

### CONSULTATION

Bass Strait Operations Turrum - Phase 3 Drilling

INFORMATION BULLETIN May 2024 Esso Australia Resources Pty Ltd (Esso) is committed to engaging with the communities where we operate and helping our stakeholders to understand our business. This information bulletin has been developed as part of Esso's commitment to keep relevant persons and other stakeholders informed of planned activities in Bass Strait and to provide them with sufficient information about the nature and scale of the activity, as well as its potential risks and impacts, so that they can make an informed decision as to whether their functions, interests or activities are affected.

#### **Overview**

Esso is a wholly owned subsidiary of ExxonMobil Australia Pty Ltd. Esso is the operator of the assets in Bass Strait that are part of the Gippsland Basin Joint Venture between Esso and Woodside Energy (Bass Strait) Pty Ltd (Woodside Energy) and the Kipper Unit Joint Venture (Esso, Woodside Energy and MEPAU Pty Ltd). These assets comprise 19 platforms with approximately 400 wells, six subsea facilities and more than 800 kilometres of subsea pipelines.

Esso is planning to undertake a drilling campaign from the Marlin Complex (Marlin A and Marlin B) location in the Gippsland Basin off the Victorian coastline. This campaign will be completed during 2025/2026 along with other jack-up rig (JUR) activities.

The JUR will operate in accordance with international safety and environmental standards, will hold a Safety Case and operate under an Environment Plan (EP) and a Well Operations Management Plan (WOMP), after all have been accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).

#### **Activity location**

The new wells will be located at the existing Marlin B platform, approximately 42 kilometres off the Gippsland coastline, south-east of Lakes Entrance in water depths of approximately 60 metres.



ightarrow Map of activity location



**ESSO FACILITIES** PRIMARY PIPELINE (OIL) PRIMARY PIPELINE (GAS) VICTORIA SECONDARY PIPELINE ACTIVITY LOCATION PLATFORM Barry Beach LOCALITY SUBSEA FACILITY 0 STATE WATERS VALVE SITE COMMONWEALTH WATERS **BATHYMETRY (WATER DEPTH)** 

The wells will not be located within any established or proposed Commonwealth or State Marine Protected Areas, Critical Habitats or Threatened Ecological Communities.

#### Activity timing

Earliest date of commencement:

2H 2025

Field activities estimated to take:

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Activities will be conducted:

24/7

The timing and order of activity may vary and is contingent on regulatory approvals, joint venture approvals, weather and JUR/vessel schedules. Consultation will be conducted with relevant persons prior to the commencement of drilling activities.

#### Activity description

Drilling of five wells from Marlin B is planned to take place with the Valaris 107 JUR. As the JUR does not have propulsion capability, it will be supported by up to three support vessels which will tow it into position alongside the Marlin B platform. The legs will then be lowered onto the seabed and the JUR elevated above the sea surface.

Gravel bed installation alongside the Marlin B platform may be required on the seafloor to ensure stability of the JUR. If necessary, a specialised vessel will be utilised to install the gravel bed. This may require several transits to the location from shore. If a gravel bed is required, it will become part of the infrastructure associated with the Marlin B platform and will be located within the existing 500m Petroleum Safety Zone (PSZ). Any potential impacts and risks from the gravel bed will be managed to ensure impacts and risks are As Low As Reasonably Practicable (ALARP) and of an acceptable level.

The JUR will position over each proposed well location and the well will be drilled and completed. The conductors for the five wells are planned to be installed prior to JUR arrival using a hydraulic hammer on the existing Marlin B platform, in existing conductor slots. The drilling process uses a rotating bit attached to the end of a string of drill pipe to bore through the earth to reach the gas reservoirs. As the bit turns, it grinds off small pieces of rock, or drill cuttings, thus deepening the well.

In upper sections water-based fluids will be pumped down the drill string to remove cuttings from the well, cool the drill bit, and maintain pressure control of the well. In lower sections, to assist well stability, low toxicity non-aqueous fluids will be used.

The drilling fluids and cuttings are recirculated to the JUR where the fluids will be removed from the cuttings before being reused. Once fluids have been removed, drill cuttings will be discharged overboard where they will settle on the seabed near the JUR.

A blowout preventer will be used to prevent the release of hydrocarbons during drilling of the wells.

Once drilling is complete, steel casing will be installed in the wellbore and cemented in place. The well will be perforated to establish communication with the gas reservoir and production tubing will be installed containing various instruments and valves to produce the well.



