

# STAKEHOLDER CONSULTATION

---

Petrel-3 and Petrel-4  
Monitoring and Decommissioning  
**July 2024**



# PETREL-3 AND PETREL-4 Monitoring and Decommissioning

Eni through its subsidiary, Eni Energy Bonaparte Pty Ltd, is the titleholder of the Petrel Gas Field (Petrel) in the Bonaparte Basin in North Western Australia. The field is located in permits NT/RL1 and WA-6-R, approximately 260 km WSW of Darwin and ~170 km offshore of the WA coast. For the purposes of the monitoring and decommissioning, the activity is limited to NT/RL1.

Within the NT/RL1 permit, two wells (Petrel-3 and Petrel-4) have been identified as suspended since the 1980s, with wellheads remaining in-situ. The wells were suspended in accordance with the regulations at the time, with barriers across and above the reservoir, including the testing of the barriers. The reservoir is isolated in both wells and the sub-hydrostatic pressure of the reservoir prevents the wells from flowing in their current condition. **Loss of well control is not considered a credible risk.**

Eni plans to decommission these wells according to *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2023 (Cth) (Environment Regulations)* and are preparing the Environment Plan for Environment Plan (EP) for monitoring and decommissioning to submit to the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).

As required by NOPSEMA, Eni must consult with people whose functions, interests and activities may be affected by the monitoring and decommissioning of wells Petrel-3 and Petrel-4. The

*Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2023* refers to such people as relevant persons.

This fact sheet provides you with information to determine if you are a relevant person for the monitoring and decommissioning activity of Petrel-3 and Petrel-4.

You may be a relevant person if the decommissioning of Petrel wells may affect:

- your spiritual or cultural connection to the land and sea country
- your business and recreational activities, such as fishing and tourism
- the functions or responsibilities of your organisation.

## FEEDBACK

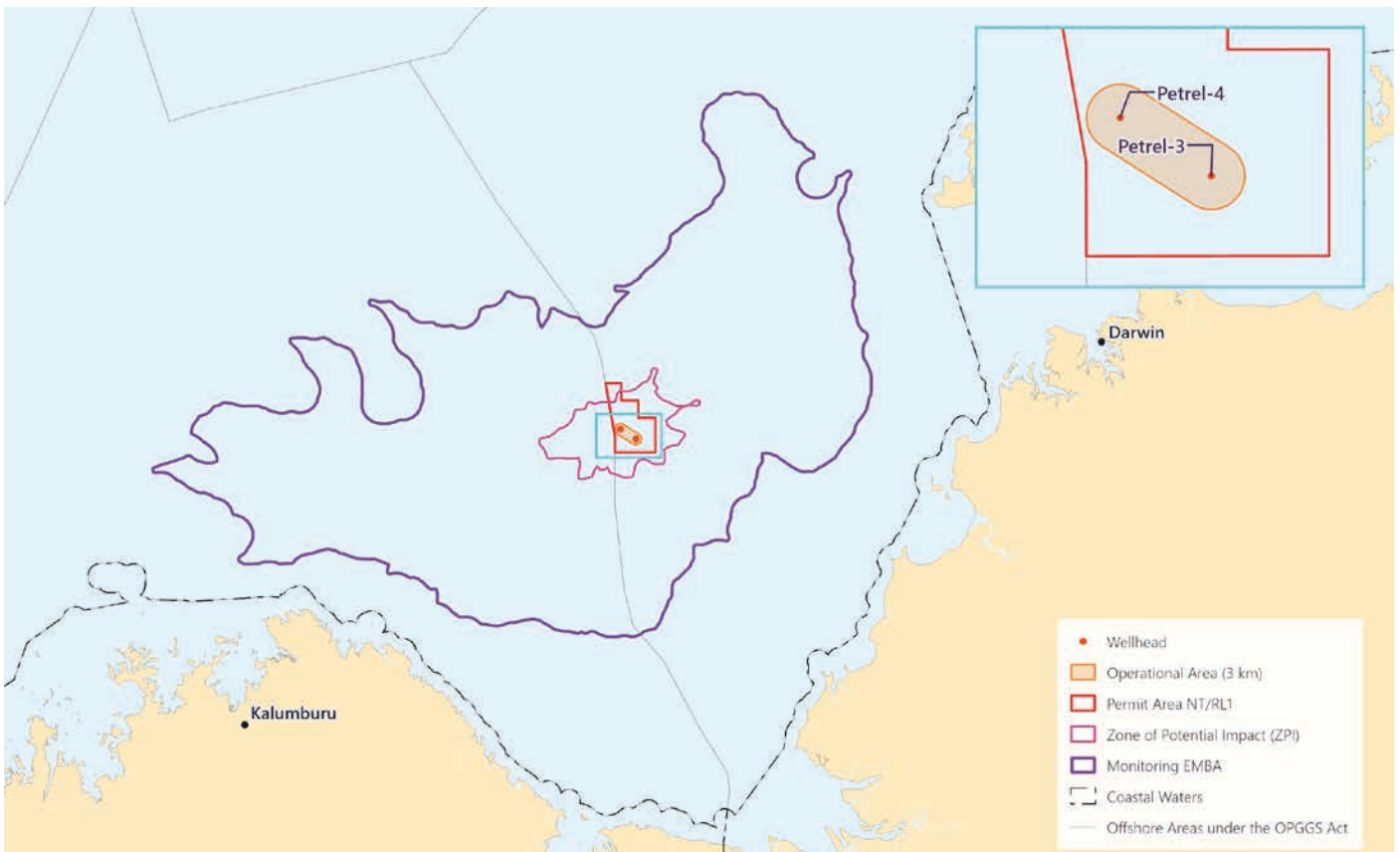
**If you think you may be a relevant person, please** review this information and provide any feedback to Eni. Additional information can be found online at [petreleni.com.au](http://petreleni.com.au). You are invited to submit your advice on control measures to mitigate potential impact (if any) that the proposed activities may have on you. We are seeking feedback by **28 August 2024**.

