

EXPLORATION DRILLING CAMPAIGN WA-285-P Environment Plan Summary

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1 INTRODUCTION

INPEX Browse Ltd. (INPEX), as titleholder on behalf of its joint venture partners, is conducting an exploration drilling campaign to assess the economic potential of gas and condensate reserves contained within the Plover and Brewster reservoirs in the Browse Basin (the Project). The Project will consist of drilling two wells, including vertical seismic profiling (VSP), within exploration permit area WA-285-P.

The drilling campaign will be conducted in accordance with the INPEX Exploration Drilling Campaign WA-285-P Environment Plan (EP) that has been prepared to comply with the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (OPGGS (E) Regulations). The EP has been accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) under Regulation 10A of the OPGGS (E) Regulations.

This document (EP Summary) provides an overview of the key elements of the EP and has been prepared to meet the requirements of Regulation 11(3) and 11(4) of the OPGGS (E) Regulations.

2 LOCATION AND TIMING OF THE ACTIVITY

The Project is located in exploration permit area WA-285-P in Commonwealth waters, approximately 180 km north-west of the Kimberley coastline, at its closest point (Figure 2-1). The closest major town is Derby, located approximately 330 km south of the southern boundary of the Project area. Coordinates of the provisional exploration wells are provided in Table 2-1. Provisional well drill centres are shown in Figure 2-1.

Drilling operations are anticipated to commence between the fourth quarter of 2014 and second quarter of 2015. Exploration drilling is expected to be completed within 12 months of commencement. Drilling of each well (including moving the mobile offshore drilling unit (MODU) between wells and anchoring) is expected to take up to approximately 90 days to complete, depending on operational efficiencies and weather conditions. Table 2-1 provides the coordinates of the provisional exploration well locations.

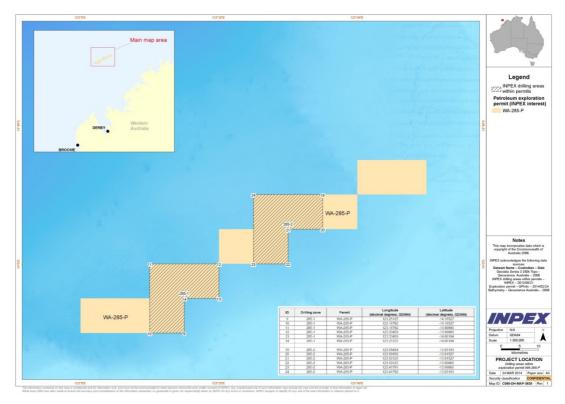


Figure 2-1: Location map of planned activity

Permit area reference	Water depth (approximate)	Latitude GDA94	Longitude GDA94
WA-285-P-1	278 m	14° 4' 34.73" S	123° 11' 30.81" E
WA-285-P-2	250 m	13° 53' 14.58" S	123° 31' 17.49" E

3 DESCRIPTION OF THE ACTIVITY

The exploration wells will be drilled using a semi-submersible MODU which will be anchored to the seabed using eight anchors. The MODU will be supported by two anchor handling supply vessels (AHSVs) and one platform supply vessel (PSV). A 500 m exclusion zone will be maintained around the MODU to control activities and reduce the risk of marine collisions.

The wells will be drilled in phases using water based mud (WBM) in upper sections of wells and synthetic-based mud (SBM) systems in lower sections.

Drilling of each exploration well will include the following steps:

- 1) Drilling of top hole sections of the well using seawater and high viscosity sweeps
- 2) Cementing of steel casings into the hole
- 3) Installation of blowout preventer (BOP) on the wellhead
- 4) Capture and recirculation of drilling fluids and drilled cuttings will be transferred from the bore, back to the MODU, via a marine riser, as a closed system
- 5) Subsequent drilling of bottom of hole sections to target depth
- 6) Installation and cementing of steel casing
- 7) On completion of drilling, wells will be plugged and abandoned.

4 DESCRIPTION OF THE ENVIRONMENT

4.1 Physical environment

The Project area lies in the Timor Province bioregion, located within the broader North West Marine Region. The climate in the Project area is monsoonal with two distinct seasons; summer (October to February) and winter (May to June). Air temperatures in the Project area remain warm throughout the year with means and maximums ranging from 26–30°C and 32–35°C respectively (RPS 2007). Peak rainfall occurs from December to March (Bureau of Meteorology 2013).

Water depths in the Project area range from approximately 250 m to 280 m. The seabed within the drilling area is expected to be generally flat and devoid of any significant bathymetric features.

The primary ocean current is the Indonesian Throughflow, which drives cooler oceanic water southerly direction. Regional surface currents show a strong tidal influence with a net westward drift during the monsoon season and a new eastward drift during the dry season.

4.2 Biological environment

The seabed at the Project area is well below the photic zone and consequently, no benthic macrophytes are expected to be present. Surveys in the Ichthys Field, in close proximity to the permit area, indicate that the sediments of the Project area are expected to range from bare substrate to soft sandy silts and support benthic invertebrate species dominated by polychaetes and crustaceans.

A search of the Commonwealth Protected Matters Database has identified 13 Threatened species and 73 listed Migratory/Marine species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) that may occur in low abundance within, or transit through, the Project area. These species include cetaceans, dolphins, sea snakes, turtles, dugongs, seabirds and migratory shorebirds (Table 4-1).

No known critical habitats, including breeding grounds or sensitive habitat environments for any of the species outlined in Table 4-1 are known to exist within, or adjacent to, the Project area. No known migration pathways pass through the Project area, with the area also distant from cetacean and marine turtle aggregation areas.

