Rhodes Ridge Iron Ore Project

Environmental Scoping Document October 2024

Table of Contents

1. Introduction

- 1.1 Indicative timing and environmental review
- 1.2 Commonwealth Government approvals

2. Form and content (work required)

- 2.1 Preliminary environmental factors
- 2.2 Specific additional work required for assessment of proposal
- 2.3 Cumulative Impact Assessment
- 2.4 Holistic Impact Assessment
- 2.5 Offsets
- 2.6 Stakeholder Consultation
- 2.8 Proposal Content Considerations
- 3. Decision-making authorities

Figures

- Figure 1 Regional location of proposal
- Figure 2 Development envelope of proposal

Tables

- Table 1General proposal and proponent information
- Table 2Indicative outline of the timing of the environmental review (indicative timeline)
- Table 3 Proposal specific and/or additional required work
- Table 4Scope of the cumulative impact assessment
- Table 5Decision making authorities and processes
- Table 6Other statutory decision-making process which can mitigate potential impacts on the
environment
- Appendix 1 Policy and Guidance

1. Introduction

The Environmental Protection Authority (EPA) has determined that the above proposal is to be assessed under Part IV of the *Environmental Protection Act 1986* (EP Act).

The purpose of the Environmental Scoping Document (ESD) is to define the form, content, indicative timing and procedure of the environmental review, required by s. 40(3) of the Act.

This ESD has been prepared by the EPA in consultation with the proponent, decision-making authorities and interested agencies consistent with the EPA's *Procedures Manual*.

The EPA requires the proponent to undertake the environmental review according to the procedures in the EPA's <u>Administrative Procedures</u> and <u>Procedures Manual</u>, and the <u>Instructions and Template:</u> <u>How to prepare an Environmental Review Document</u>.

This ESD has not been released for public review. The ESD will be available on the EPA website (<u>www.epa.wa.gov.au</u>) upon endorsement and must be appended to the Environmental Review Document (ERD). The ERD is to be published for public review for a period of 8 (eight) weeks.

The Proponent will undertake a review of the ERD to ensure the requirements of the relevant EPA instructions, templates and guidance have been met. The ERD will include a scoping checklist that identifies the section(s) and page number of the ERD indicating where both all the dot points in the scoping checklist on page 5 of the ERD Template (2021) and the requirements of this ESD can be found.

Proposal information		
Proposal name	Rhodes Ridge Iron Ore Project	
Proponent	Rhodes Ridge Management Services Pty Ltd	
Location	40 kilometres north-west of Newman in the Pilbara	
Assessment number	APP-0025093	
Local Government area	Shire of East Pilbara	
Public review period	Environmental Review Document – 8 weeks	

Table 1: General proposal and proponent information

The subject of this ESD is Rhodes Ridge Management Services Pty Ltd's **Rhodes Ridge Iron Ore Project**, involving the construction and operation of an iron ore mine, borefields and associated activities, including rail and renewable energy infrastructure. The project is located approximately 40 kilometres (km) northwest of Newman in the Pilbara Region of Western Australia.

The regional location of the proposal is shown in Figure 1 and the development envelope encompassing the physical elements of the proposal is delineated in Figure 2.

1.1 Indicative timing of the environmental review

Table 2 sets out the indicative outline of the timing of the environmental review (indicative timeline) agreed between the EPA and the proponent.

Table 2: Indicative outline of the timing of the environmental review (indicative timeline)

Key assessment milestones	
EPA approves Environmental Scoping Document	October 2024

OFFICIAL

Proponent submits first draft Environmental Review Document	September 2026
EPA provides comment on first draft Environmental Review Document (6 weeks from receipt of ERD)	November 2026
Proponent submits revised draft Environmental Review Document	April 2027
EPA authorises release of Environmental Review Document for public review (2 weeks from EPA approval of ERD)	June 2027
Proponent releases Environmental Review Document for public review for 8 weeks	July 2027
Close of public review period	August 2027
EPA provides Summary of Submissions (3 weeks from close of public review period)	September 2027
Proponent provides Response to Submissions	December 2027
EPA reviews the Response to Submissions (4 weeks from receipt of Response to Submissions)	January 2028
EPA prepares draft assessment report and completes assessment	May 2028
EPA finalises Assessment report (including two-week consultation on draft conditions) and gives report to Minister (6 weeks from completion of assessment)	June 2028

1.2 Commonwealth Government approvals

The EPBC Referral will be assessed separately under the EPBC Act as the Proponent is not seeking an accredited assessment.

2. Form and content (required work)

The EPA requires that the form of the report on the environmental review required under section 40 of the EP Act is in accordance with the *Instructions and Template: How to prepare an Environmental Review Document*.

The EPA requires that the content of the ERD is in accordance with the <u>Instructions and Template: How</u> to prepare an Environmental Review Document.

The EPA also requires that the environmental review includes the proposal specific additional content outlined in Section 2.

