Referral of proposed action

Proposed action title: Sino Iron Mine Continuation Proposal

1 Summary of proposed action

1.1 **Short description**

CITIC Pacific Mining Management Pty Ltd (**CPM**), on behalf of Sino Iron Pty Limited (**Sino Iron**) and Korean Steel Pty Limited (**Korean Steel**), proposes to expand the existing iron ore mine and export facilities at Cape Preston, Western Australia known as the 'Sino Iron Project'. The proposed action the subject of this referral is the 'Sino Iron Mine Continuation Proposal' (**the Proposed Action**) which constitutes an expansion of the Sino Iron Project, as described below.

CPM, Sino Iron and Korean Steel are ultimately owned by Hong Kong based company, CITIC Limited. In 2006, CITIC Limited established CPM to manage development and ongoing operation of the Sino Iron Project (refer section 2.1 for detail). CPM conducts those activities on behalf of Sino Iron and Korean Steel, which are parties to the agreement scheduled to the Western Australian *Iron Ore Processing (Mineralogy Pty. Ltd.) Agreement Act 2002* (as amended) (**State Agreement**). Pursuant to the State Agreement and associated commercial agreements, Sino Iron and Korean Steel each hold mining rights and subleases authorising the extraction of a combined two billion tonnes of magnetite ore, from an orebody known as the George Palmer deposit, located in the West Pilbara region of Western Australia, and contained within Mining Leases M08/123, M08/124 and M08/125.

The Sino Iron Project is operated in accordance with a range of approvals granted under Western Australian legislation. The key environmental approval for the Sino Iron Project is Ministerial Statement 635 (**MS635**) which was granted by the Minister for the Environment (WA) in October 2003 following a Public Environmental Review under Part IV of the *Environmental Protection Act 1986* (WA) (**EP Act**).

The Sino Iron Project (previously known as Austeel/Mineralogy Project) was previously referred under the now repealed *Environment Protection (Impact of Proposals) Act 1974* (Cth) (**EPIP Act**) and given certification pursuant to the *Environmental Reform (Consequential Provisions) Act 1999* (**ERCP Act**) in July 2002 as part of the transitional arrangements between the EPIP and *Environmental Protection Biodiversity Conservation Act 1999* (Cth) (**EPBC Act**) (Appendix C).

Since assessment of the Sino Iron Project under the EP Act and the EPIP Act, the Project has been the subject of minor changes assessed under s 45C of the EP Act. For ease of reference, the Sino Iron Project, as modified from time to time under s 45C of the EP Act, will be referred to as the '**Existing Project**' throughout this referral document.

The Proposed Action will involve the expansion of current facilities including tailings storage facilities (**TSF**), waste rock landforms, the mine pit area and depth, port stockyard capacity and other supporting infrastructure. An increase in the discharge of mine dewater to the Fortescue River mouth is also proposed as part of the Proposed Action.

The Proposed Action will ensure continuous operation of the Existing Project beyong the initial five year time horizon of the initial proposals approved under the State Agreement and it does not involve an alteration to existing approved mining, processing and tailings production rates or an increase in throughput of the desalinisation plant.

The Proposed Action will involve the disturbance of up to an additional 7,366 hectares (**ha**) of land.

1.2 **Latitude and longitude**

Coordinates of the Proposed Action area are
-20.830645 116.233609,-21.089693 116.225369,-21.090334 116.135419,-20.831928 116.146405,-20.830645 116.232922,-20.830645 116.233609

1.3 **Locality and property description**

The Proposed Action is to be located at Cape Preston, within the City of Karratha and approximately 80 km south-west of Karratha in the Pilbara Region of Western Australia. The Proposed Action will be located within the Mardie Station Pastoral Lease (approximately 225 000 ha), which is operated by Pastoral Management Pty Ltd (**PMPL**, a wholly owned subsidiary of CITIC Limited) as a cattle station outside the approved mining areas. The Fortescue River Road runs through the Proposed Action area, which is bound by the Indian Ocean to the north and Mardie Station to the east, west and south (Figure 1).

1.4	**Size of the development footprint or work area (hectares)**	The development footprint of the Proposed Action is an area of up to 7,366 ha (Figure 2). The approved disturbance footprint of the Existing Project is 2,734 ha. The combined footprint (currently approved and proposed) will be up to approximately 10,100 ha.
1.5	**Street address of the site**	North West Coastal Highway Cape Preston Located 80 km south west of Karratha.

1.6 **Lot description**

NA

1.7 **Local Government Area and Council contact (if known)**

City of Karratha

1.8 **Time frame**

The action is planned to commence in Q2 2017 and is anticipated to continue for more than 30 years.

1.9	**Alternatives to proposed action**	X	No
			Yes, please also complete section 2.2
1.10	**Alternative time frames, locations or activities**	X	No
			Yes, you must also complete Section 2.3. For each alternative, location, time frame, or activity identified, you must also complete details in Sections 1.2-1.9, 2.4-2.7 and 3 and 5 (where relevant).
1.11	**Commonwealth, State or Territory assessment**		No
		X	Yes, please also complete Section 2.5
1.12	**Component of larger action** ?	X	No
			Yes, please also complete Section 2.7
1.13	**Related actions/proposals**		No
		X	Yes, provide details: The Proposed Action is an expansion of the Sino Iron Project (previously known as Austeel/Mineralogy Project) that was previously referred under the repealed EPIP Act and certified under the ERCP Act (as discussed above). The footprint of the Proposed Action is almost entirely located within the footprint of the 'Stage 3 (Extension of the Sino Iron Project)' component of the 'Mineralogy Expansion Proposal' (**MEP**) which was the subject of a referral by Mineralogy Pty Ltd (**Mineralogy**) under the EPBC Act in 2009 (2009/5010). The MEP, which encompassed an area of 21,516 ha, related to what was at

			that time described as Stages 3, 4 and 5 of Mineralogy's 'Cape Preston Iron Ore Project'. As explained in the referral documentation for the MEP, the Sino Iron Project and the Balmoral South Project (described as Stages 1 and 2 respectively) were the subject of separate assessments under Federal environmental legislation. On 18 August 2009, the MEP was determined to be 'Not a Controlled Action'. To date, the only stage of the 'Cape Preston Iron Ore Project' that has been implemented is the Sino Iron Project (Stage 1) and neither the Balmoral South Project (Stage 2, EPBC 2008/4236) or the MEP (Stages 3 to 5) have been progressed. As shown in Figure 3, the Proposed Action (comprising a footprint of approximately 7,366 ha) overlaps with Stage 3 of the MEP and limited components of the Balmoral South Project.
1.14	**Australian Government funding**	X	No
			Yes, please also complete section 2.8
1.15	**Great Barrier Reef Marine Park**	X	No
			Yes, please also complete Section 3.1 (h), 3.2 (e)

2 Detailed description of proposed action

2.1 Description of proposed action

The Proposed Action is located at Cape Preston 80 km south west of Karratha within the Pilbara Region of WA (Figure 1) and is an expansion of the Existing Project authorised pursuant to Part IV of the EP Act.

The Existing Project includes the following key components within an authorised disturbance footprint of up to 2734 ha:

- Mine:
  - Open pit up to a depth of 220 m;
  - Rate of mining up to 95 million tonnes per annum (**Mtpa**); and
  - North east, south east and western waste rock dumps.
- Process Plant:
  - Concentrator rate up to 27.6 Mtpa;
  - Produced waste to TSF up to 67.4 Mtpa;
  - Pellet production up to 13.8 Mtpa (yet to be constructed); and
  - Direct reduced/hot briquetted iron up to 4.7 Mtpa (yet to be constructed).
- Infrastructure:
  - Power station capacity of 640 megawatt (**MW**);
  - North South infrastructure corridor including: access roads, power lines, buried magnetite concentrate slurry pipeline;
  - Magnetite concentrate dewatering plant at the port;
  - East West infrastructure corridor including Existing Project access road and underground gas pipeline;
  - 44 GLpa desalination plant and disposal of up to 57.8 GLpa of brine per annum into the ocean;
  - Accommodation villages, administration buildings, storage/warehouse buildings and workshops;
  - Groundwater bore field; and
  - Pit dewatering and disposal of up to two GLpa to the Fortescue River.
- Port Terminal Facilities:
  - Product stockyard capacity of approximately one Mt;
  - Bulk product ship loading facilities (conveyors and ship/barge loader);
  - Rock Causeway to Preston Island and breakwater which allows for transhipment of magnetite concentrate; and
  - Trestle jetty and dredging of up to 4.5 million metres cubed to allow for direct ship loading (yet to be constructed).

Figure 2 provides a description of the Existing Project area approved by MS635.

The Proposed Action will involve disturbance of an additional 7,366 ha, potentially increasing the cumulative footprint (including the Existing Project) to 10,100 ha. The Proposed Action will involve extensions or alterations to Existing Project infrastructure (refer Figure 2), including:

- extension of the mine pit to the west within existing Mining Leases M08/123, M08/124 and M08/125 with an increase in depth from 220 m to 455 m;
- increase to tailings capacity within M08/264, M08/265 and M08/266 and onto additional tenements including G08/53, G08/63 and G08/74;
- increase to waste storage capacity within M08/266, M08/123, M08/124 and M08/125 (approved waste rock dumps) and onto additional tenements including G08/54 and G08/63;
- increase to capacity of existing product stockpiles and associated infrastructure at the Sino Iron Port Terminal Facility situated within G08/52 to three Mt;
- construction of two new infrastructure corridors:
  - one of which will extend from the north-south road across tenements G08/53 and G08/74 to the airstrip for the purposes of providing transport, power and water supply infrastructure to the airstrip; and
  - the other of which will extend from M08/123 and/or M08/124 across G08/63 (broadly adjacent to L08/20), to connect power and water supplies to mine facilities; and
- increase the discharge of groundwater from two GLpa to potentially up to eight GLpa from dewatering into the mouth of the Fortescue River.

