and at its offshore facilities identified that its nominated emergency management personnel had less than the required level of spill response competency, skills and knowledge, as required under the accepted Environment Plan.
- The improvement notice required PTTEP AA to put mechanisms in place within 90 days to address the non-compliance by ensuring the necessary competency, skills and knowledge are developed and maintained. It also required PTTEP Australasia to submit a proposed revision to its Environment Plan for assessment by NOPSEMA within 90 days.
- On 14 September 2017, and within the specified 90 days, PTTEP AA provided NOPSEMA with a signed declaration confirming the actions required by the improvement notice had been undertaken. From 14–20 October, NOPSEMA undertook an inspection and verified the actions taken by PTTEP AA in response to the notice. The revised Environment Plan was accepted by NOPSEMA on 4 December 2017.

Map of active PTTEP AA titles



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Title	Type	Field(s)	Granted	Renewed	Expiring
AC/L7	Production Licence	Montara	20/03/2007	-	Life of field

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PTTEP Australasia
Montara Production Drilling

Fact Sheet

March 2017

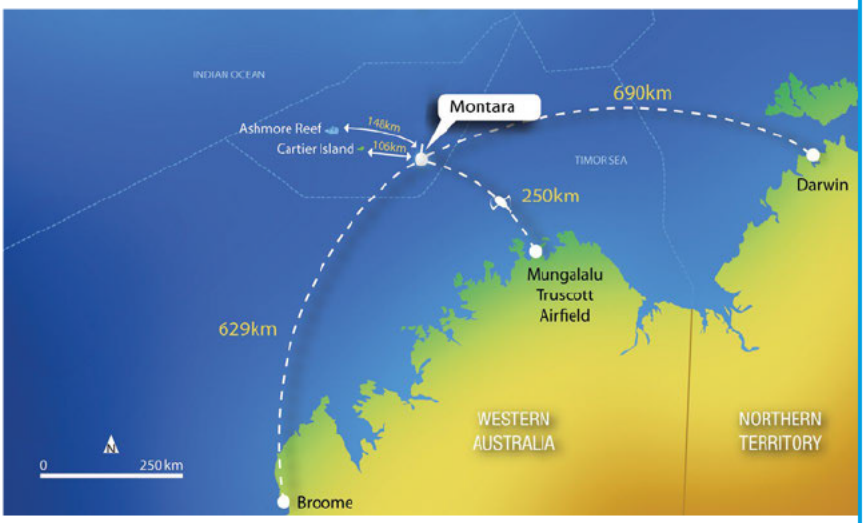
PTTEP Australasia (PTTEP AA) is the operator of production licences AC/L7 and AC/L8, located in the Commonwealth waters of the Timor Sea, approximately 690 kilometres or 373 nautical miles west of Darwin.

Overview

As part of the Montara Development Project (MDP), oil is currently extracted from production wells and transported in flow lines via the Montara Wellhead Platform to the Montara Venture Floating Production Storage and Offloading (FPSO) vessel.

PTTEP AA proposes to undertake production drilling of one well (H5) at the Well Head Platform commencing in September 2017. The drilling program is expected to last approximately 60 days. The exact timing for completion is subject to weather conditions and operational efficiencies.

A permanent 500m Prescribed Safety Zone (PSZ) for vessels is currently established at the Well Head Platform and will be in place during the drilling activity. In addition, a Cautionary Area has been established around the Montara Venture, Montara Wellhead Platform and associated subsea infrastructure by Australian Maritime Safety Authority (AMSA) and notated on the Admiralty Chart covering the region by the Australian Hydrographic Service. This area extends out 2.5nm from the Wellhead Platform in all directions, with the exception of north where it extends out 1nm due to the presence of a shipping lane. Cautionary Areas are designed to provide an area where mariners should exercise extra caution and only navigate, anchor or fish within the zone if it is safe to do so.



