



ExxonMobil

CONSULTATION

Bass Strait Operations

Gudgeon-1 and Terakihi-1 - Well Plug and Abandonment

INFORMATION BULLETIN
September 2023

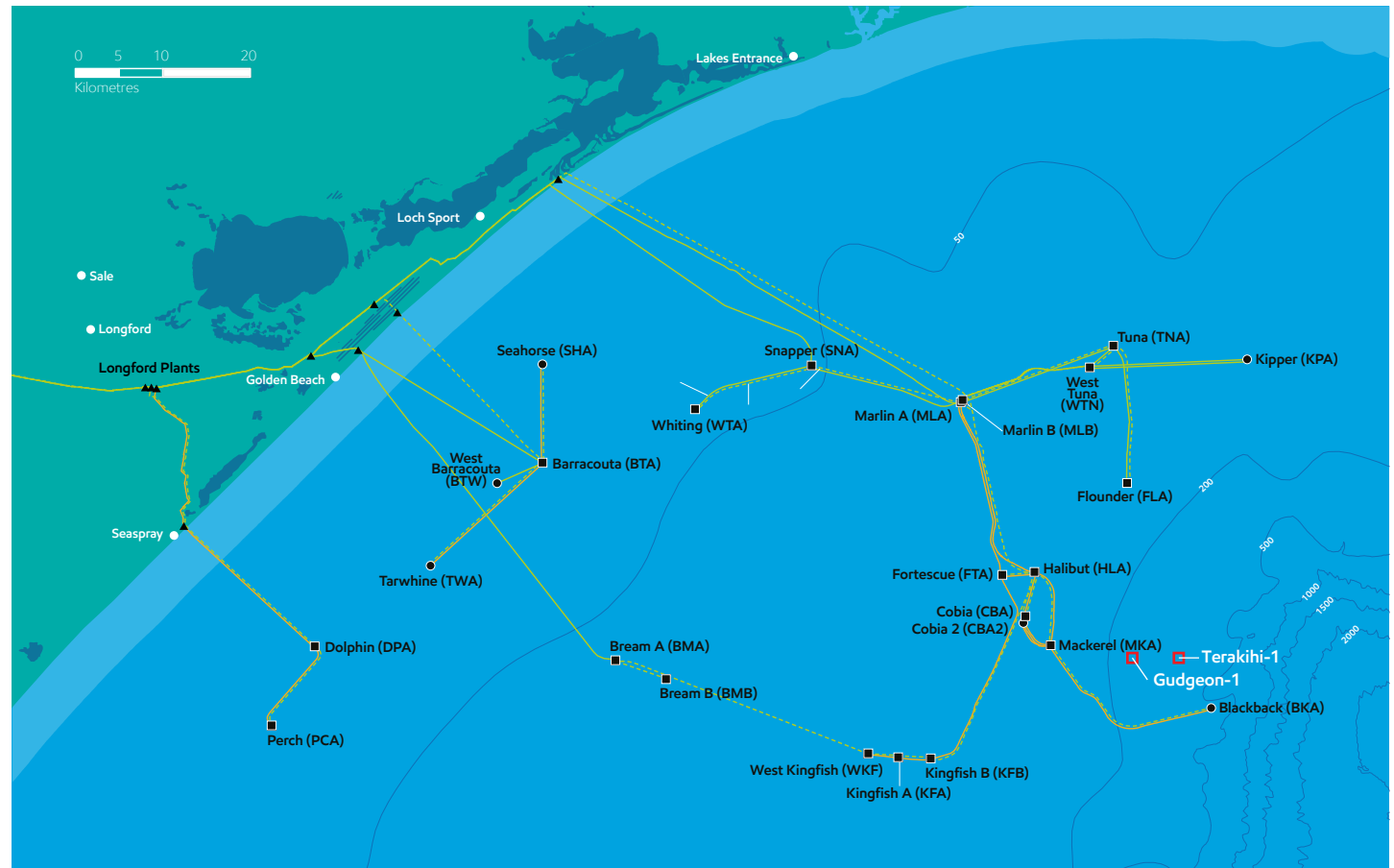
Esso is committed to engaging with the communities where we operate and helping our stakeholders to understand our business.

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 undertake an offshore activity to plug and abandon (P&A) two exploration wells – Gudgeon-1 and Terakihi-1 in the Gippsland Basin off the Victorian coastline. P&A is the industry term for the permanent closure of a well. Well P&A is a safe and long-standing practice. All well P&A activities will be undertaken by the Helix-owned and operated Q7000 Light Well Intervention Vessel (LWIV), as pictured on the cover. The Q7000 was built in 2017 and operates in accordance with current international safety and environmental standards, such as those set by the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978, (MARPOL 73/78) and Australian Maritime Safety Authority (AMSA). The Q7000 also holds a Safety Case accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), the Australian regulator.