#### → ENVIRONMENT PLAN

Under the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cth) (OPGGS Act), before any petroleum-related activities in Commonwealth waters can commence, an EP must be accepted by NOPSEMA. A single EP is being developed for drilling of these five wells.

The EP is a comprehensive document that describes the existing environment, including relevant persons, and how Esso will undertake the drilling activities to avoid, minimise or manage potential environmental impacts to ALARP and meet regulatory acceptability criteria. Demonstrating ALARP requires a titleholder to implement all available control measures where the cost is not grossly disproportionate to the environmental benefit gained from implementing the control measure.

In the course of preparing an EP, Esso must consult with relevant authorities, persons and organisations whose functions, interests or activities may be affected by the proposed activities (i.e. a relevant person) and provide the opportunity for any feedback.

## Petroleum Safety Zones and Notice to Mariners

The new Marlin B wells will be located on the existing Marlin B platform within the existing 500m PSZ established for the facility in accordance with Section 616 of the OPGGS Act.

The location and timing of the campaign will be communicated to other marine vessels via a Notice to Mariners issued by the Australian Hydrographic Office and AUSCOAST warnings issued by the Australian Maritime Safety Authority.

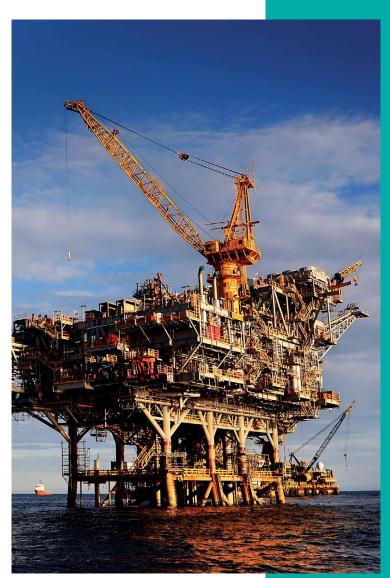
#### Interaction with commercial fishing

The activity locations are within existing Commonwealth fisheries that may be used by commercial fishers.

The impacts to commercial fishing should be minimal as fishers are already required to avoid the established PSZ. However, the timing of drilling activities and the support vessel details will be further communicated to the Lakes Entrance Fishermen's Co-op, South East Trawl Fishing Industry Association and Seafood Industry Victoria nearer the campaign.

### Potential impacts, consequences and control measures

Esso's aim is to minimise environmental and social impacts associated with the proposed activities. As such, Esso has undertaken an assessment to identify potential impacts and consequences to the environment resulting from the proposed activities, considering timing, duration, location, values and sensitivities. For each potential impact, Esso has developed the control measures outlined on the following pages to assist relevant persons in making an informed assessment of potential impacts to their functions, interests or activities.



#### $\rightarrow$ OIL POLLUTION EMERGENCY PLAN

In accordance with the OPGGS Act, Esso must demonstrate and document oil spill response arrangements. The Oil Pollution Emergency Plan (OPEP) forms part of an EP submission and demonstrates Esso's capability to respond in the unlikely event of an oil spill.

Esso is a member of the Australian Marine Oil Spill Centre, a co-operative national oil spill response organisation, which provides access to additional oil spill response resources if required.

Esso's OPEP interfaces with national, state and industry response plans prepared and implemented by the Australian Government via the Australian Maritime Safety Authority (NatPlan), the Victorian Government (Maritime Emergencies (non-search and rescue) Plan), the Tasmanian Government (TasPlan), the NSW Government (NSW Marine Oil and Chemical Spill Contingency Plan) and the Australian Oil industry's Australian Marine Oil Spill Plan (AMOSPlan) administered by the Australian Marine Oil Spill Centre.

The OPEP defines spill response options which may be applied to a spill event. The selected spill response option(s) would depend upon the size and type of spill; environmental sensitivities within the spill path; prevailing weather conditions; access restrictions and available resources. In all instances, a Net Environmental Benefits Assessment is undertaken, in consultation with relevant government agencies, to determine the most appropriate spill response option.