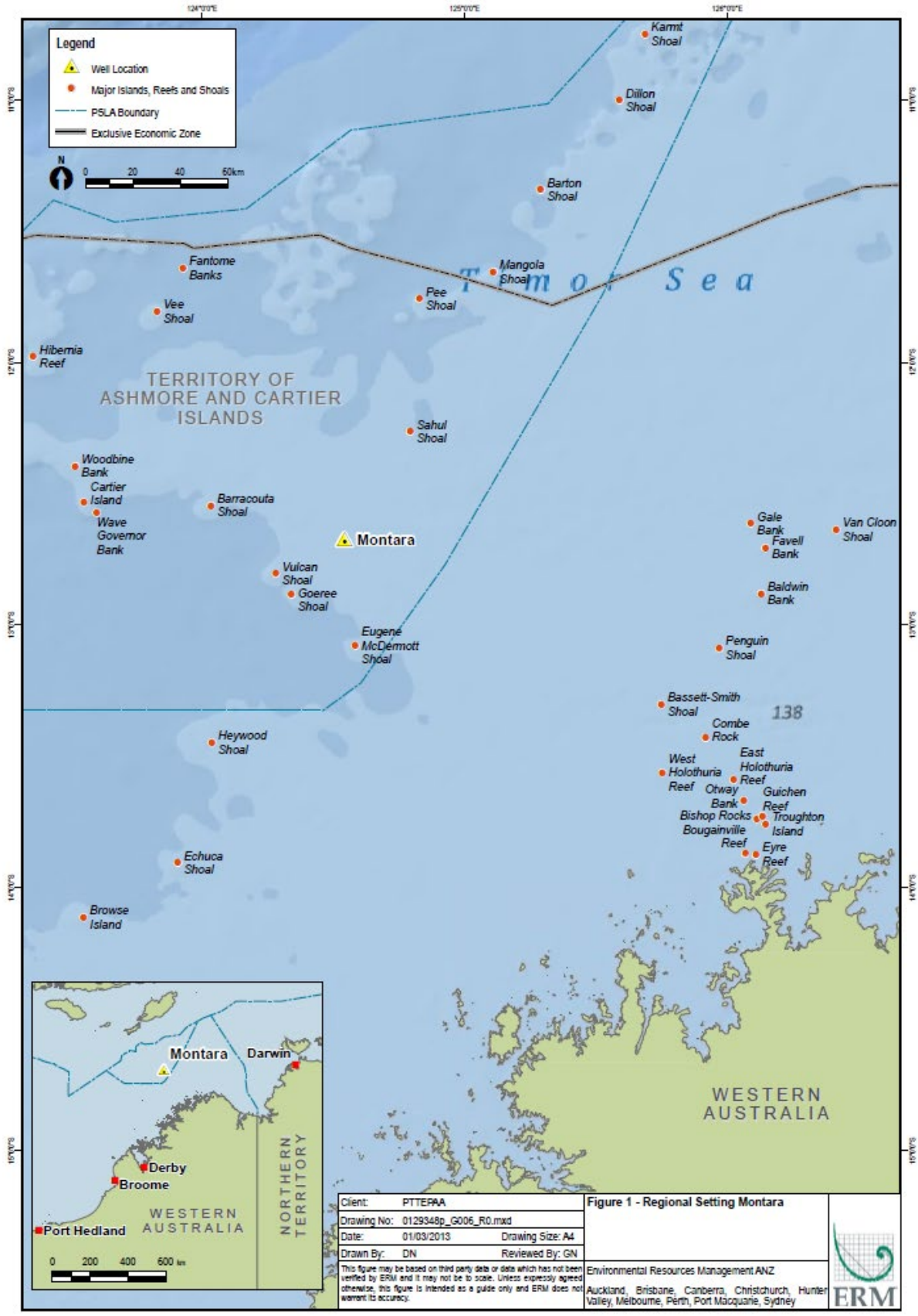
Montara is in Commonwealth waters in the Timor Sea.

PTTEP Australasia, Level 1, 162 Colin Street, West Perth WA 6005
Phone: +61 (0) 8 9483 9483 | Fax: +61 (0) 8 9483 9484 | Web: au.pttep.com

Regional Location Map

The coordinates for the drilling location are as follows:

Drilling Location	Latitude	Longitude
Montara Well Head Platform	**12° 40’ 20.5” S**	**124° 32’ 22.2” E**



Water depth within the drilling area is approximately 77m. The well will be drilled to a depth of approximately 2600m true vertical depth below sea level using a jack up Mobile Offshore Drilling Unit (MODU). Support vessels assist the MODU to move between drilling locations, and supply vessels and helicopters transport equipment, supplies and personnel from shore locations throughout the drilling campaign.