- ACTIVITY LOCATION
- LOCALITY
- STATE WATERS
- COMMONWEALTH WATERS
- BATHYMETRY (WATER DEPTH)

ESSO FACILITIES

- - - PRIMARY PIPELINE (OIL)
- PRIMARY PIPELINE (GAS)
- SECONDARY PIPELINE
- PLATFORM
- SUBSEA FACILITY
- ▲ VALVE SITE

NOTE: Some changes made to improve visibility of pipelines. Facility icons do not indicate facility size.



Activity timing

Earliest date of commencement

4Q 2023

Field activities estimated to take

~30 days per well

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 rig/vessel schedules.

Consultation will be conducted with relevant persons prior to the commencement of plug and abandonment activities.

Activity description

The Gudgeon-1 and Terakihi-1 exploration wells were originally cased and cemented safely, then suspended for potential future development, which is no longer viable. As such, permanent barriers will be installed to enable the wells to be safely P&A'd in accordance with regulatory requirements.

For all wells, a pressure control equipment system will be used during the plugging activity and permanent cement plugs/barriers will be installed, to provide sufficient physical barriers to prevent the potential release of any hydrocarbons.

The Gudgeon-1 and Terakihi-1 wellheads will then be cut at or below the seabed and removed. No seismic activity is required.

Activity location

The Gudgeon-1 and Terakihi-1 wells are located approximately 85 kilometres off the Gippsland coastline, south-east of Lakes Entrance in water depths of approximately 300-400 metres.

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

Petroleum Safety Zones and Notice to Mariners

A 500-metre Petroleum Safety Zone (PSZ) around the Gudgeon-1 and Terakihi-1 subsea wells will be established by NOPSEMA for the duration of the activity, in accordance with Section 616 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGGS Act).

The exact location of the rig will be communicated to other marine vessels via a Notice to Mariners issued by the Australian Hydrographic Service and AUSCOAST warnings issued by the AMSA.

Since the wells are located in close proximity to the main shipping route, AMSA has established temporary fairways adjacent to the Gippsland Basin Traffic Separation Scheme, to divert maritime traffic away from the rig location (Notice to Mariners 369(P)/2022, issued on 29 April 2022). The date of effect was 1 August 2022, to allow adequate time for international vessels to adopt this deviation.



ENVIRONMENT PLAN

Under the OPGGS Act, before any petroleum-related activities in Commonwealth waters can commence, an Environment Plan (EP) must be accepted by NOPSEMA. A single EP is proposed to be developed for these two well P&As.

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 As Low As Reasonably Practicable (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.

AMSA has allowed for a 2-nautical mile buffer zone around each of the well locations. In addition, a 'virtual buoy' or Automatic Identification System Base Station will transmit a signal to 'mark' the change on the electronic chart display and information system of passing vessels, as well as AMSA navigation warnings to passing ships, from its virtual buoys, for the northern and southern approaches.

Interaction with commercial fishing

The well sites are located within existing Commonwealth fisheries that may be used by commercial fishers.

The 500-metre PSZ will be communicated to the Lakes Entrance Fishermen's Co-op, South East Trawl Fishing Industry Association and Seafood Industry Victoria as it is a legal requirement that the area should be avoided during petroleum-related activities.

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.

Once completed, the activities will eliminate the risk of any loss of hydrocarbon containment and will remove obstructions and snag points for commercial fishing.



↑ Fishing vessels at Lakes Entrance

→ 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.

POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
LWIV mooring	Temporary and localised seabed disturbance	<ul style="list-style-type: none"> As the LWIV is self-propelled and will be holding position by means of dynamic positioning, no anchoring will be required under normal circumstances, therefore no impact on the seabed.
Planned discharges to the marine environment ¹	Temporary and localised reduction in water quality; temporary change to predator/prey dynamics	<ul style="list-style-type: none"> Routine discharges and vessel waste treatment systems are maintained to meet the requirements of 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 environmental assessment to confirm suitability for discharge prior to use.
Sound emissions	Temporary displacement of sound sensitive fauna around active vessels	<ul style="list-style-type: none"> Support vessels and helicopters will comply with <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> Part 8 Division 8.1 interacting with cetaceans, for example helicopters adhering to strict distances from cetaceans when sighted. A Marine Mammal Observer will be placed on the LWIV to aid in sighting and reporting of whales and there will be no more than one vessel alongside the LWIV at any one time to reduce the cumulative sound emissions. If certain listed species of whales are spotted additional controls are in place to help protect and minimise noise disturbance to these species.
Light emissions	Attraction of light sensitive species; change in fauna behaviour	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Marine engines are routinely maintained and air emissions will meet MARPOL 73/78 requirements. There will be no requirement for planned flaring or venting during P&A activities.
Unplanned interaction with marine fauna (vessel strike)	Injury or death of marine fauna	<ul style="list-style-type: none"> Support vessels will comply with <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> Part 8 Division 8.1 interacting with cetaceans. LWIV will be stationary during well intervention. Normal speed when relocating is less than 10 knots. Watchkeeping will be maintained during vessel relocations. Any injury/mortality of <i>Environment Protection and Biodiversity Conservation Act 1999</i>-listed fauna will be reported to the Department of Climate Change, Energy, the Environment and Water.
Unplanned introduction of invasive marine species	Displacement of native species and habitat domination	<ul style="list-style-type: none"> LWIV and all support vessels will have a Ballast Water Management Plan and associated certificate. LWIV and all support vessels will comply with Australian Ballast Water Management requirements. A Biofouling Risk Assessment process will be completed. Submersible equipment (Remotely Operated Vehicle, blowout preventer) will be rinsed on completion of each activity and is normally stored on deck, thereby minimising invasive marine species risk.
Discharge of cement	Temporary and localised reduction in water quality; smothering	<ul style="list-style-type: none"> Low toxicity cement additives have been selected for use. Cement hose flushing and slurry releases will be rapidly diluted and dispersed by the dynamic marine environment.

