CONSULTATION

Bass Strait Operations

Gippsland Basin Geophysical and Geotechnical Investigations - Environment Plan Revision

INFORMATION BULLETIN
March 2024

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

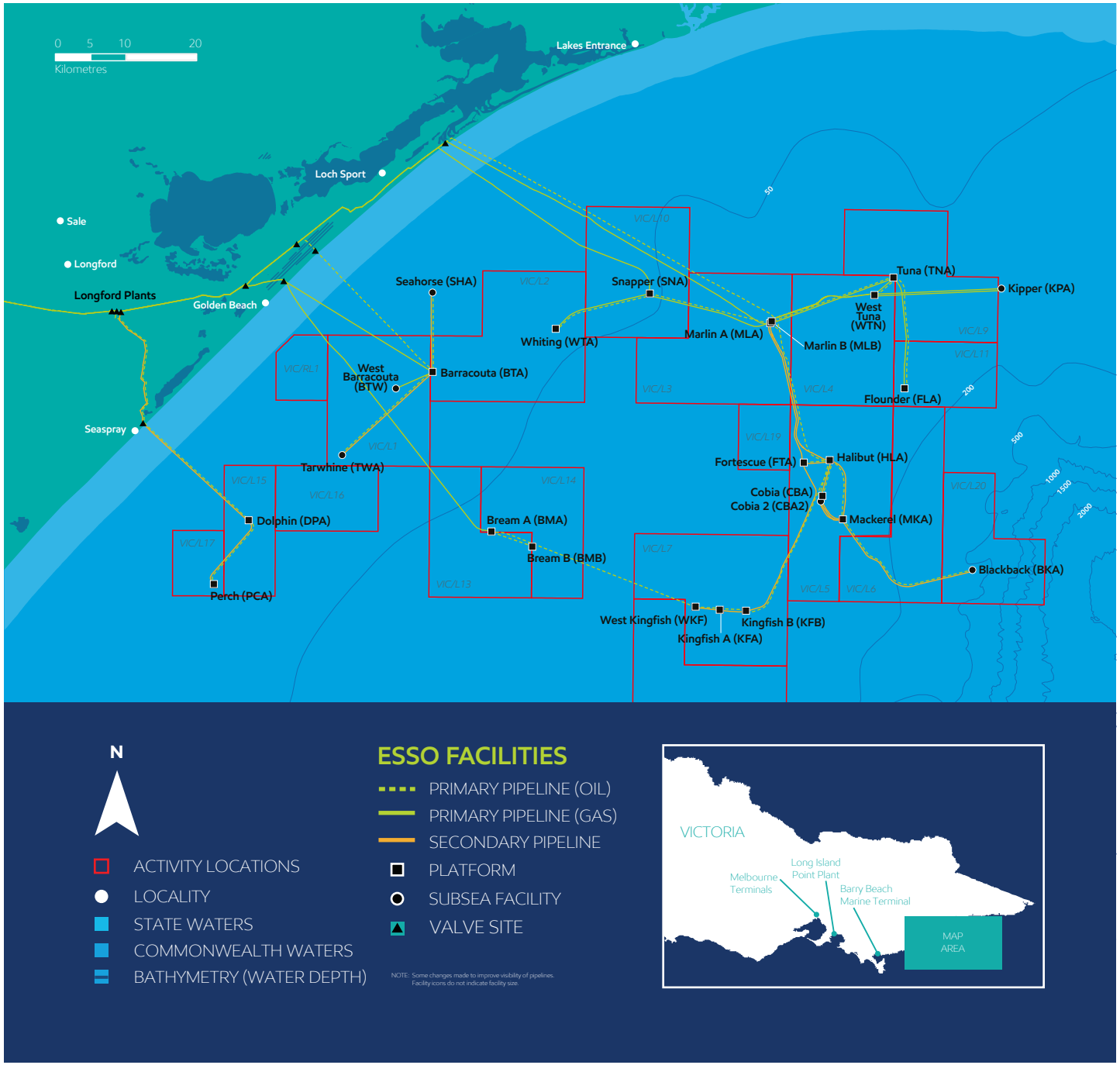
Esso Australia Resources Pty Ltd (Esso) is a wholly owned subsidiary of ExxonMobil Australia Pty Ltd. Esso is the operator of the assets in Bass Strait that are part of the Gippsland Basin Joint Venture between Esso and Woodside Energy (Bass Strait) Pty Ltd (Woodside Energy) and the Kipper Unit Joint Venture (Esso, Woodside Energy, and MEPAU A 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 continue to undertake geophysical and geotechnical (G&G) activities across multiple licence areas located within Commonwealth Waters in Bass Strait. The investigations are required to inform:

- Plug and abandonment activities
- Decommissioning
- Development around existing facilities
- Maintenance around existing facilities.

Activity location

The activity areas are located within the Gippsland Basin within the eastern Bass Strait. The investigations will be undertaken within Petroleum Production Licences VIC/L1, VIC/L2, VIC/L3, VIC/L4, VIC/L5, VIC/L6, VIC/L7, VIC/L8, VIC/L9, VIC/L10, VIC/L11, VIC/L13, VIC/L14, VIC/L15, VIC/L16, VIC/L17, VIC/L19, VIC/L20, VIC/L25 and Petroleum Retention Lease VIC/RL1.



→ Map of activity locations

Activity timing and duration

Activities described in this Environment Plan (EP) will commence upon acceptance by the Regulator noting that this is a revision to an existing EP.

Duration will vary based on whether it is a geotechnical or geophysical activity, and the scope of work to be undertaken. Geophysical activities are typically between a few days and few weeks depending on the size of the area to be surveyed. Geotechnical activities are typically a few hours and duration of the campaign will depend on the number of sites to be sampled.

Specific campaign timing and location will be provided to relevant stakeholders.

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

Activity description

Geophysical investigations

A geophysical survey is the collection of geophysical data (i.e. measurements of seabed characteristics, imaging and profiling) for assessment of water depths, seabed topography, seabed conditions and identification of obstructions on the seabed. Geophysical surveys will be conducted using conventional techniques including:

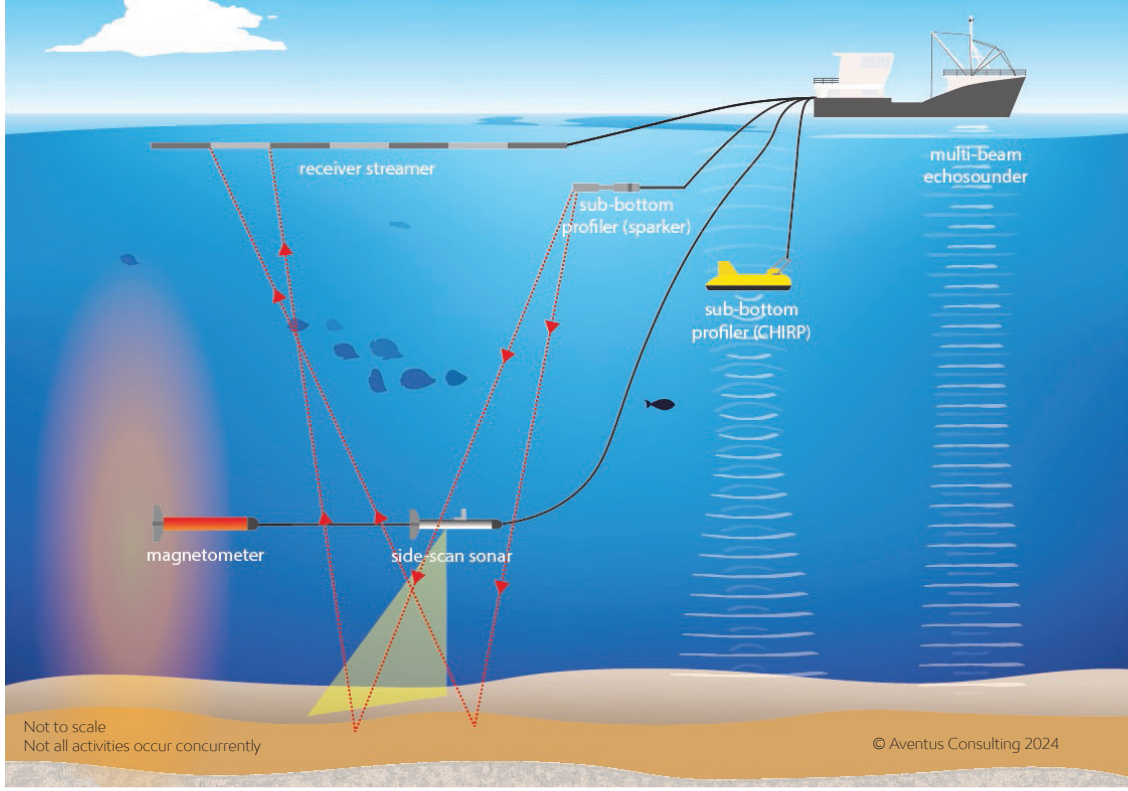
- Single beam echo sounder (SBES) to assess water depths – bathymetry
- Multi beam echo sounder (MBES) to assess water depths – bathymetry
- Side scan sonar (SSS) to detect seabed hazards such as pipelines, shipwrecks, reefs and anchors
- Sub bottom profiler (SBP) including ultra high resolution (UHR) to map the structure and thickness of the uppermost seabed sediments
- Magnetometer to detect metallic objects on or below the seabed, such as cables, anchors, chains and buried pipelines.

