Decommissioning Campaign #1 - Onshore Reception Centre early works

Application Number: **02888** Commencement Date: **17/04/2025** Status: **Locked**

1. About the project

1.1 Project details

1.1.1 Project title *

Decommissioning Campaign #1 - Onshore Reception Centre early works

1.1.2 Project industry type *

Exploration (mineral, oil and gas - non-marine)

1.1.3 Project industry sub-type

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1.1.4 Estimated start date *

05/01/2026

1.1.4 Estimated end date *

29/01/2027

1.2 Proposed Action details

1.2.1 Provide an overview of the proposed action, including all proposed activities. *

The proposed action involves works to establish an Onshore Reception Centre (ORC) at Barry Beach Marine Terminal (BBMT), near Agnes, Victoria.

BBMT is an operating port near Agnes in South Gippsland, Victoria. BBMT provides operation and maintenance support for its Bass Strait (Gippsland Basin) oil and gas fields. The proposed action is required to ready an area within BBMT to function as the ORC to safely receive decommissioned oil and gas platforms.

After delivering energy to Australia for over 50 years, many of the Bass Strait (Gippsland Basin) oil and gas fields are now reaching the end of their productive life. Esso Australia Resources Pty Ltd (EARPL) is well underway in the planning and preparation to remove non-producing platforms during the first Bass Strait decommissioning campaign (Decommissioning Campaign #1). The platforms comprise the production module (known as the topside) and the supporting steel-piled structure (known as the jacket), in this referral also referred to as structures, where relevant.

BBMT is located in South Gippsland, Victoria. The ORC project area is 30 hectare (ha) and the broader BBMT site is 88 ha (Attachment (Att) 4, Figures 1.1 and 1.2).

Decommissioning Campaign #1 activities within Victorian land and waters will be delivered in stages that reflect the discrete activities:

- Stage 1, the early works required to establish the ORC at BBMT to receive the structures (ORC early works) (subject of this referral).
- Stage 2, the activities required to transport the structures to the ORC and offloading the structures at the ORC (subject of a future referral).
- Stage 3, the dismantling operations (subject of a future referral).

The ORC early works activities that are the subject of this EPBC Act referral comprise:

- Wharf strengthening in two locations
- Building an impervious dismantling pad
- Building an impervious wash bay
- Building a self-propelled modular transporter (SPMT) travel route
- Building a temporary soil stockpile pad

These activities are further described below and in Att 1, Section 2.7, p11.

- **Wharf strengthening**: The existing wharf will be strengthened in two locations to establish load-in bays to provide the required load bearing capacity for offloading the removed structures.
- **Building an impervious dismantling pad** which will comprise earthen bund walls, a limestone base, impervious membrane, cement-stabilised crushed rock floor and concrete pads on which the topsides will be positioned. The dismantling pad will be temporarily connected to the existing stormwater management system to manage rainwater collecting in the impervious pad.
- **Building an impervious wash bay** which will comprise a reinforced concrete floor and bunded walls. The wash bay will be temporarily connected to the existing stormwater management system to manage rainwater collecting in the impervious bunded bay.
- **Building a SPMT travel route** by refurbishing existing hardstand areas, using cement or lime stabilisation and imported aggregate, to be used as travel routes for the SPMTs. This activity will necessitate clearing some planted and regrowth native vegetation that has been established or reestablished in areas previously cleared to build the marine terminal and construction of drainage swales to manage stormwater runoff from the SPMT travel route.
- **Building a temporary soil stockpile pad** which will comprise a bunded impervious pad with four cells to temporarily store soils excavated as part of the ORC early works.

The ORC early works will disturb approximately 13.6 ha of the ORC project area in constructing the infrastructure (Att 4, Figure 1.3).

ORC early works construction activities are expected to take up to 13 months to complete, with construction planned to commence in January 2026, noting that subject to receiving required environmental and planning approvals, construction may commence earlier.

1.2.2 Is the project action part of a staged development or related to other actions or proposals in the region?

Yes

1.2.3 Is the proposed action the first stage of a staged development (or a larger project)?

Yes

1.2.5 Provide information about the staged development (or relevant larger project).

EARPL is progressing the planning and preparation for Decommissioning Campaign #1 for the removal of non-producing oil and gas platforms from Bass Strait (Gippsland Basin) that have reached the end of their operating life. The platforms are in Commonwealth waters between 38 and 120 km south of Lakes Entrance, Victoria.

Decommissioning Campaign #1 includes the removal of structures from Commonwealth waters, transfer of the structures to BBMT, the dismantling of the structures for offsite recycling and disposal, as well as works to construct the ORC at BBMT.

As described in the EPBC Act referral summary report (Att 1, Section 2.4, p6), decommissioning activities within Commonwealth waters will be managed in accordance with an Environment Plan under the *Offshore Petroleum Greenhouse Gas Storage Act 2006* (OPGGS Act). For the purposes of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), decommissioning activities within Commonwealth waters are covered by a strategic assessment under Part 10 of the EPBC Act and do not require a referral.

Staged activities occurring in state waters and onshore

Decommissioning activities outside Commonwealth waters will occur in three stages, each subject to a referral under the EPBC Act. The proposed action is the first stage. The stages are:

- Stage 1 - ORC early works (this referral). The activities required to establish the ORC to receive the removed structures. ORC early works are planned to be completed over 13 months commencing January 2026.
- Stage 2 - Transportation and offloading operations (subject of future referral). The activities required to transport the removed structures through State waters, and offload and set down the structures at the laydown areas within the ORC. The structures will be delivered to the ORC separately via barges or heavy transport vessels, through existing Corner Inlet shipping channels. Transport and offloading of the structures will take place over three to four months from Q3 2027 to early 2028.
- Stage 3 - Dismantling operations (subject of future referral). The activities required to dismantle the structures and segregate the waste materials for offsite recycling and disposal. Dismantling operations are expected to commence in Q2 2028 and take two to three years.

Rationale for staged approach

EARPL is working to timeframes that meet the General Direction 817 issued by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) in 2021 under Section 574 of the OPGGS Act. In order to commence removal of the structures from Commonwealth waters no later than September 2027 as required by the General Direction, it is critical that the ORC early works (stage 1 - this referral) are completed by Q1 2027 before the Pioneering Spirit mobilises to Bass Strait in early 2027 and transportation commences in Q3 2027.

The campaign timeframes are provided in Att 4, Figure 1.4.

The stages will be referred separately with stage 1 (this referral) in Q2 2025, stage 2 in Q1 2026 and stage 3 in Q4 2027. Each stage will have a discrete commencement and completion date and will be complete prior to commencement of the next stage. The scope of activities is different in each stage and will be undertaken by specialist contractors:

- Stage 1: Qube Energy Pty Ltd
- Stage 2: Allseas Marine Contractors Australia Pty Ltd
- Stage 3: CMA Contracting Pty Ltd.

The engineering design and logistical considerations for each stage will be finalised progressively in line with sequential timeframes for completion of each stage, to allow for efficient planning and implementation in an orderly manner. The detailed design for the ORC early works (stage 1 – this referral) is most

advanced and has been the immediate focus for planning activities given the critical timeframe for removal of non-producing platforms from Bass Strait.

If staged referrals are not accepted in line with the project staging, and referral of a larger action is required by the Environment Minister, insufficient information currently exists to inform the larger action referral. This would require design, execution planning and technical studies to be brought forward delaying submission of the larger action referral.

Delayed submission of a larger action referral would mean the ORC early works would not be able to commence on time and would not be complete before the critical deadline of early 2027 to enable the Pioneering Spirit to mobilise to Bass Strait in early 2027 and commence removing structures no later than September 2027. In that case, EARPL would not be able to meet the requirements set by NOPSEMA.

In accordance with the *Environment Protection and Biodiversity Conservation Act 1999 (Cth) Policy Statement Staged Developments—Split referrals: Section 74A of the EPBC Act,* staged developments are supported under the EPBC Act where they are consistent with the objects of the Act. Through the staged approach, all relevant impacts on matters of national environmental significance (MNES) will be assessed through referrals of the individual actions. Avoidance of impacts on protected matters is a key objective of Decommissioning Campaign #1. Impact avoidance has been achieved for the ORC early works (stage 1) (see Section 4.1.1.10) and is fundamental in planning for stages 2 and 3.

EARPL has considered the potential to compromise the objects of the Act in the development of the proposed approach to staged referrals. Using the currently available information, EARPL has completed a detailed assessment of ORC early works potential impacts and a preliminary assessment of the overall impacts of the three stages. The assessments show that there are no potential risks of unregulated impacts because of staged referrals and demonstrate that the impacts can be appropriately understood and managed on a stage-by-stage basis (Att 1, Section 4.2, p199).

In summary, the ORC early works impact assessment and preliminary assessment considers:

- Key impact pathways relevant to each stage
- Impact pathways common between stages and geographical location
- Protected matters that are potentially impacted by multiple stages and multiple impact pathways (e.g., Corner Inlet Ramsar site, shorebirds)
- Duration and time over which the relevant impacts occur
- Key avoidance and management objectives
- Potential impact pathways that may be incremental or compounding and could potentially become significant when added together
- Considering the above, the potential risk of combined impacts between stages reaching the significance threshold for otherwise non-significant impacts.

The proposed approach ensures that all elements of Decommissioning Campaign #1 that are regulated by the Commonwealth will be referred for consideration under Part 7 of the EPBC Act (or otherwise considered through Part 10 of the EPBC Act).

EARPL considers the activities in this referral are not likely to have a significant impact on any protected matters and are not likely to contribute to a significant impact when combined with the larger action. The approach to staging does not “lessen” or divide any of the relevant impacts on MNES, and there would not otherwise be any greater implications for MNES if the three stages were considered as one. The results of the preliminary assessment support this conclusion and show that the risk of unregulated significant impacts is very low because:

- BBMT is a highly disturbed environment which has been impacted by continuous, long-term use as an industrial facility. Similarly, vessel movements have been ongoing for over 50 years with over-dimensional cargos and structures received at or dispatched from the marine terminal.

- The proposed impact pathways are already in place and the proposed action will not introduce any new impact pathways that have potential to result in an adverse outcome for MNES.
- EARPL's experience over 50 years ensures it has a good understanding of the environment in which it operates, the impacts of its activities, and how they can be avoided or effectively managed.
- The staged activities are limited in their duration (temporary) and separated in time, and potential impacts of the activities in each stage are discrete. Impacts to MNES will not be progressively increased as a result of the subsequent stages of the proposed action.

Accepting staged referrals will not prevent adequate assessment of all relevant impacts of the larger action and therefore, can be done consistently with the objects of the EPBC Act. Importantly, staging the activities and the referrals accordingly is a sensible approach to ensure EARPL meets Commonwealth timeframes for decommissioning and broader environmental and safety objectives underpinning the General Direction.

1.2.6 What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant? *

***Environment Protection and Biodiversity Conservation Act 1999* (Cth)**

The EPBC Act provides a framework for the protection and conservation of the environment and heritage in Australia. Under the EPBC Act, actions which are likely to have a significant impact on MNES require assessment and approval by the Minister for the Environment and Water prior to the commencement of the action. The EPBC Act is administered by the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW).

As BBMT is adjacent to the Corner Inlet Ramsar site and dependent threatened species and listed migratory species, assessment of potential project impacts on MNES has been undertaken. This referral and attached supporting technical studies include assessment of impacts on MNES with the conclusion that EARPL does not consider impacts to be significant. Potential impacts on MNES as a result of the proposed action are discussed further in Section 4 of this referral.

***Environment Effects Act 1978* (Vic)**

The *Environment Effects Act 1978* (EE Act) provides a framework for assessment of proposed works that may have a significant effect on the environment in Victoria. The EE Act allows the Victorian Minister for Planning to decide whether proposed works will cause a significant effect on the environment. If the Minister determines the proposed works are likely to have a significant effect, under section 4 of the Act, an environmental effects statement (EES) must be prepared and submitted to the Minister for assessment.

BBMT is an existing marine port, was established to develop the offshore oil and gas industry and has been continuously evolving to meet the industry needs since its establishment. ORC early works include minor modifications to enable the site to continue to serve the oil and gas industry through its decommissioning phase of operations. ORC early works are not likely to result in any new or significant adverse impacts under the EE Act.

The ORC early works have been self-assessed against the individual and combined referral criteria per the Ministerial guidelines for assessment of environmental effects under the EE Act. The self-assessment was supported by technical studies to provide detailed information on the predicted impacts and how they will be managed, with the conclusion that the individual and combined referral criteria are not met and thus an EE Act referral is not required.

***Planning and Environment Act 1987* (Vic)**

The *Planning and Environment Act 1987* (P&E Act) provides a framework for the use and development of land across the state. The P&E Act has the overarching procedures for the preparation and amendment of Victoria planning provisions and planning schemes.

ORC early works is located within the South Gippsland Shire. Land use and development requirements are set out in the South Gippsland Planning Scheme. The ORC early works require a ‘buildings and works’ planning permit under the South Gippsland Planning Scheme. This permit will be for the works required to establish the ORC at BBMT. A permit is not required for ‘use’ of the site as existing use rights under Section 97N of the P&E Act have been confirmed by South Gippsland Shire Council in a certificate issued under the section.

The planning permit application will be accompanied by supporting technical studies that demonstrate how the proposed buildings and works address the requirements of the South Gippsland Planning Scheme.

Planted and regrowth native vegetation that will be removed as part of the ORC early works will not require a native vegetation removal permit from South Gippsland Shire Council.

***Marine and Coastal Act 2018* (Vic)**

Under the *Marine and Coastal Act 2018* (Vic) (MACA), an application is required for consent to use or develop marine and coastal Crown land. Marine and coastal Crown land extends from up to 200 m inland of the high-water mark to Victorian territorial waters 3 n.m. or 5.5 km offshore.

Consent will be required as the ORC early works involve development (i.e., works) on coastal Crown land. The ORC early works will require MACA consent for the work to strengthen sections of the wharf.

***Heritage Act 2017* (Vic)**

The *Heritage Act 2017* (Vic) is administered by Heritage Victoria, providing the framework to assess, declare and protect heritage sites. To support the EE Act self-assessment and EPBC Act referral, an assessment of potential impacts on historic heritage was conducted.

No historic heritage sites or places on the National Heritage Register were identified in or near the ORC project area.

***Aboriginal Heritage Act 2006* (Vic)**

The *Aboriginal Heritage Act 2006* (Vic) provides protection of Aboriginal cultural heritage within Victoria. The Act forms the framework for Aboriginal heritage assessment in Victoria. ORC early works is located within an area of potential Aboriginal cultural heritage sensitivity. To support the EE Act self-assessment and EPBC Act referral, and to determine whether a mandatory cultural heritage management plan is required, an assessment of potential impacts to Aboriginal cultural heritage is required.

A study was conducted to assess potential impacts on Aboriginal cultural heritage. The study concluded that due to the extensive disturbance of the site over 50 years, no impacts on Aboriginal cultural heritage are expected as a result of the ORC early works. The Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) Registered Aboriginal Party was consulted during preparation of the ORC early works cultural heritage assessment (Att 1, Appendix (App) B). GLaWAC advised that a compulsory cultural heritage management plan is not required.

