Australian Government
Department of the Environment and Energy

Title of Proposal - Roper Valley Iron Ore Project

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Mining

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The Roper Valley Iron Ore Project will involve open cut mining and production of saleable iron ore from Northern Territory Iron Ore (NTIO) tenements in the remote Roper Gulf region of the Northern Territory (NT). Iron ore product will be transported from the mining areas along 235 km of upgraded public roads to a purpose-built Barge Loading Facility (BLF) located 15 km upstream from the Roper River mouth. Iron ore will be loaded onto barges and transhipped to Ocean Going Vessels (OGV) moored in >15 m deep water approximately 40 km offshore in the Gulf of Carpentaria, from where it will be exported to overseas markets.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Barge Loading Facility	1	-14.742672932089	135.33378545799
Barge Loading Facility	2	-14.743139834784	135.33450429001
Barge Loading Facility	3	-14.744716920929	135.33365671196
Barge Loading Facility	4	-14.744416030375	135.33294860878
Barge Loading Facility	5	-14.742672932089	135.33378545799
Indicative OGV mooring	1	-14.766425854617	135.72692005182
Indicative OGV mooring	2	-14.765927878344	135.72846500421
Indicative OGV mooring	3	-14.768583738618	135.72897998835
Indicative OGV mooring	4	-14.768583738618	135.72726337458
Indicative OGV mooring	5	-14.766425854617	135.72692005182
Deposit W & X mining area	1	-15.24925151808	133.86688320185
Deposit W & X mining area	2	-15.198235202418	133.83461086298
Deposit W & X mining area	3	-15.148532119093	133.89022914911
Deposit W & X mining	4	-15.146543752676	133.92593471552

Area	Point	Latitude	Longitude
area			
Deposit W & X mining area	5	-15.134613161991	133.92524807001
Deposit W & X mining area	6	-15.097491473686	134.00283901239
Deposit W & X mining area	7	-15.117378900384	134.02412502314
Deposit W & X mining area	8	-15.149857686327	133.98017971064
Deposit W & X mining area	9	-15.166426575938	133.99253932978
Deposit W & X mining area	10	-15.24925151808	133.86688320185
Deposit C mining area	1	-14.727393507917	134.27134781811
Deposit C mining area	2	-14.719009252429	134.28344994518
Deposit C mining area	3	-14.719673363629	134.30585175488
Deposit C mining area	4	-14.713696290031	134.31752472851
Deposit C mining area	5	-14.721748698097	134.35125618908
Deposit C mining area	6	-14.761093299398	134.33357506725
Deposit C mining area	7	-14.759682329056	134.2989852998
Deposit C mining area	8	-14.732457109993	134.30284768078
Deposit C mining area	9	-14.727559529523	134.27237778637
Deposit C mining area	10	-14.727393507917	134.27134781811

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

The proposed action will take place in the Roper Gulf region of the Northern Territory, which is located approximately 420 km south-east of the capital city of Darwin and 150 km east of the small regional town of Mataranka.

Mining areas: The proposed mining areas are situated south of the Roper Highway on *Minerals Title Act (NT)* Exploration Licences (EL) 24101 (Deposit C) and EL 24102 (Deposits W & X), which are both owned by NTIO. The Deposit C mining area is located within the northern portion of EL24101 where the underlying tenure is a Perpetual Pastoral Lease (PPL1180) over NT Portion 671 held by Mount McMinn station. The underlying tenure of the Deposit W & X mining areas is Aboriginal Freehold Land (NT Portion 671) held by the Alawa 1 Land Trust.

The closest settlements to the mining areas are Minyerri (15 km south east of Deposits X and W), Urapunga (30 km east of Deposit C) and Ngukurr (approximately 50 km east of Deposit C). Ngukurr is the largest settlement in the region with approximately 1,500 residents.

Road transport route: Product will be trucked to the BLF using existing public roads that will be upgraded to be suitable for the proposed haulage task. The main transport route will use the Roper Highway, Nathan River Road and Port Roper Road. Product from Deposits X and W will be hauled to the Roper Highway via the Hodgson Downs Road.

Barge Loading Facility: The BLF will be established on NT Portion 1184, a Special Purpose Lease (SPL) under the Special Purposes Leases Act (NT), located approximately 15 km upstream from the Roper River mouth. NTIO has a contract in place to acquire this SPL.

OGV mooring: OGV's will be moored in >15 m deep water approximately 40 km offshore in the Gulf of Carpentaria. The OGV mooring is located approximately 6 km to the north of Maria Island in the Commonwealth marine area.

1.6 What is the size of the development footprint or work area?

Approximately 2500 hectares (excluding the works areas required for land and marine transport).

1.7 Is the proposed action a street address or lot?

Street Address

Roper Highway
Roper Valley NT 0852
Australia

1.8 Primary Jurisdiction.

Northern Territory

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

No

1.10 Is the proposed action subject to local government planning approval?

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 04/2018

End date 12/2038

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

Land approvals: NTIO is required to operate in accordance with the requirements of the *Native Title Act 1993* and *Aboriginal Land Rights (Northern Territory) Act 1976 (ALRA)*. Native title rights exist over most of the project area and parts of the project area are on Aboriginal land.

Mining Approvals: The mining sequence that will be employed will allow for the base of the pit to be inundated during the wet season while mining continues in higher areas above the water line. Mining in lower areas will occur during the dry season. Regulation of mining activities in the Northern Territory under the *Mineral Titles Act (MTA)* and *Mining Management Act (MMA)* is administered by the NT Department of Primary Industry and Resources (DPIR). NTIO owns the following ML interests pursuant to the *MTA*:

- Mineral Lease - ML29584.

- Mineral Lease (Application) - ML(A)29070, ML(A)29071, ML(A)29072, ML(A)29437, ML(A)30317.