The Proposed Action does not involve any alteration to existing mining, processing and tailings production rates or an increase throughput of the desalinisation plant.

As disussed above, the Proposed Action substantially overlaps with the 'Stage 3 (Extension of the Sino Iron Project)' component of the MEP which was previously determined to be 'Not a Controlled Action' under the EPBC Act (2009/5010). The MEP has not been implemented since that determination. In view of the time which has passed since the

determination, the Proponent is referring the Proposed Action to confirm that the proposed expansions to the Sino Iron Project remain 'Not a controlled action' under the EPBC Act.

2.2 Feasible Alternatives to taking the proposed action

No alternatives to taking the Proposed Action are available.

2.3 Alternative locations, time frames or activities that form part of the referred action

There are no alternative locations, time frames or activities that form part of the referred action.

2.4 Context, including any relevant planning framework and state/local government requirements

The Proposed Action is an expansion of the Existing Project which is approved under Part IV of the EP Act pursuant to MS635 and will utilise existing facilities in accordance with current management practices required by this approval.

Legislation applicable to the Proposed Action includes but is not limited to those presented in Table 1.

Table 1 Aspects of the Proposed Action and applicable legislation

Aspects of the Proposed Action	Type of approval	Legislation regulating this activity	Which State agency /entity regulates this activity?
Clearing of native vegetation	Part IV assessment	*Environmental Protection Act 1986 – Part IV*	Environmental Protection Authority (**EPA**)
Abstraction / Dewatering	Section 5C Licence to take groundwater Section 26D Licence to construct wells Part IV assessment Part V assessment	*RIWI Act 1914* *Environmental Protection Act 1986 – Part IV* *Environmental Protection Act 1986 – Part V*	Department of Water (**DoW**) EPA Department of Environmental Regulation (**DER**)
Mining and processing	Endorsement of additional Project Proposals under State Agreement	*Iron Ore Processing (Mineralogy Pty Ltd) Agreement Act 2002* as amended	Department of State Development (**DSD**)
Disturbance of Aboriginal Heritage sites	Cape Preston Project Deed (Indigenous Land Use Agreement) Section 18 authority to impact a site	*Aboriginal Heritage Act 1972*.	Department of Aboriginal Affairs (**DAA**)

On 1 January 2017 the WA Environmental Protection Authority (**EPA**) revised all relevant policies and guidance material. As the new guidance material did not change the surveys and investigation requirements the surveys and investigations reference the following key EPA policies and guidance:

- Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2012
- EPA Environmental Assessment Guideline No. 1 – Defining the Key Characteristics of a Proposal
- EPA Environmental Assessment Guideline No. 8 – Environmental Assessment Guidelines for Environmental factors and objectives
- EPA Environmental Assessment Guideline No. 13 – Consideration of environmental impacts from noise
- EPA Position Statement No. 2 – Environmental Protection of Native Vegetation in Western Australia
- EPA Position Statement No. 3 – Terrestrial Biological Surveys as an Element of Biodiversity Protection
- EPA Guidance Statement No. 3 – Separation Distances between Industrial and Sensitive Land Uses
- EPA Guidance Statement No. 6 – Rehabilitation of Terrestrial Ecosystems
- EPA Guidance Statement No. 20 – Sampling of Short Range Endemic Invertebrate Fauna for Environmental Impact Assessment in Western Australia.
- EPA Guidance Statement No. 51 – Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia
- EPA Guidance Statement No. 55 – Implementing best practice in proposals submitted to the environmental impact assessment process
- EPA Guidance Statement No. 56 – Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia

- EPA Position Statement 3 Terrestrial Biological Surveys as an Element of Biodiversity Protection
- Environmental Protection Bulletin No. 1 – Environmental Offsets – Biodiversity.

2.5 Environmental impact assessments under Commonwealth, state or territory legislation

The Proponent anticipates referral of the Proposed Action to the EPA under Part IV of the EP Act in January 2017.

2.6 Public consultation (including with Indigenous stakeholders)

As outlined within Sections 1.13 and 2.1 above, in 2009 Mineralogy referred the MEP Stages 3 – 5 (2009/5010) under the EPBC Act. The MEP encompassed an area of 21,516 ha. The EPBC Act referral of the MEP was advertised on the Department of the Environment and Energy (**DEE**) website on 21 July 2009. On 18 August 2009 the MEP was determined to be 'Not a controlled action' (Appendix C).

While referred by Mineralogy, the MEP consisted of three projects with three different co-proponents:

- Stage 3 – Extension of the Sino Iron Project
- Stage 4 – The Mineralogy Project
- Stage 5 – The Austeel Project.

The Proposed Action largely reflects Stage 3 of the of the MEP, i.e. the extension of the Existing Project.

At the State level the MEP was subject to a Public Environmental Review Process under the EP Act. The State's environmental assessment for the MEP was not concluded and has been placed on hold by the EPA. However, prior to being placed on hold the PER for the MEP had been prepared in accordance with an EPA endorsed Environmental Scoping Document and was subsequently approved by the EPA for release for a six week public comment period (5 October 2009 to 16 December 2009). During the preparation of the PER and public comment period substantial consultation was undertaken with government agencies and non-government organisations. The consultation involved 26 groups including:

- key government Ministers, agencies and regional branches;
- the Shire of Roebourne (Local Government Authority, now known as City of Karratha);
- non-government organisations that represent indigenous interests, conservation and recreation groups and industry bodies;
- community groups; and
- local business groups.

During preparation of the PER for the MEP the main issues raised by stakeholders related to:

- effects on vegetation and flora and fauna (including subterranean fauna and short-range endemics and faunal linkages);
- impacts on surface water and groundwater quality and quantity;
- effects on the marine environment including water quality and marine fauna
- air emissions (including dust);
- health issues related to water supply and use, and wastewater treatment; and
- Aboriginal heritage.

During the six week public comment period for the PER 11 submissions were received including eight from government, two from non-government organisations and one from a private individual. Key issues raised by stakeholders related to:

- requirements for secondary approvals by DMAs;
- provision of additional technical detail on the design of waste rock dumps and TSF to DMP;
- provision of groundwater dewatering information to DoW; and
- ongoing consultation regarding Aboriginal heritage values.

Indigenous Land Use Agreements (**ILUAs**) have been entered into with three Traditional Owner Groups, being the Yaburara & Mardudhunera People (YM), the Kuruma Marthudunera People (**KM**) and the Wong-Goo-Tt-Oo People (**WGTO**). Since these ILUAs were agreed:

- the native title claim made by WGTO was dismissed by the Federal Court of Australia and removed from the National Native Title Tribunal's register of Native Title Claims; and
- KM amended the boundaries of its native title claim so that its claim no longer overlaps with the area the subject of the Approved Proposals or this Proposal.

CPM is committed to ongoing consultation with Traditional Owners with respect to the ongoing operation and any expansion of its operations at Cape Preston. In this regard, over the past 10 years of the Existing Project's life CPM has undertaken substantial consultation with traditional owners with an interest in the land. This has included:

- More than 30 Relationship Committee meetings (approx. 3-4 per year); and
- More than 77 consultation meetings relating to heritage management and Section 18 applications.

As a part of ILUAs with Traditional Owners, CPM has an agreed Heritage Management Plan in place that is applicable to both the Existing Project and the Proposed Action. Prior to and during implementation of the Proposed Action CPM will undertake comprehensive consultation with its Traditional Owner Stakeholders in relation to management of heritage and other issues of concern.

2.7 A staged development or component of a larger action

The Proposed Action is an expansion of the Existing Project. It is also located within the Stage 3 – 5 areas of the MEP (2009/5010) which was determined to be 'Not a controlled action' under the EPBC Act on 18 August 2009.

2.8 Related actions

The Proposed Action is an expansion of the Existing Project that was assessed under the Western Australian EP Act under Public Environmental Review (PER) in December 2000. The Existing Project was approved under Part IV of the EP Act through the granting of MS635 in October 2003.

The Existing Project (previously known as Austeel/Mineralogy Project) was also assessed under the now repealed EPIP Act and given certification in terms of the ERCP Act in July 2002 as part of the transitional arrangements between the EPIP and EPBC Act (Appendix C).

The Proposed Action will involve disturbance of an additional 7,366 ha, potentially increasing the cumulative footprint (including the Existing Project) to 10,100 ha. The Proposed Action will involve extensions or alterations to Existing Project infrastructure (refer Figure 2), including:

- extension of the mine pit to the west within existing Mining Leases M08/123, M08/124 and M08/125 with an increase in depth from 220 metres (**m**) to 455 m;
- increase to tailings capacity within M08/264, M08/265 and M08/266 and onto additional tenements within Area A including G08/53, G08/63 and G08/74;
- increase to waste storage capacity within M08/266, M08/123, M08/124 and M08/125 (approved waste rock dumps) and onto additional tenements within Area A including G08/54 and G08/63;
- increase to capacity of existing product stockpiles and associated infrastructure at the Sino Iron Port Terminal Facility situated within G08/52 to three million tonne (**Mt**);
- construction of two new infrastructure corridors:
    - one of which will extend from the north-south road across tenements G08/53 and G08/74 to the airstrip (located outside of Area A), for the purposes of providing transport, power and water supply infrastructure to the airstrip; and
    - the other of which will extend from M08/123 and/or M08/124 across G08/63 (broadly adjacent to L08/20), to connect existing power and water supply facilities authorised by the Approved Proposals to facilities outside of Area A; and

The Proposed Action does not seek to alter the existing mining, processing and tailings production rates or increase throughput of the desalinisation plant. The Proposed Action is limited to addressing constraints which are contained within the Existing Project's approvals. The Proposed Action will ensure continuous operation of the Existing Project.