***Road Management Act 2004* (Vic)**

The *Road Management Act 2004* (Vic) provides the framework for promoting a safe, responsible and efficient use of the road network in Victoria. Under the Act, a consent is required for works within a road reserve. Barry Road is a declared State arterial road. No works are proposed within Barry Road reserve.

A road transport study was conducted to assess potential impacts on the safety and efficiency of the road network. The study concluded that traffic generated by the ORC early works would not adversely affect the level of service of the road network and safety of road users.

***Environment Protection Act 2017* (Vic)**

The *Environment Protection Act 2017* (Vic) provides the legislative framework for protection of human health and the environment from pollution and waste in Victoria. The Act introduced the General Environmental Duty which requires individuals and companies to prevent harm through appropriately assessing the risk of harm and developing strategies to avoid harm.

BBMT operates under an existing EPA Licence (Permission ID: OL000010294) for activities regulated by EPA, including A01 (Reportable priority waste management) and G04 (Bulk storage). BBMT also has an A13C registration (waste and resource recovery - small) permission. No amendment is required to the existing operating licence for the ORC early works. This was confirmed by EPA through the permissions pathway application made and assessed in April 2025.

***Flora and Fauna Guarantee Act 1988* (Vic)**

The *Flora and Fauna Guarantee Act 1988* (Vic) (FFG Act) provides the legislative framework for conservation of biodiversity in Victoria. EARPL has assessed potential impacts to threatened species and communities listed under the FFG Act as a result of the ORC early works (Att 1, App A). No impacts on threatened species listed under the FFG Act are expected to occur due to ORC early works (Att 1, App A, Section 6.5, p59).

Planning policies and strategies

Planning, management and sustainable use of the Corner Inlet marine and coastal environment is guided by a range of state and local government planning policies, strategies and plans. ORC early works will need to be consistent with the objectives of these:

- *Gippsland Regional Plan 2020-2025* (RDA Gippsland Resources 2020)
- Victorian Marine and Coastal Policy (DELWP 2020)
- Victorian Marine and Coastal Strategy 2020 (DEWLP 2022)
- South Gippsland Coastal Strategy (SGSC 2023)

South Gippsland Planning Scheme

The ORC project area is within South Gippsland Shire, over which the South Gippsland Planning Scheme applies. The planning scheme sets out the requirements for use and development of land in South Gippsland Shire. ORC early works will be required to meet the provisions of the planning scheme.

Clause 12.02-1S of the South Gippsland Planning Scheme recognises the values of coastal areas and promotes their sustainable use.

Clause 21.02-4 recognises Corner Inlet as an important feature noting challenges facing the municipality are loss of biodiversity, land and water degradation, sustainable land use and development, and managing environmental impacts of climate change.

Clause 21.15-15 promotes clustering development at existing developments to retain intact natural values of Corner Inlet.

The ORC early works will be undertaken within an area zoned Industrial 1 Zone and Public Conservation and Resource Zone (Att 4, Figure 1.5). The Public Conservation and Resource Zone encompasses the wharf and wharf apron.

Planning overlays applying to the site are Bushfire Management Overlay (part only), Environmental Significance Overlay - Schedule 3 Coastal settlements (entire ORC project area), and Land Subject to Inundation Overlay (part only).

ORC early works will be subject to a buildings and works planning permit application to South Gippsland Shire Council. This application will address the relevant requirements of the South Gippsland Shire Planning Scheme, including the clauses referred to above.

1.2.7 Describe any public consultation that has been, is being or will be undertaken regarding the project area, including with Indigenous stakeholders. Attach any completed consultation documentations, if relevant. *

EARPL has engaged with the local Gippsland community as part of ongoing Bass Strait oil and gas production for more than 50 years. Since 2020, EARPL has completed broad public consultation for Decommissioning Campaign #1. Due to the scope of Decommissioning Campaign #1 activities, consultation for the offshore and onshore components of the proposed activities has been mostly consulted at the same time. Community Information Sessions have included discussions on offshore activities such as infrastructure removal and vessel movements, as well as onshore activities such as ORC early works and the dismantling and offsite recycling activities.

Detailed consultation for the ORC early works project commenced in December 2023 and has formed part of the overall Decommissioning Campaign #1 consultation process.

In the past 12 months, EARPL has undertaken the following to inform stakeholders in relation to ORC early works:

- Circulating four information bulletins to stakeholders discussing Decommissioning Campaign #1, the staged approach including ORC early works and associated potential impacts.
- Circulating the Decommissioning Annual Report to stakeholders in April 2024 and March 2025.
- Providing over 15 email updates on EARPL's activities within Bass Strait including updates on the progress of the ORC early works.
- Holding 25 community information sessions on EARPL's current proposed activities, advertised locally and in statewide publications.
- Consulting in-person at community events such as air and music shows in Gippsland.
- Undertaking six stakeholder forums on Decommissioning Campaign #1 activities, all of which included information on ORC early works.
- Engaging with State, Commonwealth and local regulators and specific community interest groups on the proposed decommissioning activities relevant to ORC early works.
- Engaging with the Gunaikurnai Land and Waters Aboriginal Corporation on the proposed decommissioning activities relevant to ORC early works.

EARPL is committed to ongoing communication with stakeholders to provide updates on ORC early works, and the broader Decommissioning Campaign #1 activities.

1.3.1 Identity: Referring party

Privacy Notice:

Personal information means information or an opinion about an identified individual, or an individual who is reasonably identifiable.

By completing and submitting this form, you consent to the collection of all personal information contained in this form. If you are providing the personal information of other individuals in this form, please ensure you have their consent before doing so.

The Department of Climate Change, Energy, the Environment and Water (the department) collects your personal information (as defined by the Privacy Act 1988) through this platform for the purposes of enabling the department to consider your submission and contact you in relation to your submission. If you fail to provide some or all of the personal information requested on this platform (name and email address), the department will be unable to contact you to seek further information (if required) and subsequently may impact the consideration given to your submission.

Personal information may be disclosed to other Australian government agencies, persons or organisations where necessary for the above purposes, provided the disclosure is consistent with relevant laws, in particular the Privacy Act 1988 (Privacy Act). Your personal information will be used and stored in accordance with the Australian Privacy Principles.

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1.3.1.1 Is Referring party an organisation or business? *

Yes

Referring party organisation details

ABN/ACN	55139460521
Organisation name	Tetra Tech Coffey Pty Ltd
Organisation address	Level 11, 2 Riverside Quay Southbank VIC 3006 Australia

Referring party details

Name	Barton Napier
Job title	Senior Principal Environmental Consultant
Phone	+61 3 9290 7000
Email	barton.napier@tetratech.com
Address	Level 11, 2 Riverside Quay, Southbank VIC 3006 Australia

1.3.2 Identity: Person proposing to take the action

1.3.2.1 Are the Person proposing to take the action details the same as the Referring party details? *

No

1.3.2.2 Is Person proposing to take the action an organisation or business? *

Yes

Person proposing to take the action organisation details

ABN/ACN	62091829819
Organisation name	ESSO AUSTRALIA RESOURCES PTY LTD
Organisation address	664 Collins Street Docklands, VIC 3008 Australia

Person proposing to take the action details

Name	Richard Perry
Job title	Decommissioning Project Manager
Phone	+61392610000
Email	richard.f.perry@exxonmobil.com
Address	664 Collins Street Docklands, VIC 3008 Australia

1.3.2.14 Are you proposing the action as part of a Joint Venture? *

Yes

Joint Venture Name	Business Address	ABN/ACN	Responsible Person	Email
Woodside Energy (Bass Strait) Pty Ltd	Mia Yellagonga, 11 Mount Street, Perth WA 6000	004228004	Jody Mahoney	Jody.Mahoney@woodside.com

1.3.2.15 Are you proposing the action as part of a Trust? *

No

1.3.2.17 Describe the Person proposing the action's history of responsible environmental management including details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the Person proposing to take the action. *

EARPL has a satisfactory record of responsible environment management. EARPL has operated in Australia for over 50 years and has a demonstrated record of minimal impact on the environment. EARPL has clearly defined policies and practices, along with rigorously applied management systems, committing them to environmental responsibility.

For completeness, it is noted that EARPL receives services, including personnel, from its affiliate, Esso Australia Pty Ltd (EAPL).

EAPL has also operated in Australia for over 50 years and during that time has, among other things, acted as a service provider to EARPL. EARPL and EAPL are both wholly owned subsidiaries of ExxonMobil Australia Pty Ltd. EARPL is the operator of the assets in Bass Strait that are part of the Gippsland Basin Joint Venture between EARPL and Woodside Energy (Bass Strait) Pty Ltd (Woodside Energy).

Noting the length of time EARPL has operated, the length of time EAPL has provided services to EARPL and the inherent risks associated with onshore and offshore oil and gas operations, EARPL and EAPL have over time been issued with a range of regulatory notices or similar documents. These include clean up and pollution abatement notices issued by the Environment Protection Authority Victoria and general directions and notices issued by the National Offshore Petroleum Safety and Environmental Authority.

EARPL/EAPL has established practices for managing regulatory notices. Generally, EARPL/EAPL will have engaged with the relevant regulator in advance of a regulatory notice being issued in order to understand the regulator's concerns and how those concerns might be addressed. Where a regulatory notice is issued:

- it is stewarded by reference to specific action plans developed to comply with the requirements of the notice;
- progress is regularly reviewed with senior management to ensure adequate resourcing is available to close out the notice; and
- there is ongoing engagement with the relevant regulator to ensure that the actions being undertaken by EAPL in response to the notice are aligned with the regulator's expectations and result in progress towards the closing out of the notice.
- Where notices extend over long periods of time, EARPL/EAPL formally engages with the relevant regulator at regular intervals to discuss progress.

EAPL, acting as a service provider to EARPL, was convicted on 12 June 1992 of a pollution offence under the Victorian *Environment Protection Act 1970* following a spill of 10,000 L of crude oil to land at its Victorian Long Island Point facility. EAPL was fined $5,000 plus $1,450 costs. Extensive remediation works were undertaken by EAPL to restore the land affected. This matter is resolved.

1.3.2.18 If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

It is EARPL policy to conduct its business in a manner that is compatible with the balanced environmental and economic needs of the communities in which it operates. EARPL is committed to continuous efforts to improve environmental performance throughout its operations.

Accordingly, EARPL's policy is to:

- Comply with all applicable environmental laws and regulations and apply responsible standards where laws and regulations do not exist;
- Encourage concern and respect for the environment, emphasise every employee's responsibility in environmental performance and foster appropriate operating practices and training;
- Work with government and industry groups to foster timely development of effective environmental laws and regulations based on sound science and considering risks, costs, and benefits, including effects on energy and product supply;
- Manage its business with the goal of preventing incidents and of controlling emissions and wastes to below harmful levels; design, operate and maintain facilities to this end;
- Respond quickly and effectively to incidents resulting from its operations, in cooperation with industry organizations and authorised government agencies;
- Conduct and support research to improve understanding of the impact of its business on the environment, to improve methods of environmental protection and to enhance its capability to make operations and products compatible with the environment;
- Communicate with the public on environmental matters and share its experience with others to facilitate improvements in industry performance; and
- Undertake appropriate reviews and evaluations of its operations to measure progress and to foster compliance with this policy.

A copy of the environmental policy which has been adopted by EARPL is provided in Att 2, EARPL Environmental Policy.

1.3.3 Identity: Proposed designated proponent

1.3.3.1 Are the Proposed designated proponent details the same as the Person proposing to take the action? *

Yes

Proposed designated proponent organisation details

ABN/ACN	62091829819
Organisation name	ESSO AUSTRALIA RESOURCES PTY LTD
Organisation address	664 Collins Street Docklands, VIC 3008 Australia

Proposed designated proponent details

Name	Richard Perry
Job title	Decommissioning Project Manager
Phone	+61392610000
Email	richard.f.perry@exxonmobil.com
Address	664 Collins Street Docklands, VIC 3008 Australia

1.3.4 Identity: Summary of allocation

Confirmed Referring party's identity

The Referring party is the person preparing the information in this referral.

ABN/ACN	55139460521
Organisation name	Tetra Tech Coffey Pty Ltd
Organisation address	Level 11, 2 Riverside Quay Southbank VIC 3006 Australia
Representative's name	Barton Napier
Representative's job title	Senior Principal Environmental Consultant
Phone	+61 3 9290 7000
Email	barton.napier@tetratech.com
Address	Level 11, 2 Riverside Quay, Southbank VIC 3006 Australia

Confirmed Person proposing to take the action's identity

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	62091829819
Organisation name	ESSO AUSTRALIA RESOURCES PTY LTD
Organisation address	664 Collins Street Docklands, VIC 3008 Australia
Representative's name	Richard Perry
Representative's job title	Decommissioning Project Manager
Phone	+61392610000
Email	richard.f.perry@exxonmobil.com
Address	664 Collins Street Docklands, VIC 3008 Australia

Confirmed Proposed designated proponent's identity

The Person proposing to take the action is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