### CONTACT ENI

Email: [info@petreleni.com.au](mailto:info@petreleni.com.au)  
Phone: 1300 155 616  
Post: PO Box 6862  
East Perth WA 6892



**Figure 1: Operational area, ZPI and EMBA**



## LOCATION

The Petrel-3 and Petrel-4 wellheads are located in Commonwealth waters approximately 260 km WSW of Darwin, approximately 150 km from closest shore, in a water depth of approximately 95m.

Location details are summarised in **Table 1**. A location map is provided in **Figure 1**.

## TIMING

The activities will potentially occur in any season between 2025 and 2027.

The actual timing of the activities will depend on a number of factors, including vessel and rig availability and weather conditions.

## ACTIVITIES AND DURATION

To ensure that the condition of the seabed equipment on the wells remains unchanged, and to plan for the monitoring and decommissioning campaign, Eni proposes the following activities as part of the Petrel-3 and Petrel-4 decommissioning strategy.

Eni is assessing the environmental benefits of leaving whole or partial wellheads in-situ, for consideration by NOPSEMA.

**Table 2 – Planned Activities**

Monitoring and pre-decommissioning activities	Activities summary	Duration (both wellheads)
General Visual Inspection (GVI) survey campaign(s)	Annual GVI survey of the two suspended wells, including potential cleaning <sup>1</sup> of the well equipment to allow detailed inspection.	Up to 2 weeks. Frequency will be annual, with no more than 24 months between surveys.
Geotechnical and Geophysical survey campaign	Geophysical investigation to evaluate the sub-seabed conditions. Geotechnical survey to support a jack-up MODU.	Geophysical survey: up to 40 days Geotechnical survey: up to 20 days
Pre-decommissioning vessel campaign	High-pressure cleaning <sup>1</sup> of the wellhead. Removal of the corrosion cap.  3D external scan by camera or laser to ensure integrity. Corrosion cap replacement.	Up to 20 days.
Decommissioning activities	Activities summary	Duration (both wellheads)
Decommissioning campaign <sup>2&amp;3</sup>	Decommissioning of the Petrel-3 and Petrel-4 wells	Up to 60 days (~30 days per well).
Post-decommissioning activities	Activities summary	Duration
As-left survey(s)	GVI survey to demonstrate that the decommissioning activities proposed have been completed and requirements have been met	2 days per well

1. Cleaning of the wellheads may take place at any time prior to decommissioning activities. Cleaning may be completed using high pressure seawater.  
2. Intent is to do both wells in a single campaign, potential for second campaign as contingency.  
3. Mobile offshore drilling unit configurations are currently under consideration.