The Proposed Action is almost entirely within the Stage 3 portion of the Mineralogy Expansion Proposal (**MEP**) Stages 3- 5 (2009/5010), which was referred under the EPBC Act in 2009 (as shown in Figure 2). The MEP's reference to Stages 3- 5 relates to the three distinct projects contained within this plan (i.e. Stages 3, 4 and 5) each being developed by a different Proponent within the overall Cape Preston Iron Ore Project area.

The MEP encompassed an area of 21,516 ha. On 18 August 2009 the MEP was determined to be 'Not a Controlled Action'. The Proposed Action (7,366 ha) approximately represents Stage 3 of the larger MEP.

3 Description of environment & likely impacts

3.1 Matters of national environmental significance

3.1 (a) World Heritage Properties

Description

The **DEE** EPBC Act Protected Matters Search Tool (Appendix G) indicates that there are no World Heritage Properties present within three km of the Proposed Action area. The nearest World Heritage Property, the Ningaloo Coast, is approximately 200 km from the Proposed Action area.

Nature and extent of likely impact

N/A

3.1 (b) National Heritage Places

Description

The EPBC Act Protected Matters Search Tool (Appendix G) indicates that there are no National Heritage Places present within three km of the Proposed Action area. The nearest National Heritage Place, the Dampier Archipelago (including Burrup Peninsula), is approximately 42 km from the Proposed Action area.

Nature and extent of likely impact

N/A

3.1 (c) Wetlands of International Importance (declared Ramsar wetlands)

Description

The EPBC Act Protected Matters Search Tool (Appendix G) indicates that there are no Wetlands of International Importance (Declared Ramsar) present within three km of the Proposed Action area. The nearest Declared Ramsar wetland, Eighty-mile Beach, is approximately 380 km from the Proposed Action area.

Nature and extent of likely impact

N/A

3.1 (d) Listed threatened species and ecological communities

Description

Flora
The EPBC Act Protected Matters Search Tool (Attachment G) indicates that there is no Threatened Flora present within three km of the Proposed Action area.

A recent peer review of flora surveys completed within the Proposal area has confirmed that further biological surveys would be unlikely to identify any further species of flora with conservation significance (Mattiske 2016 – Appendix D).

Flora and vegetation assessments of the broader Cape Preston area, including the Proposed Action area were conducted in 2008 and 2009 (AECOM 2009, Astron 2009, Maunsell 2008). These included field assessments to:

- collect and identify the vascular plant species present
- search for Threatened Flora
- define and map the native vegetation types present and assess their condition.

No Threatened Flora was identified during these assessments therefore supporting the EPBC Act Protected Matters Search Tool results.

Ecological communities

The EPBC Act Protected Matters Search Tool (Attachment G) indicates that there are no Threatened Ecological Communities present within three km of the Proposed Action area.

Fauna

The Protected Matters Search Tool identified five listed Threatened migratory birds, four listed Threatened terrestrial mammals and one listed Threatened terrestrial reptile species as having the potential to occur within the Proposed Action area and three km buffer area (Attachment G).

Threatened fauna species that may potentially occur within the Proposed Action area are listed in **Error! Reference source not found.**.

Table 2 EPBC Act listed fauna species potentially occurring in the Proposed Action area.

Species Name	Common Name	EPBC Status
Birds		
Limosa lapponica menzbieri	Northern Siberian Bar-tailed Godwit	Critically Endangered
Pezoporus occidentalis	Night Parrot	Endangered
Sternula nereis nereis	Australian Fairy Tern	Vulnerable
Mammals		
Dasyurus hallucatus	Northern Quoll	Endangered
Macroderma gigas	Ghost Bat	Vulnerable
Macrotis lagotis	Greater Bilby	Vulnerable
Rhinonicteris aurantia (Pilbara form)	Pilbara Leaf-nosed Bat	Vulnerable
Reptiles		
Liasis olivaceus barroni	Olive Python (Pilbara subspecies)	Vulnerable

A search of the EPBC Act protected matters search tool also identified two listed threatened marine mammal species, seven listed threatened marine reptile species and five listed threatened shark species as having the potential to occur within three km of the Proposed Action area (i.e. within the Indian Ocean) (Attachment G). No significant impact is expected on any listed threatened marine fauna species as the Proposed Action does not include actions in the marine environment, therefore these species are not considered further.

Nature and extent of likely impact

Flora
As no Threatened Flora were identified within three km of the Proposed Action area no impact is predicted to any Threatened Flora.

Ecological communities
As no Threatened Ecological Communities were identified within three km of the Proposed Action area no impact is predicted to any Ecological communities.

Fauna

A review of fauna surveys (Ecoscpae 2016a) reports of the Proposed Action area was undertaken to:

- summarise the the fauna records identified in previous reports
- assess the adequacy of the reports against guidelines and for use in assessing the impact of the Proposed Action
- determine if there are any additional species of conservation significance likely to occur in the Proposed Action area.

Ecoscape (2016a) concluded the surveys followed appropriate guidelines for assessing impact. Ecoscape (2016a) recommended that a survey for Northern Quolls be undertaken but further biological surveys would be unlikely to identify any further species of fauna with conservation significance (Ecoscape 2016a – Appendix E).

A Northern Quoll reconnaissance survey (Ecoscape 2016b) and targeted survey (Ecoscape 2016c) were conducted in May and July 2016, respectively, in accordance with the EPBC Act Referral guideline for the endangered Northern Quoll, Dasyurus hallucatus (DotE 2016) after potential habitat for Northern Quolls was identified in a desktop survey.

A Level 2 fauna survey was conducted by Phoenix (2009) in September 2008 in accordance with EPA Guidance Statement No. 56. A Level 2 fauna survey requires two surveys, which are conducted in two different seasons. The survey carried out by Phoenix met the requirements of a Level 2 fauna survey by incorporating the initial survey data from HGM *et al.* (2001), which was carried out in April 2000. Additional shorebird surveys have been conducted by Bennelongia (2008) and Hassell (2002). No fauna species listed as Threatened under the EPBC Act (excluding Migratory species) were recorded during these surveys.

An assessment of the likelihood of occurrence of each of the fauna species identified in the EPBC Act Protected Matters Search Tool is presented in **Table 3**, based on the habitat present and fauna surveys undertaken within the Proposed Action area (Phoenix 2009, Ecoscape

Table 3 Likelihood of EPBC Act listed fauna species occurring within the Proposed Action area

Species	Habitat	Likelihood of occurrence	Justification
Limosa lapponica menzbieri (Northern Siberian Bar-tailed Godwit)	This species occurs along the coastline of Australia, within mangroves, beaches and estuarine mud flats.	Low	Species was recorded within the wider Cape Preston area (2002, 2008). The Proposed Action area includes a limited area of mangroves; however, this species was not recorded in the field surveys and therefore has a low likelihood of occurrence.
Pezoporus occidentalis (Night Parrot)	The distribution of the Night Parrot is very poorly understood. The Night Parrot inhabits arid and semi-arid areas that are characterised by having dense, low vegetation. Based on accepted records, the habitat of the Night Parrot consists of *Triodia* grasslands in stony or sandy environments, and of samphire and chenopod shrublands, on floodplains and claypans, and on the margins of saltlakes, creeks or other sources of water.	Unlikely	Species is unlikely to occur due to lack of suitable habitat within the Proposed Action area (spinifex grasslands) and this species has not been recorded in Western Australia since 1912.
Sternula nereis nereis (Australian Fairy Tern)	The Fairy Tern nests on sheltered sandy beaches, spits and banks above the high tide line and below vegetation. The subspecies has been found in embayments of a variety of habitats including offshore, estuarine or lacustrine (lake) islands, wetlands and mainland coastline.	Unlikely	Species is unlikely to occur due to lack of suitable habitat within the Proposed Action area. This species was not recorded in the field surveys.
Dasyurus hallucatus (Northern Quoll)	The Northern quoll occupies a diversity of habitats across its range which includes rocky areas, eucalypt forest and woodlands, rainforests, sandy lowlands and beaches, shrubland, grasslands and desert. Rocky habitats are usually of high relief, often rugged and dissected but can also include tor fields or caves in low lying areas such as in Western Australia. In the Pilbara region, the species tends to prefer the Rocklea, Macroy and Robe land systems comprising of basalt hills, mesas (and buttes of limonites), high and low plateaux, lower slopes, occasional tor fields and stony plains supporting either hard or soft spinifex grasslands (van Vreeswyk et al. 2004).	**Recorded** (within the Existing Project footprint but not within the Proposed Action area)	This species was observed in the 2016 reconnaissance field survey of the Existing Project (Ecoscape 2016b). The Proposed Action area contains habitat considered suitable for this species.
Macroderma gigas (Ghost Bat)	The current range of the Ghost Bat is discontinuous with geographically disjunct colonies distributed across northern tropical and subtropical coastal and inland regions. Ghost bats occur in a wide range of habitats from rainforest, monsoon and vine scrub, to open woodlands in arid areas. These habitats are used for foraging, while roost habitat is more specific. Favoured roosting sites are undisturbed caves or mineshafts which have several openings.	Unlikely	Species is unlikely to occur due to lack of suitable habitat such as undisturbed caves within the Proposed Action area. This species was not recorded during field surveys.