1.4 Payment details: Payment exemption and fee waiver

1.4.1 Do you qualify for an exemption from fees under EPBC Regulation 5.23 (1) (a)? *

No

1.4.3 Have you applied for or been granted a waiver for full or partial fees under Regulation 5.21A? *

No

1.4.5 Are you going to apply for a waiver of full or partial fees under EPBC Regulation 5.21A?

No

1.4.7 Has the department issued you with a credit note? *

No

1.4.9 Would you like to add a purchase order number to your invoice? *

No

1.4 Payment details: Payment allocation

1.4.11 Who would you like to allocate as the entity responsible for payment? *

Third party

1.4.12 Is the third party an organisation? *

Yes

1.4.13 Do they have an existing ABN or ACN? *

Yes

1.4.14 ABN/ACN *

73643280602

1.4.16 Organisation name *

Gippsland Project Management Pty Ltd

1.4.17 Organisation's primary address *

50 Forge Creek Rd, Bairnsdale, VIC, 3875

1.4.18 First name *

Chris

1.4.19 Last name *

Cook

1.4.20 Job title *

Project Manager

1.4.21 Phone *

0409 356 777

1.4.22 Email *

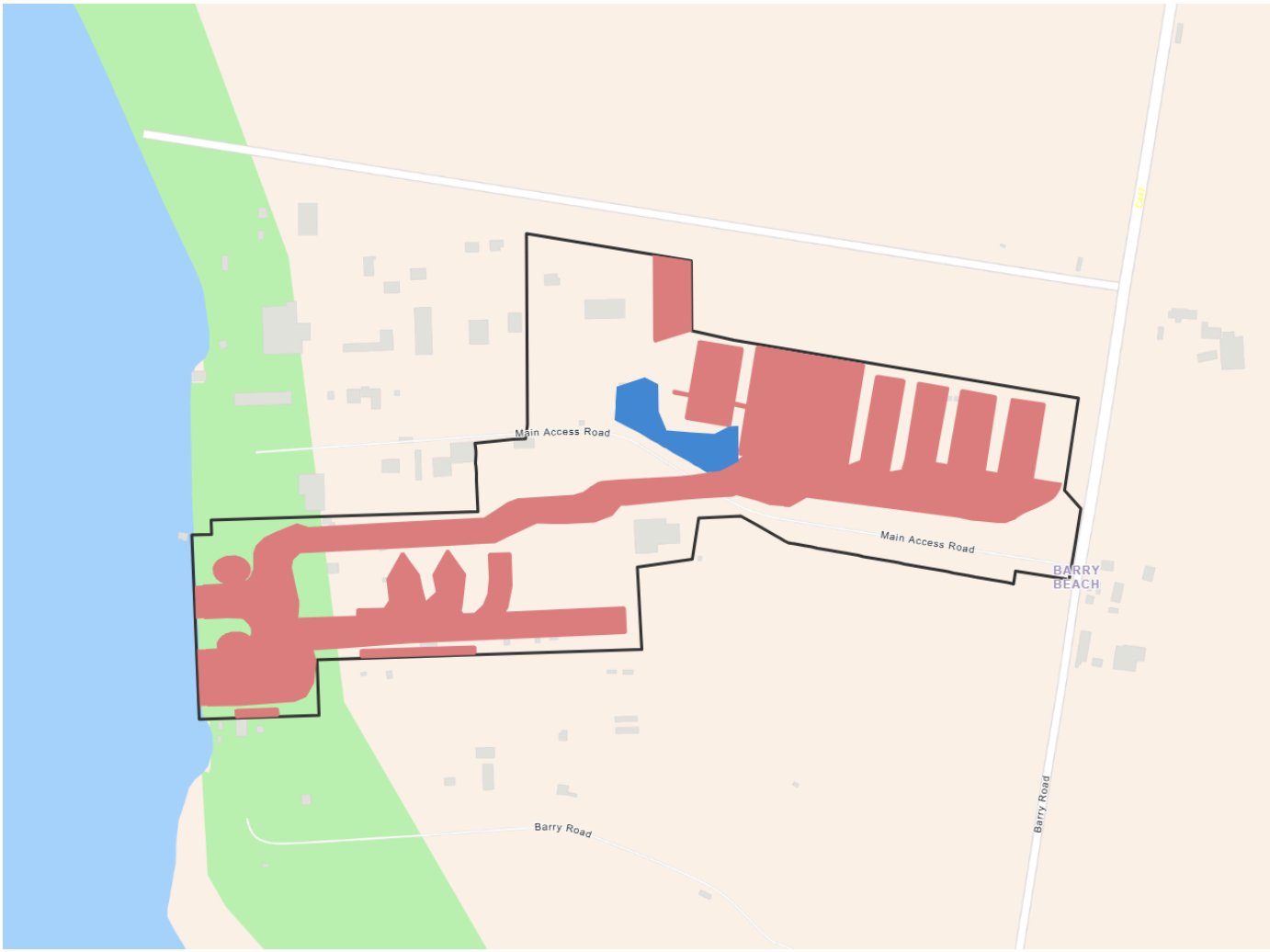
chris.cook@gippslandprojects.com.au

1.4.23 Address *

50 Forge Creek Rd, Bairnsdale, VIC, 3875

2. Location

2.1 Project footprint



Project Area: 29.88 Ha **Disturbance Footprint:** 13.57 Ha **Avoidance Area:** 0.74 Ha

2.2 Footprint details

2.2.1 What is the address of the proposed action? *

Barry Beach Marine Terminal, 550 Barry Road, Agnes, VIC 3962

2.2.2 Where is the primary jurisdiction of the proposed action? *

Victoria

2.2.3 Is there a secondary jurisdiction for this proposed action? *

No

2.2.5 What is the tenure of the action area relevant to the project area? *

BBMT comprises freehold interests and a Crown lease and Crown licence (Att 4, Figure 2.1) as follows:

- Lot 2 on Plan of Subdivision 501722S (84 ha), which is owned by the Gippsland Basin Joint Venture partners and leased to Qube Energy Pty Ltd.
- Crown lease 1508738 over Crown allotment 45B Section C Parish of Toora (4 ha), which is held by the Gippsland Basin Joint Venture partners and is 'for the construction and operation of a marine operations terminal including boat servicing, quays, storage and construction facilities, warehouse and office buildings and other purposes associated therewith'. Crown lease 1508738 expires on 1 February 2027. EARPL will apply for a new Crown lease in advance of expiry.
- Crown licence 1509965 over Crown allotment 45E Section C Parish of Toora, which is held by the Gippsland Basin Joint Venture partners and covers reserved and unreserved Crown land adjacent to BBMT. This annual licence is for maintenance dredging of the swing basin and Barry Beach Channel, and land reclamation for part of Barry Point.

The proposed action (Att 4, Figure 1.3) will occur on part of Lot 2 on Plan of Subdivision 501722S and part of Crown allotment 45B Section C Parish of Toora to which Crown lease 1508738 applies.

3. Existing environment

3.1 Physical description

3.1.1 Describe the current condition of the project area's environment.

The ORC early works will occur in the ORC project area which is located at BBMT in South Gippsland approximately 160 km southeast of Melbourne. The ORC project area is wholly contained within BBMT, which is a marine terminal that has been in operation for over 50 years. As a result, this area is a highly modified environment consistent with the industrial history of the site. The majority of the ORC project area has previously been cleared. Remnant native vegetation persists in the southeast corner of BBMT outside the ORC project area.

The topography of the ORC project area is flat and low-lying, with elevations between 2.4 m to 7.4 m Australian Height Datum (AHD).

BBMT and the ORC are accessible from Barry Road which is connected to the regional road network via the South Gippsland Highway. The highway is the major road connecting this region to Melbourne and other parts of Victoria. All construction activities will utilise the existing road network.

BBMT and the ORC are located within the Shady Creek and Nine Mile Creek catchment and falls within the West Gippsland Catchment Management Authority boundary. No defined waterways pass through the site or its surrounds. BBMT is adjacent to the Corner Inlet Ramsar site.

3.1.2 Describe any existing or proposed uses for the project area.

BBMT is an existing marine terminal owned by EARPL and has been part of South Gippsland's industrial precinct for over five decades. It is where most of the EARPL offshore oil and gas infrastructure was constructed and transported to the oil and gas fields. Commencing operation in the 1960s, the marine terminal has been continuously operating as the supply depot for EARPL's Bass Strait oil and gas operations since that time. The marine terminal supports boat servicing via a wharf and has storage and construction facilities, warehouses and office buildings. Decommissioned offshore equipment and structures are received at the marine terminal for offsite recycling and disposal.

BBMT will continue to support offshore gas exploration and production activities in Bass Strait until the gas platforms reach the end of their operating life and move into the decommissioning phase. BBMT will also continue to support other third-party activities.

BBMT is the ORC for Decommissioning Campaign #1. The ORC will receive, store and dismantle the non-producing oil and gas platforms to be removed as part of that campaign; many of which were fabricated at the marine terminal between the 1960s and 1980s.

3.1.3 Describe any outstanding natural features and/or any other important or unique values that applies to the project area.

No notable outstanding or important natural features or values occur within the ORC project area as it is within BBMT, a marine terminal. The ORC project area comprises hardstand, access roads, existing warehouses, a small patch of remnant native vegetation, and small patches of planted and regrowth native vegetation. Sand dunes in the northeastern and southeastern parts of BBMT are the only natural landform features, however, these are outside the ORC project area. Remnant native vegetation persists on these landforms.

The ORC project area is adjacent to the Corner Inlet Ramsar site (Att 4, Figure 3.1). Corner Inlet is a large tide-dominated embayment that covers an area of 67,186 ha, and meets the following six of the nine criteria for designation as a Ramsar site:

- Criterion 1: Representative, rare, or unique example of a natural or near-natural wetland.
- Criterion 2: Supports vulnerable, endangered, or critically endangered species.
- Criterion 4: Supports plant and/or animal species at a critical stage in their life cycles.
- Criterion 5: Regularly supports 20,000 or more waterbirds.
- Criterion 6: Supports one per cent of the individuals in a population of one species or subspecies of waterbird.
- Criterion 8: Important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

Corner Inlet is significant habitat for a range of waterbirds, threatened species and migratory species. The *Corner Inlet Ramsar Site Ecological Character Description* (DSEWPC 2011) cites the following critical components:

- Wetland mega-habitat types including:
    - Seagrass.
    - Intertidal sand or mud flats.
    - Mangroves.
    - Saltmarshes.
    - Permanent shallow marine water.
- Abundance and diversity of waterbirds.

The ecological character description outlines the following supporting ecosystem components for Corner Inlet (DSEWPC 2011):

- Important geomorphological features that control habitat extent and types:
    - Sand barrier island and associated tidal delta system.
    - The extensive tidal channel network.
    - Mudflats and sandflats.
- Invertebrate megafauna in seagrass beds and subtidal channels are important elements of biodiversity and control a range of ecosystem functions.
- The diverse fish communities underpin the biodiversity values of the site.

BBMT is one of four operating ports within the Corner Inlet Ramsar site which are regulated by Gippsland Ports and provide commercial and recreational boating infrastructure and services. Port Anthony immediately adjacent to BBMT also provides support for offshore activities and niche cargos.

Commercial and recreational fishing, recreational boating and commercial shipping occur within the broader Corner Inlet Ramsar site. No ORC early works activities will occur within the Corner Inlet Ramsar site.

3.1.4 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

The ORC project area is flat and low-lying, with elevations between 2.4 m and 7.4 m AHD. The site falls east to west towards Corner Inlet. The ORC project area extends inland from the coast, which at that location is defined by the BBMT wharf.

3.2 Flora and fauna

3.2.1 Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.

The below section summarises the flora, fauna and habitat present within the ORC early works project area, BBMT and adjacent areas based on studies undertaken by Eco Logical Australia (Att 1, App A) and RPS (Att 1, App D). The terrestrial ecology study area encompassed the ORC project area and remnant native vegetation to the south of the Main Access Road within BBMT. The study area of the shorebirds impact assessment encompasses BBMT and the adjacent Corner Inlet Ramsar site. While the focus of this section is the ORC project area, BBMT is discussed where required to provide context.

Att 1, Section 3.2, pp25-30; App A and App D provide further details on BBMT and the ORC project area terrestrial ecology and Corner Inlet shorebirds respectively.

Flora, fauna and habitat

BBMT is a highly modified environment and contains patches of various vegetation types that provide suitable habitat for a range of fauna species. The vegetation includes patches of woodland, regrowth native vegetation, planted vegetation, and a small patch of wetland swamp scrub. A small patch of remnant Heathy Woodland is present in the middle of the ORC project area (Att 4, Figure 3.2), as well as several small patches of planted and regrowth native vegetation in the topside laydown area. The remnant cover of *Banksia serrata* and *Corymbia maculate* within the patch of Heathy Woodland provides suitable foraging habitat for the grey-headed flying-fox. This patch of Heathy Woodland is a small part of the more intact habitat that exists outside of the ORC project area within BBMT, including mature Banksia Woodland that has been incorporated in a native vegetation protection zone within the ORC project area.

Fauna surveys recorded 28 native bird species and one exotic bird species within the study area within BBMT. It was observed that small bird diversity was greater in the western planted area and along the drainage line at the edge of the Banksia Woodland and Wet Heathland.

Additional fauna habitat in the study area outside the ORC project area included patches of high-quality woodland, regrowth native vegetation, planted vegetation and a small area of Swamp Scrub (small wetland). Large mature trees and native shrubs in these patches provide a variety of food sources for nectivorous and insectivorous species. Dense understorey provides refuge for foraging, nesting and breeding species. No tree hollows were observed, although some loose bark could provide refuge for microbats. The lack of tree hollows indicates the study area has limited suitability in providing habitat for species such as breeding parrots and large arboreal mammals.

Grey-headed flying-foxes are known to forage in *Eucalyptus globulus* and *Corymbia maculata*, which are both present along the Main Access Road and within mixed plantings recorded in the study area.

Threatened ecological communities

No threatened ecological communities were recorded within the terrestrial ecology study area. Two EPBC Act-listed threatened ecological communities were identified within a 10 km radius of BBMT:

- Subtropical and temperate coastal saltmarsh
- Natural damp grassland of the Victorian coastal plains

Coastal saltmarshes occur near BBMT, one small fringing area north and a larger saltmarsh border to the southeast. Based on Ecological Vegetation Classes (EVCs) mapping from 2005, vegetation corresponding to the Natural damp grassland ecological community is not modelled to occur within 1 km of BBMT.

Threatened and migratory species

The desktop review identified 146 national or state significant species (111 fauna and 35 flora) likely to be present within a 10 km radius of the study area within BBMT. With the exception of the grey-headed flying-fox, none of these species were recorded or have been historically recorded within the ORC project area.

Att 1, App A, Table 17 and 18, pp103–107 provides the full list of flora, fauna and vegetation identified in the study area.

3.2.2 Describe the vegetation (including the status of native vegetation and soil) within the project area.

Vegetation

Seven remnant patches of native vegetation were identified within BBMT, totalling 15.234 ha. Most of these patches of remnant native vegetation are not located in the ORC project area.

The native vegetation communities (ecological vegetation classes) identified in the study area within BBMT are:

EVC 8 Wet Heathland (1.853 ha)

Two patches of Wet Heathland were identified. One patch borders a patch of Swamp Scrub in the south of BBMT, while the second patch is contiguous to the Banksia Woodland patch and occurs within a wet depression associated with a drainage line (Att 1, App A, Section 4.2.1.4, p28). This EVC is not located within the ORC project area.

EVC 14 Banksia Woodland (9.035 ha)

Banksia Woodland occurs in the east of BBMT, dominated by *Banksia serrata* (saw banksia) in the canopy with scattered *Eucalyptus viminalis* (manna gum) occurring in the north of the patch where previous historical disturbance has occurred (Att 1, App A, Section 4.2.1.1, p24). This EVC is not located within the ORC project area.

EVC 53 Swamp Scrub (2.164 ha)

Swamp Scrub occurs in the southeast corner of BBMT within a low-lying part of the site, characterised by a dense cover of *Melaleuca ericifolia* (swamp paperbark) in the canopy surrounding the central wetland. Common frog species are likely to utilise a small wetland associated with this patch and drainage line within the study area for foraging, breeding and refuge (Att 1, App A, Section 4.2.1.2, p25). This EVC is not located within the ORC project area.

EVC 48 Heathy Woodland (2.182 ha)

Three patches of Heathy Woodland were identified within BBMT. Two of these patches are north of the Main Access Road and have been subject to previous ground disturbance. These patches are in the middle of the ORC project area (Att 4, Figure 3.2). The third patch is in the southeastern part of BBMT on the former settling ponds and constitutes regrowth native vegetation greater than 10 years. This patch is not located within the ORC project area.