There are no conservation areas within, or adjacent to the Project area. The nearest conservation area is the Cartier Island Commonwealth Marine Reserve, located approximately 122 km north of the Project area, at the closest point (Figure 4-1).

A search of the Department of the Environment Conservation Values Atlas (DSEWPaC 2013) identified six key ecological features (KEFs) which occur near the exploration drilling areas in WA-285-P or within the potential adverse exposure zone based on the maximum credible hydrocarbon spill scenarios (which are highly unlikely to occur based on the control measures to be implemented; see Section 5). These KEFs include the following:

• Ashmore Reef and Cartier Island and surrounding Commonwealth waters (approximately 189 km and 158 km north of WA-285-P respectively)

- Seringapatam Reef (approximately 148 km west of WA-285-P) and Commonwealth waters in the Scott Reef complex (approximately 153 km west of WA-285-P)
- Continental slope demersal fish communities (approximately 11 km from the centre of WA-285-P)
- Ancient coastline at 125 m depth contour (approximately 24 km south-east of the centre of WA-285-P)
- Carbonate banks and terrace system of the Sahul Shelf (approximately 440 km north east from the centre of WA-285-P)
- Pinnacles of the Bonaparte Basin (approximately 497 km north east from the centre of WA-285-P).

Table 4-1: EPBC Act listed s	necies that may	occur within or a	diacent to the Project area
Table - T. LI DO ACCIISTEU S	pecies that may		ajacent to the ritoject area

Scientific name	Common name	Threatened status	Migratory status	Listed marine species		
Birds	Birds					
Anous tenuirostris melanops	Australian lesser noddy	Vulnerable	-	Х		
Anous minutus	Black noddy	-	_	Х		
Anous stolidus	Common noddy	_	х	х		
Calonectris leucomelas	Streaked shearwater	_	х	х		
Fregata ariel	Lesser frigatebird	-	х	х		
Fregata minor	Great frigatebird	-	х	х		
Phaethon lepturus	White-tailed tropicbird	_	х	х		
Phaethon rubicauda	Red-tailed tropicbird	_	_	х		
Puffinus pacificus	Wedge-tailed shearwater	_	х	х		
Sterna albifrons	Little tern	-	х	х		
Thalasseus bengalensis	Lesser crested tern	_	Х	Х		
Hydroprogne caspia	Caspian tern	_	х	х		
Sula dactylatra	Masked booby	-	х	х		
Sula leucogaster	Brown booby	-	х	х		
Sula sula	Red-footed booby	-	Х	Х		

Scientific name	Common name	Threatened status	Migratory status	Listed marine species	
Reptiles					
Aipysurus apraefrontalis (also named Smithohydrophis apraefrontalis)	Short-nosed sea snake	Critically Endangered	_	Х	
Aipysurus foliosquama	Leaf-scaled sea snake	Critically Endangered	_	Х	
Caretta caretta	Loggerhead turtle	Endangered	х	х	
Chelonia mydas	Green turtle	Vulnerable	х	х	
Dermochelys coriacea	Leatherback turtle	Endangered	х	х	
Eretmochelys imbricata	Hawksbill turtle	Vulnerable	х	Х	
Lepidochelys olivacea	Olive ridley turtle	Endangered	Х	Х	
Natator depressus	Flatback turtle	Vulnerable	Х	Х	
Crocodylus porosus	Saltwater crocodile	_	Х	Х	
Various sea snakes	Various sea snakes	_	_	15 listed	
Mammals	·			·	
Balaenoptera musculus brevicauda	Pygmy blue whale	Endangered	Х	Cetacean	
Megaptera novaeangliae	Humpback whale	Vulnerable	Х	Cetacean	
Balaenoptera bonaerensis	Antarctic minke whale	-	Х	Cetacean	
Balaenoptera edeni	Bryde's whale	_	Х	Cetacean	
Feresa attenuata	Pygmy killer whale	_	х	Cetacean	
Globicephala macrorhynchus	Short-finned pilot whale	_	Х	Cetacean	
Kogia breviceps	Pygmy sperm whale	_	х	Cetacean	
Kogia sima	Dwarf sperm whale	_	х	Cetacean	

Scientific name	Common name	Threatened status	Migratory status	Listed marine species
Mesoplodon densirostris	Dense-beaked whale	_	Х	Cetacean
Orcinus orca	Killer whale	_	х	Cetacean
Peponocephala electra	Melon-headed whale	_	х	Cetacean
Physeter macrocephalus	Sperm whale	_	Х	Cetacean
Pseudorca crassidens	False killer whale	_	х	Cetacean
Ziphius cavirostris	Cuvier's beaked whale	_	_	Cetacean
Dugong dugon	Dugong	_	х	х
Delphinus delphis	Common dolphin	_	х	Cetacean
Grampus griseus	Risso's dolphin	_	х	Cetacean
Lagenodelphis hosei	Fraser's dolphin	_	х	Cetacean
Stenella attenuata	Spotted dolphin, pantropical spotted dolphin	_	Х	Cetacean
Stenella coeruleoalba	Striped dolphin	_	х	Cetacean
Stenella longirostris	Long-snouted spinner dolphin	_	Х	Cetacean
Steno bredanensis	Rough-toothed dolphin	_	х	Cetacean
Tursiops aduncus	Spotted bottlenose dolphin (also referred to as Indo-Pacific bottlenose dolphin) (Arafura or Timor Sea populations)	_	Х	Cetacean
<i>Tursiops truncatus</i> s. str.	Bottlenose dolphin	_	-	Cetacean
Fish				
Rhincodon typus	Whale shark	Vulnerable	х	_
Pristis zijsron	Green sawfish	Vulnerable	_	_
Isurus oxyrinchus	Shortfin mako	_	х	_