**Table 1: Location Details**

Activity Details		
Permit	NT/RL1	
	Datum: GDA94	
Petrel-3 well location	Latitude:	12° 56' 2.071" S
	Longitude:	128° 34' 14.671" E
	Easting:	453,438 m E
	Northing:	8,570,134 m N
Petrel-4 well location	Latitude:	12° 53' 13.194" S
	Longitude:	128° 29' 45.557" E
	Easting:	445,319 m E
	Northing:	8,575,307 m N
Operational Area	The Operational Area is a defined area within which all petroleum activities associated within this EP occur, and which allows impact assessment of those activities. It includes the extent of all planned activities within the EP and is defined as a 3 km radius around the two wells and a 3 km wide corridor between them. Refer to Figure 1.	
	Regional Feature	Petrel-3      Petrel-4
Nearest proximity to Key Regional Features	Darwin	~ 251 km      ~ 258 km
	Yelcherr Gas Plant	~ 173 km      ~ 182 km
	Oceanic Shoals Marine Park	~ 48 km      ~ 37 km
	Closest Mainland Point	~ 150 km      ~ 158 km
Worst case hydrocarbon spill	Maximum credible volume ~300m <sup>3</sup> marine diesel in the event of a ruptured fuel tank (full).	

## ENVIRONMENT THAT MAY BE AFFECTED (EMBA)

The environment that may be affected (EMBA) is the area within which the operations activities could have an environmental impact. The environmental impacts from planned activities will mostly be limited to within the operational area. The zone of potential impact (ZPI) or moderate exposure zone is smaller than the EMBA and may be representative of an area of biological impact from hydrocarbons.

The outermost boundary of the EMBA is based on an accidental release of marine diesel oil (MDO) to the environment in the unlikely event of a vessel collision damaging a fuel tank. This event is highly unlikely to occur and Eni implements a range of measures to prevent it. **Loss of well control is not considered a credible risk.** The EMBA is shown in **Figure 1**.

Scientific modelling is used to assess the potential impacted zone should an unplanned spill occur (eg: vessel collision), and is referred to as the EMBA. This analysis combines hundreds of modelling simulations during a range of wind and current conditions. Refer to [NOPSEMA's website](#) for information on oil spill modelling.

## ENVIRONMENTAL MANAGEMENT

Eni has assessed the environmental impacts and risks for the monitoring and decommissioning activity within the EP. A summary of the assessment and the proposed management measures to reduce the impacts and risks to as low as reasonably practicable and to an acceptable level are provided in **Table 3**.

Further details will be provided in the Petrel-3 and Petrel-4 Monitoring and Decommissioning Environment Plan, which NOPSEMA will publish on their website once the plan is submitted.

## STAKEHOLDER COMMENT AND FEEDBACK

Eni is seeking comment from relevant persons and stakeholders in relation to any potential impact that the proposed activities, covered by the Petrel-3 and Petrel-4 Monitoring and Decommissioning Environment Plan, may have on your functions, interests or activities as a relevant person.

If you wish to provide any comment or feedback on these activities, please do so by **28 August 2024** to the contact details provided. If you know anyone who may be a relevant person, we ask that you make them aware of our consultation.

Eni treats all information provided by you as confidential, with the exception of providing information to NOPSEMA. Eni is required to provide NOPSEMA with details of all correspondence with relevant persons, including copies of written correspondence. NOPSEMA routinely publish environment plans under assessment or accepted on their website.

Personal information (other than name and contact details) is sensitive information and will not be published in the EP. You can request that any material provided to Eni, including your name and contact details, be treated as sensitive information not to be published in the Petrel-3 and Petrel-4 Monitoring and Decommissioning Environment Plan.