Soils

Soils at BBMT have been mapped as predominantly arenic rudosols (Sargeant and Imhof 2003). Rudosols are young soils that show little development. They occur on geologically recent sand dunes where there has been insufficient time for a soil profile to develop. Arenic rudosols have an upper layer of at least 0.5 m, with a sandy texture generally with less than 10% being gravel (i.e., greater than 2 mm particle size).

Coastal acid sulfate soils (CASS) have been identified throughout the natural soil profile (below the water table, from -1.5 to -9.6 m AHD) across the southeastern area of BBMT, including in proximity to the wharf. CASS were also identified in the former dredged material settling ponds adjacent to the eastern boundary of the ORC project area and jacket laydown area (Att 1, App F, Section 4.2.1, p6).

Given the site's historical and continuing use as a marine terminal, a range of other contaminants have been detected across the site. Low level hydrocarbon contamination has been detected in soil samples in the ORC project area adjacent to buildings to be retained and in areas historically occupied by buildings (Att 1, App F, p6).

3.3 Heritage

3.3.1 Describe any Commonwealth Heritage Places Overseas or other places recognised as having heritage values that apply to the project area.

An EPBC Act protected matters search (Att 3) found no Commonwealth heritage areas within the ORC project area or the 10 km search buffer surrounding it.

No historic heritage sites, including registered historic heritage places or sites, were identified in and adjacent to the ORC project area.

Given the ongoing industrial activities at the site, it is unlikely that any sites more than 75 years old that would qualify as historic heritage (under Victorian law) are present within the ORC project area.

3.3.2 Describe any Indigenous heritage values that apply to the project area.

Indigenous cultural heritage in and around the ORC project area was investigated in the ORC early works cultural heritage assessment conducted by Eco Logical Australia (Att 1, App B). The study area for this assessment encompassed the ORC project area and remnant native vegetation to the south of the Main Access Road within BBMT.

No registered Aboriginal cultural heritage places listed on the Victorian Aboriginal Heritage Register are located within the ORC project area or BBMT (Att 1, App B, Section 5, p23).

As no previous archaeological surveys have been conducted within the study area, broader literature and archaeological surveys were reviewed. This was to provide wider context for occupation and site types within the area.

BBMT is in an area of Aboriginal cultural heritage sensitivity as defined under Section 2, *Aboriginal Heritage Regulations 2018* (Vic). This is due to BBMT intersecting:

- Declared Ramsar wetlands (Regulation 29 of the *Aboriginal Heritage Regulations 2018* (Vic)).
- Coastal crown land (Regulation 30).
- Coastal land (Regulation 31).
- Koo Wee Rup Plain (Regulation 34).
- Dunes (Regulation 40).

The assessment found that, due to significant ground disturbance from the construction of BBMT and ongoing activity, Aboriginal cultural heritage is unlikely to be present within the ORC project area. The ORC early works cultural heritage assessment concluded that a mandatory cultural heritage management plan under the *Aboriginal Heritage Regulations 2018* (Vic) will not be required.

The Gippsland Land and Waters Aboriginal Corporation (GLaWAC) Registered Aboriginal Party was consulted during preparation of the ORC early works cultural heritage assessment. GLaWAC advised that a compulsory cultural heritage management plan is not required.

3.4 Hydrology

3.4.1 Describe the hydrology characteristics that apply to the project area and attach any hydrological investigations or surveys if applicable. *

The hydrology of the ORC project area is discussed below in the context of BBMT, as it is wholly within the marine terminal.

BBMT is located on a promontory that extends south into Corner Inlet. No watercourses occur on the promontory with surface water draining via informal drainage lines and swales. The sandy substate of the promontory supports shallow and perched groundwater formations. Groundwater recharge is expected to be by direct infiltration and rainfall, with unsealed surfaces in direct connection with the shallow groundwater formation.

BBMT and surrounding land is underlain by the Quaternary Aquifer (sand, gravels, clay, silts). The groundwater gradient and flow are northeast to southwest, with the shallow aquifer discharging to Corner Inlet. Groundwater gradient, flow and levels are relatively uniform seasonally and generally coincide with seasonal rainfall trends. Expected depth to groundwater in the western half of the site is less than 5 m below ground surface (mbgs) and ranges from 5 to 10 mbgs in the eastern half of the site.

The western boundary of the site comprises rock revetment either side of the wharf which has a sheet pile wall. The berth pockets and swing basin adjoining the wharf have been dredged to 8 m lowest astronomical tide. The sheet pile wall reduces tidal influence on groundwater flow across the site. The reduced potential for discharge where the wall is present results in groundwater discharging to Corner Inlet north and south of the wharf through the rock revetment. The presence of the wharf is expected to decrease the mass discharge of any contaminant as it likely reduces the hydraulic conductivity of the aquifer on the site by up to an order of magnitude.

Topographically, BBMT drains from east to west, with some undulating vegetated areas in the northeast and southeast of the site. BBMT has six defined subcatchments, with surface water flows captured by the existing stormwater management system. The stormwater management system discharges to Corner Inlet through three outfalls which have stormceptor or triple interceptor pits to capture any hydrocarbons (Att 1, Section 3.2.4, p28).

4. Impacts and mitigation

4.1 Impact details

Potential Matters of National Environmental Significance (MNES) relevant to your proposed action area.

EPBC Act section	Controlling provision	Impacted	Reviewed
S12	World Heritage	No	Yes
S15B	National Heritage	No	Yes
S16	Ramsar Wetland	Yes	Yes
S18	Threatened Species and Ecological Communities	Yes	Yes
S20	Migratory Species	Yes	Yes
S21	Nuclear	No	Yes
S23	Commonwealth Marine Area	No	Yes
S24B	Great Barrier Reef	No	Yes
S24D	Water resource in relation to large coal mining development or coal seam gas	No	Yes
S26	Commonwealth Land	No	Yes
S27B	Commonwealth Heritage Places Overseas	No	Yes
S28	Commonwealth or Commonwealth Agency	No	Yes

4.1.1 World Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.1.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.1.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

No World Heritage sites are within 10 km of the proposed action. The nearest World Heritage site is the Royal Exhibition Building and Carlton Gardens in Melbourne approximately 160 km northwest of the ORC project area.

4.1.2 National Heritage

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.2.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.2.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

No National Heritage sites are within 10 km of the proposed action. The nearest listed places are Leongatha Post & Telegraph Office (46 km northwest of the ORC project area) and Wilsons Promontory Lighthouse (46 km south of the ORC project area).

4.1.3 Ramsar Wetland

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Ramsar wetland
No	Yes	Corner Inlet

4.1.3.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.3.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Corner Inlet

The ORC project area is within BBMT, adjacent to Corner Inlet Ramsar wetland. Corner Inlet is a large tide-dominated embayment located on the southeast coast of Victoria. The Corner Inlet Ramsar site covers an area of 67,186 ha (Att 4, Figure 3.1). Corner Inlet supports internationally significant populations of various aquatic and semi-aquatic species due to its large area and presence of diverse habitats. These habitats include extensive seagrass meadows including the most southerly distribution of the seagrass *Posidonia australis*; large areas of coastal saltmarsh and mangrove shrubland; significant numbers of waterbirds, including over 30 species listed under international agreements; breeding habitats of waterbirds, particularly beach-nesting species; and a diversity and abundance of fish species, including nursery habitat for recreational and commercially important species.

Impact

A detailed assessment of the potential impacts of the ORC early works on the Corner Inlet Ramsar site is outlined in the EPBC Act referral summary report (Att 1, Section 3.7.1, pp128-139). The detailed impact assessment is informed by the marine ecology characterisation and impact assessment (Att 1, App C), shorebirds impact assessment (Att 1, App D) and the ORC early works detailed site investigation summary (Att 1, App F).

The proposed action will not occur in the Ramsar site and no direct impact on the wetland, or the species it supports will occur as a result of the proposed action.

Potential indirect impacts on the Corner Inlet Ramsar site as detailed in Att 1, Section 3.7.1.2, pp130–139 are:

- **Hydrology:** ORC early works will increase the area of hardstand on BBMT and decrease the area of porous surfaces, thereby increasing the volume of stormwater runoff while proportionately decreasing the volume that infiltrates to groundwater. The overall volume of water discharging to Corner Inlet will not change, only the balance between surface water and groundwater, which can be managed within the existing capacity of the stormwater management system.
- **Water quality:** ORC early works involve earthworks and disturbance of contaminated soils and groundwater within BBMT, which if inappropriately managed, could potentially be mobilised to Corner Inlet via stormwater and groundwater discharge. As construction activities involve the use of fuelled vehicles and plant, and use of routine chemicals, there is also potential for accidental fuel, oil or chemical spills. Changes to water quality could result from pollutant inputs (sediment and nutrients), CASS, contaminated groundwater and surface water, and accidental fuel, oil or chemical spills, if they were mobilised and discharged into Corner Inlet.
- **Native fauna and habitats:** Activities associated with the ORC early works will generate noise from equipment, heavy machinery, light and heavy vehicles, and impulse noise from piling rigs. Noise generated from the ORC early works may be audible at local foraging and roosting sites for shorebirds, waterbirds and seabirds dependent on Corner Inlet. The ORC early works will also generate artificial light, as night works may be required in early morning and early evening (in late autumn and winter), which may be visible from local roosting and breeding sites. The potential for impacts on threatened and migratory species dependent on the wetland is primarily discussed in Sections 4.1.4.2 and 4.1.5.2 of this referral. Changes to water quality, if contaminants were mobilised from BBMT and discharged into Corner Inlet, could potentially affect seagrass meadows adjacent to the wharf, which provide habitat for fish species dependent upon the wetland
- **Invasive species:** Aquatic weeds and marine pest species, which are harmful to the ecological character of the wetland are known to occur in Corner Inlet, including in the waters adjacent to the BBMT wharf. Terrestrial pests, such as foxes, also occur within BBMT, which if dispersed within Corner Inlet are harmful to fauna values of the wetland.

4.1.3.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

No

4.1.3.6 Describe why you do not consider this to be a Significant Impact. *

As the ORC early works are entirely on land, and no works will occur in marine or wetland habitats, the proposed action is **unlikely** to have a significant direct impact on the ecological character of a declared Ramsar wetland. A detailed assessment against the significant impact criteria is provided in the EPBC Act referral summary report (Att 1, Table 3.7, p137).

No direct impact on the wetland, or the species it supports will occur as a result of the ORC early works. Indirect impacts could occur and are summarised in the following sections. A detailed assessment is provided in the EPBC Act referral summary report (Att 1, Section 3.7.1.2, pp130–139).

- **Hydrology:** All water will drain to Corner Inlet via the existing stormwater management system or drainage pathways. The overall volume of water discharging to Corner Inlet will not change, only the balance between surface water and groundwater, which can be managed within the existing capacity of the system. The changes to hydrology at BBMT as a result of the ORC early works are minor, and unlikely to result in a substantial and measurable change to the volume, timing, duration or frequency of groundwater and surface water flows to the wetland. The proposed action will not result in any changes to the hydrological regime of the wetland.
- **Water quality:** The potential for sedimentation and nutrient inputs is low as the bulk of excavated material will be immediately stored in a bunded impervious and temporary soil stockpile pad. The risk of encountering CASS during excavation is low, as excavations are above the depth that CASS occur. While accidental spills and leaks are not expected, any spills would likely be small in volume (i.e., associated with one vehicle), and the risk of mobilisation via surface water or groundwater discharges to Corner Inlet is very low, given the hydrology of the site. The proposed action will not cause a substantial and measurable change in the water quality of Corner Inlet.
- **Native fauna**: Noise modelling undertaken to predict noise levels at adjacent shorebird aggregation sites against thresholds for disturbance and physiological harm based on published research has been done. The modelled noise levels were below the threshold for behavioural response and unlikely to disturb behaviour such as foraging, breeding or roosting and will not cause physiological harm or injury (Att 1, Section 3.5.2.3, p43). Construction works will occur in daylight hours and the requirement for temporary night lighting is limited to early morning and evening in late autumn and winter. Native fauna is pre-exposed to lighting as BBMT is a maritime security zone and is lit for security and safety reasons. Given the proposed temporary lighting (if required) in the context of the existing lighting, artificial lighting as a result of ORC early works is unlikely to substantially change the light profile of Corner Inlet such that it might cause disturbance to breeding birds (Att 1, Section 3.7.1.2, pp133–134).
- **Seagrass**: ORC early works are unlikely to have any substantial and measurable change in water quality discharged from BBMT into Corner Inlet (see Water quality above). As the ORC early works are unlikely to cause a substantial and measurable change in water quality in Corner Inlet, they are unlikely to adversely impact seagrass meadows and associated habitat for native species (Att 1, Section 3.7.1.2, pp134–135).
- **Invasive species**: As ORC early works are entirely on land, and no works will occur in marine or wetland habitats, the proposed action is unlikely to introduce or spread invasive marine species to Corner Inlet and its associated habitats (Att 1, Section 3.7.1.2, p135). Introduced fauna species, such as foxes, deer, and rats, have been recorded at BBMT. Minor clearing of planted and regrowth native vegetation as part of ORC early works will not create pathways for these terrestrial invasive species to be introduced or spread in Corner Inlet. For these reasons, the ORC early works are unlikely to have a significant direct or indirect impact on the ecological character of a declared Ramsar wetland.

4.1.3.7 Do you think your proposed action is a controlled action? *

No

4.1.3.9 Please elaborate why you do not think your proposed action is a controlled action. *

The proposed action is entirely on land avoiding direct impacts on the Ramsar wetland. Indirect impacts are avoided through design and general avoidance measures (Att 1, Section 3.4, pp36–40).

An assessment against the significant impact criteria set out in the EPBC Act *Matters of National Environmental Significance Significant impact guidelines 1.1* (DoE 2013) was completed for the Corner Inlet Ramsar site (Att 1, Section 3.7.1.2, Table 3.7, pp137–138). The assessment determined that the ORC early works, which are relatively small scale civil works, are unlikely to result in a significant impact on the ecological character of a declared Ramsar wetland as the works will not destroy or substantially modify the wetland, result in substantial or measurable changes to the hydrological regime of the wetland, result in the habitat or lifecycle of native species being seriously affected, result in substantial and measurable change in water quality of the wetland, and not result in harmful invasive species establishing in the wetland.

The detailed assessment is provided in the EPBC Act referral summary report (Att 1, Section 3.7.1.2, pp130–139). As the ecological character of the Corner Inlet Ramsar site is unlikely to be significantly impacted, the proposed action is not considered a controlled action.

4.1.3.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

ORC early works will occur entirely on land and within BBMT, which is a highly modified industrial environment.

The ORC early works design, layout and construction method were developed to avoid impacts on Corner Inlet and associated values and to reduce vegetation removal within the ORC project area to the greatest extent possible.

A summary of avoidance through design is provided below, further details are provided in Att 1, Section 3.4.1, pp36–37.