Scientific name	Common name	Threatened status	Migratory status	Listed marine species
Isurus paucus	Longfin mako	—	х	_
Other				
Various pipefish, pipehorse, seahorse	Various pipefish, pipehorse, seahorse	_	_	32 listed

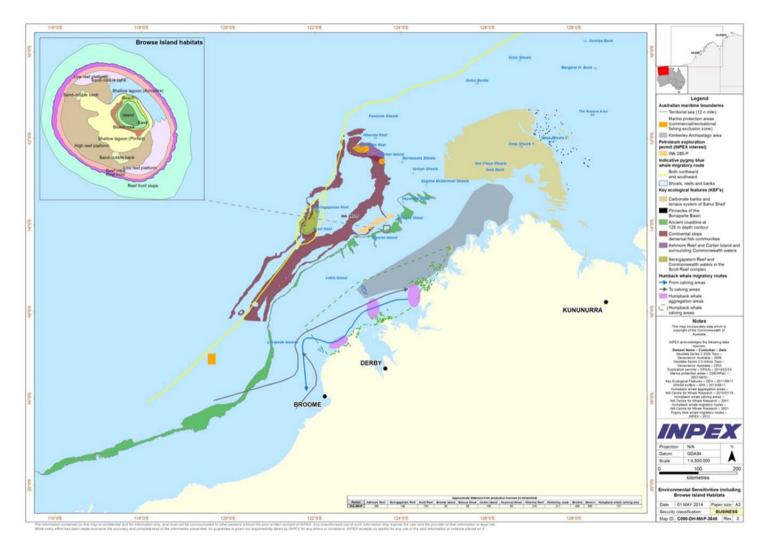


Figure 4-1: Environmental sensitivities including Browse Island habitats

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4.3 Socio-economic environment

The Project area is not located in, or immediately adjacent to, any national heritage, world heritage, wetland of international importance, Commonwealth marine reserve, maritime heritage or indigenous heritage places.

Traditional Indonesian fishing, under the memorandum of understanding signed by Indonesia and Australia in 1974, may occur in the Project area, however, the area traditionally fished does not directly overlap with WA-285-P.

One Commonwealth-managed commercial fishery and three State-managed commercial fisheries overlap the Project area and include the:

- North West Slope Trawl Fishery (Commonwealth)
- Northern Shark Fisheries, including the West Australian North Coast Shark Fishery and the Joint Authority Northern Shark Fishery (State)
- Mackerel Managed Fishery (State)
- Northern Demersal Scalefish Fishery (State).

While these fisheries overlap the Project area, no concerns were raised by the Australian Fisheries Management Authority or individual stakeholders during stakeholder consultation.

The Project area is located in deeper, offshore waters that are not expected to be accessed for tourism activities including recreational fishing and boating, and charter boat operations, which are typically centred around nearshore waters, islands and coastal areas.

Although there are no oil and gas production facilities currently in operation within the Browse Basin, the region is subject to considerable exploration activity. Shell is in the process of constructing a floating liquefied natural gas (FLNG) facility (Prelude) which will be located to the north east of the Project area within the Browse Basin. Additionally, the Browse Joint Venture proposes to commercialise three fields, Brecknock, Calliance and Torosa, as part of the Browse FLNG Development in the vicinity of Scott Reef.

The closest major commercial port to the Project area is Broome, approximately 450 km south-south-west of the Project area. No shipping routes traverse the Project area, with the main shipping channel located to the north-west.

The Royal Australian Air Force (RAAF) Base Curtin air to air weapons range training area is located approximately 100 km south-west of the Project area. Helicopter transfer of personnel between Broome and the Project area would always comply with any restrictions of movement in airspace. Helicopter transfer will be re-routed to avoid the restricted area when necessary and therefore, there will be no interaction with RAAF activities.

5 ENVIRONMENTAL IMPACTS AND RISKS

INPEX has a risk management process to verify that activities are undertaken such that risks are managed to 'as low as reasonably practicable' (ALARP) and acceptable levels. The risk assessment has been undertaken for all drilling activities, in accordance with the procedures outlined in the Australian and New Zealand Standards *AS/NZS ISO 31000:2009, Risk management—Principles and guidelines* and *HB 203:2012, Managing environment—Related risk.* The process is documented at various levels throughout the organisation and is supported by risk management standards, procedures and tools.

Key elements of the risk management process are as follows:

- Identification of sources of risk/ hazard: identifies the sources of risks (hazards) and their environmental and socio-economic impacts.
 - Identification of hazards the identification of planned and credible unplanned interactions between aspects of the Project and environmental and socio economic receptors that represent a hazard with the potential to impact on the described environment.
 - Identification of impacts the identification of adverse or beneficial changes to environmental and socio-economic receptors resulting from hazards (planned and credible unplanned interactions).
- **Risk analysis:** determines the level of risk (which is the product of the consequence and likelihood of an impact occurring) of an environmental impact. Inherent and residual risk analyses have been undertaken and are defined as:
 - Inherent risk the analysis of pre-treatment (management or mitigation) risk levels demonstrates the risk of a particular impact should management or mitigation measures fail.
 - Residual risk the analysis of post-treatment risk levels identifies all measures applied to reduce the risk to residual level.
- **Risk evaluation:** compares the level of risk found during the risk analysis process against acceptability and tolerability, and determines whether further management measures are required to reduce a risk to ALARP. The evaluation of risks has been undertaken in two stages to completely demonstrate that the environmental impacts and risks will be reduced to ALARP, these being:
 - Preliminary risk evaluation the evaluation of planned risks (arising from planned hazards). If the preliminary risk evaluation identifies the need for a risk to be further evaluated (i.e. the risk is deemed unacceptable, intolerable and requires further management measures to be ALARP), the risk is further evaluated in the detailed risk evaluation.
 - Detailed risk evaluation the detailed evaluation of planned risks requiring further investigation and unplanned risks (arising from unplanned hazards). The detailed risk evaluation further analyses the impacts associated with a risk, additional management measures required for the risk to be ALARP and provides a description of acceptability.