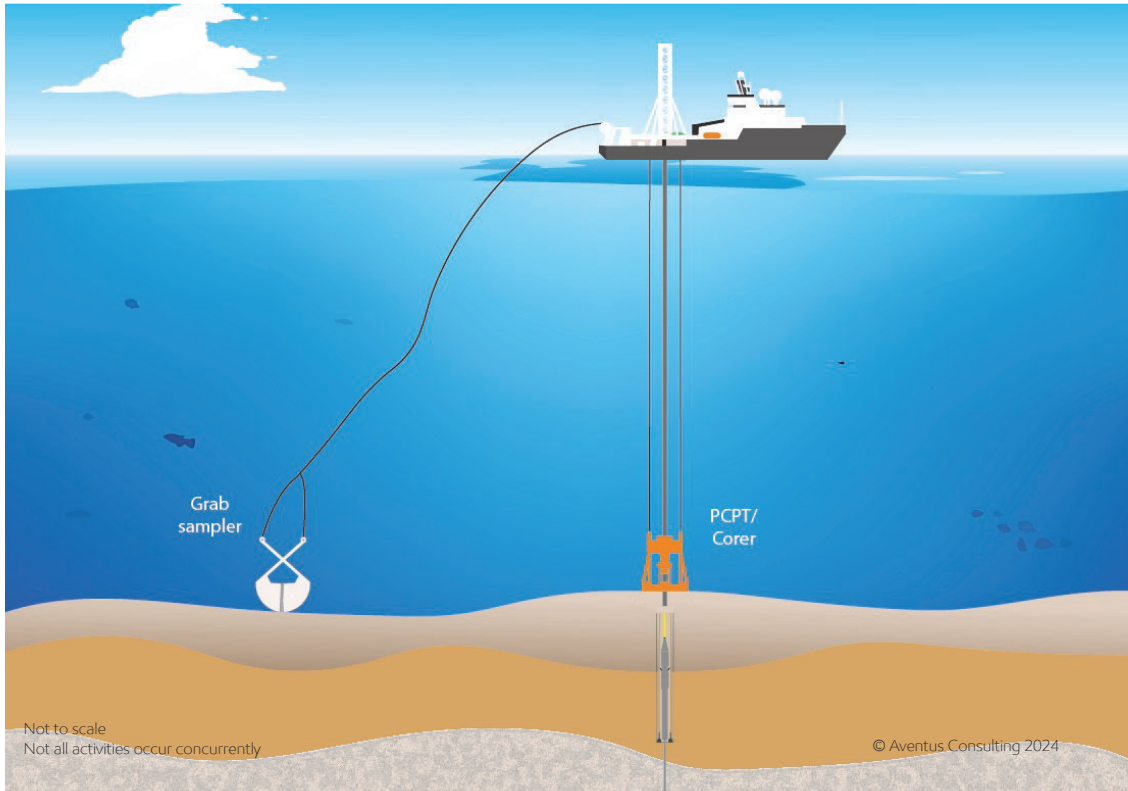
Geophysical equipment is deployed using a survey vessel together with autonomous underwater vehicles (AUV), remotely operated vehicles (ROV), towfish and/or catamarans. The geophysical activities are likely to be conducted using a locally-based vessel.