- The initial project design considered replacing 160 m of the BBMT wharf and construction of a skidway to facilitate load in of the structures. A load-in design and use of SPMTs were selected as they negate the need to replace the wharf and also eliminated the skidway from the design. This change:
    - significantly reduces the number of piles required reducing the duration of noise from piling activities, a major source of construction noise.
    - avoids works in the marine environment and hence avoids direct impacts on MNES including Corner Inlet Ramsar site values.
    - avoids clearing regrowth native vegetation (1.705 ha of Heathy Woodland) and protecting habitat for terrestrial birds and fauna. A further 13.529 ha of remnant native vegetation inside and outside the ORC project area has been set aside in remnant native vegetation protection zones.
- Maximising separation to sensitive receptors. The locations of the dismantling pad and wash bay were selected to balance:
    - Noise impacts on adjacent sensitive residential receptors. The dismantling pad and wash bay were moved as far west as reasonably practicable.
    - Noise impacts on shorebird aggregations at Toora Island, Toora Beach and Barry Point. The dismantling pad and wash bay were not moved north or south to avoid reducing the distance to these sensitive avifauna sites.
    - Potential for contaminants to reach Corner Inlet. The distance to Corner Inlet was maximised by locating the dismantling pad and wash bay east of the existing operations area.

ORC early works will apply a range of general avoidance measures to avoid and minimise impacts on the environment, which include compliance with industry guidelines and standards as well as the selection of better practice construction methods.

Construction activities will be undertaken in accordance with relevant Victorian requirements and guidelines, and best practice standards, including EPA publications. These guidelines are intended to reduce the risk of harm to human health and the environment through good environmental practice.

Further details are provided in Att 1, Section 3.4.2, pp37–40.

4.1.3.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

As ORC early works are unlikely to have a significant impact on the ecological character of a declared Ramsar wetland, no offsets are proposed.

4.1.4 Threatened Species and Ecological Communities

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Threatened species

Direct impact	Indirect impact	Species	Common name
No	No	Amphibromus fluitans	River Swamp Wallaby-grass, Floating Swamp Wallaby-grass
No	No	Antechinus minimus maritimus	Swamp Antechinus (mainland)
No	No	Anthochaera phrygia	Regent Honeyeater
No	No	Ardenna grisea	Sooty Shearwater
No	No	Arenaria interpres	Ruddy Turnstone
No	No	Botaurus poiciloptilus	Australasian Bittern
No	No	Caladenia orientalis	Eastern Spider Orchid
No	No	Caladenia tessellata	Thick-lipped Spider-orchid, Daddy Long-legs
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	Yes	Calidris canutus	Red Knot, Knot
No	Yes	Calidris ferruginea	Curlew Sandpiper
No	Yes	Calidris tenuirostris	Great Knot
No	No	Callocephalon fimbriatum	Gang-gang Cockatoo
No	Yes	Carcharodon carcharias	White Shark, Great White Shark
No	No	Caretta caretta	Loggerhead Turtle
No	No	Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover
No	No	Charadrius mongolus	Lesser Sand Plover, Mongolian Plover
No	No	Chelonia mydas	Green Turtle
No	No	Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)
No	No	Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)
No	No	Dermochelys coriacea	Leatherback Turtle, Leathery Turtle, Luth

Direct impact	Indirect impact	Species	Common name
No	No	Diomedea antipodensis	Antipodean Albatross
No	No	Diomedea antipodensis gibsoni	Gibson's Albatross
No	No	Diomedea epomophora	Southern Royal Albatross
No	No	Diomedea exulans	Wandering Albatross
No	No	Diomedea sanfordi	Northern Royal Albatross
No	No	Eubalaena australis	Southern Right Whale
No	No	Falco hypoleucos	Grey Falcon
No	No	Fregetta grallaria grallaria	White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian)
No	No	Galaxiella pusilla	Eastern Dwarf Galaxias, Dwarf Galaxias
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Glycine latrobeana	Clover Glycine, Purple Clover
No	No	Grantiella picta	Painted Honeyeater
No	No	Hirundapus caudacutus	White-throated Needletail
No	No	Lathamus discolor	Swift Parrot
No	Yes	Limosa lapponica baueri	Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit
No	No	Limosa limosa	Black-tailed Godwit
No	No	Lissolepis coventryi	Swamp Skink, Eastern Mourning Skink
No	No	Litoria raniformis	Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog
No	No	Macronectes giganteus	Southern Giant-Petrel, Southern Giant Petrel
No	No	Macronectes halli	Northern Giant Petrel
No	No	Neophema chrysogaster	Orange-bellied Parrot
No	Yes	Neophema chrysostoma	Blue-winged Parrot
No	Yes	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
No	No	Pachyptila turtur subantarctica	Fairy Prion (southern)

Direct impact	Indirect impact	Species	Common name
No	No	Petaurus australis australis	Yellow-bellied Glider (south-eastern)
No	Yes	Pluvialis squatarola	Grey Plover
No	No	Potorous tridactylus trisulcatus	Long-nosed Potoroo (southern mainland)
No	No	Prasophyllum spicatum	Dense Leek-orchid
No	Yes	Prototroctes maraena	Australian Grayling
No	No	Pseudomys novaehollandiae	New Holland Mouse, Pookila
No	No	Pterodroma leucoptera leucoptera	Gould's Petrel, Australian Gould's Petrel
No	Yes	Pteropus poliocephalus	Grey-headed Flying-fox
No	No	Pterostylis chlorogramma	Green-striped Greenhood
No	No	Pycnoptilus floccosus	Pilotbird
No	No	Rostratula australis	Australian Painted Snipe
No	No	Senecio psilocarpus	Swamp Fireweed, Smooth-fruited Groundsel
No	No	Seriolella brama	Blue Warehou
No	No	Stagonopleura guttata	Diamond Firetail
No	No	Sternula albifrons	Little Tern
No	Yes	Sternula nereis nereis	Australian Fairy Tern
No	No	Thalassarche bulleri	Buller's Albatross, Pacific Albatross
No	No	Thalassarche bulleri platei	Northern Buller's Albatross, Pacific Albatross
No	No	Thalassarche carteri	Indian Yellow-nosed Albatross
No	No	Thalassarche cauta	Shy Albatross
No	No	Thalassarche chrysostoma	Grey-headed Albatross
No	No	Thalassarche impavida	Campbell Albatross, Campbell Black-browed Albatross
No	No	Thalassarche melanophris	Black-browed Albatross
No	No	Thalassarche salvini	Salvin's Albatross
No	No	Thalassarche steadi	White-capped Albatross

Direct impact	Indirect impact	Species	Common name
No	No	Thesium australe	Austral Toadflax, Toadflax
No	No	Tringa nebularia	Common Greenshank, Greenshank
No	No	Xenus cinereus	Terek Sandpiper
No	No	Xerochrysum palustre	Swamp Everlasting, Swamp Paper Daisy

Ecological communities

Direct impact	Indirect impact	Ecological community
No	No	Natural Damp Grassland of the Victorian Coastal Plains
No	No	Subtropical and Temperate Coastal Saltmarsh

4.1.4.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.4.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Results from an EPBC Act PMST for the proposed action identified 85 threatened species and two threatened ecological communities within a 10 km radius of BBMT (Att 3). No threatened ecological communities or threatened flora species were recorded in or adjacent to the ORC project area.

The preliminary assessment determined 11 threatened fauna species have the potential to be affected by the proposed action (Att 1, Table 3.5, p55). A detailed assessment was completed for each of these species.

Impact

Potential impact pathways were identified and are listed below (Att 1, Section 3.7.2, pp139–177).

- **Vegetation clearance:** ORC early works will result in the loss of 0.911 ha of planted and regrowth native vegetation to construct the SPMT travel route. The planted and regrowth native vegetation may provide marginal habitat for perching and low quality potential foraging habitat for the vulnerable blue-winged parrot and vulnerable grey-headed flying-fox.
- **Physical presence:** ORC early works will be a temporary increase in human activities over a 13-month period, compared to normal operations at BBMT, with the activities similar in nature to those that have occurred during historical peaks at the site (e.g., traffic movements, equipment, workers) over the past 50 years. The visual presence of infrastructure, vehicles and equipment associated with ORC early works is less pronounced than the existing features such as warehouses, tank farms, vessels operating out of the port, and the Favco crane already present at BBMT and in Corner Inlet (Att 1, Section 3.5.1, p41).
- **Noise:** ORC early works will involve noise generating activities which may be heard by fauna in adjacent foraging habitat for the blue-winged parrot and grey-headed flying-fox in vegetation at BBMT, as well as foraging and roosting habitats for threatened avifauna in Corner Inlet. As BBMT is an existing port facility, threatened species roosting and foraging in the vicinity of BBMT are pre-exposed to noise and vibration from port operations (Att 1, Section 3.5.2, pp41-46).
- **Artificial light:** Additional temporary night lighting required for ORC early works activities could be visible from sensitive locations and habitats for threatened fauna, including roosting, foraging and breeding sites (Att 1, Section 3.5.3, p46–47). Artificial lighting also has the potential to attract juvenile fish which can increase predation risk.
- **Mobilisation of contaminants:** ORC early works will disturb contaminated soils that could, if inappropriately managed, impact water quality and habitat for threatened species due to the unplanned introduction of contaminants into the marine environment, some of which may have the potential to bioaccumulate (Att 1, Section 3.5.4, pp47–50).
- **Spread of weeds:** Introduced weeds and pathogens, which can potentially be spread through earthworks, vegetation clearance, vehicle movements and import of fill and materials into BBMT, have the potential to directly and indirectly impact threatened species and their habitat (Att 1, Section 3.5.6, p51–53).

<u>Endangered and critically endangered avifauna</u>

Two critically endangered and one endangered species that could be indirectly impacted by the proposed action are (Att 1, Section 3.7.2.1, pp140–147):

Curlew sandpiper *(Calidris ferruginea)* (CR, Mi, Ma)

This species has declined by 53% in the last 16 years (Att 1, App D, Section 4.2.2.8, pp43–46). Corner Inlet is an internationally important habitat for this species as it supports an ecologically significant proportion of the population, estimated to be 1.5% of the global population.

Far eastern curlew *(Numenius madagascariensis)* (CR, Mi, Ma)

Australia is an important destination for the species, with 73% of the population residing in Australia during the non-breeding season. The broader Corner Inlet area is likely to be considered habitat critical to the survival of this species, with recent observations recording 195 individuals between 2005 and 2024 (Att 1, App D, Section 4.2.2.12, pp49–50), which represents more than 0.1% of the global population.

Nunivak bar-tailed godwit *(Limosa lapponica baueri)* (EN)

The global population of this species has declined by 47% over the last 25 years in Australia. Corner Inlet populations have declined from an average 10,080 individuals between 1982 and 2011 to 6,070 individuals between 2005 and 2024 (Att 1, App D, Section 4.2.2.11, pp48–49).

The ORC early works could potentially impact the above three species as a result of physical presence, noise generated by construction activities, artificial light and mobilisation of contaminants.

Vulnerable avifauna – shorebirds

Three shorebirds listed as vulnerable under the EPBC Act that could be indirectly impacted by the proposed action are (Att 1, Section 3.7.2.2, pp147–155):

Great knot *(Calidris tenuirostris)*

The number of individuals recorded in Corner Inlet varies, ranging from a mean summer abundance of 240 individuals from 1982 to 2011 to a mean summer abundance of 52 individuals from 2005 to 2024 (Att 1, App D, Section 4.2.2.8, pp43–46). Corner Inlet is not an internationally important habitat for this species as it only supports 0.01% of the global population.

Grey plover *(Pluvialis squatarola)*

Corner Inlet supports between 1.5% and 4.4% of the global population, meaning the wetland is likely to be an internationally important habitat critical to the survival of this species. Major threats to this species in Australia include habitat loss from commercial development disturbance at feeding and roosting sites, and habitat loss via the invasion of cordgrass (Att 1, App D, Section 4.2.2.9, pp46–47).

Red knot *(Calidris canutus)*

This species has an estimated global population of 64,700 mature individuals. Corner Inlet is estimated to support around 2.2% of the global red knot population and the outer barrier islands and mudflats of Corner Inlet are internationally important feeding and roosting sites for the species (Att 1, App D, Section 4.2.2.8, pp43–46).

The ORC early works could potentially impact the above three species as a result of physical presence, noise generated by construction activities, artificial light and mobilisation of contaminants.

Vulnerable avifauna

The Australian fairy tern and blue-winged parrot are listed as vulnerable under the EPBC Act and could be potentially indirectly impacted by the proposed action.

Australian fairy tern *(Sternula nereis nereis)*

The population is approximately 7,450 mature individuals, with significant decreases to the eastern population over the last 20 years. Corner Inlet's extensive tidal flats and sand splits provide important feeding areas for Australian fairy terns, with known breeding colonies on Clonmel Island, Boxbank Island, and more recently, Possum Island South (Att 1, App D, Section 4.4.2.1. pp57–59).

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.2.3, pp155–160).

Blue-winged parrot *(Neophema chrysostoma)*

The population has declined by 30% to 50% in 11 years, with the estimated population currently at 10,000 mature individuals. These declines have likely been caused by habitat loss and deterioration in habitat quality (DCCEEW 2023d). To the south and east of the ORC project area, patches of banksia and heathy woodlands offer habitat that could be considered critical for the survival of the blue-winged parrot (Att 1, Section 3.7.2.4, p160).

The ORC early works could potentially impact this species as a result of vegetation clearance, physical presence, noise generated from construction activities, artificial light and spread of weeds (Att 1, Section 3.7.2.4, pp160–164).

Vulnerable terrestrial fauna

One EPBC Act-listed threatened vulnerable terrestrial fauna species was acoustically recorded at BBMT and the ORC project area, the grey-headed flying-fox.

Grey-headed flying-fox *(Pteropus poliocephalus)*

While BBMT supports foraging habitat for the species, the closest known camps are between 45 and 60 km away at Woodside and Traralgon respectively (DCCEEW 2025ae). Vegetation contained within or adjacent to BBMT is not known to be a roost site for this species (Att 1, Section 3.7.2.5, p164).

The ORC early works could potentially impact this species as a result of vegetation clearance, physical presence, noise generated from construction activities, and artificial light (Att 1, Section 3.7.2.5, pp164–168).

Vulnerable marine fauna

The white shark *(Carcharodon carcharias)* could be indirectly impacted by ORC early works. Corner Inlet is a designated biologically important area for the white shark as it is one of three areas in eastern Australia where juveniles of this species are known to have a prolonged residency period (DCCEEW 2025b). Corner Inlet likely supports an ecologically significant proportion of the population during breeding periods (Att 1, Section 3.7.2.6, p169).

No works in the marine environment are part of the proposed action. Unplanned introduction of contaminants into the marine environment from accidental leaks or spills could potentially affect the species, some of which may have the potential to bioaccumulate (Att 1, Section 3.7.2.6, pp169–173).

Vulnerable freshwater fish

One EPBC Act-listed vulnerable freshwater fish species, Australian grayling *(Prototroctes maraena*), could be indirectly impacted by the proposed action. This species has been recorded in Corner Inlet and relies on the Franklin and Agnes rivers for habitat (Backhouse et al. 2008). The inlet is used by juveniles of the species for dispersal and potentially refuge during the marine period of their life cycle (Att 1, Section 3.7.2.7, p173).