Environmental Approvals

Drilling at the Well Head Platform last occurred in March 2014 and the Environment Plan (EP) for that activity was accepted by the Commonwealth Regulator, National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) on 16 October 2013. This EP is currently being revised and updated in accordance with relevant legislation and NOPSEMA guidance documents for submission to NOPSEMA for assessment within the coming weeks.

The purpose of the EP is to demonstrate;

- Detailed understanding of the existing marine environment within the activity area, particularly the key environmental features and sensitivities,
- All potential environmental impacts and risks have been identified and assessed, both for planned and unplanned events,
- Appropriate management controls, including relevant regulatory requirements, will be implemented to manage the environmental effects,
- Environmental performance outcomes, standards and measurement criteria have been defined to monitor, audit and manage the activity. These will be used to minimise the environmental effects, and
- Appropriate management controls are in place to manage the potential risks from the activity.

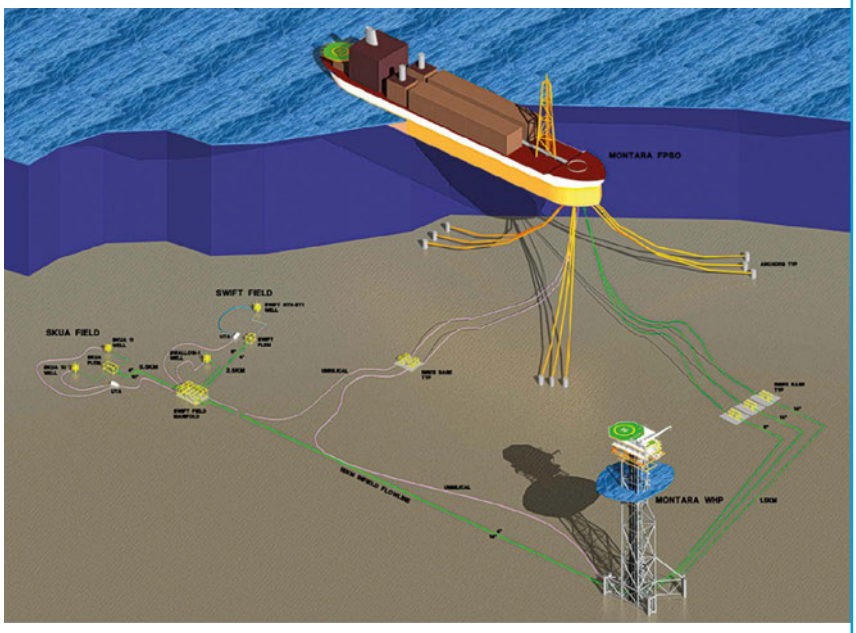
The purpose of this Fact Sheet is to provide information on this proposed drilling activity and provide contact details should you wish to receive additional information or provide feedback. Consultation is being conducted with all relevant stakeholders, including those whose operational interests may be affected or those with an interest in the potential environmental, social or economic impacts.

All feedback received is considered as part of the environmental risk assessment and management process to assist in the preparation of the EP. A summary of all feedback and communication received and given on behalf of PTTEP AA will be provided to NOPSEMA as required under legislation. PTTEP AA will continue to communicate with relevant stakeholders during the assessment process and the planned activity.

Risk Assessment

PTTEP AA implements a health, safety and environmental management system which provides the framework for the company and our contractors to identify, assess and manage environmental risks and impacts from all of our activities. This system, including the policies, standards, plans and procedures, is applied during all drilling activities to manage the environmental risks and impacts.

PTTEP AA has undertaken an environmental risk assessment of the impacts and risks that may arise from all aspects of the proposed drilling activity. The risk assessment has identified a range of controls that will be implemented to manage the environmental risks. Details of each identified risk, potential impacts and the management controls to be applied are detailed in Appendix A – Risk Assessment and Management Controls.