Table 5-1 provides a summary of the risks assessed for the Project.

Sources of risk (hazard)	Preliminary risk evaluation	Detailed risk evaluation				
Physical presence						
Physical presence of MODU, supply vessels and helicopters	\checkmark					
Anchoring of MODU	\checkmark					
Introduction of invasive marine species (IMS)		\checkmark				
Interference and/or collision with marine fauna		\checkmark				
Accidental loss of equipment overboard from MODU	\checkmark					
Well abandonment	\checkmark					
Waste management						
Non-hazardous waste	\checkmark					
Hazardous waste	\checkmark					
Discharges to the marine environment: planned						
Cooling water	\checkmark					
Treated sewage, grey-water and putrescible waste	\checkmark					
Deck drainage and bilge	\checkmark					
Disposal of drilling fluids and cuttings	\checkmark	\checkmark				
Cementing fluids and additives	\checkmark					
Blowout preventer (BOP) control fluids	\checkmark					
Brine discharge from reverse osmosis (RO) plant onboard the MODU	\checkmark					
Discharges to the marine environment: unplanned						
Spill of marine gas oil (MGO)/SBM during transfer operations		\checkmark				
Vessel collision resulting in MGO spill		\checkmark				
Loss of well containment leading to release of gas with low condensate content		\checkmark				

Sources of risk (hazard)	Preliminary risk evaluation	Detailed risk evaluation
Emissions: planned	•	
Atmospheric emissions	\checkmark	
Light emissions	\checkmark	
Noise emissions: general drilling operations	\checkmark	
Sound generation: VSP		\checkmark
Ozone depleting substances (ODS)	\checkmark	
Emissions: unplanned		
Unplanned venting of gas during drilling		\checkmark
Implementation strategy administration		
Failure to employ implementation strategy and performance outcomes, standards and measurement criteria		\checkmark
Poor environmental awareness		\checkmark
Failure to undertake scheduled audits, inspections, monitoring and review of environmental performance		\checkmark

5.1 Control Measures

The key environmental risks and control measures to be applied to the Project are provided in Appendix A. These are consistent with INPEX's corporate and Project-specific objectives, standards and measurement criteria. All control measures associated with the hazards will be used to reduce environmental risk to ALARP and all risks will be of an acceptable level.

6 ONGOING MONITORING OF ENVIRONMENTAL PERFORMANCE

The Project will be managed in compliance with the INPEX Exploration Drilling Campaign WA-285-P EP accepted by NOPSEMA under the Environment Regulations, other relevant environmental legislation and the INPEX Environment Policy.

The implementation strategy is the key mechanism of monitoring environmental performance throughout the life of the Project, with a particular focus on determining that environmental performance outcomes and standards in the EP are being met.

The implementation strategy will be undertaken in accordance with the INPEX Health Safety and Environment – Management System, which provides a foundation of standards, procedures and tools that support the implementation of the EP in accordance with Regulation 14 of the OPGGS (E) Regulations.

The key components of implementation of the EP are:

- **Policy:** provides a statement of INPEX's Environment Policy which sets the framework for the INPEX HSE-MS under which the Project will be managed to ensure that the environmental impacts and risks of the Project area continuously reduced to ALARP.
- **Plan:** specific INPEX standards and guidelines to be used to ensure the Project will be managed such that risks are ALARP.
- **Do:** details roles and responsibilities, training and competency measures, INPEX emergency response framework including incident management, references to the INPEX Oil Pollution and Emergency Plan (OPEP) (D020-AD-PLN-10038) and contractor Shipboard Oil Pollution Emergency Plan (SOPEP), cyclone response and emergency response training which in turn provides for the maintenance for the INPEX OPEP and contractor SOPEP, and provides details on INPEX document control procedures.
- **Check:** monitoring, audit and management of non-conformance of INPEX environmental performance and the implementation strategy.
- Act: management review of the Project's environmental performance and the implementation strategy.

At a high level, monitoring of environmental performance is evaluated through the following:

- annual environmental performance report which is submitted to NOPSEMA for assessment to confirm compliance with the environmental performance objectives, standards and measurement criteria outlined in the EP
- formal INPEX annual management review to (among other matters) verify the implementation, adequacy and effectiveness of the EP
- internal INPEX monthly and quarterly performance reports which include review of HSE incidents, performance against key performance indicator targets (including environmental metrics) and review of outstanding actions as a result of audits or incident investigations
- emissions and discharges monitoring data.

6.1 Environment Plan Revision

Any revisions of the EP will be conducted in accordance with Regulation 17 of the OPGGS (E) Regulations and submitted to NOPSEMA for approval. Revision of the EP will occur if there is a change, or proposed change, of circumstances or operations, for example the introduction of a new significant environmental impact/risk or increase in an existing environmental impact/risk.

7 RESPONSE ARRANGEMENTS IN THE OIL POLLUTION EMERGENCY PLAN

The INPEX OPEP details the spill response activities and arrangements, and provides a framework for response to any accidental hydrocarbon discharge from the MODU and supply vessels engaged in the exploration drilling campaign within permit area WA-285-P. Contractors (MODU and vessel) are required to comply with this OPEP. Contractors are also required to maintain emergency response plans and trained personnel as appropriate to their scope of work. INPEX will manage its contractors to verify effective spill response strategies are implemented safely.