Macrotis lagotis (Greater Bilby)	Extant population of the Greater Bilby occur in semi-arid and arid Australia, in a variety of habitats, usually on landforms with level to low slope topography and light to medium soils. It occupies three major vegetation types; open tussock grassland on uplands and hills, mulga woodland/shrubland growing on ridges and rises, and hummock grassland in plains and alluvial areas.	Unlikely	Species is unlikely to occur due to lack of suitable habitat within the Proposed Action area. This species was not recorded during field surveys.
Rhinonicteris aurantius (Pilbara form) (Pilbara Leaf-nosed Bat)	This species' range stretches from the Pilbara region of Western Australia to Camoweal in Queensland. Colonies of the Pilbara Leaf-nosed Bat are found in three distinct areas: in the mines of the eastern Pilbara; scattered throughout the Hamersley Range in smaller colonies; and in sandstone formations south of the Hamersley Range in a small number of significant colonies. This species is restricted to caves and mine adits (horizontal shafts) with stable, warm and humid microclimates.	Unlikely	While the area may contain foraging habitat the Species is unlikely to roost in the Proposed Action area due to lack of suitable habitat such as warm and humid caves. This species was not recorded during field surveys.
Liasis olivaceus barroni (Pilbara Olive Python)	This species is restricted to ranges within the Pilbara region, north-western Western Australia, such as the Hamersley Range, and islands of the Dampier Archipelago. This species prefers escarpments, gorges and water holes in the ranges of the Pilbara region.	Unlikely	Species is unlikely to occur in the Proposed Action area due to the lack of a permanent water source. This species was not recorded during a targeted search.

Assessment of impact on Northern Quolls

Northern Quoll reconnaissance survey

A Northern Quoll reconnaissance survey (Ecoscape 2016b) was conducted in May 2016 in accordance with the *EPBC Act Referral guideline for the endangered Northern Quoll;* Dasyurus hallucatus (DotE 2016) after potential habitat for Northern Quolls was identified in a desktop survey using the EPBC Act Protected Matters Search Tool.

In accordance with the *EPBC Act Referral guideline for the endangered Northern Quoll,* Dasyurus hallucatus (DotE 2016), scat searches were also carried out and motion cameras (60 total) were installed in a variety of potential Northern Quoll habitat (denning, foraging, dispersal) which included boulder piles in the mine and port areas (Ecoscape 2016b). All motion cameras were baited with non-food reward lures (burley oil soaked cloth ropes) and remained in the field for a minimum of 19 nights.

The motion cameras within the potential habitat recorded Northern Quolls at four locations within the port area within man-made structures. No Northern Quolls were recorded in the Mine area. All four recorded locations at the Port area were outside the Proposal footprint. Two recordings were along the breakwater and two recordings were in a water seep south of the breakwater and may be associated with denning habitat (Ecoscape 2016b).

The Northern Quoll reconnaissance survey identified a total of 49.75 ha of potential habitat within the Proposed Action area, including 49.65 ha within the Mine area and 0.12 ha within the Port area (Figure 4). Northern Quoll habitat included rugged, rocky areas (boulder piles) and creek lines within the Proposed Action area (Ecoscape 2016b). In the mine area there was no evidence of the presence of Northern Quoll and no records from site personnel. The proposed Mine area was therefore assessed as not containing a population of Northern Quolls.

Based on the results of the reconnaissance survey, a targeted survey was conducted within the Port area in July 2016 (Ecoscape 2016c).

Northern Quoll targeted survey

The targeted survey of the Port area for Northern Quolls was completed with methodology following the EPBC Act Referral guideline for the Northern Quoll, *Dasyurus hallucatus* (DotE 2016). The results of the reconnaissance survey were used to set the design parameters for the targeted survey. The targeted survey was focussed on the Port area including non-impacted areas on Cape Preston.

Trap sites were established at seven locations based on the outcomes from the reconnaissance survey (identification of suitable habitat and recorded Northern Quolls). A total of 80 cage traps and large Elliott box traps were established across seven areas of suitable and critical habitat and left in place for seven consecutive nights (between 18 and 26 July 2016). Each trap was baited using a bolus of rolled oats, peanut butter and sardines (as outlined in the EPBC Act Referral guideline) with the bait refreshed every second day. All traps were checked daily within two hours of sunrise and all captured Northern Quoll processed to determine weight, short pes length, caudal width, head length, sex, and reproductive condition. All captured Northern Quoll were also injected with a PIT microchip for identification of recaptures and a small ear notch taken for future DNA analysis by research institutions (Ecoscape 2016c).

During the targeted survey, three male Northern Quolls were captured on several occasions (Ecoscape 2016c). All captures were located on the northern end of the breakwater (outside the Proposed Action area). Despite the relatively intensive trapping effort, no females were recorded from the site; however, they are considered likely to reside in close proximity to the Existing Project. Males are likely to travel to the Port area for foraging and dispersal since males are known to have extensive roaming

behaviour. Attributes such as shelter, high humidity, and abundance of food resources (black rats, house mice, crabs etc.) are a likely driving factor for Northern Quolls to utilise this area (Ecoscape 2016c).

Based on habitat mapping and the density and location of records, the northern section of the port infrastructure contains a small amount of critical habitat (both natural and artificial) for the species which is likely to be utilised as foraging ground due to the proximity to the breakwater (Ecoscape 2016c).

Summary of habitat use by Northern Quolls within the Existing Project area

Based on results from the targeted trapping and reconnaissance survey, a permanent Northern Quoll population persists within the Existing Project at Cape Preston. The port area was determined to contain critical populations as high density populations were recorded and there are areas of refuge rich habitat (0.12 ha man-made rock piles) located adjacent to the Proposed Action area. Northern Quoll appear to have colonised the breakwater and surrounding areas soon after the construction of the Port facility and associated breakwater in 2009-2010, with sightings by site staff first reported in 2010. The implications to environmental impact assessments of Northern Quoll colonising man-made habitat is currently not well understood (Ecoscape 2016c).

Northern Quolls were not found to use the potential habitat within the Proposed Action area during the reconnaissance and targeted surveys (Ecoscape 201b, 2016c).

Assessment of potential impact to Northern Quoll

The increase in the footprint at the port does not occur in any area of Northern Quoll habitat and the majority of the Proposed Action area is not considered to be suitable Northern Quoll habitat as it consists of low open shrubland over low spinifex on flat plains.

Northern Quolls have only been recorded in the area since the Existing Project was constructed. The artificial habitat utilised by Northern Quoll is outside the Proposed Action area therefore no direct impacts of the Proposed Action are expected. On this basis, it is unlikely that the Proposed Action will affect the population of Northern Quolls that occur in the area.

3.1 (e) Listed migratory species

Description

A total of 28 listed migratory species were identified using the Protected Matters Search Tool as having the potential to occur within the vicinity of the Proposed Action and three km buffer area (Appendix G). Of the 28 listed migratory species, two are migratory marine birds, three are migratory terrestrial species, 18 are migratory marine species (turtles, manta rays and sharks) and five are migratory wetland species (Appendix G). No significant impact is expected on any listed migratory marine species or migratory wetland species due to the Proposed Action and these species are not considered further. An assessment of the likelihood of occurrence of the remaining listed migratory species (marine birds and terrestrial species) identified by the Protected Matters Search Tool is presented in **Table 4**.

Table 4 Listed migratory species identified in a protected matters search of the Proposed Action area

Species Name	Habitat	Likelihood of occurrence	Comment
Migratory Marine Birds			
Apus pacificus (Fork-tailed Swift)	The Fork-tailed Swift is almost exclusively aerial, flying from less than 1 m to at least 300 m above ground and probably much higher. This species is largely independent of terrestrial habitats.	Unlikely	This species has not been recorded within three km of the Proposed Action area therefore this species is considered unlikely to occur within the Proposed Action area.
Macronectes giganteus (Southern Giant-Petrel)	This species is a marine bird that occurs in Antarctic to subtropical waters. In summer, it mainly occurs over Antarctic waters, and it is widespread south as far as the pack-ice and onto the Antarctic continent.	Unlikely	Species is unlikely to occur in the Proposed Action area as it only rarely occurs this far north. This species was not recorded during field surveys.
Migratory Terrestrial Species			
Hirundo rustica (Barn Swallow)	The Barn Swallow has a large range and is recorded in open country in coastal lowlands, often near water, towns and cities. Birds are often sighted perched on overhead wires and also in or over freshwater wetlands, paperbark *Melaleuca* woodland, mesophyll shrub thickets and tussock grassland.	Unlikely	The species is found over a large range and is unlikely to be a regular visitor.
Motacilla cinerea (Grey Wagtail)	The Grey Wagtail has a large range with several well marked populations. This species prefers habitat near streams and rivers along embankments.	Unlikely	The species is found over a large range and is unlikely to be a regular visitor.
Motacilla flava (Yellow Wagtail)	The Yellow Wagtail has an extremely large range. This species prefers habitat near streams and rivers along embankments.	Unlikely	The species is found over a large range and is unlikely to be a regular visitor.

Twenty-one species listed as Migratory under the EPBC Act have been recorded in the Cape Preston Area, all of these were Marine shorebirds (Hassell 2002, Bennelongia 2008a, Ecoscape 2016a), and are therefore considered unlikely to occur within the Proposed Action area. Species recorded within the Cape Preston area during fauna surveys (2000-2016) are presented in **Table 5**.