All comments provided will be considered in the Petrel-3 and Petrel-4 Monitoring and Decommissioning Environment Plan revision to be submitted to NOPSEMA, in accordance with the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009*. Please let us know if your feedback for this activity is sensitive and we will make this known to NOPSEMA in order for this information to remain confidential to NOPSEMA.

If you wish to opt out of our consultation process after reviewing the information in this letter, please let us know via email.

Please consider NOPSEMA's advice in Consultation on Offshore Petroleum Environment Plans – Information can also be found at the project landing page at **petreleni.com.au**.

### CONTACT ENI

Email: [info@petreleni.com.au](mailto:info@petreleni.com.au)  
Phone: 1300 155 616  
Post: PO Box 6862  
East Perth WA 6892



Table 3 - Summary of Potential Key Environmental Impact/Risks and Management Measures

Aspect	Description	Potential Impact / Risk	Proposed Management
<b>Planned Impacts</b>			
Seabed disturbance	<p>Seabed disturbance will be caused by:</p> <ul style="list-style-type: none"> <li>seabed sampling during the geotechnical survey.</li> <li>positioning of the mobile offshore drilling unit (MODU), if a moored or jack-up MODU is used.</li> <li>removal of marine growth on the wellhead.</li> <li>installation of temporary winches on the seabed.</li> <li>cutting of the wellhead.</li> <li>retrieval of the wellhead and guide base/s from the seabed.</li> </ul>	<p>Seabed disturbance will cause a localised and temporary reduction in water quality, and disturbance to benthic habitat.</p> <p>The maximum seabed disturbance footprint is from MODU positioning, if a moored MODU is used.</p> <p>In this case, up to 12 anchors and mooring lines will be laid, giving a maximum footprint of 1,944 m<sup>2</sup> per well.</p> <p>There is no sensitive benthic habitat, Marine Parks or Key Ecological Features (KEFs) in the operational area.</p>	<ul style="list-style-type: none"> <li>MODU move and anchoring procedure (including mooring analysis).</li> <li>All deployed equipment will be recovered.</li> <li>Post-activity ROV survey will be conducted.</li> </ul>
Physical interaction – Other marine users	<p>The physical presence of the MODU and movement of vessels within the operational area can interfere with other marine users by causing displacement from the area during activities.</p>	<p>The operational area is a 3 km radius around the two wells and the corridor between them. There is no formal Petroleum Safety Zone; however, exclusion and cautionary zones will be in place during activities.</p> <p>Activities in the operational area are of short duration, expected to last between 2 to 60 days.</p> <p>Seven active fisheries overlap the operational area; however, these commercial fisheries have recorded limited historical catch effort data within the area.</p> <p>There are no tourism or recreational fishing activities expected in the operational area due to distance from shore, and no Maritime Defence Exercise areas.</p>	<ul style="list-style-type: none"> <li>Navigation equipment and procedures, in accordance with legislative requirements.</li> <li>Maritime notices will be complied with.</li> <li>All activities will occur within the operational area.</li> <li>Other relevant notifications may be made, as requested by stakeholders.</li> <li>Lighting will be used as required for safe work conditions and navigational purposes.</li> </ul>
Physical presence – Equipment in-situ	<p>If the wellhead or other equipment (e.g. the guidebase/s) are left in-situ following decommissioning, the permanent physical presence of the wellhead or other equipment will continue to:</p> <ul style="list-style-type: none"> <li>Provide a hard substrate resulting in the creation of a new habitat.</li> <li>Potentially interrupt natural sediment movement in the immediate vicinity of the wellhead remaining in-situ permanently.</li> <li>Introduce contaminants to the water column and sediment surrounding the wellhead as it degrades overtime.</li> </ul>	<p>The gradual degradation and corrosion of the wellheads and equipment over time will result in trace amounts of metals to the water column and surrounding sediments. The main constituent of low-alloy steel used for this era of wellhead is iron (typically 95-98%), which is only toxic to marine organisms at extremely high concentrations – which are unlikely to be reached in this offshore location. The remaining constituents are chromium, molybdenum, manganese, and &lt;1% of trace alloys including nickel, silicon, sulphur and phosphorous.</p> <p>Corrosion of the wellhead is likely to be slow (at a rate of ~0.2 mm/year) because of exposure to strong water currents.</p> <p>There are no other materials identified to be associated with the wellheads – i.e. plastic components or surface coatings.</p>	<p>For wellheads and other equipment (e.g. guidebase/s) to be left in-situ following decommissioning, the EP must demonstrate an equal or better environmental outcome; and demonstration of ALARP and acceptability.</p>