INPEX have existing contracts in place with Australian Marine Oil Spill Centre (AMOSC), Oil Spill Response Limited (OSRL) and RPS Asia Pacific Applied Science Associates (RPS APASA) for the supply of spill response resources, personnel and oil spill trajectory modelling (OSTM). INPEX has also entered into a Memorandum of Understanding (MoU) with AMSA which details each party's understanding of their respective roles and responsibilities when responding to marine pollution incidents, including provision of aerial response services and cost recovery.

The OPEP for the Project provides:

- protocols for response escalation and the interfacing of this OPEP with federal and state plans – most notably for vessel based spills and the interface with the National Plan for Maritime Environmental Emergencies (Australian Maritime Safety Authority (AMSA) 2014)
- guidance and direction to the site emergency response team (ERT), incident management team (IMT) and crisis management team (CMT) in relation to all aspects of the response activities
- descriptions of the specific roles and responsibilities for spill response support roles for contractors' ERTs, INPEX IMT and CMT personnel in the event of a marine hydrocarbon spill
- an outline of the proposed schedule for the testing of spill response arrangements (i.e. exercises, drills and audits)
- an outline of the primary and secondary response strategies, including detailed response action plans which provide practical "action based" resource guides for implementation of response strategies in the event of a spill. The response actions plans outline the specific actions and outcomes, resources required and suppliers, and persons/ organisations responsible for implementing the response. Refer to Section 7.1 for further details.
- for effective operational and scientific monitoring in response to an oil spill event, if required based on the nature and scale of the spill. Plans contained in the Operational and Scientific Monitoring Program (OSMP) will be implemented as part of the response strategies detailed in Section 7.1.

7.1 Primary and secondary response strategies

Primary response strategies

The primary response strategies considered ALARP and acceptable (depending on the tier of spill) for the credible spill scenarios that could occur as a result of the Project are:

- Monitoring and evaluation:
 - Overarching outcome: Spills monitored and evaluated (based on the adverse exposure zone) throughout the course of the spill until there are no visible signs of pollution at the sea surface.
 - The following techniques will be used to deliver the response strategy, as appropriate to the tier of spill: vessel surveillance, OSTM, tracking buoy deployment and subsequent tracking, aerial and satellite spill surveillance, satellite imagery analysis and operational monitoring program surveys.
- Pre-contact wildlife response
 - Overarching outcome: Protect wildlife from hydrocarbon impact.
 - The following hazing practices to exclude wildlife from the spill area may be adopted depending on nature of the spill threat and wildlife affected artificial visual, auditory threat stimuli or exclusion devices.

Secondary response strategies

Secondary response strategies are provided to present options to reflect required flexibility for response planning in actual spill circumstances. These secondary response strategies may be enacted in the unlikely event that results of modelling an incident indicate that the behaviour and fate of a spill is significantly different to the modelled credible spill scenarios presented in this OPEP. Secondary responses would also only be implemented if they satisfy all conditions of the secondary response strategy decision making process and may be activated in conjunction with the primary response strategies (as appropriate).

Secondary response strategies which may be implemented include:

- protect and deflect
- post-contact wildlife response
- containment and recovery.

8 CONSULTATION

INPEX has been a member of the Australian business community since 1986 and during this time has engaged with stakeholders on a regular basis for a broad range of activities. As such, INPEX has utilised well-developed stakeholder engagement procedures in order to consult in an appropriate manner with a variety of stakeholders relevant to the Project. The engagement planning process included the following tasks:

- convene stakeholder identification and classification workshop
- compile list of stakeholders
- rate stakeholder levels of interest and expectations
- rate stakeholder levels of influence
- determine appropriate method of stakeholder engagement
- finalise and approve stakeholder register.

INPEX has utilised this process to engage with 'relevant' stakeholders that have an interest in or the potential to be affected by the Project, as consistent with Regulation 11A of the OPGGS (E) Regulations. Stakeholder groups that were identified as 'relevant' during this process are presented in Table 8-1 and include:

- Commonwealth, state/territory and local government departments and agencies
- Ministers of relevant portfolios
- National Native Title Tribunal and relevant Aboriginal and Torres Strait Islander land councils and prescribed bodies corporate
- commercial fishing industry associations and individual operators (permit or licence holders/lessees) in fisheries potentially impacted by our activities
- recreational fishing associations
- environmental, heritage and marine research groups
- Aboriginal and Torres Strait Islander communities (Traditional Owners) in areas potentially impact by our activities
- oil and gas industry peers
- business groups.

Table 8-1: Relevant Stakeholders identified for the Project

Organisation	Relevance
Australian Maritime Safety Authority (AMSA)	Authority, Commonwealth, Regulator
Department of Transport (DoT	Authority, Western Australia, state/local authority
Australian Marine Oil Spill Centre (AMOSC)	Business, Australia, Service provider
Oil Spill Response Limited (OSRL)	Business, Australia, Service provider