↑ Marlin B platform

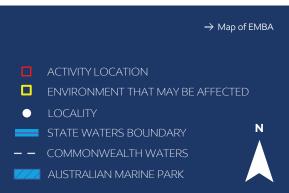
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POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
JUR AND VESSEL-BASED IMPACTS		
JUR leg placement causes seabed disturbance	<ul> <li>Localised seabed disturbance/turbidity.</li> <li>Temporary and localised reduction in water quality.</li> </ul>	<ul> <li>Seabed survey completed to identify obstructions.</li> <li>JUR move procedures in place.</li> <li>Small area affected by leg placement, rapidly filled by natural current movements after removal.</li> <li>Area is sandy bottom with no sensitive seabed features.</li> </ul>
Gravel bed alongside Marlin B platform (if required)	<ul> <li>Localised seabed disturbance/turbidity.</li> <li>Temporary and localised reduction in water quality.</li> </ul>	<ul> <li>Clean gravel will be sourced from Australia and will be free of invasisve marine species.</li> <li>The specialised vessel uses a discharge pipe extended to the seafloor , for accurate placement to minimise water column and seafloor disturbance.</li> </ul>
Planned discharges to the marine environment: sewage and food waste; treated bilge and deck wash; and cooling water and brine	<ul> <li>Temporary and localised reduction in water quality.</li> <li>Temporary change to predator/prey dynamics.</li> </ul>	<ul> <li>Routine discharges and vessel waste treatment systems will meet International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978, (MARPOL 73/78) requirements. Treatment systems are routinely monitored and regularly maintained.</li> <li>No discharge of oily water exceeding acceptable limit for oil in water content.</li> <li>Food-scraps macerated prior to discharge.</li> <li>Planned chemical discharges assessed and confirmed consistent with the Esso chemical assessment procedure prior to use.</li> </ul>
Sound emissions	<ul> <li>Temporary displacement of sound sensitive fauna around active vessels.</li> </ul>	<ul> <li>Compliance with Environment Protection and Biodiversity Conservation Regulations 2000 (Cth) Part 8 Division 8.1 interacting with cetaceans.</li> <li>Sound modelling has been undertaken for conductor installation activity, indicating extremely localised distances to effect for mammals and fish.</li> </ul>
Light emissions	<ul><li>Attraction of light sensitive species.</li><li>Change in fauna behaviour.</li></ul>	<ul> <li>Lighting will used in accordance with the National Light Pollution Guidelines for Wildlife.</li> <li>Lighting will be kept to a minimum while still meeting navigational and workplace safety requirements.</li> </ul>
Air emissions	<ul> <li>Temporary and localised reduction in air quality.</li> </ul>	<ul> <li>Air emissions from marine engines meet MARPOL 73/78 requirements and are routinely maintained.</li> <li>Use of low sulphur content fuel.</li> </ul>
Unplanned interaction with marine fauna (vessel strike)	<ul> <li>Injury or death of marine fauna.</li> </ul>	<ul> <li>Support vessels will comply with Environment Protection and Biodiversity Conservation Regulations 2000 (Cth) Part 8 Division 8.1 interacting with cetaceans.</li> <li>JUR will be stationary during drilling activities</li> <li>Any injury/mortality of Environment Protection and Biodiversity Conservation Act 1999 (Cth)-listed fauna will be reported to the Department of Climate Change, Energy, the Environment and Water.</li> </ul>
Unplanned introduction of invasive marine species	<ul> <li>Displacement of native species and habitat domination.</li> </ul>	<ul> <li>Ballast Water Management Plan and Certificate.</li> <li>Biofouling Risk Assessment shows low risk of invasive marine species introduction.</li> </ul>