Aspect	Description	Potential Impact / Risk	Proposed Management
<b>Planned Impacts</b>			
Atmospheric emissions and greenhouse gas (GHG)	<p>Atmospheric and GHG emissions are generated by the MODU and vessels as a result of combustion for power generation.</p> <p>Vessels may also use ozone-depleting substances (ODS) in refrigeration systems.</p> <p>No waste will be incinerated on board.</p>	<p>Hydrocarbon combustion may result in a temporary, localised reduction of air quality in the environment immediately surrounding the release point.</p> <p>Non-GHG emissions (such as NOx and SOx) and GHG emissions can lead to a reduction in local air quality.</p> <p>Given the short duration of the campaigns (between 2 to 60 days) and relatively low fuel usage, the contribution of atmospheric and GHG emissions to the global carbon budget is expected to be insignificant and is not evaluated further.</p>	<ul style="list-style-type: none"> <li>Use low sulphur fuel on the vessels and MODU, in accordance with legislative requirements (e.g. Marine Orders).</li> <li>Bulk solids transferred in accordance with bulk transfer procedures to reduce the risk of an unintentional release to sea and air.</li> <li>No waste incineration onboard.</li> <li>Ozone-depleting substances (ODS) managed in accordance with MARPOL.</li> <li>Compliance with regulatory requirements for marine air pollution and GHG emissions reporting.</li> <li>MODU and vessel Planned Maintenance System (PMS) in place to maintain DP, engines and machinery.</li> </ul>
Noise emissions - Continuous	<p>Continuous noise emissions will be generated by the operation of support vessels, helicopters, operation of the MODU and cutting of the wellheads.</p>	<p>Underwater noise emissions can cause:</p> <ul style="list-style-type: none"> <li>a change in marine fauna behaviour.</li> <li>mask communication.</li> <li>temporary or permanent hearing loss.</li> </ul> <p>The greatest source of noise emissions is if a MODU on Dynamic Position (DP) is used (from thruster noise), and its support vessels.</p> <p>The operational area does not overlap with any biologically important areas (BIAs) for marine mammals or fish/sharks, though it does for 4 species of marine turtles – any individuals present would be transitory.</p> <p>Potential impacts are likely to be restricted to localised and temporary avoidance behaviour. Given the short duration of the MODU campaign (60 days), the potential impacts are considered low.</p>	<ul style="list-style-type: none"> <li>Compliance with administrative controls (such as EPBC Regulations Part 8) to reduce interactions with marine fauna.</li> <li>Documented maintenance program in place for equipment on vessels that provides a status on the maintenance of equipment.</li> <li>MODU and vessel Planned Maintenance System (PMS) in place to maintain DP, engines and machinery.</li> <li>Marine assurance standard in place.</li> </ul>
Noise emissions – Impulsive	<p>Impulsive noise emissions generated by acoustic survey techniques during the geophysical survey – i.e. Multibeam echo sounder, side scan sonar, sub-bottom profiling, magnetometer, ultra-short baseline positioning system.</p> <p>Such equipment is designed to characterise the seabed topography, bathymetry, potential geohazards, and other seafloor features prior to MODU placement at the wellheads.</p>	<p>The operational area does not overlap with any biologically important areas (BIAs) for marine mammals or fish/sharks, though it does for 4 species of marine turtles – any individuals present would be transitory.</p> <p>The impulsive noise emissions generated by the various acoustic survey instruments may result in localised and temporary behavioural changes to marine fauna within tens or hundreds of metres.</p>	<ul style="list-style-type: none"> <li>Compliance with administrative controls (such as EPBC Regulations 8 (Part 8)) to reduce interactions with marine fauna.</li> </ul>