Organisation	Relevance
Department of the Environment (DoE). Formerly the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC)	Authority, Commonwealth, Regulator
Department of Industry Formerly the Department of Resources, Energy and Tourism (DRET)	Authority, Commonwealth, Regulator
Minister for Industry Formerly Resources and Energy; Tourism	Authority, Australia, Elected officials
Broome Port Authority (BPA)	Authority, Western Australia – Broome, state/local authority
Department of Parks and Wildlife (DPaW) Formerly Department of Environment and Conservation (DEC	Authority, Western Australia, state/local authority
Department of Mines and Petroleum (DMP)	Authority, Western Australia, state/local authority
Shire of Derby / West Kimberley (SDWK)	Authority, Western Australia, state/local authority
Office of Minister for Mines and Petroleum	Authority, Western Australia, Elected official
Department of Agriculture (DoA) - Biosecurity (Ex-DAFF)	Authority, Commonwealth, Central authority
Shire of Broome	Authority, Western Australia, state/local authority
World Wildlife Fund for Nature (WWF)	Civil Society, Australia, eNGO
Department of Lands, Planning and the Environment (DLPE)	Authority, Northern Territory, state/local authority
Bardi Jawi Prescribed Body Corporate	Authority, Australia, Native title representative body
Kimberley Land Council (KLC)	Civil Society, Western Australia – Kimberley, Aboriginal authority
Djarindjin Community	Civil Society, Western Australia – Kimberley, Aboriginal community
Kooljaman at Cape Leveque	Civil Society, Western Australia – Kimberley, Aboriginal community
Lombadina Community	Civil Society, Western Australia – Kimberley, Aboriginal community
Australian Hydrographic Service (Department of Defence)	Authority, Commonwealth, Central authority

Organisation	Relevance
Australian Fisheries Management Authority (AFMA) North West Slope Trawl Fishery (NWSTF) Southern Bluefin Tuna Fishery Western Skipjack Fishery Western Tuna and Billfish Fishery	Authority, Commonwealth, Central authority
Border Protection Command	Authority, Commonwealth, Central authority
Customs Coastwatch	Authority, Commonwealth, Central authority
Department of Broadband, Communications and the Digital Economy	Authority, Commonwealth, Central authority
Department of Fisheries (DoF)	Authority, Western Australia, state/local authority
Shire of Wyndham East Kimberley	Authority, Western Australia, state/local authority
Commonwealth Fisheries Association (CFA)	Business, Australia, Industry association – marine
National Seafood Industry Alliance (NSIA)	Business, Australia, Industry association -marine
Aquaculture Council Western Australia (ACWA)	Business, Western Australia, Industry association – marine
Western Australian Fishing Industry Council (WAFIC), including stakeholders: Kimberley Prawn Managed Fishery Mackerel Managed Fishery Northern Demersal Scalefish Fishery Joint Authority Northern Shark Fisheries Pearl Producers Association, Kimberley Professional Fishermen's Association (KPFA)	Business, Western Australia, Industry association – marine
Australian Conservation Foundation (ACF)	Civil Society, Australia, eNGO
Conservation Council of WA (CCWA	Civil Society, Western Australia, eNGO
Recfishwest	Civil Society, Western Australia, Recreational groups
A Raptis and Sons Austral Fisheries Kimberley Professional Fishermen's Association (KPFA MG Kailis Northern Fishing Companies Association (NFCA) Shark Bay Seafood Tuna West	WA fisheries contacts – business

Organisation	Relevance
WA Seafood Exporters WestMore Seafoods	

8.1 Consultation undertaken

INPEX has produced an activity-specific fact sheet detailing key information about exploration drilling activities, including:

- description, location and schedule (timing and duration) of the Project
- vessels/equipment to be used and logistics information
- environmental sensitivities and management approach
- contact information for stakeholder queries and feedback, and a means for the stakeholder to "opt out" of further communications.

In addition to provision of the factsheet, INPEX has also engaged with stakeholders through face-to-face meetings, emails and phone calls, as needed, to provide additional information on the Project and the consultation process.

To date, consulted stakeholders have not raised concerns with regards to the Project. The feedback received has related primarily to requests for the Factsheet or for further engagement. Other requests related to notifications required by some Agencies/Authorities and these requirements have been included in the EP as performance standards in control/mitigation measures.

8.2 Ongoing consultation

As appropriate to the nature and the scale of the Project, INPEX has planned for only a low level of ongoing consultation during the operational phase of the activities.

Stakeholders will be notified of any proposed changes, and how they may be affected, verbally and/or by e-mail or letter.

Ongoing stakeholder feedback and concerns have been encouraged during previous consultation efforts and, through, use of the INPEX contact details provided in the fact sheet, stakeholders can continue to contact INPEX with feedback.

9 TITLEHOLDER'S NOMINATED LIAISON PERSON

The main point of contact for further information regarding this EP or the Project is: Dawn MacInnes Senior Environmental Advisor Well Construction and Integrity INPEX Level 22, 100 Saint Georges Terrace, Perth, WA 6000 T + 61 8 6213 6477