Mining activities may only occur on a granted Mineral Lease (ML). NTIO will apply for an authorisation to carry out mining activities under the *MMA*. The application will be accompanied by a Mining Management Plan (MMP). The MMP will include information relating to the description of mining activities, the management systems to be implemented for the management of health, safety and environmental aspects, costing of closure activities, and particulars of organisational structure. The MMP is required to be reviewed at intervals specified in the authorisation to carry out mining activities.

NTIO anticipates that, prior to being authorised under the *MMA*, the proposed mining activities will require assessment under the *Environmental Assessment Act (NT) (EA Act)* and approval under the *EPBC Act*.

Water Approvals: The *Water Act (NT)* is administered by the Water Resources Division of the Department of Environment and Natural Resources (DENR). The project area occurs within the Daly Roper Water Control District. Water extraction licences are required for extraction greater than 5ML/year within a Water Control District; however, mining activities are exempt from this requirement. Whilst water extraction for the proposed mining activities does not require a licence, NTIO anticipates that water sustainability will need to be addressed through the environmental approvals process.

Current water management planning indicates that the project will not require a Waste Discharge Licence (WDL) under the *Water Act (NT)*. If more detailed planning identifies the need for off-lease discharge, a WDL will be sought.

Other Legislative Requirements: Other relevant legislation is listed below:

• Territory Parks and Wildlife Conservation Act • Northern Territory Aboriginal Sacred Sites Act • Heritage Act • Weeds Management Act • Bushfires Act • Control of Roads Act • Dangerous Goods Act • Soil Conservation and Land Utilisation Act • Traffic Act • Waste Management and Pollution Control Act • Work Health and Safety (National Uniform Legislation) Act.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

Prior to acquiring the project, NTIO undertook consultation with Native Title Claimants and Traditional Owners (TO's) through the NLC. The NLC arranged meetings between NTIO representatives and the Native Title Claimants and Traditional Owners in August 2016 at Minyerri and Mataranka, where approval was sought and obtained to assign existing NLC native title (and ALRA) agreements from Sherwin Iron to NTIO.

Those agreements set out the terms and conditions under which exploration and development activities are to be conducted by NTIO, including measures to preserve and protect sacred sites and objects, a financial benefits package for the TO's, employment, training and business development opportunities for TO's and a regional committee to ensure involvement of TO's in the project. Consultation with the NLC will be ongoing throughout the planning, construction and operational phases of the project.

NTIO representatives met with the owners of Perpetual Pastoral Lease 1180 (Mt McMinn Station) in March 2017 to discuss NTIO’s plans with a view to formalising a mutually beneficial access agreement.

Regional service providers and other stakeholders within an interest in the region will also be engaged as part of the Economic and Social Impact Assessment (ESIA) process. The ESIA will inform the preparation of an Economic and Social Impact Management Plan (ESIMP) that will document measures to minimise potential negative impacts and maximise the uptake of opportunities provided by the project. A preliminary list of regional service providers, local indigenous business capabilities and other stakeholders (including pastoral, recreational, environmental and tourism interests) is currently being developed.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

The previous tenement holders prepared an Environmental Impact Statement (EIS) for mining of Deposit C with transport of ore by road to the Port of Darwin for export. The proposed activities received approval under the *EPBC Act* (reference EPBC 2013/6726). The EIS was also assessed under *Environmental Aassessment Act (NT)* (*EAA*) as detailed in the Assessment Report 75 (available online at

https://ntepa.nt.gov.au/__data/assets/pdf_file/0008/290492/sherwin_assessment_report.pdf). Following completion of NT and Commonwealth environmental approvals processes, the proposed activities were authorised to proceed under the *MMA (NT)* in May 2014.

These approvals, although valid, do not encompass all elements of the project proposed by NTIO, such as the increased production rate, the proposed product logistics solution via Port Roper, the inclusion of ore processing, the expansion of the mining areas to include Deposit W and Deposit X, and the increased project water requirements. Subsequently, new approvals are being sought. A Notice of Intent (NOI) (as required by the *EAA* (NT)) was submitted to the NT EPA in March 2017. NTIO considers it likely that the project will require assessment at the level of an EIS.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

Yes

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation).

The project is related to the previously approved action referred to as the Roper River Iron Ore Project (EPBC 2013/6726). The previous tenement holder (Sherwin Iron) developed the Deposit C mining area with access roads and support infrastructure. Open pit mining of Direct Shipping Ore (DSO) was undertaken in 2013-2014 and the ore was trucked to the Port of Darwin for export. The company went into voluntary administration in 2014 and the mine site was placed in Care and Maintenance. NTIO acquired the assets in September 2016. As NTIO is proposing changes to the proposed activity, the company is seeking new environmental approvals.

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

2.1 Is the proposed action likely to impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to impact on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
SHOREBIRD SPECIES Curlew Sandpiper -	Desktop review found recent records for eight