Aspect	Description	Potential Impact / Risk	Proposed Management
<b>Planned Impacts</b>			
Light emissions	Lights on the MODU and vessels will be required on a 24-hour basis during the activities for safety and navigational purposes, in accordance with navigational requirements. There is no proposed flaring.	Light emissions have the potential to result in changes to marine fauna behaviour, by acting as an attractant to light-sensitive species, leading to possible increased predation and/or disorientation.  The closest nesting BIA for marine turtles is ~116 km from the 20 km buffer used for light impact assessment – meaning light from the MODU and vessels is not visible from shore; and there is no potential to impact nesting females or hatchlings.  The operational area does not overlap any BIAs for seabirds, and is >150 km from shore, meaning there is no potential to impact fledging behaviour.  There is the potential for a small number of adult seabirds and migratory shorebirds may be attracted to the MODU and vessels, however given the short duration of the campaigns (between 2 to 60 days), this is considered minor.	<ul style="list-style-type: none"> <li>Lighting will be used as required for safe work conditions and navigational purposes.</li> </ul>
Planned discharges – Routine	Operation of vessels and the MODU will routinely discharge the following to the marine environment: <ul style="list-style-type: none"> <li>sewage.</li> <li>greywater.</li> <li>putrescible waste.</li> <li>treated bilge.</li> <li>cooling water and brine.</li> <li>deck drainage.</li> </ul>	A temporary and localised impact on water quality may result in a change in water quality and changes to predator-prey dynamics.  Given the relatively low volume and intermittent nature of planned vessel discharges, the short duration of the campaigns (between 2 to 60 days), the water depth and open ocean environment of the operational area, the potential impact is expected to be localised to the immediate proximity of the release, and of short duration.	<ul style="list-style-type: none"> <li>All routine marine discharges will be managed according to legislative requirements.</li> <li>MODU and vessel PMS in place to maintain DP, engines and machinery.</li> </ul>
Planned discharges – Decommissioning	Decommissioning activities may result in the following discharges to the marine environment: <ul style="list-style-type: none"> <li>inhibited seawater (chemical additives include biocide, oxygen scavenger, dyes, corrosion inhibitor).</li> <li>control (hydraulic) fluid.</li> <li>cement and cement debris.</li> <li>Water Based Mud (WBM).</li> <li>reservoir gas.</li> <li>cleaning chemicals (weak acids).</li> </ul> No Synthetic Based Mud will be used.	Discharges of muds and other fluids have the potential to impact to: <ul style="list-style-type: none"> <li>Water quality.</li> <li>Sediment quality and benthic habitat.</li> <li>Local marine fauna.</li> </ul> The benthic fauna and seabed at the operational area is widely represented on the Joseph Bonaparte Gulf.  Given the quantities of the discharges, the low toxicity of WBM and cement and high dispersion in the open, offshore environment, any impact on the marine environment from the discharges are expected to be minor and temporary.  Recovery of water quality conditions is expected within hours after the cessation of the discharges.  Cement discharge impacts to the marine environment are associated with smothering of benthic and infauna communities in the vicinity of the wellheads. Due to the localised area of disturbance, impacted benthic communities are expected to rapidly recolonise any disturbed areas upon completion of the activities.	<ul style="list-style-type: none"> <li>Selection of chemicals to reduce impact to as low as reasonably practicable (ALARP) and acceptable levels.</li> <li>Quality control limits for barite.</li> <li>Bulk powder, fluids and brine discharge framework, to restrict the discharge of leftover bulk products to ALARP.</li> <li>Drill cuttings returned to the MODU will be discharged below the water line to facilitate dispersion.</li> <li>Lost-circulation material procedures.</li> <li>Cement remaining at the completion of drilling is managed so as to avoid or minimise its discharge overboard.</li> <li>Chemical assessment procedure will be implemented.</li> </ul>