No works in the marine environment are part of the proposed action. ORC early works have the potential to result in indirect impacts from unplanned introduction of contaminants into the marine environment (Att 1, Section 3.7.2.7, pp173–177).

4.1.4.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

No

4.1.4.6 Describe why you do not consider this to be a Significant Impact. *

No direct impact on habitat critical for the survival of threatened species will occur as a result of the proposed action. Indirect impacts on threatened species could occur and are summarised in the following sections. A detailed assessment is provided in the Att 1, Section 3.7.2, pp.139–177.

Threatened avifauna – Endangered and critically endangered avifauna, vulnerable shorebirds, and the vulnerable Australian fairy tern

A summary of the detailed impact assessment for six threatened avifauna is outlined below, with the detailed assessment provided in the EPBC Act referral summary report (Att 1, Section 3.7.2, pp139-177).

- **Physical presence:** Over the long term, avifauna in the vicinity of BBMT has been pre-exposed to the presence of industrial buildings, equipment, car and truck traffic, workers, and vessel movements. As a result, it is expected that avifauna has habituated to the physical presence of these features and activities. The ORC early works are relatively small-scale civil works, not inconsistent with historic activities at BBMT. The ORC early works will not significantly impact these threatened avifauna and shorebird species.
- **Noise:** Given the context of existing noise emissions and the predicted noise levels (Att 1, Section 3.5.2.3, p43), noise emissions due to ORC early works are below the threshold for behavioural disturbance of threatened shorebirds and seabirds. The proposed action is unlikely to disturb these threatened avifauna species and will not result in any temporary or permanent hearing impact.
- **Artificial light:** Construction works will occur in daylight hours. Temporary lighting may be required early morning and evening in late autumn and winter. This is predominantly outside the period when migratory species are present in Corner Inlet (spring and summer). Given this and the existing lighting at BBMT, artificial lighting for ORC early works is unlikely to substantially change the light profile of Corner Inlet such that it might disturb foraging or roosting by threatened shorebirds in the inlet. Temporary lighting will be selected and operated considering the principles of best practice lighting design to reduce light pollution for migratory shorebirds and bats as recommended by the National Light Pollution Guidelines for Wildlife May 2023 Version 2.0 (DCCEEW 2023).
- **Mobilisation of contaminants:** ORC early works are not expected to introduce new contaminants to the site or mobilise existing contamination such that it could migrate and have a significant impact on habitat or ecosystem function for these threatened avifauna species. On this basis it is unlikely that the ORC early works will result in a significant impact on these threatened avifauna species as a result of the mobilisation of contaminants.

The ORC early works are unlikely to result in a significant impact on the curlew sandpiper, far eastern curlew, Nunivak bar-tailed godwit, great knot, grey plover, red knot or Australian fairy tern.

Vulnerable avifauna - Blue-winged parrot

A summary of the detailed impact assessment for the vulnerable blue-winged parrot is outlined below with the detailed assessment provided in Att 1, Section 3.7.2.4, pp160–164.

- **Vegetation clearance:** ORC early works will result in the loss of 0.911 ha of planted and regrowth native vegetation. Given the historical disturbance and proximity to port operations, this habitat is unlikely to be critical to the survival of the species and unlikely to be used frequently (if at all). No tree hollows were recorded within BBMT during the 2023 field surveys and as such no suitable breeding habitat is located within the ORC project area or the broader BBMT (Att 1, App A, Section 4.2.5, p33).
- **Physical presence:** Over the long term, avifauna in the vicinity of BBMT has been pre-exposed to the presence of industrial buildings, equipment, car and truck traffic, workers, and vessel movements. As a result, it is expected that avifauna has habituated to the physical presence of these features and activities. The ORC early works are relatively small-scale civil works, not inconsistent with historic activities are BBMT.
- **Noise:** Given the context of existing noise emissions and the predicted noise levels (Att 1, Section 3.5.2.3, pp43–46), noise emissions due to ORC early works are unlikely to affect the foraging

or roosting of the species within BBMT given the existing nature of anthropogenic disturbance at the site and will not result in a significant impact to an important population of the species.

- **Artificial light:** Construction works will occur in daylight hours. Temporary lighting may be required early morning and evening in late autumn and winter. The temporary and infrequent artificial lighting as a result of ORC early works is unlikely to substantially change the light profile of BBMT such that it might cause disturbance to foraging or roosting blue-winged parrots. Temporary lighting will be selected and operated considering the principles of best practice lighting design to reduce light pollution for migratory shorebirds and bats as recommended by the National Light Pollution Guidelines for Wildlife May 2023 Version 2.0 (DCCEEW 2023).
- **Spread of weeds:** Invasive weeds are identified as a threat to the species habitat in the conservation advice. The risk posed by the ORC early works is not likely to impact the quality or value of habitat for the species within BBMT and the ORC project area.

Potential impacts on the blue-winged parrot resulting from the ORC early works are unlikely to result in a significant impact on the species.

Vulnerable terrestrial fauna – Grey-headed flying-fox

A summary of the detailed impact assessment for the grey-headed flying-fox is outlined below, with the detailed assessment provided in Att 1, Section 3.7.2.5, pp164–169.

- **Vegetation clearance:** ORC early works will result in the removal of 0.911 ha of planted and regrowth native vegetation. While some of the trees to be cleared are known to be important winter foraging species for the grey-headed flying-fox, it is unlikely that the planted and native regrowth vegetation is habitat critical to the survival of the species given that the vegetation is in isolated patches and the ORC project area is not within 20 km of a nationally important camp.
- **Physical presence:** Over the long term, grey-headed flying-foxes in the vicinity of BBMT have been pre-exposed to presence of industrial buildings, equipment, car and truck traffic, workers, and vessel movements. As a result, it is expected that grey-headed flying-foxes have habituated to the physical presence of these features and activities. The ORC early works are relatively small-scale civil works, not inconsistent with historic activities are BBMT.
- **Noise:** Grey-headed flying-fox have a greater tolerance to noise due to their vocalisations and use of noise in foraging (Att 1, App A, Section 4.5.1.1, p43). As the most noise will be generated by piling which will be completed during daylight hours and the nearest camps are 45 to 60 km from BBMT, noise generated by ORC early works is unlikely to disturb the foraging behaviour of this nocturnal species. Noise modelling shows noise levels in habitat adjacent to the ORC project area will be below the threshold for behavioural disturbance (Att 1, App A, Section 4.5.1.1, p43).
- **Artificial light:** Construction works will occur in daylight hours and the requirement for temporary night lighting is limited to early morning and evening in late autumn and winter. The temporary and infrequent artificial lighting is unlikely to substantially change the light profile of BBMT such that it might cause disturbance to the foraging grey-headed flying-fox. Temporary lighting will be selected and operated considering the principles of best practice lighting design to reduce light pollution for migratory shorebirds and bats as recommended by the National Light Pollution Guidelines for Wildlife May 2023 Version 2.0 (DCCEEW 2023).

Potential impacts on the grey-headed flying-fox resulting from the ORC early works are unlikely to result in a significant impact on the species.

Vulnerable marine and freshwater fauna

A summary of the detailed impact assessment for the vulnerable white shark and Australian grayling is outlined below, with the detailed assessment provided Att 1, sections 3.7.2.6 and 3.7.2.7, pp169–177.

- **Mobilisation of contaminants:** The risk of contaminants being mobilised into Corner Inlet and affecting marine ecosystems is very low. Marine water quality monitoring shows that the current levels of contaminants of potential concern in Corner Inlet are '...typically at least one order of

magnitude less than that reported in groundwater adjacent to the wharf, and generally less than the adopted water dependent ecosystems and species (WDES) criteria and reported range of background marine water quality.' (Att 1, App F, Section 4.3, p7). ORC early works are not expected to introduce new contaminants to the site or mobilise existing contamination such that it could migrate and have a significant impact on water quality and habitat for these species which use the inlet to hunt prey (white shark) and migrate (Australian grayling).

- **Artificial light:** Construction works will occur in daylight hours. Temporary lighting may be required early morning and evening in late autumn and winter. Given the proposed temporary lighting and existing lighting, artificial lighting for ORC early works is unlikely to substantially change the light profile of Corner Inlet such that it might cause disturbance to breeding or foraging habitat used by juveniles of these species. Therefore, it is unlikely artificial light will result in a significant impact on the white shark and Australian grayling.

Potential impacts on the white shark and Australian grayling resulting from the ORC early works are unlikely to result in a significant impact on these species.

4.1.4.7 Do you think your proposed action is a controlled action? *

No

4.1.4.9 Please elaborate why you do not think your proposed action is a controlled action. *

The ORC early works are temporary in nature, occurring over approximately 13-month period and are located in part of an existing industrial site entirely on land. Design responses have avoided direct impacts on threatened species residing in or visiting the Corner Inlet Ramar wetland.

To support the view that impacts are not significant, a preliminary assessment was conducted of the 71 threatened fauna species, 14 threatened flora species and 2 threatened ecological communities (Att 1, Section 3.6, pp53–128). No threatened ecological communities were identified at or adjacent to BBMT and the ORC project area. With the exception of the eastern spider orchid (*Caladenia orientalis)*, no suitable habitat for the threatened flora species exists at or near BBMT. Ecological surveys confirmed the eastern spider orchid is not present in suitable habitat at BBMT.

This assessment found that 60 threatened fauna species were unlikely to be impacted and that the ORC early works would not result in significant impacts on those protected matters.

A detailed assessment against the Significant Impact Criteria in accordance with the Significant impact guidelines 1.1 (DoE 2013) was undertaken for the 11 threatened fauna species identified as potentially impacted by the proposed action.

The detailed assessment provided in Att 1, Section 3.7.2, pp139–177 determined that potentially affected threatened species are unlikely to be significantly impacted as there are no direct impacts and indirect impacts are minor and temporary.

Vegetation clearing is limited to 0.911 ha of planted and regrowth native vegetation. ORC early works are consistent with current and historic activities at the site in physical presence. Modelling has confirmed noise heard at adjacent shorebird aggregation areas is below the threshold for behavioural disturbance. Temporary short-term lighting during late autumn and winter is for a maximum of 2.5 hours a day over approximately 5 months out of the 13-month construction timeframe. Marine water quality has confirmed concentrations of contaminants of potential concern in Corner Inlet are '…typically at least one order of magnitude less than that reported in groundwater adjacent to the wharf, and generally less than the adopted WDES criteria and reported range of background marine water quality.' (Att 1, App F, Section 4.3, p7). The combined circumstances that must be met for contaminated groundwater or soils to harm the Corner Inlet Ramsar wetland are complex and interdependent and have been avoided through the general avoidance measures. The ORC early works will not introduce or cause the spread of weeds, diseases and pests due to the general avoidance measures. The ORC early works are entirely on land and will not introduce spread of invasive marine species.

The indirect impacts will not cause a long-term decrease in the size of a population, fragment a population, reduce the area of occupancy, affect habitat critical to the survival of the species, disrupt breeding cycles of an important population, destroy, reduce or degrade habitat, introduce diseases, or interfere with the recovery of the species.

As no threatened species or ecological communities are likely to be significantly impacted, the proposed action is not considered a controlled action.

4.1.4.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

ORC early works will occur entirely on land and within BBMT, which is a highly modified industrial environment. The ORC early works design, layout and construction method were refined to avoid significant impacts on threatened species and their habitat, and to reduce vegetation removal within the ORC project area to the greatest extent possible.

A summary of avoidance through design is listed below, further details are provided in Att 1, Section 3.4.1, pp36–37).

- The initial project design considered replacing 160 m of the BBMT wharf and construction of a skidway to facilitate load in of the structures. A load-in design and use of SPMTs were selected as they negate the need to replace the wharf and also eliminated the skidway from the design. The scope of works was reduced to strengthening two sections of the existing wharf. This change:
    - significantly reduces the number of piles required reducing the duration of noise from piling activities, a major source of construction noise.
    - avoids works in the marine environment and hence avoids direct impacts on MNES including Corner Inlet Ramsar site values (including threatened species).
    - avoids clearing regrowth native vegetation (1.705 ha of heathy woodland), which provides habitat for terrestrial fauna. A further 13.529 ha of remnant native vegetation inside and outside the ORC project area has been set aside in remnant native vegetation protection zones.
- Maximising separation to sensitive receptors. The locations of the dismantling pad and wash bay were selected to balance:
    - Noise impacts on adjacent sensitive residential receptors. The dismantling pad and wash bay were moved as far west as reasonably practicable.
    - Noise impacts on shorebird aggregations at Toora Island, Toora Beach and Barry Point. The dismantling pad and wash bay were not moved north or south to avoid reducing the distance to these sensitive avifauna sites.
    - Contaminants reaching Corner Inlet. The distance to Corner Inlet was maximised by locating the dismantling pad and wash bay east of the existing operations area.
- Reduction in jacket laydown area: The jacket laydown area was reduced in the east to avoid the vegetation on the former settling ponds and the adjacent intact tract of remnant native vegetation comprising heathy woodland, banksia woodland, wet heathland and swamp scrub. The intact heathy woodland is suitable habitat for the EPBC Act-listed endangered eastern spider orchid (*Caladenia orientalis*) despite ecology surveys not identifying any individuals. Avoiding the remnant native vegetation protects the eastern spider orchid from disturbance should it ever be found in the suitable habitat.
- Avoiding remnant native vegetation. The ORC was designed to avoid remnant native vegetation. Avoiding remnant native vegetation protects habitat for threatened species including the vulnerable grey-headed flying-fox which was acoustically recorded at BBMT. In total, 15.234 ha of remnant native vegetation has been avoided including:
    - The patch of remnant native vegetation comprising heathy woodland and mature eucalypt species adjacent to the dismantling pad and wash bay (0.477 ha).
    - The intact tract of remnant native vegetation comprising mature banksia woodland, wet heathland and swamp scrub east of the former settling ponds and jacket laydown (13.052 ha).
    - Vegetation on the former settling ponds comprising planted and regrowth vegetation, and a small patch of regrowth heathy woodland greater than 10 years old (1.705 ha).

ORC early works will apply a range of general avoidance measures to avoid impacts on the environment, which include compliance with industry guidelines and standards as well as the selection of better practice construction methods. These include fitting acoustic shrouds to impact piling rigs that reduce noise at source by up to 12 dB LAeq (Att 1, App E, Section 5.1, p27).

Construction activities will be undertaken in accordance with relevant Victorian requirements and guidelines, and best practice standards, including EPA publications. These guidelines are intended to reduce the risk of harm to human health and the environment through good environmental practice.

Further details are provided in the EPBC Act referral summary report (Att 1, Section 3.4.2, pp37–40).

4.1.4.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

As ORC early works are unlikely to result in a significant impact on any threatened species or ecological communities, no offsets are required.