Species	Impact
Calidris ferruginea - CR Red Knot - Calidris canutus - EN Great Knot - Calidris tenuirostris - CR Greater Sand Plover - Charadrius leschenaultii - VU Lesser Sand Plover - Charadrius mongolus - EN Bar-tailed Godwit (Western Alaska subsp.) - Limosa lapponica baueri - VU Bar-tailed Godwit (Northern Siberian subsp.) - Limosa lapponica menzbieri - CR Eastern Curlew - Limosa lapponica menzbieri - CR	threatened shorebird species within and proximate to the mouth of the Roper River, including a known a roost site within one kilometre of the proposed BLF. Construction and operational activities at the BLF have potential to increase disturbance of shorebird roosting and/or feeding activities.
SAVANNAH SPECIES Red Goshawk - Erythrotriorchis radiatus - VU	Desktop review identified the Red Goshawk as a species that could occur within the proposed mining areas. A breeding pair of Red Goshawks has previously been recorded on the Roper River, approximately 30km to the east of the Deposit C mining area. A targeted survey for Red Goshawk habitat was undertaken around Deposit C in 2013 (refer Attachment 1 - Section 5.1.2). The survey found that suitable foraging habitat occurs but the trees are not of sufficient height for nesting. Red Goshawk expert (D Baker-Gabb) was consulted and stated the view that Red Goshawks are unlikely to breed more than 200m from the Roper River or a major creek because in the Roper River catchment the trees are too small. Based on the field survey and expert advice it is concluded that the project activities are unlikely to impact Red Goshawk breeding. The removal of a relatively small area of potential woodland foraging habitat is not expected to impact the species given the large home range and widespread regional availability of this habitat.
SAVANNAH SPECIES Gouldian Finch - Erythrura gouldae - EN	Records of Gouldian Finch occur approximately 25 km west of the Deposit C. A desktop search also reveals that several records of the species are scattered throughout the surrounding region, including a 2006 record of more than 50 individuals, most of which were juveniles. There is potentially suitable habitat for the Gouldian Finch in the vicinity of Deposit C, with small waterholes in Sherwin Creek that persist late in the dry in some years. A camera trap survey of waterholes undertaken in the late dry season did not detect the presence of the Gouldian Finch (refer Attachment 1 – Section 3.3). The

Species	Impact
	report concluded that this suggests there may not be a breeding population within or nearby to the disturbance area. In the absence of a breeding population, the project activities are not expected to impact the Gouldian Finch.
SAVANNAH SPECIES Bare-rumped Sheath-tailed Bat - Saccolaimus saccolaimus nudicluniatus - VU	Desktop review identified that the Bare-rumped Sheath-tailed Bat could occur within the project area. There is a record of this species at Port Report (the proposed BLF site) from 2001. However, the flora and fauna surveys undertaken across the proposed mining areas (refer Attachment 1 and 2) indicate that the area does not contain the tall Eucalyptus forests or open Pandanus woodlands that are utilised by the species for roosting (in tree hollows) and foraging. Photos of the BLF site (Attachment 3) show that these habitat types are also absent from that area. Therefore the project is not expected to impact any roosting habitat utilised by the species. Minor disturbance of potential foraging habitats could occur but is not expected to cause a significant impact given the pre-existing land use of the area and the regional availability of suitable habitats.
SAWFISH Freshwater or Largetooth Sawfish - Pristis pristis - VU Green Sawfish - Pristis zijsron – VU	Desktop review identified a record of the Freshwater Sawfish from near Port Roper and the Green Sawfish is known to occur in the Gulf of Carpentaria. These species are most typically recorded from marine and estuarine environments; however, they are known to enter fresh waters to breed during the wet season. It is possible that any change to freshwater flows in the Roper River due to over-extraction of water during the dry season, could impact freshwater habitats utilised by juvenile sawfish. Sawfish utilising the marine and estuarine habitats near the BLF and downstream to the Roper River mouth are not expected to be impacted by project activities; as highly mobile bottom dwellers, these species are not likely to be susceptible to disturbance associated with vessel movements.
MARINE TURTLES Green Turtle - Chelonia mydas - VU Flatback Turtle - Natator depressus - VU Olive Ridley Turtle - Lepidochelys olivacea	Marine turtle are known to nest and forage within the Limmen Bight and broader Gulf of Carpentaria. It is possible that lights associated

Species	Impact
- EN Leatherback Turtle - Dermochelys coriacea - EN Hawksbill Turtle - Eretmochelys imbricata – VU	with barges and OGV's could disorientate turtles and hatchlings. The risk associated with this impact is expected to be low because there are no nesting beaches in proximity to the mouth of the Roper River, and the transhipment mooring is located in deep water, greater than 10 km away from the turtle nesting beaches that occur on the southern side of Maria Island. Vessel strikes could disrupt breeding and foraging activities; however, vessel speed limits (where necessary) are expected reduce this risk to an acceptable level.

2.4.2 Do you consider this impact to be significant?

Yes

2.5 Is the proposed action likely to impact on the members of any listed migratory species, or their habitat?

Yes

2.5.1 Impact table

Species	Impact
NON-SHOREBIRD SPECIES (REFER PREVIOUS SECTION 2.4.1 FOR SHOREBIRD SPECIES) Twenty-nine migratory species were identified by the EPBC PMST. When assessing if the project will significantly impact upon a migratory species, the key considerations under the EPBC Significant Impact Guidelines 1.1 (DoE 2013) are whether an important habitat for a migratory species or an ecologically-significant population of a migratory species is involved. Four migratory species, were assessed as having potential for an important habitat and/or an ecologically-significant proportion occurring within the Roper River/Limmen Bight (refer attachment - MNES Significant Impact Assessment - Section 7.3).	See below
Narrow Sawfish (Anoxypristis cuspidata)	Sawfish utilising the marine and estuarine habitats near the BLF and downstream to the

Species	Impact
	Roper River mouth are not expected to be impacted by project activities. As highly mobile bottom dwellers, these species are not likely to be susceptible to disturbance associated with vessel movements.
Dugong (Dugong dugon) Irrawaddy Dolphin (Orcaella brevirostris) Indo-Pacific Humpback Dolphin (Sousa chinensis)	Noise generated during the construction and/or operation of the BLF, as well as increased vessel activity around the mouth of the Roper River, could increase disturbance in important habitats. Marine mammals are susceptible to vessel strikes; however, speed limits (where deemed necessary) are expected to reduce this risk to an acceptable level. Seagrass habitats, that are important feeding habitats for Dugongs, will not be directly impacted and the project does not require dredging.

2.5.2 Do you consider this impact to be significant?

Yes

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action likely to impact on any part of the environment in the Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Will there be any impact on a water resource related to coal / gas / mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to impact on any part of the environment in the Commonwealth marine area?