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10 REFERENCES

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APPENDIX A: ENVIRONMENTAL IMPACTS, RISKS AND CONTROL MEASURES

Source of risk (hazard)	Potential environmental impact	Control/ mitigation measures
Physical presence		
Physical presence of MODU, supply vessels and helicopters	Interference with and/or exclusion of other commercial users. Damage or loss of equipment Loss of access within 500 m safety exclusion zone leading to loss of revenue	 Establishment and maintenance of a 500 m petroleum safety zone around the MODU. MODU safety case (or revision) stipulates only supply vessels enter the 500 m safety exclusion zone upon receiving approval from the Offshore Installation Manager (or appropriate delegate). A company standby vessel will be on location and radar will be used to warn any vessels should they come within the exclusion zone. Implementation of a stakeholder engagement procedure and consultation with relevant stakeholders. Adherence of contractors to relevant standard maritime safety or navigation procedures, as per <i>Navigation Act 2012, Convention on the International Regulations for Preventing Collisions at Sea 1972,</i> Part B – Steering and Sailing (Rules 4–19), International Finance Corporation (IFC) <i>Environment, Health and Safety Guidelines for Offshore Oil and Gas Development</i> – Ship collision and <i>Marine Orders – Part 30: Prevention of collisions, Issue 8</i> (Order No. 5 of 2009) (as implemented by the <i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983</i>), as appropriate to vessel class. Contractor compliance with the INPEX Aviation Standard.
Anchoring of MODU	Temporary physical scarring of benthic habitats	 Pre-drilling surveys to verify MODU anchoring takes place in areas which do not support sensitive benthic primary producer habitat. Preparation and implementation of a Rig Move and Positioning Plan prior to the MODU arriving in the Project area.
Introduction of IMS	Reduction in species biodiversity of surrounding environment Displacement of native marine species Socio-economic impacts on commercial resources (e.g. fisheries)	 Pre-mobilisation IMS risk assessment completed for selected MODU or relevant vessels (vessel mobilised from outside of Australian waters and required to enter and operate within nearshore Australian waters defined as being with 12 nautical miles of land and waters less than 50 m depth). Compliance with all Australian legislation and current guidance from Department of Agriculture and WA Department of Fisheries associated with quarantine matters. Maintenance of a biofouling record book and ballast water exchange book. All ballast water exchanges conducted more than 50 nm from land and in greater than 200 m water depth. Vessels (of appropriate class) will have current International Anti-Fouling Systems Certificate.
Interference/ collision with marine fauna	Marine fauna behavioural change Injury or mortality of significant fauna from vessel strike	 Vessels will comply with EPBC Regulations 2000 – Part 8 Division 8.1. Implementation of the INPEX <i>Marine Megafauna Interaction and Observation Procedure</i>. Crew briefings. Bridge crew trained in marine mammal and marine turtle identification.

Source of risk (hazard)	Potential environmental impact	Control/ mitigation measures
Accidental loss of equipment overboard from MODU	Temporary localised damage/ disturbance of benthic habitats	 Mobilise supply vessel to pick up floating objects. Maintenance of clear work areas (i.e. good housekeeping practices). Elimination of working at heights, if possible. Post-well ROV survey to verify no dropped objects present. Retrieval of any dropped objects where safe and feasible.
Well abandonment	Temporary localised damage/ disturbance of benthic habitats Localised decline in water quality	 Implement the INPEX <i>Well Construction and Integrity Standard</i> and drilling campaign Well Operations Management Plan (WOMP). Post-well remotely operated vehicle (ROV) survey carried out.
Waste management		
Improper management of non-hazardous waste	Pollution and contamination of the environment Injury or mortality of marine biota (ingestion, or entanglement with litter)	 Compliance with the <i>Protection of the Sea (Prevention of Pollution from Ships) Act 1983</i> – Parts IIIA and IIIC. Compliance with <i>Marine Orders – Part 95: Marine Pollution Prevention –</i> Garbage (as appropriate to vessel class), including maintenance of a garbage disposal record. Adherence to INPEX <i>Waste Management Standard</i>. Contractors' Waste Management Plan.
Improper management of hazardous waste	Temporary and localised reduction in water quality leading to toxic effects on marine biota Injury or mortality of marine biota	 Compliance with the Protection of the Sea (Prevention of Pollution from Ships) Act 1983 – Parts IIIA and IIIC Compliance with Marine Orders – Part 94: Marine Pollution Prevention – Packaged Harmful Substances (as appropriate to vessel class). Adherence to INPEX Waste Management Standard and INPEX Liquid Discharge Standard. Contractors' Waste Management Plan, which includes prohibition of discharge or disposal of hazardous waste overboard to sea. Contractor compliance with the INPEX Chemical Selection, Assessment and Approval Procedure.
Discharges to the marine en	vironment: planned	
Cooling water discharge	Localised increase in ambient sea water temperature Reduction of water quality	 Adhere to International Finance Corporation (IFC) and World Bank Effluent Emission Standards for all discharges of cooling water. Release of cooling water will be above sea level to enable effective cooling, aeration and dispersion. Biocide concentrations monitored to ensure they are kept at minimum dosage required to maintain system integrity.

Source of risk (hazard)	Potential environmental impact	Control/ mitigation measures
		Adherence to INPEX Liquid Discharge Standard.
Treated sewage, grey water and putrescible waste discharge	Reduction in water quality	 Manage and dispose of sewage and putrescible wastes in accordance with MARPOL 73/78 Annex IV and Annex V (as appropriate to vessel class), Marine Orders – Part 96: Marine Pollution Prevention – Sewage and Marine Orders - Part 95: Marine Pollution Prevention – Garbage. Current International Sewage Pollution Prevention Certificate. Sewage and putrescible wastes macerated to a diameter of less than 25 mm prior to disposal.
Drainage overboard of treated bilge and treated and untreated deck drainage	Temporary and localised reduction in water quality	 Compliance with Marine Orders – Part 91: Marine Pollution Prevention – Oil; and Marine Orders – Part 94: Marine Pollution Prevention – Packaged Harmful Substances, as appropriate to vessel class. Liquids with oil-in-water content exceeding 15 ppm will be contained and disposed of onshore. Liquids from drains will be discharged only if the oil-in-water content does not exceed 15 ppm. MODU and vessels will have current MARPOL compliant ship oil pollution emergency plan (SOPEP). Adherence to INPEX Liquid Discharge Standard.
Disposal of drill fluids and drill cuttings (residual SBM on drill cuttings and WBM)	Increased water turbidity Smothering of significant benthic fauna Temporary and localised reduction in water quality	 Contractor compliance with the corporate INPEX <i>Chemical Selection, Assessment and Approval Procedure</i>, which includes the use of the chemical hazard and risk management (CHARM) and offshore chemical notification scheme (OCNS) rating as selection criteria in the selection of WBM and SBM drilling fluids. Discharges of SBM drill cuttings in accordance with the WA Department of Mines and Petroleum Guidelines: Drilling Fluids Management. No planned discharge of whole SBM drilling fluids offshore. Discharge of fluids (WBM only) and cuttings will be near the sea surface to enhance dispersion through the water column. Bunkering procedures for SBM transfers will be prepared and implemented.
Discharge of cementing fluids and additives	Increased water turbidity Smothering of significant benthic fauna Temporary and localised reduction in water quality	 Verification that MODU specific procedures align with the INPEX Liquid Discharges Standard, which includes selection of cement through the INPEX Chemical Selection, Assessment and Approval Procedure, use of a ROV survey to monitor for cement breaking seabed and recording of cement volumes discharged.
BOP and subsea control fluid discharge	Temporary and localised reduction in water quality	• Contractor compliance with the corporate INPEX <i>Chemical Selection, Assessment and Approval Procedure</i> , which includes the use of the CHARM and OCNS rating as selection criteria in the