4.1.5 Migratory Species

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

Direct impact	Indirect impact	Species	Common name
No	No	Actitis hypoleucos	Common Sandpiper
No	No	Apus pacificus	Fork-tailed Swift
No	No	Ardenna carneipes	Flesh-footed Shearwater, Fleshy-footed Shearwater
No	No	Ardenna grisea	Sooty Shearwater
No	Yes	Ardenna tenuirostris	Short-tailed Shearwater
No	No	Arenaria interpres	Ruddy Turnstone
No	No	Calidris acuminata	Sharp-tailed Sandpiper
No	No	Calidris alba	Sanderling
No	No	Calidris canutus	Red Knot, Knot
No	No	Calidris ferruginea	Curlew Sandpiper
No	No	Calidris melanotos	Pectoral Sandpiper
No	No	Calidris pugnax	Ruff
No	Yes	Calidris ruficollis	Red-necked Stint
No	No	Calidris tenuirostris	Great Knot
No	No	Caperea marginata	Pygmy Right Whale
No	No	Carcharias taurus	Grey Nurse Shark
No	No	Carcharodon carcharias	White Shark, Great White Shark
No	No	Caretta caretta	Loggerhead Turtle
No	Yes	Charadrius bicinctus	Double-banded Plover
No	No	Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover
No	No	Charadrius mongolus	Lesser Sand Plover, Mongolian Plover
No	No	Chelonia mydas	Green Turtle

Direct impact	Indirect impact	Species	Common name
No	No	Dermochelys coriacea	Leatherback Turtle, Leathery Turtle, Luth
No	No	Diomedea antipodensis	Antipodean Albatross
No	No	Diomedea epomophora	Southern Royal Albatross
No	No	Diomedea exulans	Wandering Albatross
No	No	Diomedea sanfordi	Northern Royal Albatross
No	No	Eubalaena australis	Southern Right Whale
No	No	Gallinago hardwickii	Latham's Snipe, Japanese Snipe
No	No	Gallinago megala	Swinhoe's Snipe
No	No	Gallinago stenura	Pin-tailed Snipe
No	No	Hirundapus caudacutus	White-throated Needletail
No	Yes	Hydroprogne caspia	Caspian Tern
No	No	Lagenorhynchus obscurus	Dusky Dolphin
No	No	Lamna nasus	Porbeagle, Mackerel Shark
No	Yes	Limosa lapponica	Bar-tailed Godwit
No	No	Limosa limosa	Black-tailed Godwit
No	No	Macronectes giganteus	Southern Giant-Petrel, Southern Giant Petrel
No	No	Macronectes halli	Northern Giant Petrel
No	No	Megaptera novaeangliae	Humpback Whale
No	No	Motacilla flava	Yellow Wagtail
No	No	Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew
No	No	Numenius minutus	Little Curlew, Little Whimbrel
No	No	Numenius phaeopus	Whimbrel
No	No	Pluvialis fulva	Pacific Golden Plover
No	No	Pluvialis squatarola	Grey Plover
No	No	Sternula albifrons	Little Tern
No	No	Thalassarche bulleri	Buller's Albatross, Pacific Albatross

Direct impact	Indirect impact	Species	Common name
No	No	Thalassarche carteri	Indian Yellow-nosed Albatross
No	No	Thalassarche cauta	Shy Albatross
No	No	Thalassarche chrysostoma	Grey-headed Albatross
No	No	Thalassarche impavida	Campbell Albatross, Campbell Black-browed Albatross
No	No	Thalassarche melanophris	Black-browed Albatross
No	No	Thalassarche salvini	Salvin's Albatross
No	No	Thalassarche steadi	White-capped Albatross
No	Yes	Thalasseus bergii	Greater Crested Tern
No	No	Tringa brevipes	Grey-tailed Tattler
No	No	Tringa glareola	Wood Sandpiper
No	No	Tringa nebularia	Common Greenshank, Greenshank
No	No	Tringa stagnatilis	Marsh Sandpiper, Little Greenshank
No	No	Xenus cinereus	Terek Sandpiper

4.1.5.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

Yes

4.1.5.2 Briefly describe why your action has a direct and/or indirect impact on these protected matters. *

Results from an EPBC Act PMST for the proposed action identified 60 migratory species within a 10 km radius of BBMT (Att 3, EPBC Act Protected Matters Search Tool (April 2025)).

A preliminary assessment of the likelihood of occurrence of protected matters and the potential for direct and indirect impacts from ORC early works was completed (Att 1, Section 3.6.2, Table 3.5, p55). The preliminary assessment determined that six migratory species have the potential to be affected by the proposed action (Att 1, Section 3.6.2, Table 3.5, p55). They are:

Three EPBC Act-listed non-breeding migratory shorebirds:

- Red-necked stint *(Calidris ruficollis)*
- Double-banded plover *(Anarhynchus bicinctus)*
- Bar-tailed godwit *(Limosa lapponica)*

Three EPBC Act-listed locally breeding migratory seabirds:

- Caspian tern *(Hydroprogne caspia)*
- Greater crested tern *(Thalasseus bergii)*
- Short-tailed shearwater *(Ardenna tenuirostris)*

A detailed assessment was completed for each of these species.

Impact

A summary of relevant potential impact pathways is below. Further details are provided in Att 1, Section 3.7.3, pp177–190).

- **Physical presence:** ORC early works activities will be a temporary increase in human activities over a 13-month period, comparable to normal operations at BBMT. The activities will be similar in nature to those that have occurred at the site during historical peaks (e.g., traffic movements, equipment, workers) over the past 50 years. The visual presence of infrastructure, vehicles and equipment associated with ORC early works is less pronounced than the existing features including warehouses, tank farms, vessels operating out of the port, and the Favco crane already present within BBMT and Corner Inlet (Att 1, Section 3.5.1, p41).
- **Noise:** ORC early works will involve noise generating activities which may be heard by migratory birds at foraging, roosting and breeding sites in Corner Inlet. However, given that BBMT is an existing port, birds roosting, breeding and foraging within the vicinity of BBMT are pre-exposed to noise and vibration from port operations.
- **Artificial light:** Additional temporary lighting associated with ORC early works activities (early morning and evening in late autumn and winter) may be visible from roosting, breeding or foraging sites for migratory species.
- **Mobilisation of contaminants:** ORC early works have the potential to result in impacts on habitat for migratory shorebirds due to the unplanned introduction of contaminants into the marine environment, some of which may have the potential to bioaccumulate.

Potential impacts on the six migratory species are summarised in the following sections, with the detailed assessment presented in Att 1, Section 3.7.3, pp177–189.

Non-breeding migratory shorebirds

Red-necked stint *(Calidris ruficollis)*

In southeast Australia, many red-necked stints occur on inland wetlands during October and November, moving to coastal bays by December (DCCEEW 2025j). This species is distributed along most of the east coast and is known to occur in Corner Inlet. The estimated global population for this species is 315,000 individuals, with more than 80% of this population residing in Australia. Barry Point, the closest roost site to BBMT, is known to regularly support moderate numbers of the species (Att 1, App D, Section 4.2.2.8, pp43–46).

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.3.1, Table 3.24, p179).

Double-banded plover *(Anarhynchus bicinctus)*

The double-banded plover only breeds in New Zealand, however this species migrates to Australia during the non-breeding season. In Australia, Corner Inlet is considered a site of international importance during the non-breeding period and has been known to support a up to 330 individuals during winter (Bamford et. al. 2008). The double-banded plover is regularly recorded in small numbers at the Barry Point roost site and adjacent tidal flats during the austral autumn and winter (Att 1, App D, Section 4.2.2.10, pp47–48) which is located approximately 1 km from the ORC project area.

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.3.1, Table 3.26, p182).

Bar-tailed godwit *(Limosa lapponica)*

The bar-tailed godwit contains two subspecies that occur in Australia (*Limosa lapponica baueri* (Nunivak bar-tailed godwit) and *Limosa lapponica menzbieri*), with the Nunivak bar-tailed godwit having potential to occur in Corner Inlet. The most recent estimate of the global bar-tailed godwit population was between 1,060,000 and 1,110,000 individuals. An estimated 325,000 bar-tailed godwits occupy the East Asian–Australasian Flyway, of which 155,000 are Nunivak bar-tailed godwits. A total of 6,070 Nunivak-bar tailed godwits are estimated to occur in Corner Inlet (Att 1, App D, Section 4.2.2.11, pp48–49). This represents an ecologically significant proportion of the population of this migratory species.

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.3.1, p177).

Locally breeding migratory seabirds

Caspian tern *(Hydroprogne caspia)*

The Caspian tern has a scattered distribution globally, including Australasia (DAWE 2020). In Corner Inlet, the Caspian tern breeds from October to March. Corner Inlet is of notable importance as a breeding site for this species, as it is considered one of only three significant breeding colonies for the Caspian tern in Victoria (Att 1, Section 3.7.3.2, pp185–190). Two known small to medium Caspian tern breeding colonies within Corner Inlet are on Boxbank Island (31 km from BBMT) and on Clonmel Island (25 km from BBMT), with 120 and 70 Caspian terns present, respectively (Att 1, Section 3.7.3.2, pp184–189).

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.3.2, Table 3.28, p187).

Greater crested tern *(Thalasseus bergii)*

The greater crested tern has a global population of between 150,000 and 1,100,000 individuals (DAWE 2020). Greater crested terns are known to roost on intertidal flats immediately south and directly opposite of the ORC project area and, given their large foraging range, may forage in waters adjacent to BBMT throughout the year (Att 1, Section 3.7.3.2, pp184–189).

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.3.2, Table 3.28, p187).

Short-tailed shearwater *(Ardenna tenuirostris)*

This species breeds on Tasmanian offshore islands and off the east coast of southern Australia, with the bulk of the population in southeast Australia (DAWE 2020). Within Corner Inlet, Bennison Island (15 km from BBMT) and Granite Island (11 km from BBMT) are known to support large breading colonies of this species (approximately 7,200 and 2,100 birds, respectively) (Att 1, App D, Section 4.4.2.3, p59).

The ORC early works could potentially impact this species as a result of physical presence, noise generated from construction activities, artificial light and mobilisation of contaminants (Att 1, Section 3.7.3.2, Table 3.28, p187).

4.1.5.4 Do you consider this likely direct and/or indirect impact to be a Significant Impact? *

No

4.1.5.6 Describe why you do not consider this to be a Significant Impact. *

A summary of the relevant potential impacts is provided below with the detailed assessment provided in the EPBC Act referral summary report (Att 1, Section 3.7.3, pp177–189).

Migratory shorebirds - red-necked stint and double-banded plover

A summary of the detailed impact assessment for red-necked stint and double-banded plover is outlined below. Further details are provided in the EPBC Act referral summary report (Att 1, Section 3.7.3.1, pp177–184).

Based on the findings of the detailed assessment for the Nunivak bar-tailed godwit (see Sections 4.1.4.2 and 4.1.4.6 of this referral), which is a subspecies of the bar-tailed godwit, it is unlikely that the ORC early works will result in a significant impact on an ecologically significant proportion of this migratory species. Further detailed impact assessment for this species is not required, as potential impacts on Nunivak bar-tailed godwit have been separately assessed.

- **Physical presence:** Over the long term, avifauna in the vicinity of BBMT has been pre-exposed to presence of industrial buildings, equipment, car and truck traffic, workers, and vessel movements. As a result, it is expected that avifauna has habituated to the physical presence of these features and the ORC early works will not significantly impact these migratory species.
- **Noise:** Given the context of existing noise emissions and the predicted noise levels (Att 1, Section 3.5.2.3, pp43–46), noise emissions as a result of ORC early works are unlikely to affect the foraging or roosting of these species in Corner Inlet and will not result in a significant impact on important habitat for these migratory species.
- **Artificial light:** Red-necked stints arrive in Australia between August (and possibly July) and September, and double-banded plovers migrate to Australia between February and March where they stay for the austral winter and start departing from July. The requirement for temporary night lighting for ORC early works (early morning and evening during late autumn and winter) will only be for a maximum 2.5 hours per day for approximately 5 months of the 13-month construction timeframe. Given the proposed temporary lighting and existing lighting at BBMT, artificial lighting as a result of ORC early works is unlikely to substantially change the light profile of Corner Inlet such that it might cause disturbance to foraging or roosting to an ecologically significant proportion of these migratory shorebirds. Temporary lighting will be selected and operated considering the principles of best practice lighting design to reduce light pollution for migratory shorebirds as recommended by the National Light Pollution Guidelines for Wildlife May 2023 Version 2.0 (DCCEEW 2023).
- **Mobilisation of contaminants:** The risk of contaminants being mobilised into Corner Inlet and affecting areas of habitat or foraging for migratory shorebirds is low. Marine water quality monitoring shows that current levels of contaminants of potential concern in Corner Inlet '...were typically at least one order of magnitude less than that reported in groundwater adjacent to the wharf, and generally less than the adopted water dependent ecosystems and species (WDES) criteria and reported range of background marine water quality.' (Att 1, App F, Section 4.3, p7). ORC early works are not expected to introduce new contaminants to the site or mobilise existing contamination such that a significant impact on habitat or ecosystem function for threatened migratory shorebirds is likely to occur. On this basis it is unlikely that the ORC early works will result in a significant impact on important habitat or an ecologically significant proportion of migratory shorebirds.

Potential impacts on the red-necked stint or double-banded plover resulting from the ORC early works are unlikely to significantly impact these species.

Locally breeding migratory seabirds

A summary of the detailed impact assessment for Caspian tern, greater crested tern and the short-tailed shearwater is outlined below, with the detailed assessment provided in Att 1, Section 3.7.3.2, pp184–189).

- **Physical presence:** ORC early works are exclusively terrestrial and localised, occurring more than 25 km from Caspian tern and greater crested tern breeding colonies in Corner Inlet, and more than

10 km from known nesting colonies of the short-tailed shearwater. Due to the distance from the ORC project area, it is unlikely that ORC early works will result in physical disturbance to breeding individuals.

- **Noise:** Given the context of existing noise emissions and the predicted noise levels (Att 1, Section 3.5.2.3, pp43–46), noise emissions as a result of ORC early works are unlikely to result in the behavioural disturbance of these migratory seabirds at any of the known breeding sites and will not result in any temporary or permanent hearing impact to any individuals.
- **Artificial light:** The breeding period for the locally breeding migratory species coincides with longer days in the spring and summer months. As a result, the requirement for temporary night lighting for the ORC early works being required when these species are breeding at Corner Inlet is expected to be limited (if required at all). Given the proposed temporary lighting and existing lighting at BBMT, artificial lighting as a result of ORC early works is unlikely to substantially change the light profile of Corner Inlet such that it might cause disturbance to breeding, foraging or roosting to locally breeding migratory seabirds in Corner Inlet.
- **Mobilisation of contaminants:** The risk of contaminants being mobilised into Corner Inlet and affecting areas of habitat or foraging for shorebirds is low. Marine water quality monitoring shows that the current levels of contaminants of potential concern in Corner Inlet are '...typically at least one order of magnitude less than that reported in groundwater adjacent to the wharf, and generally less than the adopted water dependent ecosystems and species (WDES) criteria and reported range of background marine water quality.' (Att 1, App F, Section 4.3, p7). ORC early works are not expected to introduce new contaminants to the Ramsar site or mobilise existing contamination such that it could migrate and have a significant impact to important habitat or an ecologically significant proportion of any of these species.