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POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
Unplanned Wastes and Materials discharge (accidental loss)	<ul> <li>Temporary and localised:         <ul> <li>increase in turbidity</li> <li>burial of benthic habitat in immediate seabed area</li> <li>potential toxicity impacts.</li> </ul> </li> </ul>	<ul> <li>Waste handling, storage and disposal meets MARPOL 73/78 requirements.</li> <li>Lifting equipment certified and routinely maintained.</li> <li>Bulk transfer equipment meets Guidelines for Offshore Marine Operations requirements and is routinely maintained.</li> <li>Recovery of dropped objects where safe and practicable.</li> </ul>
Accidental release of fuel (vessel collision)	<ul> <li>Tainting of commercial fisheries species (e.g. shellfish).</li> <li>Injury and death of species such as fish, marine reptiles, seabirds, cetaceans.</li> <li>Pathological effects on fish larvae and plankton.</li> </ul>	<ul> <li>Location within gazetted exclusion zones.</li> <li>Communicate commencement of activity and exclusion zone to relevant persons via Notice to Mariners and via the Australian Maritime Safety Authority</li> <li>Vessel crew and navigational equipment will meet vessel class requirements.</li> <li>Vessels travel at reduced speeds within PSZ.</li> <li>Comply with approved Shipboard OPEP, including maintaining spill kits, emergency response procedures and conducting spill response exercises.</li> <li>Implementation of OPEP.</li> </ul>
DRILLING ACTIVITY IMPA	ACTS	
Discharge of cement	<ul> <li>Localised and temporary:</li> <li>reduction in water quality</li> <li>smothering of benthic habitat.</li> </ul>	<ul> <li>Low toxicity cement additives are selected for use.</li> <li>Cement hose flushing and slurry releases rapidly diluted and dispersed.</li> </ul>
Drilling fluid and cuttings discharges	<ul> <li>Localised and temporary:         <ul> <li>increase in turbidity</li> <li>burial of benthic habitat in immediate seabed area</li> <li>potential toxicity impacts.</li> </ul> </li> </ul>	<ul> <li>Seawater-based fluids used where practicable.</li> <li>Use of low toxicity non-aqueous fluids and additives.</li> <li>Solids control equipment minimises non-aqueous fluids on cuttings prior to cuttings discharge overboard (i.e. fluids are returned for reuse).</li> <li>Dynamic seabed and marine environment with rapid dispersion of sediments.</li> </ul>
Drilling and completion fluid discharges	<ul><li>Increased salinity.</li><li>Potential toxicity effects.</li></ul>	<ul> <li>Low toxicity chemical additives are selected for use in drilling, clean-up and completion fluids.</li> <li>Planned chemical discharges assessed and confirmed consistent with the Esso chemical assessment procedure prior to use.</li> </ul>
Loss of well control	<ul> <li>Tainting of commercial fisheries species (e.g. shellfish).</li> <li>Injury and death of species such as fish, marine reptiles, seabirds, cetaceans.</li> <li>Pathological effects on fish larvae and plankton.</li> <li>Pollution of shoreline habitats such as sandy beaches and rocky shores.</li> </ul>	<ul> <li>Turrum wells are predominantly gas with some associated condensate, therefore large oil spills are unlikely.</li> <li>NOPSEMA-accepted WOMP will be in place prior to commencement.</li> <li>NOPSEMA-accepted Safety Case will be in place prior to commencement of activity.</li> <li>Esso-approved drilling and completions procedures will be in place.</li> <li>Preventative maintenance systems will be in place.</li> <li>Well control equipment testing.</li> <li>Emergency response preparedness including: OPEP; Operational and Scientific Monitoring Plan; Source Control Plan and relief well planning.</li> </ul>

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#### Environment that may be affected

The environment that may be affected (EMBA) is the largest spatial extent where the activities could potentially have an environmental consequence (direct or indirect impact). For this EP, the broadest extent of the EMBA takes into consideration planned and unplanned activities and is determined by a highly unlikely release of condensate from a loss of well control and marine diesel to the environment as a result of a vessel collision.

The EMBA represents the total area that could be exposed to hydrocarbon, including trace concentrations of oil in the water column, as a result of any spill from this activity. This area takes into account the merged area of many possible paths a highly unlikely hydrocarbon release could travel depending on the weather and ocean conditions at the time of the release. This means in the highly unlikely event a hydrocarbon release does occur, the entire EMBA will not be affected and the specific and minimal part of the EMBA that is affected will only be known at the time of the release.

For this EP, Esso has defined the EMBA by combining the potential spatial extent of surface and in-water (dissolved and entrained) hydrocarbons, resulting from a worst-case credible spill from a vessel collision and the accidental release of condensate from a loss of well control.



#### Consultation

Esso is committed to ongoing engagement with the communities where we operate. Your functions, interests and activities may mean you, your business or your organisation are a relevant person for these activities. Your participation will help Esso to better understand the impacts and risks that may arise from the activities. As such, we're seeking your feedback as we develop the EP. Please note that your feedback and our response will be included in our EP for the proposed activities, which will be submitted to NOPSEMA for acceptance in accordance with the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 (Cth). Please let us know if your feedback is sensitive and we will make this known to NOPSEMA upon submission of the EP in order for this information to remain confidential to NOPSEMA. Esso will communicate any material changes to the proposed activity to relevant persons as they arise.

If you would like to comment on the proposed activities outlined in this information bulletin, or would like additional information, please contact us.

# **E**‰onMobil

#### How to contact us

For more information, visit our Consultation Hub using the QR Code below, or contact our Consultation team at:

- T: +61 3 9261 0000
- E: consultation@exxonmobil.com
- W: www.exxonmobil.com.au



Scan to access the <u>Consultation Hub</u> and Esso Consultation Questionnaire

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#### Acknowledgement of traditional owners



Esso Australia acknowledges the Traditional Custodians of Country, the Gunaikurnai Peoples, and the land and sea upon which our operations are located.

We recognise the Gunaikurnai Peoples' continuing connection to land, sea, culture and community, and pay our respects to Elders past and present.