Table 5 Listed migratory species recorded in the Cape Preston area

Species	Conservation status
Actitis hypoleucos (Common Sandpiper)	Marine, Migratory
Arenaria interpres (Ruddy Turnstone)	Marine, Migratory
Calidris alba (Sanderling)	Marine, Migratory
Calidris ferruginea (Curlew Sandpiper)	Critically Endangered, Marine, Migratory
Calidris ruficollis (Red-necked Stint)	Marine, Migratory
Calidris tenuirostris (Great Knot)	Critically Endangered, Marine, Migratory
Charadrius leschenaultii (Greater Sand Plover)	Vulnerable, Marine, Migratory
Charadrius mongolus (Lesser Sand Plover)	Endangered, Marine, Migratory
Charadrius veredus (Oriental Plover)	Marine, Migratory
Heteroscelus brevipes (Grey-tailed Tattler)	Marine, Migratory
Limosa lapponica (Bar-tailed Godwit)	Marine, Migratory
Macronectes giganteus (Southern Giant Petrel)	Endangered, Marine, Migratory
Numenius madagascariensis (Eastern Curlew)	Critically Endangered, Marine, Migratory
Numenius phaeopus (Whimbrel)	Marine, Migratory

Pandion haliaetus (Osprey)	Marine, Migratory
Pluvialis squatarola (Grey Plover)	Marine, Migratory
Sterna anaethetus (Bridled Tern)	Marine, Migratory
Sterna caspia (Caspian Tern)	Marine, Migratory
Tringa nebularia (Common Greenshank)	Marine, Migratory
Tringa stagnatilis (Marsh Sandpiper)	Marine, Migratory
Xenus cinereus (Terek Sandpiper)	Marine, Migratory

Nature and extent of likely impact

There were no listed migratory species from the Protected Matters Search Tool likely to be present within the Proposed Action area. The migratory species recorded during surveys within the Cape Preston area are predominantly shorebirds and likely to occur outside of the Proposed Action area. A recent review of fauna surveys completed within the Proposal area has confirmed that further biological surveys would be unlikely to identify any further species of fauna with conservation significance (Ecoscape, 2016a – Appendix E). Therefore, no significant impact is expected on any listed migratory species due to the Proposed Action.

3.1 (f) Commonwealth marine area
(If the action is in the Commonwealth marine area, please complete 3.2(c) instead. This section is for actions taken outside the Commonwealth marine area that may have impacts on that area.)

Description
The EPBC Protected Matters Search Tool (Appendix G) indicates that there are no Commonwealth marine areas present within three km of the Proposed Action area.

Nature and extent of likely impact

N/A

3.1 (g) Commonwealth land
(If the action is on Commonwealth land, please complete 3.2(d) instead. This section is for actions taken outside Commonwealth land that may have impacts on that land).

Description
The Proposed Action will not be taken on, or adjacent to, Commonwealth land.

Nature and extent of likely impact

N/A

3.1 (h) The Great Barrier Reef Marine Park

Description
The Proposed Action is not located within or nearby the Great Barrier Reef Marine Park.

Nature and extent of likely impact

N/A

3.1 (i) A water resource, in relation to coal seam gas development or large coal mining development

Description
The Proposed Action will not impact upon a water resource in relation to coal seam gas development.

Nature and extent of likely impact

N/A

3.2 Nuclear actions, actions taken by the Commonwealth (or Commonwealth agency), actions taken in a Commonwealth marine area, actions taken on Commonwealth land, or actions taken in the Great Barrier Reef Marine Park

3.2 (a)	**Is the proposed action a nuclear action?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment		

3.2 (b)	**Is the proposed action to be taken by the Commonwealth or a Commonwealth agency?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment		

3.2 (c)	**Is the proposed action to be taken in a Commonwealth marine area?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(f))		

3.2 (d)	**Is the proposed action to be taken on Commonwealth land?**	X	No
			Yes (provide details below)
	If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(g))		

3.2 (e)	**Is the proposed action to be taken in the Great Barrier Reef Marine Park?**	X	No
			Yes (provide details below)

If yes, nature & extent of likely impact on the whole environment (in addition to 3.1(h))

3.3 Description of the project area and affected area for the proposed action

3.3 (a) Flora and fauna

Flora

Within the entire surveyed area of Cape Preston, a total of 639 vascular flora taxa from 73 families have been recorded. This total includes 614 (96%) native species and 25 (4%) introduced (weed) or non-endemic species. Families with the highest representation were Poaceae (Grass family – 81 native taxa; 5 introduced taxa); Papilionaceae (Pea family – 57 native taxa); and the Malvaceae (Mallow Family – 59 native taxa, 2 introduced taxa). No vegetation communities or flora species identified within the Proposed Action area are listed as threatened under the *Wildlife Conservation Act 1950*, or as Threatened under the EPBC Act; however, four Priority flora species have been recorded within the Cape Preston area.

In comparison to other bioregions of Western Australia, flora species richness is generally poor in the Pilbara and the diversity of the Proposed Action area was found to be relatively low. The Proposed Action area is within an active pastoral station that has historically been adversely affected by weed invasion and grazing by stock. The majority of riparian vegetation in the area is invaded by Buffel Grass and many areas contain invasions of mesquite *(Prosopis pallida*) and Native Thornapple (*Datura leichhardtii*) which are Declared Plants by the Department of Agriculture, pursuant to the *Agriculture and Related Resources Protection Act 1976* (Maunsell 2008). Figure 5 provides a description of the extent and density of mesquite within and surrounding the area of the Proposed Action (data source: van Klinken *et al*, 2007).

Fauna

The Cape Preston area contains broad terrestrial habitat types including cracking clays, dunes, hilltop/hill slopes/rocky outcrops, mangrove/beach, samphire, stony spinifex plain with or without low shrub and woodland drainage areas (Phoenix 2008). The majority of habitat within the Proposed Action area is of low conservation significance consisting of low open shrubland over low spinifex on flat plains.

Fauna habitat along ridgelines and the Edward and Du Boulay Creeks are corridors of particular habitat types and are considered to be fauna linkages. Whilst no Threatened or Priority fauna species are dependent on the area around the creeks for movement or dispersal it is possible that this habitat is important for other species (Phoenix 2009).

Baseline fauna studies of the broader Cape Preston area recorded three species listed under the EPBC Act as Critically Endangered, Marine and Migratory (Curlew Sandpiper, Great Knot and Eastern Curlew), one species listed as Endangered, Marine and Migratory (Lesser Sand Plover) and one species listed as Vulnerable, Marine and Migratory (Greater Sand Plover) outside of the Proposed Action area. The conservation significant species that were recorded occur over a number of habitat types or occur in habitats that are widespread in the region. None of the habitat types present in the Proposed Action area is unique to the locality or regionally significant.

3.3 (b) Hydrology, including water flows

The Fortescue River is the major watercourse in the area and is adjacent to the Proposed Action area with an effective catchment area of 20,000 km^2. Edward Creek and Du Boulay Creek are minor tributaries of the Fortescue River and run between mining areas and waste rock landforms of the Proposed Action to the Fortescue River. The Edward and Du Boulay creeks have catchment areas of approximately 64 km^2 and 200 km^2 respectively and flow generally north-west before discharging into the Fortescue River. The Du Boulay Creek flows at an extremely flat grade on the Fortescue floodplain towards an anabranch of the Fortescue River. Flood flows spread out across the Fortescue floodplain and flood depths are shallow.

The Proposed Action is within an area of Proterozoic basement rocks (including the orebody) with low permeability and brackish groundwater. The Proposed Action will also intersect the very edge of the Fortescue alluvium associated with the Fortescue River and its large floodplain to the west of the main channel. The Fortescue alluvium is highly permeable and fresh.

The dewatering discharge location is within the lower Fortescue River estuary, a tide dominated delta which experiences strong tidal influence (spring tidal range at approximately 3.6 m) extending approximately four km inland. At the mouth of the Fortescue River, the river channel is in excess of 200 m wide forming an estuarine setting of salt marsh and intertidal flats. Upstream of the estuary the Fortescue River has a well-defined main flow channel, typically four m to six m deep and about 100 m wide. The combination of a wide well defined channel and high tidal range provides high velocities in the river mouth and the current speed in the Fortescue River frequently exceeds 0.1 m/s. The strong tidal influence of the estuary has a low sediment trapping efficiency; naturally high turbidity with well mixed circulation.

In addition to the strong tidal flows the river mouth also experiences a very high rate of flushing from the discharge of water during the wet season. At the Department of Water Bilanoo gauging station (approximately 35 km upstream) the mean long-term discharge of the river is 305 GLpa and on average more than 90% occurs between the summer wet season from January and April (DoW 2015).

3.3 (c) Soil and Vegetation characteristics

The Proposed Action area falls within the Brockman Iron Formation, a Precambrian banded iron formation and to a lesser extent the underlying Mount McRae Shale – Mount Sylvia Formation. The Brockman Iron formation is made up of banded iron formation, cherts, shales and breccias. Over the eastern ridge of the formation lies a thin veneer of Quaternary aged alluvial, colluvial and residual soils that overlies the basement rocks, with creek bed alluvium along drainage courses.

The Proposed Action area is situated within the Roebourne subregion and Fortescue Botanical District of the Pilbara Biogeographic Region of Interim Biogeographic Regionalisation for Australia (IBRA). The Roebourne subregion has been broadly described as: Quaternary alluvial and older colluvial coastal and sub-coastal plains with a grass savannah of mixed bunch and hummock grasses and a dwarf shrub steppe of *Acacia stellaticeps* or *Acacia pyrifolia* and *Acacia* (Kendrick and Stanley 2001). The coastal plains are punctuated by resistant linear ranges of basalt, which support *Triodia* (Spinifex) hummock grasslands with very sparse shrubs. Ephemeral drainage lines support *Eucalyptus* woodlands, while marine alluvial flats and river deltas are characterised by halophytic species and mangroves.