Potential impacts on the Caspian tern, greater crested tern, and the short-tailed shearwater resulting from the ORC early works are <u>unlikely</u> to significantly impact these species.

4.1.5.7 Do you think your proposed action is a controlled action? *

No

4.1.5.9 Please elaborate why you do not think your proposed action is a controlled action. *

The ORC early works are temporary in nature, occurring over approximately a 13-month period and located on part of an existing industrial site entirely on land. Design responses have avoided direct impacts on migratory species visiting the Corner Inlet Ramar wetland.

To support the view that impacts are not significant, a preliminary assessment was conducted of the 60 migratory species (Att 1, Section 3.6.2, Table 3.5, pp55–127). This assessment found that 54 listed migratory species were unlikely to be impacted and that the ORC early works would not result in significant impacts on those protected matters.

A detailed assessment against the Significant Impact Criteria in accordance with the Significant impact guidelines 1.1 (DoE 2013) was undertaken for the six migratory species identified as potentially impacted by the proposed action. The Nunivak bar-tailed godwit (*Limosa lapponica baueri*) is the subspecies of the bar-tailed godwit recorded at Corner Inlet. This species was assessed under threatened species and ecological communities.

The detailed assessment provided in Att 1, Section 3.7.3, pp177–190 determined that potentially affected migratory species are unlikely to be significantly impacted as there are no direct impacts and indirect impacts are minor and temporary.

Vegetation clearing is limited to 0.911 ha of planted and regrowth native vegetation. ORC early works are consistent with current and historic activities at the site in physical presence. Modelling has confirmed noise heard at adjacent shorebird aggregation areas is below the threshold for behavioural disturbance. Temporary short-term lighting during late autumn and winter is for a maximum of 2.5 hours a day over approximately 5 months out of the 13-month construction timeframe. Marine water quality has confirmed concentrations of contaminants of potential concern in Corner Inlet are '…typically at least one order of magnitude less than that reported in groundwater adjacent to the wharf, and generally less than the adopted WDES criteria and reported range of background marine water quality.' (Att 1, App F, Section 4.3, p7). The combined circumstances that must be met for contaminated groundwater or soils to harm the Corner Inlet Ramsar wetland are complex and interdependent and have been avoided through the general avoidance measures. The ORC early works will not introduce or cause the spread of weeds, diseases and pests due to the general avoidance measures. The ORC early works are entirely on land and will not introduce or spread invasive marine species.

The indirect impacts will not substantially modify, destroy or isolate an area of important habitat for these species, result in invasive species harmful to these species becoming established in important habitat or seriously disrupt the lifecycle of an ecologically significant proportion of the population of these species.

As no migratory species are likely to be significantly impacted, the proposed action is not considered a controlled action.

4.1.5.10 Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures. *

ORC early works will occur entirely on land and within BBMT, which is a highly modified industrial environment. BBMT is an operating marine terminal with existing activities managed to avoid impacts on the Corner Inlet Ramsar site and migratory species.

Consistent with this management objective, the ORC early works design, layout and construction method were developed to avoid significant impacts on migratory species and their habitat, and to ensure that removal of vegetation within the project area was minimised.

A summary of avoidance through design is listed below, further details are provided in the EPBC Act referral summary report (Att 1, Section 3.4.1, pp36–37).

- The initial project design considered replacing 160 m of the BBMT wharf and construction of a skidway to facilitate load in of the structures. A load-in design and use of SPMTs was selected as it negates the need to replace the wharf and also eliminated the skidway from the design. The scope of works was reduced to strengthening two sections of the existing wharf. This change:
    - significantly reduces the number of piles required reducing the duration of noise from piling activities, a major source of construction noise.
    - avoids works in the marine environment and hence avoids direct impacts on MNES including Corner Inlet Ramsar site values (including threatened and migratory species).
    - avoids clearing regrowth native vegetation (1.705 ha of heathy woodland) and protecting habitat for terrestrial birds and fauna. A further 13.529 ha of remnant native vegetation inside and outside the ORC has been set aside in remnant native vegetation protection zones.
- Maximising separation to sensitive receptors. The locations of the dismantling pad and wash bay were selected to balance:
    - Noise impacts on adjacent sensitive residential receptors. The dismantling pad and wash bay were moved as far west as reasonably practicable.
    - Noise impacts on shorebird aggregations at Toora Island, Toora Beach and Barry Point. The dismantling pad and wash bay were not moved north or south to avoid reducing the distance to these sensitive avifauna sites.
    - Contaminants reaching Corner Inlet. The distance to Corner Inlet was maximised by locating the dismantling pad and wash bay east of the existing operations area.

ORC early works will apply a range of general avoidance measures to avoid and minimise impacts on the environment, which include compliance with industry guidelines and standards as well as the selection of better practice construction methods. These include fitting acoustic shrouds to impact piling rigs that reduce noise at source by up to 12 dB LAeq (Att 1, App E, Section 5.1, p27).

Construction activities will be undertaken in accordance with relevant Victorian requirements and guidelines, and best practice standards, including EPA publications. These guidelines are intended to reduce the risk of harm to human health and the environment through good environmental practice.

Further details are provided in the EPBC Act referral summary report (Att 1, Section 3.4.2, pp37–40).

4.1.5.11 Please describe any proposed offsets and attach any supporting documentation relevant to these measures. *

As ORC early works are unlikely to result in a significant impact on important habitat for migratory species, no offsets are proposed.

4.1.6 Nuclear

4.1.6.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.6.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not a nuclear action.

4.1.7 Commonwealth Marine Area

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

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4.1.7.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.7.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The ORC project area is not in or adjacent to the Commonwealth Marine Area. The ORC early works are on land and will not have a direct or indirect impact on the Commonwealth Marine Area.

4.1.8 Great Barrier Reef

4.1.8.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.8.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The ORC project area is not in or adjacent to the Great Barrier Reef. The ORC early works will not have a direct or indirect impact on the Great Barrier Reef.

4.1.9 Water resource in relation to large coal mining development or coal seam gas

4.1.9.1 Is the proposed action likely to have any direct and/or indirect impact on this protected matter? *

No

4.1.9.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The proposed action is not in relation to large coal mining development or coal seam gas.

4.1.10 Commonwealth Land

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.10.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.10.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The ORC project area is not on or adjacent to Commonwealth land.

4.1.11 Commonwealth Heritage Places Overseas

You have identified your proposed action will likely directly and/or indirectly impact the following protected matters.

A direct impact is a direct consequence of an action taken – for example, clearing of habitat for a threatened species or permanent shading on an ecological community as the result of installing solar panels.

An indirect impact is an 'indirect consequence' such as a downstream impact or a facilitated third-party action.

—

4.1.11.1 Is the proposed action likely to have any direct and/or indirect impact on any of these protected matters? *

No

4.1.11.3 Briefly describe why your action is unlikely to have a direct and/or indirect impact. *

The ORC project area is not adjacent or near to Commonwealth Heritage Places Overseas.

4.1.12 Commonwealth or Commonwealth Agency

4.1.12.1 Is the proposed action to be taken by the Commonwealth or a Commonwealth Agency? *

No

4.2 Impact summary

Conclusion on the likelihood of significant impacts

You have indicated that the proposed action will likely have a significant impact on the following Matters of National Environmental Significance:

None

Conclusion on the likelihood of unlikely significant impacts

You have indicated that the proposed action will unlikely have a significant impact on the following Matters of National Environmental Significance:

- World Heritage (S12)
- National Heritage (S15B)
- Ramsar Wetland (S16)
- Threatened Species and Ecological Communities (S18)
- Migratory Species (S20)
- Nuclear (S21)
- Commonwealth Marine Area (S23)
- Great Barrier Reef (S24B)
- Water resource in relation to large coal mining development or coal seam gas (S24D)
- Commonwealth Land (S26)
- Commonwealth Heritage Places Overseas (S27B)
- Commonwealth or Commonwealth Agency (S28)

4.3 Alternatives

4.3.1 Do you have any possible alternatives for your proposed action to be considered as part of your referral? *

No

4.3.8 Describe why alternatives for your proposed action were not possible. *

Timeline

In 2021, NOPSEMA issued a General Direction to EARPL under section 574 of the OPGGS Act to complete all preparatory decommissioning activities and commence the topside dismantling campaign no later than 30 September 2027 (see General Direction Number 817). EARPL has a legal obligation to comply with the General Direction.

ORC early works are required to establish the ORC at BBMT and ready it to receive the removed platforms. Construction activities for the ORC early works will take approximately 13 months. These works must be completed and the ORC available to receive the removed structures before the Pioneering Spirit mobilises to Bass Strait in early 2027.

EARPL would not meet its obligations under General Direction Number 817 if this timeline is not met. An alternative timeline is not possible for the ORC early works.

Location

In January 2024, EARPL nominated BBMT as the site for the ORC for Decommissioning Campaign #1. EARPL selected BBMT as the preferred ORC because:

- Its long history as a port facility and supply depot, including to support decommissioning activities, means most of the infrastructure needed to complete this next phase of decommissioning already exists at the site. This limits the early works required to get the ORC ready to receive the structures for dismantling.
- It is close to the Bass Strait oil and gas fields which minimises potential risks associated with transporting the removed structures in water over long distances, and
- BBMT is where most of the facilities were constructed and loaded out, which means it has the space to accommodate the Decommissioning Campaign #1 oil and gas platforms which will be delivered over a short period.

In investigating potential sites for the ORC, EARPL considered major Victorian and Tasmanian ports, as well as ports in New South Wales and overseas in southeast Asia. EARPL also considered the feasibility of BBMT as it was where most of the structures were fabricated before being towed to and installed in the oil and gas fields.

Key reasons why the other sites were discounted include:

- Insufficient space to receive, store and dismantle the structures. BBMT has sufficient unused space that is immediately available. The other sites had limited space.
- A lack of infrastructure required to support the activities. BBMT is an operating marine terminal that almost exclusively supports offshore oil and gas exploration and production in Bass Strait. The infrastructure including wharf, laydown areas, and existing services avoid the need to develop those facilities as is required for some of the other sites investigated.
- Exclusive use of the facility. EARPL owns BBMT and has priority use of the marine terminal avoiding potential clashes with commercial cargo and container vessels using other mainland ports. This is an important consideration given the decision to use a single lift method and remove and transport the decommissioned structures to BBMT over 3 to 4 months.
- Closest distance to the oil and gas fields. BBMT is the closest port to the Bass Strait (Gippsland Basin) oil and gas fields. This reduces the transport distances for the structures which materially reduces the environmental and safety risks of long sea voyages.

For these reasons, an alternative location for the proposed action is not possible.

Activities

The activities required to construct the ORC early works are standard civil construction methods. As impacts on protected matters have been avoided through design and construction methods, alternative activities are not proposed or required as part of the action.

5. Lodgement

5.1 Attachments

1.2.1 Overview of the proposed action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att 1 - Summary report.pdf EPBC Act referral summary report	17/04/2025	No	High
#2.	Document	Att4-Figuresandmaps.pdf Attachment 4 contains figures	17/04/2025	No	High

1.3.2.18 (Person proposing to take the action) If the person proposing to take the action is a corporation, provide details of the corporation's environmental policy and planning framework

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att2-EARPL Environmental Policy.pdf EARPL Environmental Policy	17/04/2025	No	High

3.2.1 Flora and fauna within the affected area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-AppA-TerrestrialEcologyAssessment.pdf Onshore Reception Centre Early Works Terrestrial Ecology Impact Assessment	17/04/2025	No	High
#2.	Document	Att1-AppD-ShorebirdsAssessment.pdf Onshore Reception Centre Early Works Shorebird Impact Assessment	17/04/2025	No	High

3.2.2 Vegetation within the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-AppF-DSISummary.pdf Onshore Reception Centre Early Works – Detailed Site Investigation Summary	17/04/2025	No	High

3.3.1 Commonwealth heritage places overseas or other places that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att3-EPBCProtectedMattersSearch.pdf Protected Matters Search Tool April 2025	16/04/2025		High

3.3.2 Indigenous heritage values that apply to the project area

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-AppB-Cultural Heritage.pdf Onshore Reception Centre Early Works Cultural Heritage Assessment	17/04/2025	No	High

4.1.3.2 (Ramsar Wetland) Why your action has a direct and/or indirect impact on the identified protected matters

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-AppC-MarineEcologyAssessment.pdf Onshore Reception Centre Early Works Marine Ecology Characterisation and Impact Assessment	17/04/2025	No	High

4.1.3.10 (Ramsar Wetland) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-AppG-Dewateringreport.pdf Onshore Reception Centre Early Works Wharf Strengthening - Dewatering Inflow Modelling and Management Options Assessment	17/04/2025	No	High

4.1.4.10 (Threatened Species and Ecological Communities) Avoidance or mitigation measures proposed for this action

	Type	Name	Date	Sensitivity	Confidence
#1.	Document	Att1-AppE-NoiseReport.pdf Onshore Reception Centre Early Works Noise and Vibration Assessmen	17/04/2025	No	High

5.2 Declarations

Completed Referring party's declaration

The Referring party is the person preparing the information in this referral.

ABN/ACN	55139460521
Organisation name	Tetra Tech Coffey Pty Ltd
Organisation address	Level 11, 2 Riverside Quay Southbank VIC 3006 Australia
Representative's name	Barton Napier
Representative's job title	Senior Principal Environmental Consultant
Phone	+61 3 9290 7000
Email	barton.napier@tetratech.com
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☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ By checking this box, I, **Barton Napier of Tetra Tech Coffey Pty Ltd**, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

Completed Person proposing to take the action's declaration

The Person proposing to take the action is the individual, business, government agency or trustee that will be responsible for the proposed action.

ABN/ACN	62091829819
Organisation name	ESSO AUSTRALIA RESOURCES PTY LTD
Organisation address	664 Collins Street Docklands, VIC 3008 Australia
Representative's name	Richard Perry

Representative's job title	Decommissioning Project Manager
Phone	+61392610000
Email	richard.f.perry@exxonmobil.com
Address	664 Collins Street Docklands, VIC 3008 Australia

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ I, **Richard Perry of ESSO AUSTRALIA RESOURCES PTY LTD**, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

✔ Completed Proposed designated proponent's declaration

The Proposed designated proponent is the individual or organisation proposed to be responsible for meeting the requirements of the EPBC Act during the assessment process, if the Minister decides that this project is a controlled action.

Same as Person proposing to take the action information.

☑ Check this box to indicate you have read the referral form. *

☑ I would like to receive notifications and track the referral progress through the EPBC portal. *

☑ I, **Richard Perry of ESSO AUSTRALIA RESOURCES PTY LTD**, the Proposed designated proponent, consent to the designation of myself as the Proposed designated proponent for the purposes of the action described in this EPBC Act Referral. *

☐ I would like to receive notifications and track the referral progress through the EPBC portal. *