Yes

2.13.1 Describe the nature and extent of the likely impact on the whole of the environment.

The transhipment location will be located within Commonwealth waters approximately 40 km offshore in the Gulf of Carpentaria, which is part of the North Marine Region 'Commonwealth Marine Area'. The Commonwealth *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* (DOE 2013) describe when an action is likely to have a significant impact on the environment in a Commonwealth marine area. The proposed action is assessed against these guidelines below.

Will the action result in a known or potential pest species becoming established in the Commonwealth marine area?

Unlikely. Pest species could be brought into the region via contaminated construction vessels and/or OGV ballast water (an event against which there are many legally-prescribed safeguards).

Will the action modify, destroy, fragment, isolate or disturb an important or substantial area of habitat such that an adverse impact on marine ecosystem functioning or integrity in a Commonwealth marine area results?

Unlikely. Barge movements and transshipping will disturb a relatively small area of the marine environment . Seafloor disturbance will be limited to a small area around the transhipper mooring; there is no dredging proposed.

Will the action have a substantial adverse effect on a population of a marine species or cetacean including its life cycle (for example, breeding, feeding, migration behaviour, life expectancy) and spatial distribution

Possible. Increased frequency of vessel movements in the Limmen Bight could disrupt the behaviour of cetaceans and/or marine turtles. Vessel speed limits (where deemed necessary) are expected to reduce the risk of strikes, which will limit impacts on dugongs and dolphins feeding in the area traversed by the barges and/or moving through the area to other sites. The

risk of impacts to marine turtles is expected to be low because there are no nesting beaches in proximity to the mouth of the Roper River, and the transhipment mooring is located in deep water, greater than 10 km away from the turtle nesting beaches that occur on the southern side of Maria Island.

Will the action result in a substantial change in air quality or water quality (including temperature) which may adversely impact on biodiversity, ecological integrity; social amenity or human health?

Unlikely. Arguably would require a major chemical spill from an OGV (an event against which there are many legally-prescribed safeguards).

Result in persistent organic chemicals, heavy metals, or other potentially harmful chemicals accumulating in the marine environment such that biodiversity, ecological integrity, social amenity or human health may be adversely affected

Unlikely. Spills of iron ore product during loading and transshipment could cause iron ore to accumulate in the marine environment. However, iron ore is stable and chemically inert in the environment. MSDS indicates iron ore fines has no biological exposure limit. No other harmful chemicals will be used.

Will the action have a substantial adverse impact on heritage values of the Commonwealth marine area, including damage or destruction of an historic shipwreck.

None. Not relevant to this project – the region of the Commonwealth marine area in question is not known to have heritage values.

2.13.2 Do you consider this impact to be significant?

Yes

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

flora and fauna surveys were undertaken across the mining areas in 2011-2012 (refer Attachment 2 and 3). In addition to the EPBC listed threatened and migratory fauna species discussed above, the surveys observed the Grey Falcon (*Falco hypoleucos*) and Mertens Water Monitor (V*aranus mertensi),* which are listed as Vulnerable under the *Territory Parks and Wildlife Conservation Act*. No threatened flora species were recorded in the surveys and none are expected to occur based on the habitats that are present.

3.2 Describe the hydrology relevant to the project area (including water flows).

Surface Water: The project area is located within the Roper River Basin. Project activities will occur across the major sub-catchments of the Roper River and Hodgson River. The Roper River is a large perennial river that has base flow through the dry season due to groundwater discharges that occur in the upper reaches. The Hodgson River and most other rivers and associated tributaries in the region are intermittent, flowing only during the wet season; however, some permanent pools or groundwater fed springs may exist along their length. Hodgson River flows north then north-easterly towards the Roper River which is located on the northern region of the project area. The Roper River flows east towards the Gulf of Carpentaria.

Deposit C occurs close to Sherwin Creek, a small intermittent first order tributary of the Roper River. In the vicinity of the proposed mine site, Sherwin Creek has a rocky bed with average channel dimensions of 25 m (wide) x 3 m (deep). The area of Deposit C drains predominantly to the west towards Sherwin Creek, which drains from south to north into the Roper River some 8 km north-east of the mine.

Deposits W and X are in the Hodgson River catchment (which itself is part of Roper River catchment). Surface water from both deposits runs into LD Creek, which joins the Hodgson River approximately 17 km downstream. The Hodgson River joins the Roper a further 85 km downstream.

The Roper River is a losing system, with flows decreasing with distance downstream, except for areas of groundwater interaction (Knapton 2009). Only the upper reaches of the Roper River maintain flows greater than 0.1 m^3/s (10 L/s) by the end of the dry season, due to groundwater input. The middle and lower reaches of the river, where the project area is located, usually have flows less than 0.1 m^3/s by the end of the Dry season, and flow records show that cease to flow conditions can often occur at Roper Bar (Knapton 2009). In some very dry periods, such as the

1950s and 1960s, cease to flow events occurred up to 65 km upstream of Roper Bar. There is a network of water gauging stations located along the length of the Roper River that have recorded historical flow data, which will be used to inform an assessment of the amount of water that may be sustainably extracted from the system and to establish triggers for cessation of extraction prior to cease to flow conditions.

The proposed BLF site is on the banks of the Roper River, about 15 km from the Roper River mouth to the Gulf of Carpentaria. The Limmen Bight (Port Roper) Tidal Wetlands System is the second-largest area of saline coastal flats in the Northern Territory and is considered a good example of a system of tidal wetlands (intertidal mud flats, saline coastal flats and estuaries), with a high volume of freshwater inflow, typical of the Gulf of Carpentaria coast (Knapton 2009).

Groundwater: The project is situated in the Geological Province of the McArthur Basin, an extensive area dominated by fractured and weathered sedimentary rock supporting local scale aquifers, where discharge areas are typically less than 5 km from recharge areas (Tickell 1994).