Geotechnical investigations

A geotechnical survey is used to assess and characterise the conditions of the seabed in nominated locations. Geotechnical investigations involve taking shallow core samples of seabed sediment (sand, silts, clays) and underlying rock to establish geological conditions. Geotechnical investigations may involve:

- Geological analysis of unconsolidated seabed sediments using grab sampling
- Geological analysis of formations below the seabed using coring
- Determination of seabed strength using pipeline end manifold (PLEM) seabed sampling, piezocone penetration testing (PCPT) and borehole sampling.





↗ Simplified representation of geophysical investigation techniques
→ Simplified pictorial representation of geotechnical investigation techniques

Geotechnical investigations are undertaken using a specialised vessel.

Geophysical and geotechnical investigations are commonly used in the resources industry to provide a greater understanding of seabed conditions and shallow geology.

Notice to Mariners

The location and timing of the activity will be communicated to 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 activities will take place within existing Commonwealth fisheries areas.

The impacts to commercial fishing should be minimal as fishers are required to avoid established Petroleum Safety Zone's in and around the Esso facilities. However, the timing of activities and the support vessel details will be further communicated to the potentially impacted fisheries closer to the time of operations.

Environment Plan

Under the OPGGS Act, before any petroleum-related activities in Commonwealth waters can commence, an EP must be accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA). An existing EP is currently in-force enabling Esso to conduct G&G activities within Bass Strait. Esso is now proposing to extend this EP for another five years, and a revision to the existing EP is being prepared. The key changes are the extension to the timing of the activities and additional title areas added to cover all Esso Bass Strait License areas where the activity may occur.

The EP is a comprehensive document that describes the existing environment, including relevant persons, and how Esso will undertake the activities to avoid, minimise and manage potential environmental impacts to As Low As Reasonably Practicable (ALARP) and meet 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.

↑ Multi-purpose support vessel the *Skandi Darwin*

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 (AMOSC), 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 (NEBA) is undertaken, in consultation with relevant government agencies, to determine the most appropriate spill response option.

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 possible impacts to their functions, interests or activities.

POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
PLANNED (ROUTINE AND NON-ROUTINE) ACTIVITIES		
Sound emissions	• Temporary displacement of sound sensitive fauna around active vessels	• Support vessels will comply with *Environment Protection and Biodiversity Conservation Regulations 2000* Part 8 Division 8.1 • If certain listed species of whales are spotted, additional controls are in place to help protect and minimise noise disturbance • A 500-metre shutdown zone will be maintained around vessel and survey equipment, using crew observers • Fauna observations will be undertaken by trained personnel
Lighting emissions	• Attraction of light sensitive species • Change in fauna behaviour	• Lighting will be used in accordance with the National Light Pollution Guidelines for Wildlife • Lighting will be kept to a minimum while still meeting navigational and workplace safety requirements
Air emissions	• Temporary and localised reduction in air quality	• Marine engines are maintained and air emissions will meet MARPOL 73/78 requirements
Planned discharges to the marine environment including treated sewage and food waste, treated bilge and deck wash, and cooling water and brine	• Temporary and localised reduction in water quality • Temporary change to predator/prey dynamics	• Routine discharges and vessel waste treatment systems are maintained to meet the requirements of the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78) • Food scraps will be macerated prior to discharge • Discharged bilge water will have less than 15 parts per million oil in water content • Chemicals planned for discharge will undergo an environmental assessment to confirm suitability for discharge prior to use • All vessels will hold a current International Oil Pollution Prevention (IOPP) Certificate • Vessel contractors have scupper plugs fitted for use in overboard drains
Physical presence – seabed disturbance	• Smothering/alteration of benthic habitats • Localised and temporary increase in turbidity near the seabed	• Seabed grab sampling and coring activities are localised • Core holes are narrow and will collapse in on themselves and small surface 'craters' will fill in with sediments and recolonise with benthic fauna
UNPLANNED ACTIVITIES (ACTIVITIES/INCIDENTS)		
Unplanned introduction of invasive marine species	• Displacement of native species • Habitat domination	• Project vessels will have a Ballast Water Management Plan and associated certificate • Project vessels will comply with Australian Ballast Water Management requirements • Biofouling risk assessment process will be completed • Submersible equipment (ROV) will be rinsed on completion of each activity and is normally stored on deck, thereby minimising invasive marine species risk
Dropped objects	• Localised physical impacts on benthic communities • Localised physical disturbance	• Cargo securing manual • Lifting gear is appropriately maintained • Vessel inductions include training for crew on dropped object prevention

POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
Unplanned interaction with marine fauna (vessel strike)	• Injury or death of marine fauna	• Project vessels will comply with *Environment Protection and Biodiversity Conservation Regulations 2000* Part 8 Division 8.1 • Any injury/mortality of *Environment Protection and Biodiversity Conservation Act 1999*-listed fauna will be reported to the Department of Climate Change, Energy, the Environment and Water • Grills or guards fitted to side thrusters of vessels to limit significant marine fauna ingress (where structurally possible)
Accidental release of waste	• Physical harm to marine fauna resulting from ingestion or entanglement with solid waste (garbage) • Marine pollution	• Project vessels will comply with MARPOL Annex V which includes measures to prevent loss of waste to the marine environment
Minor chemical spill	• Localised increased turbidity of the water column • Potential toxicity • Localised (and normally temporary) smothering or pollution of benthic habitats	• All hazardous wastes and chemicals will be stored in a bunded area capable of containing leakage or spillage, prior to onshore disposal • Safety Data Sheets (SDSs) are present on board for each hazardous chemical • Shipboard Marine Pollution Emergency Plan (SMPEP) in place • ROV pre and post dive inspection will be conducted to visually checks for leaks • Suitable spill kits in accessible locations onboard to be used immediately in the event of a chemical/hydrocarbon spill
Vessel collisions	• Vessel impacts • Spill risk • Damage to/or loss of fishing equipment and/or loss of commercial fish catches (resulting in financial loss)	• Marine users will be informed (including Notice to Mariners) prior to the commencement of activities so they will be able to plan their activities and avoid unexpected interactions • Petroleum Safety Zone established in accordance with the OPGGS Act at least one month before start of field activities • Establishment of adequate navigational aids and communication systems • Implementation of vessel communication procedures • Relevant persons whose activities are within the activity location will be notified of activities approximately four weeks and again one week prior to commencement • Project vessels will comply with Marine Order 21 (Safety of navigation and emergency procedures) 2012 • Project vessels will comply with Marine Order 30 (Prevention of Collisions) 2009
Accidental release of Marine Diesel Oil (MDO)	• Temporary closure of areas (i.e. fishing grounds, beaches, etc.) • Visual amenity • Physical harm to marine fauna resulting from ingestion, inhalation or skin contact with oil • Disturbance to reproduction of seabirds and shorebirds	• Shipboard Marine Pollution Emergency Plan (SMPEP) • Shipboard Oil Pollution Emergency Plan (SOPEP) that will be implemented in the event of an MDO spill • Oil spill response equipment is appropriately maintained • No refuelling on location

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 activity, the broadest extent of the EMBA takes into consideration planned and unplanned activities and is determined by a highly unlikely release of 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 areas of many possible paths which a highly unlikely hydrocarbon release could travel depending on the weather and ocean conditions at the time of the release. This means that in the highly unlikely event a hydrocarbon release does occur, the entire EMBA will not be affected. The specific part of the EMBA that is affected can only be known at the time of the release.

For this activity, 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 at the Perch, West Kingfish, Barracouta, Halibut and Kipper facilities.

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 are seeking your feedback as we develop the revised Bass Strait G&G 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 assessment in accordance with the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009*.

↑ Map of EMBA

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.

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.

ExxonMobil

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 Consultation Hub and Esso Consultation Questionnaire