A collective total of 95 distinct vegetation communities have been described and mapped within the Cape Preston area using consistent mapping units based on the original Mineralogy vegetation and flora mapping at Cape Preston (HGM et al 2001). These communities include hummock and tussock grasslands, annual herblands on cracking clays, *Acacia* shrublands over hummock grasslands, tall *Acacia* shrublands and low *Corymbia* woodlands over *Acacia* shrublands. A total of 17 vegetation communities fall within the Proposed Action area (Table 6).

The majority of the Proposed Action area contains vegetation communities of moderate local conservation significance. The Proposed Action area contains a number of vegetation communities of elevated (high) local conservation significance including dune vegetation types, creek lines and floodplains associated with the Peedamurra land system and creek lines associated with the Rocklea land system. Current levels of cumulative impacts to vegetation cover approximately 2734 ha (current project footprint), less than 30% of the pre-clearing extent, as per the EPA guidelines.

Table 6: Vegetation communities within the Proposed Action area.

Vegetation community	Landform	Conservation significance
Hp, Hp1, Hpg1, Hpg2, Hpg3, Hps1	Clayey plains	Moderate to High
Ls1, Ls2, Ls3a	Tidal mudflats	Moderate
Ld1, Ld2, Ld3, Ld4, Ld5	Dunes	High
Mp1	Plains	Moderate
Nh, Nh1, Nh2, Nh3,Nh4, Nh5	Low Hills and slopes	Moderate
Nc, Nc1, Nc2, Nc3, Nc4	Minor flowlines	Moderate to High
Px1, Px2, Px3, Px4, Px5	Plains	Moderate
Pp1, Pp2. Pp3, Pp4	Plains	Moderate
Pc, Pc1, Pc2, Pc3, Pc4, Pf1, Pf2, Pf3	Creek lines and Floodplains	High
Rc1, Rc2, Rc3, Rc4	Creek lines	High
Rf1, Rf2, Rf3	Floodplains	Moderate
Roh1, Roh1a, Roh1b, Roh2, Roh2a, Roh2b, Roh2c, Roh3a	Low hills and slopes	Low to Moderate
Ropl, Rox1, Rop1	Plains	Low to Moderate
Roc1, Roc2, Roc3, Roc4, Roc5, Roc6, Roc7, Roc8	Minor flowlines	Moderate
Ror, Ror2, Ror1, Ror3	Rock piles	Low to Moderate
Yp1	Plains	Low to Moderate

Vegetation community	Landform	Conservation significance
Mf1	Not defined	Not defined

3.3 (d) Outstanding natural features

There are no outstanding features in the vicinity of the Proposed Action.

3.3 (e) Remnant native vegetation

Vegetation condition within the Proposed Action area ranges from Completely Degraded to Very Good (Maunsell 2008, Aecom 2009, Astron 2009) using the Keighery (1994) Bushland Condition Scale. Cleared and Completely Degraded vegetation is associated with pastoral grasses and heavily degraded areas as a result of the current Mardie Station cattle operations and infrastructure.

3.3 (f) Gradient (or depth range if action is to be taken in a marine area)

The Proposed Action area has varying gradients including low hills and slopes, ridges and flats.

3.3 (g) Current state of the environment

Flora

In comparison to other bioregions of Western Australia, flora species richness is generally poor in the Pilbara and the diversity of the Proposed Action area was found to be relatively low. The Proposed Action area is within an active pastoral station that has been operating since the late 1890s and that has been adversely affected by significant weed invasion and grazing by stock. The majority of riparian vegetation in the area is invaded by mesquite *(Prosopis pallida*) and Parkinsonia which are Declared Plants by the Department of Agriculture, pursuant to the *Agriculture and Related Resources Protection Act 1976* (Maunsell 2008) as well as Weeds of National Significance. Figure 5 provides a description of the extent and density of mesquite within and surrounding the area of the Proposed Action. Buffel grass is also common throughout the pastoral lease.

Fauna

Three species of introduced fauna were recorded in the Proposed Action area; cat (*Felis catus*), rat (*Rattus rattus*) and mouse (*Mus Map musculus*), and an additional two introduced fauna species were observed in the Existing Project area; sheep (*Ovis aries)* and fox (*Vulpes vulpes*), which is consistent with the use of the area for a pastoral station. Pest animal management is undertaken including baiting.

3.3 (h) Commonwealth Heritage Places or other places recognised as having heritage values

There are no Commonwealth Heritage Places or sites listed on State Register of Heritage Places (SHC 2016).

3.3 (i) Indigenous heritage values

As outlined within Section 2.6 above, as a part of ILUAs with Traditional Owners, CPM has an agreed Heritage Management Plan in place that is applicable to both the Existing Project and the Proposed Action. Prior to and during implementation of the Proposed Action CPM will complete heritage surveys and consult with its Traditional Owner Stakeholders in relation to the management of heritage.

CPM has conducted 32 heritage surveys of the Existing Project, with each program tailored to a particular heritage circumstance. Aboriginal archaeological surveys have been conducted with representatives from local Aboriginal groups to identify Aboriginal archaeological sites, places and items. Anthropological consultations and surveys have also taken place to record anthological significance of mythological sites, traditional land use activities and known archaeological sites by senior Aboriginal elders (17 surveys). Local Aboriginal people have been engaged for ground disturbance monitoring, whereby all initial earthmoving works are checked for subsurface Aboriginal material. Archaeological salvage has taken place with the relevant Aboriginal groups under the conditions of the *Aboriginal Heritage Act 1972*. Known heritage sites have been clearly demarcated to provide protection during site works.

Proposed heritage management for the remainder of the project will be informed by consultation with the local Aboriginal groups, the Commonwealth 'Ask First' guidelines and CPM's heritage management process. CPM's management of heritage will also comply with requirements set out within existing ILUAs and their respective Heritage Management Agreements/Plans.

It is anticipated that items of heritage value will be found within areas not yet surveyed within the Proposed Action area. Any heritage identified through future survey work is expected to be similar to heritage that has been found under the Existing Project footprint. Prior to implementing the Proposed Action, CPM will undertake heritage surveys and consultations with traditional owners with respect to managing any heritage values that may be found. Should any heritage material be potentially impacted by the Proposed Action CPM will apply for necessary authorisations under the *Aboriginal Heritage Act 1972*.

3.3 (j) Other important or unique values of the environment

No other important or unique environmental values have been identified.

3.3 (k) Tenure of the action area (e.g. freehold, leasehold)

The Proposed Action is located within the Mardie Station Pastoral Lease (approximately 225 000 ha), which is operated by the Proponent as a cattle station outside the approved mining areas. Mining tenements are shown in Figure 2.

3.3 (l) Existing uses of area of proposed action

Existing land uses include the Mardie Station and the current project. The Mardie Station Pastoral Lease is operated by PMPL as a cattle station outside the approved mining areas. The current project operated by the Proponent involves but is not limited to:

- mining and crushing of ore and associated dewatering and waste rock disposal
- construction and operation of ore processing plant
- construction and operation of infrastructure in previously constructed service corridors
- construction and operation of a power station, concentrators, desalination plant, stockyards, workforce accommodation, roads, conveyors, pipelines, site drainage structures, flood protection and waste disposal facilities.

The Proposed Action will use and also expand upon the Existing Project's infrastructure.

3.3 (m) Any proposed uses of area of proposed action

Beyond the Proposed Action described in this referral, there are no other known proposed land uses within the Proposed Action area.

4 Environmental outcomes

The Proposed Action will result in the clearing of up to 7,366 ha of native vegetation, of which only a small amount (49.75 ha) is considered moderate to low quality potential Northern Quoll habitat (including denning, foraging and dispersal) (Ecoscape 2016b). A reconnaissance survey recorded Northern Quolls on the breakwater within the Existing Project footprint. The Proposed Action will not affect the critical (constructed) Northern Quoll habitat within the port area as this is located outside the Proposed Action footprint. The mine area of the Proposed Action is not considered to contain critical populations of the Northern Quoll, therefore potential impacts to current populations are not expected and the Northern Quoll conservation status is unlikely to be affected as a result of the Proposed Action.

5 Measures to avoid or reduce impacts

The Proponent will continue to implement environmental management measures designed to address potential environmental impacts associated with proposed clearing activities undertaken as part of the Proposed Action. Key environmental management measures include:

- clearing to stay within approved footprint by clearly delineated clearing footprint boundaries
- land clearing to take place in stages to allow for local migration of fauna into adjacent areas
- appropriate speed limits to be enforced to minimise fauna vehicle interactions
- conduct risk assessment prior to clearing to identify high risk areas, including where Northern Quoll species and habitat have been identified and potential impacts are likely in accordance with CPM's Risk Assessment framework (this is to include major project activities within known artificial habitats such as the breakwater)
- include fauna and environmental awareness training into site induction materials. This material will inform the workforce of the significant fauna present and will describe behaviours necessary to prevent direct and inadvertent feeding of feral animals.
- continue with feral animal control (1080 baiting) outside Northern Quoll habitat and outside the time of breeding and emergence of their young.
- inspections of potential habitat for Northern Quoll prior to clearing.

These measures are contained within a Northern Quoll Management Plan (Appendix F).