Potential groundwater yield per bore is thought to be less than five litres per second and salinity to be in the range of 500 – 1500 mg/L. The mining areas have low to moderate salinity hazard. Deposit C is situated immediately to the east of a more intensive groundwater resource study (Yin Foo 2000), which confirms that the local environment is dominated by fractured and weathered rock with local aquifers and fractured and weathered rock with minor groundwater resources.

At Deposit C, the local aquifers are described as weathered strata overlying hard fractured bed rock and comprise:

A permeable and ephemeral shallow system. The pedological column, particularly at the north-western end of Deposit C, contains some lenses of fresh ground water trapped locally in silty-clays, overlying extremely weathered sandstone (~6 m thick). These conditions do not extend across the footprint of the proposed open pit and are highly localised, within the alluvial-debris fans located at the outlets of numerous small creek channels and gullies.The shallow system is underlain by a sequence of interlayered weathered and fractured siltstones, sandstones, shales and localised mudstones, in which groundwater is encountered between about 20 m below surface (lower lying terrain) and 70 m below surface (across higher lying terrain and the open pit). Below this, there is a thick sequence of siltstones overlying a very hard bluish dolerite that acts as the lower boundary of the confining system.

Baseline groundwater investigations in the area of Deposit C (Alarcon-Leon 2013) indicated that groundwater depth was between 27 and 100 metres below ground level (mbgl). Eleven bores were assessed and ten bores had groundwater in excess of 40 mbgl. Based on this information, it was concluded that mining to about 30-40 m below surface would not interfere with the deeper fractured aquifers and groundwater influx would not take place at Deposit C.

Additional groundwater assessments are required at Deposits W and X, and at the BLF.

3.3 Describe the soil and vegetation characteristics relevant to the project area.

SOILS AND GEOLOGY: The project area is located within the Gulf Region, which is characterised by sandy soils associated with sandstone plateaux with isolated pockets of clay and red earths (Wilson et al. 1990). The resource lies within the Mesoproterozoic aged Roper Group Stratigraphy where iron rich mineralisation is present within several layers of the Sherwin Formation.

The Sherwin Formation comprises quartz sandstone with interbedded micaceous siltstone, mudstone and locally ironstone as distinct units. Ironstones were deposited in marginal, shallow and deeper marine shelf environments reflecting alternating basin-wide sea level rises and falls. Tholeiitic dolerite and gabbro sills are locally present and these can be up to 50 m in thickness.

Acid sulfate soils (ASS): The Australian Soil Resource Information System (CSIRO 2006) identifies the soils in the mining areas as having 'extremely low probability of occurrence' of ASS. The proposed BLF has potential to disturb ASS. Further studies will be performed prior to any soil disturbance activities.

Potentially acid forming materials: Extensive geochemical testing within Deposit C did not find statistically significant levels of potentially acid forming (PAF) materials (GHD 2015). A few samples had a weekly positive NAPP (net acid producing potential) but neutral pH, likely indicating the presence on non-acid producing sulphur (sulfate) (GHD 2015). GHD (2015) determined that, although the analyses indicated very low sulfur and low leachable metals and salt content, with significant potential for self-neutralisation, ongoing testing and in-pit encapsulation of any PAF material would be required to keep residual risk of environmental harm low.

VEGETATION: From remote sensing datasets, as well as previous surveys undertaken within the project area, it has been identified broadly that:

- Deposit C consists mainly of a prominent sandstone escarpment dominated by *Eucalyptus* open forest with a grassy understorey with some outer areas of *Eucalyptus* woodland with tussock grass understorey.

- Deposits W and X consist of *Acacia* forests and woodland; Deposit W also has a small area to the west of the deposit identified as *Eucalyptus* woodland with tussock grass understorey.

- The proposed BLF site on the Roper River is a mixture of previously cleared land and open grassland. Mangroves occur nearby but not directly within the BLF footprint.

Sensitive vegetation types (as defined by the NT Land Clearing Guiedlines) that occur within the project footprint are described below:

Dry monsoon rainforest has been recorded within the Deposit C area. Aerial photography and ground surveys have estimated the extent to be approximately 0.25 hectares.

Riparian vegetation occurs in association with rivers, creeks and wetlands. The mining areas do not encompass any areas of riparian vegetation, however, this vegetation type is intersected by the public roads that will be used for transport of ore, and at locations where surface water will be harvested/extracted to supply the project.

Mangroves are present in small patches proximate to the proposed BLF site on the Roper River, but not within areas that will be subject to direct disturbance.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

The location of significant sites and features in relation to the project area is shown in Map 4 (attached at Section 1.4). The following is noted:

Sections of the Roper Highway and Nathan River Road that are proposed for use as a transport route, traverse the northern section of the Limmen National Park.The proposed BLF site is located on the tidal section of the Roper River, approximately 15 km upstream from the river mouth, but outside of either the National Park or the Marine Park.The proposed barge route will traverse the tidal reaches of the Roper River and shallow near-shore marine environments within Limmen Bight in the Gulf of Carpentaria, but the proposed barge route will not traverse the Marine Park.

3.5 Describe the status of native vegetation relevant to the project area.

The project area is largely remnant native vegetation, which is consistent with the broader region. There area some areas of cleared land associated with previous bulk sampling activities at the Deposit C mining area and the establishment of access roads. There has alos been previous clearing at the proposed BLF site. Refer photos at Attchment 4.

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

OGV’s will be moored in >15 m deep water approximately 40 km offshore in the Gulf of Carpentaria.

3.7 Describe the current condition of the environment relevant to the project area.

Land use surrounding the project area includes pastoral, conservation, tourism, Aboriginal freehold and leasehold, fishing and horticulture. Currently, mining makes up a very small percentage of land use in the region. The project area and surrounding land is covered by native vegetation, excepting for those areas developed as part of previous mining activities at

Deposit C.