2.1 Preliminary key environmental factors

The preliminary key environmental factors to be addressed in the ERD are:

- 1. Flora and Vegetation
- 2. Terrestrial Fauna
- 3. Subterranean fauna
- 4. Terrestrial Environmental Quality
- 5. Landforms
- 6. Inland Waters
- 7. Greenhouse Gas Emissions
- 8. Social Surroundings

2.2 Specific and/or additional work required for assessment of proposal for key environmental factors

Table 3 outlines the proposal specific and/or additional work required as it relates to preliminary key environmental factor/s for the proposal. The information outlined in the table below is required in addition to the required work outlined in the *Instructions and Template: How to prepare an Environmental Review Document* and any application policy and guidance.

All Environmental Factors		
Required work	Work to be consistent with the requirements in the <u>Instructions and Template</u> : <u>How to prepare an Environmental Review Document</u> and provided for each factor:	
	1. Factor objective	
	2. Relevant policies and guidance (including, but not limited to Appendix 1)	
	3. Receiving environment	
	4. Potential environmental impacts (direct, indirect and cumulative) (local and regional at the same scale)	
	5. Mitigation	
	6. Assessment and significance of residual impact	
	7. Environmental outcomes (with evidence to support)	
	Work required to inform the ERD will be conducted in accordance with the requirements of the most recent EPA Environmental Factor Guidelines and Technical Guidance at the time the ERD is published for each preliminary key environmental factor, and a consolidated report of all surveys and/or investigations undertaken must be provided for each factor. Where previous investigations or surveys are relied upon, justification will be provided to demonstrate that they are relevant and consistent with EPA guidance.	
	Ensure all information as required by EPA guidelines and guidance is provided in the ERD and that the content in the main document aligns with the information in the attached appendices, or provide justification why this is not the case.	
	Any novel approaches need to be agreed to prior to submission and supported with an independent peer review to demonstrate it is fit-for-purpose. Any investigation, study or survey limitations need to be discussed, along with the methodology as to how any gaps in information have been addressed.	
	For each preliminary key environmental factor, the proponent is required to follow relevant recovery plans, conservation advices and/or threat abatement plans for conservation significant species, communities, habitat (supporting, significant, and critical), and ecosystems that are known to occur, or are likely to occur in the vicinity of the proposal area. Any instances where published guidance is not followed must be adequately justified.	
Flora and Vegetati	, on	

Table 3: Proposal specific and/or additional required work

Required work	1.	If previous surveys are relied on for context, justification should be provided to demonstrate that they are relevant and consistent with EPA guidance
	2.	Identify and describe the flora species and vegetation communities identified by the studies and surveys. Of those identify the significant flora species and vegetation units. For those that are considered not to be significant provide a succinct justification
	3.	Where limitations or gaps in surveys and studies are known, discuss how these limitations and gaps have been addressed.
	4.	Undertake Traditional Ecological Knowledge surveys to understand the potential impacts of the Proposal on culturally significant flora species and vegetation.
	5.	Describe significant flora and vegetation communities, and provide an analysis of each species and community in a local and regional context
	6.	Provide tables with quantitative assessments of direct, indirect and cumulative impact per species and vegetation communities including but not limited to number of individuals, populations, areas of vegetation units in local and regional scale and currently protected within conservation estate.
	7.	Consider the IUCN red list categories and criteria when undertaking the assessment of the impacts of the proposal on each significant environmental value.
	8.	Provide appropriate mapping and figures, including but not limited to, survey efforts, habitats, location of recorded species and/or specific vegetation types.
	9.	Provide cumulative impacts and incorporating available data from adjacent and regional proposals to inform species distributions, vegetation or habitat extents, and the predicted cumulative impacts to species and communities from multiple projects.
	10.	In addition to a mine closure plan, discuss the impacts of surplus water discharge and surface water management (such as, but not limited to, creek diversion) on flora species, vegetation types, habitats and communities, and how impacts will be managed during operations and post-closure with regards to the mitigation hierarchy.
	11.	Discuss proposed approach to rehabilitation and waste landform design including the identification of relevant stakeholders involved.
Terrestrial Fauna		
Required work	12.	In accordance with EPA guidance, and other relevant guidelines, conduct studies to identify and characterise the vertebrate, aquatic invertebrate, and short-range endemic (SRE) invertebrate fauna species and fauna habitats in a local and regional context, clarify and justify the quantification of the local and regional context used in the assessment.
	13.	If previous surveys and records for invertebrate species are utilised, older specimens should be compared with newer collected specimens. Genetic