Montara Field development plan

Environmental Studies

PTTEP AA has undertaken extensive environmental studies of the Montara area as part of the Company's commitment to understand and protect the environment to support potential future development.

These environmental studies include;

- Comprehensive 5-year environmental monitoring program following the 2009 Montara incident,
- Marine baseline study of a number of PTTEP AA permits including the Southern fields (Montara), and
- Field studies of shoals near Montara by the Australian Institute of Marine Science (AIMS).

The studies were undertaken in conjunction with a range of expert research partners and consultancies. The data collected has enhanced understanding of water and sediment quality, benthic habitats, fauna and fish communities and underwater noise.

AIMS recently completed a survey to investigate seabed biodiversity and fish communities of offshore shoals near Montara. It provides a better understanding of the existing environment in the development area and will be used to inform future environmental plans.

As part of PTTEP AA commitment to making the data publically available, the majority of these studies are currently available on the federal Department of Environment website as well as the North West Atlas website.

With co-funding from PTTEP AA, AIMS established the North West Atlas (http://northwestatlas.org) in late 2014. The purpose is to deliver a user-friendly tool to communicate scientific and relevant social data from the findings of the Montara Environmental Monitoring Program. This in particular highlighted the ecological significance of nine shoals which were virtually unknown prior to these studies.

Further Information and Feedback

Should you want any further information or have any queries on the planned production drilling activities at Montara, please contact PTTEP AA as soon as possible and by no later than **21 April 2017**.

You can communicate to PTTEP AA in any manner convenient to you (post, email or phone). All input is carefully considered, formally recorded and a response provided.

Please direct comments to Tony Dawe, Stakeholder Engagement Adviser at **tony.dawe@ppr.com.au**

Yours sincerely,

Paul McCormick
Safety, Security, Health and Environment Manager

PTTEP Australasia

A Mobile Offshore Drilling Unit (MODU) at the Montara Wellhead Platform.

APPENDIX A

Risk Assessment and Management Controls

Risk	Potential Impacts
Proximity of the Mobile Offshore Drilling Unit (MODU) (and associated exclusion zone) and supply vessels to other marine users	Interference with and/or exclusion of commercial fishing or shipping vessels

Controls

Stakeholder consultation program that includes ongoing consultation with commercial fisheries, shipping and other relevant stakeholders operating in the permits and surrounds to inform them of the proposed drilling campaign.

A permanent 500m Prescribed Safety Zone (PSZ) for vessels is currently established at the Well Head Platform and will be in place during the drilling activity. In addition, a Cautionary Area has been established around the Montara Venture, Montara Wellhead Platform and associated subsea infrastructure by AMSA and notated on the Admiralty Chart covering the region by the Australian Hydrographic Service. This area extends out 2.5nm from the Wellhead Platform in all directions with the exception of north where it extends out 1nm due to the presence of a shipping lane.

The drilling campaign will comply with all relevant legislation, eg. *Offshore Petroleum and Greenhouse Gas Storage Act* 2006 (OPGGS) and will be carried out in accordance with applicable international maritime conventions such as MARPOL (Marine Pollution Conventions), COLREGS (International Regulations for Preventing Collisions at Sea) and SOLAS (International Convention for the Safety of Life at Sea) and relevant Australian Marine Orders (as appropriate to vessel class).

Vessels will have Automatic Identification System (AIS) and approved electronic navigation systems and radar on support vessels and marine radio will be used to communicate with other vessels in the area.

The Australian Hydrographic Service (AHS) will be notified to generate Maritime Safety Information Notifications (MSIN) and AMSA Rescue Coordination Centre for rig movements.

Support vessel entry and movements within the 500m PSZ will be undertaken in accordance with MODU procedures.

Risk	Potential Impacts
Routine discharge of drilling cuttings and drilling fluids	Low levels of chemicals released; increased localised turbidity; potential depletion of oxygen in surface sediments; possible loss of seafloor habitat. Potential cumulative increase to background contaminant levels and loss of biodiversity

Controls

If Synthetic Based Muds (SBM) are used, a closed loop mud system will be used and the use of Solids Control Equipment (SCE) in accordance with the MODU drilling procedures will reduce the residual amount of synthetic fluid on SBM cuttings discharged overboard (<10% synthetic fluid on cutting weight per weight averaged over the well).