6 Conclusion on the likelihood of significant impacts

Identify whether or not you believe the action is a controlled action (i.e. whether you think that significant impacts on the matters protected under Part 3 of the EPBC Act are likely) and the reasons why.

6.1 Do you THINK your proposed action is a controlled action?

X	No, complete section 5.2
	Yes, complete section 5.3

6.2 Proposed action IS NOT a controlled action.

The Proposed Action largely reflects Stage 3 of the MEP (2009/5010), which was referred by Mineralogy on behalf of three proponents (i.e. Stages 3-5 each had a different proponent) in 2009 and determined not to be a controlled action.

The Proposed Action includes clearing of up to 7,366 ha of native vegetation containing approximately 49.75 ha of moderate to low quality potential Northern Quoll habitat, of which only 0.12 ha is likely to be used by Northern Quolls. Northern Quolls have been recorded outside the Proposed Action area on the breakwater within the Existing Project footprint.

On this basis the Proposed Action is considered not likely to have a significant impact on Northern Quolls for the following key reasons:

- Northern Quolls were not found to utilise the potential habitat within the Proposed Action area during the reconnaissance and targeted surveys conducted by Ecoscape (2016b and c)
- the majority of the Proposed Action area is not considered to be suitable Northern Quoll habitat as it consists of low open shrubland over low spinifiex on flat plains.

The predicted environmental impact resulting from the Proposed Action is not expected to be significant at a national, regional or local scale and can be adequately managed through implementation of environmental management measures and the Northern Quoll Management Plan (Appendix F).

The Proposed Action is therefore not considered likely to have a significant impact on the Northern Quoll or other matters of national environmental significance and therefore is not a controlled action.

6.3 Proposed action IS a controlled action

	Matters likely to be significantly impacted
	World Heritage values (sections 12 and 15A)
	National Heritage places (sections 15B and 15C)
	Wetlands of international importance (sections 16 and 17B)
	Listed threatened species and communities (sections 18 and 18A)
	Listed migratory species (sections 20 and 20A)
	Protection of the environment from nuclear actions (sections 21 and 22A)
	Commonwealth marine environment (sections 23 and 24A)
	Great Barrier Reef Marine Park (sections 24B and 24C)
	A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)
	Protection of the environment from actions involving Commonwealth land (sections 26 and 27A)
	Protection of the environment from Commonwealth actions (section 28)
	Commonwealth Heritage places overseas (sections 27B and 27C)

7 Environmental record of the person proposing to take the action

		Yes	No
7.1	**Does the party taking the action have a satisfactory record of responsible environmental management?** **Provide details** The Proponent has not been subject to any adverse findings or prosecuted for instances of environmental harm.	X	
7.2	**Provide 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:** **(a) the person proposing to take the action, or** **(b) if a permit has been applied for in relation to the action - the person making the application.** **If yes, provide details**		X
7.3	**If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework and if and how the framework applies to the action.**	X	
7.4	**Has the party taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?** **Provide name of proposal and EPBC reference number (if known)** The Proposed Action was included in the Mineralogy Expansion Proposal Stage 3 – 5 (2009/5010)	X	

8 Information sources and attachments

(For the information provided above)

8.1 References

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Astron Environmental Services (Astron) 2009, *Mineralogy Expansion Proposal, Desktop Vegetation and Flora Study*, report prepared for Mineralogy, July 2009.

Bennelongia Pty Ltd (Bennelongia) 2008a, *Report on Shorebird Numbers and Shorebird Values at Cape Preston*, prepared for Citic Pacific Mining, December 2008.

Department of Aboriginal Affairs (DAA) 2016, Aboriginal Heritage Inquiry System [Online], Department of Aboriginal Affairs < http://maps.dia.wa.gov.au/AHIS2/> [12 April 2016].

Department of the Environment and Energy (DotE 2016) EPBC Act Referral guideline for the endangered Northern Quoll, *Dasyurus hallucatus*, [Online], Australian Government, available from: *http://www.environment.gov.au/system/files/resources/d7e011a7-bf59-40ed-9387-9afcb8d590f8/files/referral-guideline-northern-quoll.pdf* [20 April 2016].

Ecoscape 2016a,

Ecoscape 2016b, *Cape Preston Northern Quoll Reconnaissance Survey*, prepared for Citic Pacific Mining Management, December 2016.

Ecoscape 2016c, *Cape Preston Northern Quoll Targeted Survey*, prepared for Citic Pacific Mining Management, December 2016.

Halpern Glick Maunsell (HGM) with Biota Environmental Sciences and M.E. Trudgen & Associates 2001, *Austeel Biological Survey Phase I*, February 2001.

Keighery B 1994, *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*, Wildflower Society, Floreat.

Mattiske Consulting Pty Ltd (Mattiske) 2016, Review of Flora and Vegetation Reports for the Mineralogy project at Cape Preston, report prepared for Strategen, Subiaco.

Maunsell Australia Pty Ltd (Maunsell) 2008, *Cape Preston Mining Estate Consolidated Vegetation, Flora and Fauna Assessment*, report prepared for International Minerals.

O'Connor, R. 2001. Report on an ethnographic survey of the proposed Cape Preston Iron Ore Mine and treatment plant. Report prepared for Austeel Pty Ltd.

Phoenix 2009, Fauna Survey Cape Preston Iron Ore Precinct, prepared for Mineralogy Pty Ltd, Northbridge, WA.

Quartermaine Consultants 2001, *Report on an archaeological survey for Aboriginal sites*, Cape Preston, Western Australia. Report prepared for Halpern Glick Maunsell.

Rieks D. van Klinken, Damian Shepherd, Rob Parr, Todd P. Robinson, and Linda Anderson. 2007. *Mapping Mesquite (Prosopis) Distribution and Density Using Visual Aerial Surveys*, Rangeland Ecology & Management 60:408–416, July 2007.

8.2 Reliability and date of information

Information regarding the presence of Matters of National Environmental Significance was obtained through an EPBC Act Protected Matters Search of the Proposed Action area, conducted in July 2016. This is in addition to a Level 1 flora and vegetation and Level 2 fauna assessment conducted in 2008 and a Northern Quoll reconnaissance survey conducted in May 2016 (Ecoscape 2016b) comprising surveys conducted across the Proposed Action area and current project area. A Northern Quoll Targeted Survey was conducted in July 2016 (Ecoscape 2016c) of the Port Area.

A recent review of flora and fauna surveys completed within the area of the Proposed Action has confirmed that further biological surveys would be unlikely to identify any further species of flora and fauna with conservation significance (Mattiske 2016 (Appendix D) and Ecoscape 2016a, b and c (Appendix E)).

For information in section 3 and the map required by section 1, specify:

- source of the information;
- how recent the information is;
- how the reliability of the information was tested; and
- any uncertainties in the information.

8.3 Attachments

Indicate the documents you have attached. All attachments must be less than three megabytes (3mb) so they can be published on the Department's website. Attachments larger than three megabytes (3mb) may delay the processing of your referral.

		✓ attached	Title of attachment(s)
You must attach	figures, maps or aerial photographs showing the locality of the proposed action (section 1)	✓	Figure 1: Regional location Figure 2: The Proposed Action Figure 3: Comparison with MEP Figure 4: Northern Quoll habitat within the Survey area (Map 4 of the Ecoscape Targeted NQ survey) Figure 5: Mesquite weed infestation in proximity to Proposed Action and Project. Appendix A: GIS data file
	GIS file delineating the boundary of the referral area (section 1)		
	figures, maps or aerial photographs showing the location of the proposed action in respect to any matters of national environmental significance or important features of the environments (section 3)	✓	Figure 4: Northern Quoll habitat within the Survey area
If relevant, attach	copies of any state or local government approvals and consent conditions (section 2.5)		Appendix C: Existing approvals (includes EPIP Act Approval Letter and Mineralogy Expansion Proposal 'Not a Controlled Action decision' letter)
	copies of any completed assessments to meet state or local government approvals and outcomes of public consultations, if available (section 2.6)		
	copies of any flora and fauna investigations and surveys (section 3)	✓	Appendix D: Review of flora and vegetation reports for the Mineralogy project at Cape Preston, Mattiske 2016 Appendix E: Fauna surveys within the

		Proposed Action area, Ecoscape 2016
technical reports relevant to the assessment of impacts on protected matters that support the arguments and conclusions in the referral (section 3 and 4)		Appendix D: Review of flora and vegetation reports for the Mineralogy project at Cape Preston, Mattiske 2016 Appendix E: Fauna surveys within the Proposed Action area, Ecoscape 2016a, b and c Appendix F: Northern Quoll Management Plan, CPM Appendix G: Protected Matters Search Tool results
report(s) on any public consultations undertaken, including with Indigenous stakeholders (section 3)		

9 Contacts, signatures and declarations

Proposed action title: Sino Iron Mine Continuation Proposal

9.1 Person proposing to take action

This is the individual, government agency or company that will be principally responsible for, or who will carry out, the proposed action. It may be a trustee (either being an individual or a body corporate) acting on behalf of the trust for which they have responsibility (but not the trust).

If the proposed action will be taken under a contract or other arrangement, this is:

- the person for whose benefit the action will be taken; or
- the person who procured the contract or other arrangement and who will have principal control and responsibility for the taking of the proposed action.

If the proposed action requires a permit under the GBRMP Act[1], this is the person requiring the grant of a GBRMP permission.

The Minister may also request relevant additional information from this person.

If further assessment and approval for the action is required, any approval which may be granted will be issued to the person proposing to take the action. This person will be responsible for complying with any conditions attached to the approval.