Aspect	Description	Potential Impact / Risk	Proposed Management
<b>Unplanned Risks</b>			
Interaction with other marine users -equipment in-situ	If the wellhead or other equipment (e.g. the guide base/s) are left in-situ following decommissioning, the permanent physical presence of the wellhead or other equipment may cause an impact to other marine users (e.g. commercial fisheries, petroleum industry, or shipping).	<p>The wellheads have been in-situ on the seabed for the past ~40 years without any reported incidents or issues. The height of the wellheads is only ~3 m above the seabed, and the guidebase/s are partially buried.</p> <p>Seven active fisheries overlap the operational area; however, these commercial fisheries have recorded limited historical catch effort data within the area.</p> <p>There are no tourism or recreational fishing activities expected in the operational area due to distance from shore, and no Maritime Defence Exercise areas.</p> <p>There are no known recognised major shipping routes through the operational area, and the water depth (~95 m) and height of the wellheads (~3 m) mean it is unlikely to cause any disturbance or displacement of shipping traffic.</p>	<ul style="list-style-type: none"> <li>Wellheads are charted on AHO nautical charts so that marine users are aware of their location.</li> <li>AHO and any other stakeholders who requested to be informed of wellhead locations (i.e fisheries) are notified.</li> </ul>
Marine fauna interaction	<p>There is the potential for vessels to collide with marine fauna, including marine mammals, fish, marine reptiles and seabirds.</p> <p>The main collision risk is through vessel collision with large, slow-moving cetaceans, potentially resulting in severe injury or mortality.</p>	<p>Given the short duration of the campaigns (between 2 to 60 days), and the slow speeds at which vessels operate, collisions with marine fauna are considered highly unlikely.</p> <p>Eni will apply control measures to ensure the likelihood of the event occurring is reduced to ALARP and acceptable levels.</p>	<ul style="list-style-type: none"> <li>Compliance with administrative controls (such as EPBC Regulations Part 8) to reduce interactions with marine fauna.</li> <li>Any vessel strikes with cetaceans will be reported in the National Ship Strike Database.</li> <li>Observations of the surroundings will be undertaken from the vessel/s for marine fauna.</li> </ul>
Introduction of marine pest species	There is the potential for introduction and establishment of invasive marine pests to the operational area via vessels ballast water or biofouling on vessel hulls.	<p>The risk of introducing IMS is limited by the depth of the operational area (&gt;50 m), which is not directly adjacent to any shallow shoals or banks. The substrate in the operational area does not have any hard substrate to which IMS can attach.</p> <p>Eni will apply control measures to ensure the likelihood of the event occurring is reduced to ALARP and acceptable levels.</p>	<ul style="list-style-type: none"> <li>All vessels will be assessed and managed as appropriate to prevent the introduction of marine pests.</li> <li>Vessels will comply with biosecurity requirements for ballast water and biofouling, and comply with the Maritime Arrivals Reporting System (MARS).</li> </ul>
Accidental release – waste and solid objects	<p>There is the potential for the accidental disposal of hazardous wastes (e.g. hydrocarbon contaminated materials, batteries, paint cans) and non-hazardous solid wastes (e.g. paper and cardboard, wooden pallets, scrap steel, rope, glass and plastics).</p> <p>There is the potential for dropped objects during retrieval activities – i.e. the wellhead or guidebase/s (in particular if corroded) or the winches.</p>	<p>The accidental release of wastes can cause a temporary and localised reduction in water quality, and the potential for marine fauna to ingest or become entangled with solid waste (garbage).</p> <p>If equipment is dropped, this may cause disturbance or smothering of benthic habitats. The largest footprint of any item of equipment that will be lifted or retrieved during the campaigns is 30 m<sup>3</sup> (footprint of a guidebase or basket).</p> <p>This is a small area; and benthic habitats are known to rapidly recover. There are no KEFs or sensitive benthic habitat in the operational area.</p> <p>Eni will apply control measures to ensure the likelihood of the event occurring is reduced to ALARP and acceptable levels.</p>	<ul style="list-style-type: none"> <li>Procedures to reduce the potential for loss of non-hazardous and hazardous waste and dropped objects to be followed.</li> <li>Dropped objects to be retrieved where possible.</li> <li>Lifting procedures will be implemented.</li> <li>For hazardous chemicals, including hydrocarbons, hazardous chemical management procedures will be in place to reduce the risk of an accidental release to sea.</li> <li>Chemical assessment procedure will be implemented.</li> </ul>