Third party inspection and monitoring of SBM handling equipment and management.

All drilling fluid chemicals discharged to the marine environment will have an Offshore Chemical Notification Scheme (OCNS) grouping of D or E or a Chemical Hazard and Risk Management (CHARM) Hazard Quotient colour banding of Silver or Gold. If other rated or non-rated chemicals are required to be risk assessed for environmental acceptability before use.

Risk	Potential Impacts
Potential for support vessels to interact with marine fauna	Injury and/or mortality to marine mammals or marine reptiles from vessel collision. Behavioural disruption to cetaceans

Controls

Vessels will adhere to EPBC Regulations 2000 - Part 8 Division 8.1 Interacting with Cetaceans

Risk	Potential Impacts
Introduction of invasive marine species via biofouling and/or ballast water from MODU and support vessels	Displacement of native marine species (e.g. marine mammals, marine reptiles, sharks/rays and fish) Reduction in species biodiversity and decline in ecosystem integrity of the surrounding marine environment
Controls	MODU and support vessels will have Department of Agriculture and Water Resources (DoAWR) quarantine clearance to enter Australian waters. Ballast water discharges from the MODU and support vessels must comply with the requirements of the Australian Ballast Water Management Requirements (as enforced under the *Quarantine Act* 1908 [Section 27A]; Quarantine Regulations 2000; and *Biosecurity Act* 2015 [Chapter 5]).
	Completion of DoAWR Ballast Water Management Summary (BWMS) forms for any ballast water discharge in Australian waters. MODU and support vessels will be in possession of current antifouling certificates to verify compliance with the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (as appropriate to vessel class).

Risk	Potential Impacts
Disturbance to marine fauna from light emissions (night-time operations) from MODU and support vessels	Light spill on to ocean attracting fish, turtles and other sea life - causes disruption to natural behaviour (e.g. foraging) leading to decline of local population.
Controls	Lighting is the minimum required for navigation and safety requirements

Risk	Potential Impacts
Seabed disturbance from lowering of the legs of the MODU	Seabed impacts from the lowering of legs to seabed - Disturbance to seabed or epifauna causing damage or loss of habitat, localised loss, disturbance and/or smothering of seabed features and benthic habitat.
Controls	Adherence to MODU contractor rig move procedures to minimise potential impacts on the seabed MODU to be located on Montara Wellhead Platform location, which is a pre-existing disturbed site with Remotely Operated
	Vehicle (ROV) surveys available which have identified no objects on the seabed.

Risk	Potential Impacts
Underwater Noise Emissions from MODU and support vessels	Disturbance to marine fauna, mammals and fish and potential behavioural changes; possible physical damage to immobile plankton such as fish eggs and larvae in immediate proximity to MODU and support vessels.
Controls	Maintenance procedures on the MODU will optimise the efficiency of equipment (ie. engines, thrusters, generators) to reduce excess noise as per manufacturers' specifications in compliance with the MODU contractor Preventative Maintenance System.
	Support vessels adherence to EPBC Regulations 2000 – Part 8 Division 8.1 Interacting with cetaceans

Risk	Potential Impacts
Power generation from MODU and support vessels producing atmospheric emissions	Power generation for drilling operations by the MODU, fuel use for support/supply vessels and helicopters releases combustion products to the atmosphere. These emissions may contribute to global warming (CH4, CO2), acid effects (SOx, NOx). There may be the potential for localised smog formation.
Controls	All power generation equipment will be maintained in accordance with manufacturer's specifications as part of MODU contractor Preventative Maintenance System.
	MODU and supply vessels to have valid International Air Pollution Prevention Certificate (as appropriate to vessel class).