¹ Including treated sewage and food waste, treated bilge and deck wash, and cooling water and brine.

POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
Drilling fluid and cuttings discharges	Temporary and localised increase in turbidity; burial of benthic habitat in immediate seabed area; potential toxicity impacts	<ul style="list-style-type: none"> • Seawater-based fluids will be used where practicable. • Low toxicity non-aqueous fluids and additives will be used when required. • Non-aqueous fluids will be removed as much as possible from the cutting fluids using 'solids control equipment' prior to discharge overboard. • Dynamic seabed and marine environment will rapidly disperse discharged cuttings and drilling fluids.
Well fluid discharges	Increased salinity; potential toxicity effects	<ul style="list-style-type: none"> • Low toxicity chemical additives will be selected for use in abandonment and completion fluids. • Chemicals used in well fluids will undergo environmental assessment to confirm suitability for discharge prior to use. • Dynamic seabed and marine environment will rapidly disperse discharged well fluids.
Disconnection/cutting discharges	Temporary and localised reduction in water quality; smothering	<ul style="list-style-type: none"> • Chemicals planned for discharge will undergo environmental assessment to confirm suitability for discharge. • Discharges will rapidly disperse in dynamic seabed and marine environment.
Naturally Occurring Radioactive Material	Temporary exposure of marine fauna to radioactive material	<ul style="list-style-type: none"> • As these wells have never been producing there is no credible risk for Naturally Occurring Radioactive Material. • It is the aim that wellheads will be removed on completion of P&A activities and disposed in accordance with the OPGGS Act.
Vessel collisions	Vessel impacts; injury or death; spill risk; interruption to plug and abandonment activities	<ul style="list-style-type: none"> • Marine users will be informed (including Notices to Mariners) prior to commencement of the P&A activities so they will be able to plan their activities and avoid unexpected interactions. • Establishment of temporary fairways and 2-nautical mile buffer zone through AMSA/Australian Hydrographic Service. • PSZ established in accordance with the OPGGS Act at least one month before start of field activities. • Establishment of adequate navigation aids and communication systems on LWIV and supporting facilities (virtual buoy). • Collaboration with AMSA in ensuring adequate warnings and notifications to mariners. • 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.
Loss of well control	Potential toxicity; oiling of fauna; reduction in visual aesthetic; socioeconomic impacts to the fishing and tourism industries	<ul style="list-style-type: none"> • NOPSEMA-accepted Well Operation Management Plan prior to commencement. • NOPSEMA-accepted Safety Case prior to commencement of activity. • Esso-approved P&A procedures. • Preventative maintenance systems in place. • Well control equipment testing. • Emergency response preparedness including: OPEP; Operational and Scientific Monitoring Plan; Source Control Plan; availability of suitable Mobile Offshore Drilling Unit to drill a relief well; and P&A Bridging Emergency Response Plan.

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). The EMBA is also known as the Potentially Exposed Area (PEA). For this activity, the broadest extent of the PEA/EMBA is determined by a highly unlikely release of hydrocarbons from a loss of well containment.

The EMBA represents the area that could be exposed to hydrocarbons, including trace concentrations of oil in the water column, as a result of a loss of well containment from this activity. Each spill simulation is subject to different wind and ocean currents at different times of the year. The 100 individual spill simulations for each scenario are then combined to identify the largest envelope in which a single spill could occur. The PEA/EMBA is not representative of a single spill; an individual spill would affect a significantly smaller area.

For this activity, Esso has defined the PEA/EMBA by combining the potential spatial extent of surface and in-water (dissolved and entrained) hydrocarbons, resulting from a loss of well containment.

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*. 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.



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

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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.