Erosion: Land systems mapping indicates areas of moderate to high erosion risk associated with some of the land systems that occur within the project area.

Weeds: There are at least 44 different weed species that may occur within the project footprint. Regionally, the most prolific weed species is Parkinsonia (*Parkinsonia aculeata*) which is well established in the Gulf and grows in a wide range of habitats. Weed species in the region are expected to mainly occur along watercourses (especially the Roper River and tributaries) and previously disturbed areas (i.e. roadsides, fences and water-points).

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

There are no Commonwealth Heritage Places that could be impacted by the project activities. A search of the NT Heritage Register and consultation with NT Heritage Branch did not identify any nominated, provisional or declared heritage places located within the project areas.

3.9 Describe any Indigenous heritage values relevant to the project area.

The NT Heritage branch advised that there are no previously recorded Aboriginal archaeological sites in the databases maintained by the Branch. However, the mining areas contain areas of vertical relief/rocky outcrop areas where archaeological sites (rock art sites and stone artefact scatters) commonly occur, and the Port Roper area is likely to contain coastal archaeological sites such as shell mounds/middens.

A detailed heritage survey of Deposit C was conducted in 2013 by Earth Sea Heritage Surveys. The survey located 12 rock art sites, one historical site, one stone artefact scatter and numerous isolated stone artefacts. Advice from the NT Heritage Branch indicates that the mining areas contain areas of vertical relief/rocky outcrop areas where archaeological sites (rock art sites and stone artefact scatters) commonly occur, and the Port Roper area is likely to contain coastal archaeological sites such as shell mounds/middens.

Archaeologists will be engaged to undertake further survey work and to assess the significance of any identified sites and develop appropriate management strategies. It is anticipated that further archaeological surveys over the proposed Deposit W and X mining areas and the proposed BLF site will identify archaeological sites that are protected under the *Heritage Act (NT).*

A search of the NT Aboriginal Areas Protection Authority Sacred Sites database indicates that both registered sacred sites and recorded scared sites occur within the proposed project area. The previous mineral title holder was granted an Authority Certificate by the AAPA under the *Northern Territory Aboriginal Sacred Sites Act 1989* for extensive exploration and ground disturbance activities on EL24101. NTIO will engage with the Northern Land Council in relation to sacred sites surveys and will apply for Authority Certificates for all areas associated with the

project, but will in the meantime abide by the conditions set out in the Authority Certificate number 2011/14619.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

Mining areas: The Deposit C mining area is located within the northern portion of EL24101 where the underlying tenure is Perpetual Pastoral Lease 1180 over NT Portion 4971 (Mt McMinn Station). The underlying tenure of the Deposit W & X mining areas is Aboriginal Freehold Land NT Portion 671 held by the Alawa 1 Land Trust.

BLF: The BLF will be established on NT Portion 1184, a Special Purpose Lease (SPL) under the *Special Purposes Leases Act (NT)*. NTIO has a contract in place to acquire this SPL.

3.11 Describe any existing or any proposed uses relevant to the project area.

Pastoral activities (Mt. McMinn Station) - Deposit C mining area.

Traditional indigenous living (Aboriginal Freehold Land - Alawa 1 - Deposit W & X mining areas.

Tourism - the Roper Highway is travelled as part of the Savannah Way tourism drive.

Recreational and commercial fishing - proposed BLF site.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

Measures to avoid or reduce impact on the Commonwealth marine area

The transhipment site will be located in deep water (>15m depth), which will avoid direct impacts on important habitats for EPBC listed marine and migratory marine species, such as seagrasses and soft corals, that occur at shallower depths. The location will be outside of the Limmen Bight Marine Park.

The requirement for dredging will be avoided by locating the BLF and transhipping site so that there is sufficient water depth between the locations to allow for the safe passage of barges. A reconnaissance depth survey of the Roper River has been undertaken and confirms there is a minimum depth 4m between the BLF site and the river mouth (refer Attachment 6).

Impacts to marine waters associated with spills of iron ore product, fuels and oils are not anticipated to pose a risk of significant impact to the Commonwealth marine area. The iron ore product is not classified as environmentally hazardous. Standard operating procedures used for bulk commodity transhipping will be sufficient to limit the possibility of large or frequent spills. Shipping operations will comply with the regulations and conventions implemented by the Australian Maritime Safety Authority to protect the marine environment from ship pollution.

Measures to avoid or reduce impact on marine mammals

Vessel speed restrictions will be imposed if necessary to reduce the potential for impacts to turtles, dolphins and dugongs from vessel strike.

Measures to avoid or reduce impact on marine turtles

The transhipment site will be located north of Maria Island. The location is in deep water and greater than 10 km away from turtle nesting beaches that occur on the southern side of the island. This location will reduce the potential for lighting at the transhipment site to cause disorientation of nesting turtles

Measures to avoid or reduce impact on migratory shorebirds

The BLF will be located at Port Roper, a site which has an existing level of development and utilisation. Any shorebirds utilising the area around Port Roper would be habituated to some level of human-related disturbance. Refer Attachment 4 for photos of the site.

Measures to avoid or reduce impacts on threatened Sawfish

The amount of water extracted from the Roper River will be minimised by maximising the amount of water harvested and reused within the project area. A site water balance will be prepared for both construction and operation phases of the project to identify the amount of water that may be harvested and/or reused from within the mining areas as a source of water. The water balance will also identify any risks to surface waters associated with release of water from the open pits. The establishment of trigger points for cessation of extraction from the Roper River is proposed to minimise potential impacts on the downstream environments and other water users.

Assessments within the Deposit C mining area have been undertaken to confirm the absence of PAF. Further studies will be undertaken to confirm the absence of PAF across the mining areas and to determine the extent of ASS present within the BLF site. Erosion and Sediment Control Plans (ESCP) will be will be developed to be project specific and based on relevant guidelines and applicable standards.