Risk	Potential Impacts
Routine discharge of putrescible wastes, treated sewage, grey water, deck drainage and bilge water	Localised and temporary reduction in water quality leading to toxic effects on marine fauna
Controls	The MODU and support vessels must have a valid International Sewage Pollution Prevention Certificate applicable to vessel class and any sewage or waste discharge will be done in accordance with applicable international maritime conventions e.g. MARPOL, and relevant Australian Marine Orders. Vessels must have a valid International Oil Pollution Prevention Certificate applicable to vessel class and any bilge water discharges (machinery space bilges) from the MODU and support vessels must comply with MARPOL. Food waste discharges from the MODU and support vessels must comply with the requirements of MARPOL Annex V – Garbage. MARPOL is an International Maritime Organisation (IMO) convention and will be adhered to by all vessels regardless of their Flag or Class.

Risk	Potential Impacts
Routine discharge of cooling water and brine	Temporary and localised increases in sea water temperatures and salinity resulting in physical effects to marine biota.
Controls	Cooling water system maintained in accordance with manufacturer's specifications as part of MODU contractor Preventative Maintenance System. The cooling water system is a segregated system, with no hydrocarbons or chemical content.
	Desalination system to be operated in accordance with the manufacturer's specification to ensure brine is diluted in cooling water system prior to discharge.

Risk	Potential Impacts
Routine discharge of cement, cementing fluids	Possible smothering of seabed around the well site by discharged cement slurry. Potential depletion of oxygen in surface sediments; possible loss of seafloor habitat. Low levels of chemicals released resulting in potential toxic effects on marine biota.
Controls	Cementing fluids will have an Offshore Chemical Notification Scheme (OCNS) grouping of D or E or a Chemical Hazard and Risk Management (CHARM) Hazard Quotient colour banding of Silver or Gold. If other rated or non-rated chemicals are required to be risk assessed for environmental acceptability before use.
	Volume of cement to be used will be planned as per the drilling well plan to minimise volumes.

Risk	Potential Impacts
Accidental release of Ozone Depleting Substances (ODS)	Contribution to the incremental buildup of ODS in the atmosphere

Controls

The MODU and support vessels will comply with all relevant legislation, e.g. *Ozone Protection and Synthetic Greenhouse Gas Management Act* 1989 to prevent loss of ODS.

Risk	Potential Impacts
A release of hydrocarbons to the marine environment as a result of: • **Release of aviation fuel as a result of hose break or coupling failure during helicopter refueling on MODU** • **Release of marine diesel as a result of hose break or coupling failure during refuelling of the MODU or support vessel** • **Support vessel collision resulting in loss of marine diesel** • **Loss of well integrity leading to a surface well blowout from the well head platform (WHP)**	Localised and temporary reduction in water quality resulting in toxic effects on marine fauna. Direct toxic or physiological effects on marine fauna and flora, in particular marine mammals Accumulation of oil and chemicals in the food chain and in sediments. Loss of biodiversity. Socio economic effects on fishing, commercial shipping and defence activities Indirect impacts could include: habitat loss, impact on tourism and fisheries, issue of waste disposal Accumulation of oil and chemicals in the food chain and in sediments. Loss of biodiversity.

Controls

The MODU and support vessels will comply with all relevant legislation, e.g. OPGGS Act and will operate in accordance with applicable international maritime conventions such as MARPOL, COLREGS and SOLAS and relevant Australian Marine Orders (as appropriate to vessel class).

Support vessel entry and movements within the 500m PSZ will be undertaken in accordance with MODU procedures.

Any vessel to vessel bunkering of fuel or SBM will use hoses with dry break couplings, break away connections, floats and transfer pump emergency shutdown.

Undertake drilling in accordance with NOPSEMA accepted Well Operations Management Plan, MODU Safety Case and titleholder Environment Plan documents.

Completion of emergency response and testing and exercises.

Blowout Contingency Plan prepared that incorporates requirements and considerations for delivering a source control and containment response for a loss of well control.

Memorandum of Understanding between PTTEP AA and other operators in the vicinity of the Montara Development Project (MDP) area for assistance including rig for a relief well in place prior to drilling.

Implementation of the PTTEP AA Montara Production Drilling Oil Pollution Emergency Plan (OPEP) which includes notifications, appropriate response arrangements and strategies, and triggering of operational and scientific monitoring plans.

MODU helicopter refuelling procedure includes the use of non-return valves installed on fuel transfer hoses, constant surveillance and communication protocols, bunding of aviation fuel tanks.

MODU and support vessel SOPEP that includes procedures for minimising losses to sea and material to respond to a spill.