Source of risk (hazard)	Potential environmental impact	Control/ mitigation measures
		selection of BOP control fluid.Adhere to INPEX Liquid Discharges Standard.
Brine discharge from RO plant onboard the MODU	Temporary and localised reduction in water quality	 Adhere to the IFC Environmental, Health and Safety Guidelines, specifically mixing of desalination brine with other waste streams, if feasible. Adhere to INPEX Liquid Discharges Standard.
Emissions: planned		
Atmospheric emissions combustion of fuel or incineration of waste	Reduction in localised air quality Contribution to global greenhouse gas emissions	 Use of low sulfur MGO. Compliance with <i>Marine Orders – Part 97: Marine Pollution Prevention –</i> Air Pollution, as appropriate to vessel class. All power generation equipment is maintained and operated in accordance with manufacturer's specifications through the implementation of an operational preventative maintenance system.
Light emissions from MODU and support vessels	Attraction, disorientation or repulsion of migratory seabirds, fish and marine turtles	 Lighting will be kept at the lowest acceptable level for safe operating. HSE inspection of the MODU includes consideration of lighting in terms of safe working conditions and minimising impact on marine fauna.
Noise emissions: general drilling operations	Behavioural change and increased stress levels to marine fauna	 Operations to be undertaken in accordance with EPBC Regulations 2000 – Part 8, Division 1. Implement the INPEX Marine Megafauna Interaction and Observation Procedure.
Noise emissions: VSP	Behavioural change and increased stress levels to marine fauna	 VSP operations will be undertaken in accordance with EPBC Act Policy Statement 2.1. Implement the INPEX Marine Megafauna Interaction and Observation Procedure.
ODS	Contribution to global ozone depletion	Maintenance of an ODS Record Book, as required by MARPOL Annex VI (Regulation 12) - Ozone-Depleting Substances from refrigerating plants and firefighting equipment.
Discharges to the marine en	vironment: unplanned	
Spill of MGO/SBM during transfer operations	Temporary and localised reduction in water quality Potential hydrocarbon contact with marine wildlife	 Strict adherence to vessel bunkering procedures, which include: bunkering undertaken in daylight hours, if operations permit and weather is favourable use of dry break coupling and weak link break-away coupling bulk transfer hoses are certified and rated for hydrocarbons and pressure tested establishment and maintenance of good communications between vessel captain and MODU personnel monitoring of prevailing and forecast weather conditions preventative maintenance of equipment. MODU and vessels have current SOPEP.

Source of risk (hazard)	Potential environmental impact	Control/ mitigation measures
Vessel collision, resulting in spill of MGO	Temporary and localised reduction in water quality Potential hydrocarbon contact with marine wildlife	 MODU and vessels equipped with appropriate navigational systems, depth sounders and aids. A 'Notice to Mariners' issued through AMSA. Implementation of a stakeholder engagement procedure and consultation with relevant stakeholders. Establishment and maintenance a 500 m safety exclusion zone around the MODU
Loss of well containment/blow out	Toxic effects to marine biota Hydrocarbon contact with marine wildlife Hydrocarbon contact with coastlines, islands and shoals	 Contractors Well Control Manual, which will align with INPEX standards (including the INPEX <i>Well Construction and Integrity Well Control Standard</i>). Strict adherence to NOPSEMA accepted WOMP. Implementation of preventative barriers. Personnel appropriately trained in spill response. Preventative maintenance systems. Well design integrity is aligned with industry and global standards. Installation of a robust BOP. INPEX <i>Exploration Drilling WA-285-P OPEP</i> implemented in the event of a spill which: activates initial on-site response to spills to ocean identifies available response equipment provides ongoing support and response to spills to the marine environment
Emissions: unplanned		
Unplanned venting of gas during drilling	Reduction in localised air quality Contribution to global greenhouse gas emissions	• Implementation of INPEX Well Construction and Integrity Well Control Standard and WOMP.
Implementation strategy adr	ninistration	
Failure to execute the implementation strategy and performance objectives, standards and measurement criteria	Environmental impacts dependent on the nature of the non-conformance action or incident	 Compliance with INPEX HSE-MS Requirements (specifically the INPEX HSE Performance Measurement and Reporting Standard) and INPEX Incident Reporting, Recording and Investigation Standard. Comply with the INPEX HSE Training and Competency Standard to ensure personnel are competent. Significant changes are managed in accordance with the INPEX Ichthys Project Management of

Source of risk (hazard)	Potential environmental impact	Control/ mitigation measures
		Change Procedure.
Poor environmental awareness	Environmental impacts dependent on the nature of the non-conformance action or incident	Environmental inductions provided to all employees.
Failure to undertake scheduled audits, inspections, monitoring and review of environmental performance	Environmental impacts dependent on the nature of the non-conformance action or incident	• Adherence to the INPEX HSE Audit, Inspection, Monitoring and Review Standard and the INPEX Ichthys Project Action Tracking System Procedure.