Measures to avoid or reduce impacts on terrestrial threatened species

Fauna and flora surveys have been undertaken across the mining areas (refer Attachments 2 and 3). These surveys did not identify the presence of any EPBC listed threatened species, or habitats that are likely to support important populations of these species. No specific mitigations are proposed; however, in accordance with accepted practice, the project will development and implement a risk-based Environmental Management Plan that will manage impacts associated with weeds, bushfire, dust, noise, water pollution, water extraction.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

Through the environmental assessment process, a risk-based approach will be used to assess the extent to which threatened species, migratory species and the Commonwealth Marine Area, may be affected by the proposed action. Outcomes-based conditions will be developed where they are deemed appropriate.

NTIO is of the view that the potential impacts associated with this project are manageable and is confident that the proposed mitigation measures will be effective. NTIO is committed to ensuring the project does not result in significant environmental harm, and is actively developing plans to ensure the project operates in an environmentally sustainable and responsible manner.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

Listed threatened species and communities - Yes

5.1.5 Listed migratory species

Listed migratory species - Yes

5.1.6 Commonwealth marine environment

Commonwealth marine environment - Yes

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

N/A

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

NTIO's parent company, Al Rawda Resources Limited, is a member of the Dubai based Al Rawda Group and another group company, Wadi Al Rawda Crushing, based in Fujairah Emirate approximately 80km east of Dubai, produces and supplies construction aggregates to the UAE civil construction industry. Mining, crushing, screening and supporting services are all owner operated, with the large scale quarry operations currently producing at rates in excess of 50,000 tonnes per day to customers in the UAE and throughout the Gulf region. The business's Environmental Management and Occupational Health and Safety Management Systems achieved ISO14401:2004 and ISO18001:2007 certification in 2015.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (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.

N/A

6.3 Will the action be taken in accordance with the corporation's environmental policy and planning framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

See attached

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

No

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
ADWG (2004). Australian drinking water guidelines. National Health and Medical Research Council	Reliable	None
Alarcon-Leon, E. (2013). Ground Water Assessment: Implications for Mine Water Management – Deposit C Sherwin Creek Iron Ore Project. Appendix to EIS, Pendragon Environmental Solutions, November 2013.	Reliable	None
ANZECC (2000). Australian Water Quality Guidelines for Fresh and Marine Waters. Australian and New Zealand Environment and Conservation Council, Kingston.	Reliable	None
Baker, B. Price, O. Woinarski, J. Gold, S. Connors, G. Fisher, A. & Hempel, C. (2005). Northern Territory Bioregions – Assessment of Key Biodiversity Values and Threat. Department of Natural Resources, Environment and The Arts, Palmerston, Northern Territory.	Reliable	None
Bannister, J. Kemper, C. & Warneke, R. (1996). The Action Plan for Australian Cetaceans. Canberra: Australian Nature Conservation Agency.	Reliable	None
Bureau of Meteorology (2017). Climate Data Online. [online] Available at <http://www.bom.g	Reliable	None

Reference Source	Reliability	Uncertainties
ov.au/climate/data/>. [Accessed 19 January 2017].		
Chatto, R. (2003). The distribution and status of shorebirds around the coast and coastal wetlands of the Northern Territory. Technical report 73/2003. Parks and Wildlife Commission of the NT. Palmerston, NT.	Reliable	None
Commonwealth of Australia (2012). Marine bioregional plan for the north marine region. Department of Sustainability, Environment, Water, Population and Communities.	Reliable	None
Commonwealth of Australia (2015). EPBC Act Policy Statement 3.21: Industry guidelines for avoiding, assessing and mitigting impacts on EPBC Act liste migratory shorebird species. Department of the Environment, Australia.	Reliable	None
CSIRO (2009). Water in the Roper region. In CSIRO (2009) Water in the Gulf of Carpentaria Drainage Division. A report to the Australian Government from the CSIRO Northern Australia Sustainable Yields Project, CSIRO Water for a Healthy Country Flagship, Australia. pp 59-120.	Reliable	None
Delaney, R. (2012). Limmen Bight Marine and Coastal Biodiversity Values. Parks and Wildlife Service NT [online]. Available at <https://denr.nt.gov .au/__data/assets/pdf_file/0009 /255087/Limmen- Marine-Technical-Report.pdf>. [Accessed 25 January 2017].	Reliable	None
Department of the Environment and Energy (DoEE) (2017). Species Profile and Threats	Reliable	None

Reference Source	Reliability	Uncertainties
Database [online]. Available at <https://www.environment.gov.au/spratpublic/ action/kef/view/84;jsessionid=01AD87551D0DE1B0248C8722BE137004>. [accessed 5 January 2017].		
Department of Natural Resources, Environment, The Arts and Sport (2010) (DNRETAS). Land Clearing Guidelines. Department of Natural Resources, Environment, The Arts and Sport, Darwin. Northern Territory.	Reliable	None
Department of the Environment (DoE) (2013). Matters of National Environmental Significance - Significant impact guidelines 1.1. Commonwealth fo Australia, Canberra.	Reliable	None
Faulks, J. (2001). Roper River Catchment - An assessment of the physical and ecological condition of the Roper River and its major tributaries. Technical report No. 36/2001. Department of Lands, Planning and Environment, Katherine, NT.	Reliable	None
Freeman, A. Thomson, S. and Cann, J. (2014). Elseya lavarackorum – Gulf Snapping Turtle, Gulf Snapper, Riversleigh Snapping Turtle, Lavarack's Turtle. Conservation Biology of Freshwater Turtles and Tortoises – Chelonian Research Monographs, [online] No. 5. Available at <http://www.iucnttftsg. org/wp-content/uploads/file/Accounts/crm_5_082_lavarackorum_v1_2014.pdf>. [Accessed 1 March 2017].	Reliable	None