Name and Title:	
Organisation: (if applicable	CITIC Pacific Mining Management Pty Ltd on behalf of: • Sino Iron Pty Ltd ACN: 058 429 708 • Korean Steel Pty Ltd ACN: 058 429 600
Trust deed: (if applicable):	
ACN / ABN: (if applicable):	ACN: 119 578 371
Postal address:	GPO Box 2732 Perth WA 6001
Telephone:	08 9226 8316
Email:	bruce.watson@citicpacificmining.com

COMPLETE THIS SECTION ONLY IF YOU QUALIFY FOR EXEMPTION FROM THE FEE(S) THAT WOULD OTHERWISE BE PAYABLE

I qualify for exemption from fees under section 520(4C)(e)(v) of the

□ an individual; OR

□ a small business entity – aggregated turnover is less than $2million for the

[1] *If your referred action, or a component of it, is to be taken in the Great Barrier Reef Marine Park the Minister is required to provide a copy of your referral to the Great Barrier Reef Marine Park Authority (GBRMPA) (see section 73A,* EPBC Act*). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.*

EPBC Act because I am:

previous income year (as prescribed within section 328-110 (other than subsection 328-119 (4)) of the *Income Tax Assessment Act 1997*); OR

□ a small business entity – aggregated turnover for the current financial year is likely to be less than $2million (note that aggregated turnover for one of the previous two income years must also be less than $2million) (as prescribed within section 328-110 (other than subsection 328-119 (4)) of the *Income Tax Assessment Act 1997*) (Cth)).

□ not applicable.

If you are small business entity you must provide the Date/Income Year that you became a small business entity:

Note 1: Please retain evidence (i.e. tax statements) displaying aggregated turnover for the relevant income year. The Department may request this evidence at any stage of the assessment process. Aggregated turnover, for the purposes of the *Environment Protection and Biodiversity Conservation Regulations* 2000 (Cth)), means:

(1) a company annual turnover for the income year **and**

(11) the annual turnover for the income year of any entity that is connected or affiliated with the company at any time during the income year (see section 328-155 of the Income Tax Assessment Act 1997 (Cth)).

Note 2: You must advise the Department within 10 business days if you cease to be a small business entity. Failure to notify the Secretary of this is an offence punishable on conviction by a fine (regulation 5.23B(3) *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth)).

COMPLETE THIS SECTION ONLY IF YOU WOULD LIKE TO APPLY FOR A WAIVER

Note: Applications for a waiver must be supported by information in writing setting out the grounds on which the applicant considers that a waiver should be made and the reasons why it should be made. The Minister may, at his or her discretion, waive all or part of a fee that would otherwise be payable in the following circumstances:

- the action's primary objective is to protect the environment, or protect and conserve heritage, in a way that is consistent with the objects of the EPBC Act;
- it is in the public interest to do so; or
- there are other exceptional circumstances justifying the waiver.

The Minister will consider the application within 20 business days.

I would like to apply for a waiver of full or partial fees under regulation 5.21A of the EPBC Regulations. Under regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made:

□ not applicable.

Declaration:

I declare that to the best of my knowledge the information I have given on, or attached

to this form 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 of or for the benefit of any other person or entity.

Signature: 

Chen Zeng Chief Executive Officer
on behalf of CITIC Pacific Mining Management

Date: 19/01/2017

9.2 Designated proponent

Individual or organisation who is proposed to be designated as the proponent if the Minister decides that the action is a controlled action and further assessment and approval is required. The proponent is responsible for meeting the requirements of the EPBC Act during the assessment process. The proponent may or may not be the person proposing to take the action.

Name of proposed proponent: CITIC Pacific Mining Management Pty Ltd

If the name of the proposed proponent is not the same person as named at item 1 of section 9.1 above, please complete all of the below fields in section 9.2.

ACN / ABN (if applicable): ACN: 119 578 371

Postal address: GPO Box 2732
Perth WA 6001

Telephone: 9226 8316

Email:

Declaration by the proposed proponent: CITIC Pacific Mining Management, on behalf of the proposed proponent, consent to the proposed designation as the proponent for the purposes of the action described in this referral.

Signature : 

Chen Zeng, Chief Executive Officer
on behalf of CITIC Pacific Mining Management

Date: 19/01/2017

Declaration by the person proposing to take the action: I .....N/A....., the person proposing to take the action, consent to the proposed designation of.....N/A..... as proponent for the purposes of the action described in this referral.

Signature : N/A **Date**:

9.3 Person preparing the referral information (if different from section 9.1)

Individual or organisation who has prepared the information contained in this referral form.

Name:	Mat Brook
Title:	Associate and Mining Lead
Organisation:	Strategen
ACN / ABN (if applicable):	056 190 419
Postal address:	Level 1, 50 Subiaco Square Road Subiaco WA 6008
Telephone:	(08) 9380 3100
Email:	m.brook@strategen.com.au
Declaration:	I declare that to the best of my knowledge the information I have given on, or attached to this form is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: 

Date: 19/01/2017

REFERRAL CHECKLIST

NOTE: This checklist is to help ensure that all the relevant referral information has been provided. It is not a part of the referral form and does not need to be sent to the Department.

HAVE YOU:

- ☑ Completed all required sections of the referral form?
- ☑ Included accurate coordinates (to allow the location of the proposed action to be mapped)?
- ☑ Provided a map showing the location and approximate boundaries of the project area for the proposed action?
- ☑ Provided a map/plan showing the location of the action in relation to any matters of NES?
- ☑ Provided a digital file (preferably ArcGIS shapefile, refer to guidelines at Attachment A) delineating the boundaries of the referral area?
- ☑ Provided complete contact details and signed the form?
- ☑ Provided copies of any documents referenced in the referral form?
- ☑ Ensured that all attachments are less than five megabytes (5mb)?
- ☑ Sent the referral to the Department (electronic and hard copy preferred)

Geographic Information System (GIS) data supply guidelines

If the area is less than 5 hectares, provide the location as a point layer. If the area greater than 5 hectares, please provide as a polygon layer. If the proposed action is linear (eg. a road or pipeline) please provide a polyline layer.

GIS data needs to be provided to the Department in the following manner:

- Point, Line or Polygon data types: ESRI file geodatabase feature class (preferred) or as an ESRI shapefile (.shp) zipped and attached with appropriate title
- Raster data types: Raw satellite imagery should be supplied in the vendor specific format.
- Projection as GDA94 coordinate system.

Processed products should be provided as follows:

- For data, uncompressed or lossless compressed formats is required - GeoTIFF or Imagine IMG is the first preference, then JPEG2000 lossless and other simple binary+header formats (ERS, ENVI or BIL).
- For natural/false/pseudo colour RGB imagery:
    - If the imagery is already mosaiced and is ready for display then lossy compression is suitable (JPEG2000 lossy/ECW/MrSID). Prefer 10% compression, up to 20% is acceptable.
    - If the imagery requires any sort of processing prior to display (i.e. mosaicing/colour balancing/etc) then an uncompressed or lossless compressed format is required.

Metadata or 'information about data' will be produced for all spatial data and will be compliant with ANZLIC Metadata Profile. (http://www.anzlic.org.au/policies_guidelines#guidelines).

The Department's preferred method is using ANZMet Lite, however the Department's Service Provider may use any compliant system to generate metadata.

Privacy and Confidentiality Notice

The Department is required under section 74(3) of the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**) to publish the information (including personal information of the author and/or third parties) provided in this referral on the internet. The information published may include your personal information.

Information including your personal information included in this referral will be used for the purposes of administering the EPBC Act. The information may be provided to various Commonwealth, State and Territory agencies for the purposes of administering the Act or other Commonwealth, State or Territory legislation. For example, if the proposed action (or a component of it) is to be taken in the GBRMP, the Minister is required to provide a copy of your referral to GBRMPA (see section 73A, EPBC Act). For information about how the GBRMPA may use your information, see http://www.gbrmpa.gov.au/privacy/privacy_notice_for_permits.

The Department will collect, use, store and disclose the personal information contained in this referral in a manner consistent with its obligations under the *Privacy Act 1988* and the Department's privacy policy.

The Department's privacy policy contains details about how respondents may access and make corrections to personal information that the Department holds about the respondent, how respondents may make a complaint about a breach of an Australian Privacy Principle, and how the Department will deal with that complaint.

A copy of the Department's privacy policy is available at: http://environment.gov.au/privacy-policy.

The Department is not obliged to publish information that the Minister is satisfied in commercial-in-confidence. If you believe that this referral contains information that is commercial-in-confidence, you must clearly identify such information and the reason for its confidentiality at the time of making the referral. The Minister cannot be satisfied that particular information included in a referral is commercial-in-confidence unless you demonstrate to the Minister (by providing reasons in writing) that:

- release of the information would cause competitive detriment to the person; and
- the information is not in the public domain; and
- the information is not required to be disclosed under another law of the Commonwealth, a State or a Territory; and
- the information is not readily discoverable.

The Department is subject to certain legislative and administrative accountability and transparency requirements of the Australian Government including disclosures to the Parliament and its Committees. While the Department will treat all referral information provided in this referral sensitively, any information contained in or relating to a referral, including information identified by a person as commercial-in-confidence, may be disclosed by the Department:

- to its employees and advisers in order to evaluate or assess a referral;
- to the Parliamentary Secretary;
- within the Department or other agencies where this serves the legitimate interest of the Australian Government;
- in response to a request by a House or Committee of the Parliament of the Commonwealth of Australia;
- where information is authorised or permitted by law to be disclosed; and
- where the information is in the public domain other than by the Department's disclosure of that information.