Aspect	Description	Potential Impact / Risk	Proposed Management
<b>Unplanned Risks</b>			
Accidental release – Minor loss of containment	<p>Minor volumes of hydrocarbon or other chemicals (e.g. hydraulic fluids, deck spills) may be accidentally released to the marine environment due to:</p> <ul style="list-style-type: none"> <li>• Bulk product spills (e.g. cement, barite).</li> <li>• Loss of primary/secondary containment.</li> <li>• Incorrect handling and storage.</li> <li>• ROV failure.</li> </ul>	<p>Minor accidental releases of hydrocarbons or chemicals can cause a change in water quality. Expected volumes are small (&lt;1 m<sup>3</sup>), and there is no potential for injury or mortality to marine fauna.</p> <p>Eni will apply control measures to ensure the likelihood of the event occurring is reduced to ALARP and acceptable levels.</p>	<ul style="list-style-type: none"> <li>• Use of MDO rather than Heavy Fuel Oil (HFO) on vessels (MDO is lighter than HFO and will evaporate faster and persist less in the marine environment).</li> <li>• Response plans and equipment will be in place and maintained to manage spills to the environment (e.g. oil pollution emergency plans).</li> <li>• Administrative control, such as bunkering / bulk refuelling procedures.</li> <li>• In the event of a minor loss of containment to sea, Oil Pollution Emergency Plan (OPEP) requirements will be implemented to mitigate environmental impacts.</li> <li>• Chemical assessment procedure will be implemented.</li> <li>• For hazardous chemicals, including hydrocarbons, hazardous chemical management procedures will be in place to reduce the risk of an accidental release to sea.</li> <li>• Remotely operated vehicle (ROV) inspection and maintenance procedures.</li> <li>• Procedures to reduce the potential for loss of non-hazardous and hazardous waste and dropped objects to be followed.</li> <li>• MODU and vessel PMS in place to maintain DP, engines and machinery.</li> <li>• Where required, operational and scientific monitoring undertaken in accordance with Eni's Operational and Scientific Monitoring Plan.</li> </ul>
Accidental release – MDO (vessel collision)	<p>A release of up to 300 m<sup>3</sup> marine diesel oil (MDO) could occur from a collision between the activity vessels and a third-party vessel due to factors such as human error, poor navigation, vessel equipment failure or poor weather.</p> <p>A smaller volume of MDO (~50 m<sup>3</sup>) could be released during bunkering (i.e. refuelling of the MODU).</p>	<p>An accidental release of MDO can cause a change in water quality, a change in fauna behaviour, injury or mortality to marine fauna and an impact to other marine users.</p> <p>Potential impacts include those to plankton, fish, marine turtles, marine mammals, seabirds and migratory shorebirds, commercial fisheries, and cultural heritage.</p> <p>MDO is a relatively volatile, non-persistent nature hydrocarbon with rapid evaporation on the sea-surface (typically ~36% within the first 2 hours).</p> <p>Hydrocarbon spill modelling does not predict any shoreline contact; or any contact with Marine Parks or KEFs.</p> <p>Seven active fisheries overlap the operational area; however, these commercial fisheries have recorded limited historical catch effort data within the area. There are no tourism or recreational fishing activities expected, and no Maritime Defence Exercise areas.</p> <p>Eni will apply control measures to ensure the likelihood of the event occurring is reduced to ALARP and acceptable levels.</p>	<ul style="list-style-type: none"> <li>• Pre-start notifications will be issued.</li> <li>• Regulatory requirements for the prevention of vessel collisions and safety and emergency arrangements.</li> <li>• Use of MDO rather than Heavy Fuel Oil (HFO) on vessels.</li> <li>• In the event of an oil spill to sea, OPEP requirements will be implemented to mitigate environmental impacts.</li> <li>• Response plans and equipment will be in place and maintained to manage spills to the environment (e.g., oil pollution emergency plans).</li> <li>• Administrative control, such as bunkering / bulk refuelling procedures.</li> <li>• Vessels selected and on-boarded are operated, maintained and manned in accordance with industry standards (Marine Orders) and regulatory requirements.</li> <li>• Where required, operational and scientific monitoring undertaken in accordance with Eni's Operational and Scientific Monitoring Plan.</li> </ul>