Reference Source	Reliability	Uncertainties
GHD (2015a). Report for Sherwin Iron Ltd - Roper River Iron Ore Project - Deposit C DSO Proposal.	Reliable	None
GHD (2015b). Roper River Iron Ore Project - Deposit C DSO Proposal AMD Assessment and Management Plan.	Reliable	None
Griffiths, A. (1997). Biological Survey of Elsey National Park. Technical Report No. 63. Parks and Wildlife Commission NT, Palmerston.	Reliable	None
Harrison, L. McGuire, L. Ward, S. Fisher, A. Pavey, C. Fegan, M. and Lynch, B. (2009). An inventory of sites of international and national significance for biodiversity values in the Northern Territory. Department of Natural Resources, Environment, The Arts and Sport, Darwin, NT.	Reliable	None
IECA (2008). Best Practice Erosion & Sediment Control. International Erosion Control Association (Australasia), Picton NSW	Reliable	None
Knapton, A. (2009). Gulf Water Study Integrated Surface Groundwater Model of the Roper River Catchment Part A: Coupled Surface – Groundwater Model.NT Department of Natural Resources, Environment, The Arts and Sport, Darwin.	Reliable	None
NT Environment Protection Authority (NT EPA) (2014). Sherwin Creek Iron Ore Project - Sherwin iron Pty Ltd, Assessment Report 75. May 2014, Darwin, Northern Territory. [online]. Available at < https://ntepa.nt.gov.au/__data/assets/pdf_file/0008/290492/she	Reliable	None

Reference Source	Reliability	Uncertainties
rwin_assessment_report.pdf>. [Accessed 17 January 2017].		
Pendragon Environmental Solutions (2013). Ground Water Assessment - Implications for Mine Water Management - Deposit C Sherwin Creek Iron Ore Project - Sherwin Iron Ltd. Revision No 1. Northbridge, WA.	Reliable	None
SRK Consulting (2012). ASX announcement - Independent Technical and Fair Market Valuation Update Report (2012) on Roper River Iron Ore Project.	Reliable	None
Tickell, S. (1994). Dryland Salinity Hazard of the Northern Territory. Northern Territory of Australia.	Reliable	None
URS Australia Pty Ltd (2010). Desktop Hydrological Study – Hodgson Downs Iron Ore Project. Final report - Prepared for Engenium Pty Ltd, Darwin, Australia.	Reliable	None
Wilson, P. Brocklehurst, P. Clark, M. and Dickinson, K. (1990). Vegetation survey of the Northern Territory, Australia. Conservation Commission, Northern Territory.	Reliable	None
Yin Foo, D. (2000). Water resources development map commentary notes: Avago, Birdum Creek, Maryfield, Middlecreek, Sunday Creek, Tarlee, Vermelha and Western Creek Stations. Northern Territory Government.	Reliable	None

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

N/A

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Director

9.2.2 First Name

Bill

9.2.3 Last Name

Mackenzie

9.2.4 E-mail

bill.mackenzie@ntio.com.au

9.2.5 Postal Address

68 Excelsior Street
Shenton Park WA 6008
Australia

9.2.6 ABN/ACN

ACN

609206706 - NORTHERN TERRITORY IRON ORE PTY LTD

9.2.7 Organisation Telephone

0409689022

9.2.8 Organisation E-mail

bill.mackenzie@ntio.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date: .....

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub 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

Person proposing the action - Declaration

I, WILLIAM ROSS MACKENZIE, 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 of or for the benefit of any other person or entity.

Signature:..... Date: 1 May 2017

I, WILLIAM ROSS MACKENZIE, the person proposing the action, consent to the designation of NORTHERN TERRITORY IRON ORE PTY LTD as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:..... Date: 1 May 2017

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Director

9.5.2 First Name

Bill

9.5.3 Last Name

Mackenzie

9.5.4 E-mail

bill.mackenzie@ntio.com.au

9.5.5 Postal Address

68 Excelsior Street
Shenton Park WA 6008
Australia

9.5.6 ABN/ACN

ACN

609206706 - NORTHERN TERRITORY IRON ORE PTY LTD

9.5.7 Organisation Telephone

0409689022

9.5.8 Organisation E-mail

bill.mackenzie@ntio.com.au

Proposed designated proponent - Declaration

I, William Ross Mackenzie, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

W. Mackenzie 1 May 2017

Signature:..... Date: .....

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Managing Consultant - Approvals

9.8.2 First Name

Kylie

9.8.3 Last Name

Welch

9.8.4 E-mail

kylie.welch@ecoz.com.au

9.8.5 Postal Address

GPO BOX 381
Darwin NT 0800
Australia

9.8.6 ABN/ACN

ACN

143989039 - ECOZ PTY LTD

9.8.7 Organisation Telephone

08 8981 1100

9.8.8 Organisation E-mail

ecoz@ecoz.com.au

Referring Party - Declaration

I, KYLIE WELCH, I 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.

Signature: K.P. Welch Date: 2 MAY 2017

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. attachment_1_threatened_species_likelihood_of_occurrence_assessment.pdf
2. attachment_2_fauna_report.pdf
3. attachment_3_flora_report.pdf
4. attachment_4_groundwater_report_reduced.pdf
5. attachment_6_roper_river_reconaissance_survey_reduced.pdf
6. attachment_7_ntio_sutainable_development_policy.pdf
7. epbc_2013-6726_approval.pdf
8. map_1_ntio_tenements_in_the_roper_valley_region.pdf
9. map_2_location_of_project_area.pdf
10. map_3_location_of_project_components.pdf
11. map_4_location_of_significant_sites_and_features.pdf
12. ntepa_assessment_report_75.pdf