



ExxonMobil

Well plug and abandonment

Jack-up rig

After having delivered energy to Australia for over 50 years, some of Esso's Bass Strait facilities are no longer producing oil and gas. Esso is focused on safely shutting-down non-producing facilities and ensuring they stay safe throughout the entire decommissioning process. At the same time, Esso is continuing to safely operate the still producing offshore platforms and subsea facilities in the Bass Strait.

Esso is planning to plug and abandon (P&A) 21 platform-based wells and five subsea wells 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. Esso also plans to install conductors at one platform and potentially undertake geotechnical survey work.

All P&A activities will be undertaken by a third-party contracted jack-up rig (JUR), as pictured on the cover. The JUR will operate in accordance with international safety and environmental standards, and will hold a Safety Case accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), the Australian regulator.

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 relevant persons 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.

Activity description

The planned activities involve the P&A of platform-based wells that are no longer producing and subsea exploration wells, which were suspended for potential future use but are no longer required. All wells will be safely P&A'd in accordance with a NOPSEMA-accepted Well Operations Management Plan (WOMP) and Environment Plan (EP). Seismic activity is not required.

To prevent the accidental release of hydrocarbons during P&A activities, a mechanism called a blowout preventer will be put into place. This involves installing cement plugs in the wellbores to permanently isolate any hydrocarbon reservoirs.

ACTIVITY LOCATIONS



Subsea wellheads and conductors will be cut at or below the seabed and removed. The JUR will also remove the wellheads and conductors from the platform-based wells.

The conductor installation activity will consist of up to five conductors installed using a hydraulic hammer.

The geotechnical survey work involves acquiring near-seabed core samples of the local geology at and around the three well locations, with up to three cores at each location.

Activity location

The P&A activity involves 26 wells across eight locations in the Bass Strait, south-east of Lakes Entrance. The subsea wells are located at the Marlin-1, Whiptail-1A, Mulloway-1, Halibut-1 and East Pilchard-1 well sites, while the platform-based wells are at the Bream B, Perch and Dolphin platforms. The conductor installation activity will occur at the Marlin B platform while the geotechnical survey work will potentially be undertaken at the Bream 2, 3 and 5 wells.

None of the activities are located within established or proposed Commonwealth or State Marine Protected Areas, Critical Habitats or Threatened Ecological Communities.

While conducting these activities, the JUR will potentially be visible from the shore at some locations.

Potential impacts and control measures

Provided in the following pages are the key potential impacts and control measures relating to the activities to assist relevant persons in making an informed assessment of possible impacts to their functions, interests or activities in the area.

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

Petroleum Safety Zones and Notice to Mariners

A 500-metre PSZ around the 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*.

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

Interaction with commercial fishing

The well sites are located within existing designated 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.

Environment Plan

Under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, before any petroleum-related activities in Commonwealth waters can commence, an EP must be accepted by NOPSEMA.

A single EP is proposed to be developed for the P&A of 26 wells, conductor installation activities and geotechnical survey work.

The EP is a comprehensive document that describes the existing environment, including relevant persons, and how Esso will undertake the activities to avoid, minimise or manage potential environmental impacts to As Low As Reasonable Practicable (ALARP) and meet regulatory acceptability criteria. Achieving 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 concerns, objections or claims to be raised.



OIL POLLUTION EMERGENCY PLAN

Under Commonwealth environment legislation, 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.



ACTIVITY TIMING

Earliest date of commencement

Q4 2024

All activities completed within

2.5 years

Field activities estimated to take

30 days per well

Activities will be conducted

24/7

POTENTIAL IMPACTS, CONSEQUENCES AND CONTROL MEASURES

POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
Physical presence - Seabed disturbance	Smothering/alteration of benthic habitats; localised and temporary increase in turbidity near the seabed	<ul style="list-style-type: none"> • Site-specific geotechnical assessment to confirm no sensitive seabed features. • JUR will be soft pinned while undertaking geotechnical survey work. • Seabed grab sampling and coring activities are extremely localised. • Core holes are very narrow and will collapse in on themselves and small surface 'craters' will quickly fill in with sediments and recolonise with benthic fauna.
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 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.
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 Part 8 Division 8.1</i> interacting with cetaceans, for example helicopters adhering to strict distances from cetaceans when sighted. • During specific months a Marine Mammal Observer will be placed on the JUR to aid in sighting and reporting of whales. • If certain listed species of whales are spotted, additional controls are in place to help protect and minimise noise disturbance. • Sound modelling being undertaken for conductor installation activity.
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. • No requirement for any planned flaring or venting.
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 Part 8 Division 8.1</i>. • 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"> • JUR and all support vessels will have a Ballast Water Management Plan and associated certificate. • JUR 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) will be rinsed on completion of each activity and is normally stored on deck, thereby minimising Invasive Marine Species risk.

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

POTENTIAL IMPACTS, CONSEQUENCES AND CONTROL MEASURES

POTENTIAL IMPACTS	POTENTIAL CONSEQUENCES	CONTROL MEASURES
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.
Disconnection discharges	Localised and temporary: reduction in water quality; smothering of benthic habitats	<ul style="list-style-type: none"> • Chemicals planned for discharge will undergo environmental assessment to confirm suitability for discharge.
Naturally Occurring Radioactive Material (NORM)	Temporary exposure of marine fauna to radioactive material	<ul style="list-style-type: none"> • No NORM expected. If production tubing is removed from a well, it will be tested for NORM. • Any NORM found will be treated as prescribed waste, transported back to shore in accordance with the waste management manual.
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. • PSZ established in accordance with the <i>Offshore Petroleum and Greenhouse Gas Storage Act 2006</i> at least one month before start of field activities. • Establishment of adequate navigation 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.
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 WOMP 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: Oil Pollution Emergency Plan; 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.

Esso Australia Resources Pty Ltd (EARPL) and Woodside Energy (Bass Strait) Pty Ltd are 50:50 co-venturers in a joint venture for the exploration, development and production of oil and gas from Bass Strait and are the owners of the Longford Facility. EARPL is the designated Operator of the joint venture under the Gippsland Basin Joint Venture Operating Agreement. EARPL receives services, including personnel, from its wholly owned subsidiary, Esso Australia Pty Ltd (Esso). Esso, which is also a wholly owned subsidiary of ExxonMobil Australia Pty Ltd, is "operator" as defined in the Victorian *Occupational Health and Safety Regulations 2017*.

The ExxonMobil logo is displayed in red text on a white background. The word "Exxon" is in a bold, sans-serif font, and "Mobil" is in a similar font but with a distinctive slanted 'i'.

Esso is committed to ongoing engagement with the communities where we operate. Esso has been consulting with relevant persons potentially affected by this activity through a number of different channels. We will continue to address questions, concerns, objections or claims and consider feedback from relevant persons throughout this activity.

Esso welcomes the opportunity for more face-to-face meetings and will continue to keep relevant persons informed of the proposed activities throughout the planning phase and into the execution phase.

If you have any specific questions or feedback about any of these activities please contact Esso at:

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or call:

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