Risk	Potential Impacts
Accidental loss of chemicals, equipment or wastes from MODU or support vessels during general operations and bulk transfers	Pollution or contamination of the marine environment Localised and temporary reduction in water quality resulting in toxic effects on marine fauna Injury or mortality of marine fauna through ingestion or entanglement

Controls

The MODU and support vessels will comply with all relevant legislation and will be carried out in accordance with applicable international maritime conventions, including MARPOL and with relevant Australian Marine Orders (as appropriate to vessel class).

The MODU and support vessels will have a valid International Pollution Prevention Certificate and an International Maritime Dangerous Goods Code (as appropriate to vessel class) and have provision for appropriate segregation facilities for storage of hazardous wastes

PTTEP AA will verify that the MODU/support vessel operational procedures include appropriate storage and transport of bulk hydrocarbons and chemicals, up to date Safety Data Sheets available on board for all hazardous substances, stocks of Shipboard Oil Pollution Emergency Plan (SOPEP) spill response kits readily available and a preventative maintenance system.

MODU procedures for lifting operations - including use of appropriate and certified lifting equipment, lifting undertaken by competent personnel, preventative maintenance, consideration of weather conditions.

From: s.22
Sent: Monday, 19 March 2018 1:16:07 PM
To: Schofield, Lisa
Cc: s.22
Subject: FW: PTTEP AA meeting brief [DLM=For-Official-Use-Only]
Response requested: No
Sensitivity: Normal
Attachments:
Briefing for meeting with s.22 .docx ;

Lisa,
This document has been saved into your Execdocs folder for Tuesday☺
s.22

From: s.22
Sent: Monday, 19 March 2018 1:13 PM
To: s.22
Subject: FW: PTTEP AA meeting brief [DLM=For-Official-Use-Only]
As discussed ☺

For Official Use Only

From: Schofield, Lisa
Sent: Friday, 16 March 2018 6:38 PM
To: s.22 @industry.gov.au>
Subject: RE: PTTEP AA meeting brief [DLM=For-Official-Use-Only]
Thanks Tina

For Official Use Only

From: s.22
Sent: Friday, 16 March 2018 10:40 AM
To: Schofield, Lisa <Lisa.Schofield@industry.gov.au>
Cc: s.22 @industry.gov.au>; s.22 @industry.gov.au>; s.22 s.22 @industry.gov.au>; s.22 @industry.gov.au>
Subject: PTTEP AA meeting brief [DLM=For-Official-Use-Only]
Hi Lisa
Ahead of your meeting with s.22 from PTTEP AA next Tuesday at 1:30pm, please find below the brief we prepared for s.22 s meeting with s.22 which is later that afternoon at 3pm.
MB18-000155 Meeting with PTTEP AA
Cheers
s.22

Senior Policy Officer
Environment, Safety and Security Section
Offshore Resources Branch
Resources Division
Department of Industry, Innovation and Science
Industry House Level 5
10 Binara Street, Canberra City ACT 2601
GPO Box 2013, Canberra ACT 2601 Australia
Ph: +s.22
Email: s.22 @industry.gov.au
Internet: www.industry.gov.au
ABN 74 599 608 295

From: Schofield, Lisa
Sent: Tuesday, 28 March 2017 8:15:44 AM
To: s.22
Subject: FW: Montara drilling factsheet [SEC=UNCLASSIFIED]
Response requested: No
Sensitivity: Normal
Attachments:
Montara Factsheet Mar2017 TS Proof 6.pdf;

FYI
From: s.22 @ecclesconsultancy.com]
Sent: Sunday, 26 March 2017 9:17 PM
To: Schofield, Lisa
Subject: Montara drilling factsheet
Hi Lisa
Thank you for meeting with s.22 and me last week.
s.22 is currently overseas (as are you) and has asked me to forward the fact sheet on production Montara drilling of H5 at the well head platform that it proposes to commence in September 2017. It's just been finalised for the consultation process.
I hope your trip is successful.
We look forward to seeing you again.
kind regards
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s.22
s.22

Eccles Consulting Pty Ltd
s.22
s.22 ecclesconsultancy.com