		analysis may be required to match and identify specimens
	14.	Where limitations or gaps in surveys and studies are known, discuss how these limitations and gaps have been addressed.
	15.	Undertake Traditional Ecological Knowledge surveys to understand the potential impacts of the Proposal on culturally significant fauna species.
	16.	Identify and describe the fauna assemblages recorded and likely to be present within the development envelope that may be impacted by the proposal. Where recorded or likely to be present fauna species are considered not to be significant provide a succinct justification.
	17.	Identify significant (including restricted) fauna species and describe in detail their known ecology, likelihood of occurrence, habitats and known threats.
	18.	Provide tables with quantitative assessments of direct, indirect and cumulative impact of each significant habitat in local and regional scale and currently protected within conservation estate.
Subterranean Faun	a	
Required work	19.	In accordance with EPA guidance, conduct studies and surveys to identify and characterise the subterranean fauna (identified to a species level where possible), assemblages, and habitats in a local and regional context, and clarify and justify the quantification of the local and regional context used in the assessment.
		If previous surveys and records are utilised, older specimens should be compared with newer collected specimens. Genetic analysis may be required to match and identify specimens.
	20.	Identify and describe the subterranean fauna habitats:
		a. That may be impacted directly and indirectly by the proposal during construction and operations.
		b. Describe the significance of these values in a local and regional context.
		c. Include relevant geological and hydrological information to determine habitat suitability and connectivity, including inside and outside the impact areas.
	21.	Provide clear and simplified figures and maps showing the extent of subterranean fauna habitats in relation to the proposal's impacts and species distributions. Consider any local or regional cumulative impacts. Any graphics provided must be clearly annotated and of high resolution.
	22.	Identify and describe the fauna assemblages present and likely to be present within the development envelope that may be impacted by the proposal.
	23.	Describe and quantify the extent of potential direct, indirect and cumulative impacts, including percentages, to subterranean fauna as a result of implementation of the proposal during both construction and operations, in a local and regional context.
Terrestrial Environ	ment	al Quality

Required work	24.	Provide details and rationale for locations of Waste Rock Landforms (WRL), Tailings Storage Facilities (TSF), stockpiles and landfills, including but not limited to a detailed flood risk assessment (i.e. meteorological, geological and geographical characteristics), groundwater modelling.
	25.	Provide details of the stability of the site from a geotechnical and geochemical perspective including baseline studies and stability assessment, materials characterisation and availability, designs for proposed landforms.
	26.	Conduct geochemical and physical characterisation of each processing waste/tailings stream, the waste materials, including characterisation of tailings pore water and discuss the potential impacts associated with each.
	27.	Provide a graphical conceptual representation of the final TSF including parameters to prevent/minimise seepage impacts and seepage modelling to demonstrate that the conceptual TSF design would be environmentally acceptable.
	28.	Provide a baseline ambient groundwater monitoring in the vicinity of the TSFs with ongoing ambient groundwater monitoring compared to this data.
	29.	Assess and provide details of potential best-case and worst-case impacts on surrounding environment through erosion and sediment transport as a result of clearing, TSF, WRL and stockpiles including failure of TSF integrity.
	30.	If pit lakes are to be retained, provide detailed information on the pit lake closure model, including an assessment of the orebody margin and other relevant details to inform how potential impacts to the terrestrial environmental quality can be mitigated. Discuss alternatives to pit lake retention including backfilling to the water table.
Inland Waters		
Required work	31.	Undertake and collect baseline data of inland waters environmental values including but not limited to surface water and groundwater, riparian vegetation and groundwater dependent vegetation
	32.	Provide a hydrogeological assessment for the proposal (including detailed numerical groundwater modelling) with geological cross-sections to assess potential impacts on local and regional aquifers due to dewatering, discharge and reinjection and subsequent impacts to groundwater dependent ecosystems, including but not limited to those within Mindy Mindy Creek, Western Creek, Weeli Wolli Creek, Spearhole Creek, Coondiner Creek, Fortescue Marsh and Fortescue River. This must address aquifer and pit lake recovery during mine closure.
	33.	Complete a water balance study to determine if proposal water requirements can be met over the life of the proposal. This must address surplus water management including but not limited to creek discharge and aquifer reinjection.
	34.	Undertake hydrological investigations to determine:
		 a. the effects any modified drainage will have on the surface and groundwater quality and quantity,

		b. the likely direct and indirect impact areas from the above and
		c. the impacts of climate change, potential weather conditions, cumulative impacts and a range of climatic scenarios including probable maximum precipitation.
	35.	Provide detailed evidence based ecohydrological conceptualisation to illustrate the collective and interacting impacts that may arise from this project linking predicted drawdown, mounding and other predicted impacts to groundwater dependent ecosystems.
	36.	Consider and report potential uncertainty in local and regional aquifer connectivity and potential impacts of drawdown on groundwater dependent and cultural values
	37.	Provide cumulative impacts of surplus water discharge from the current and existing surrounding proposals.
Greenhouse Gas E	missio	ons
Required work	38.	Provide information in accordance with the EPA's guidance for this factor.
	39.	Discuss how the required actions and obligations under the <i>National Greenhouse and Energy Reporting Act 2007</i> and the Commonwealth Safeguard Mechanism for the proposal will meet the EPA's objective.
Social Surrounding	s	
Required work	40.	Characterise and describe the social, cultural, amenity, and heritage values within and adjacent to the Proposal area and any sensitive receptors that may be directly or indirectly impacted as a result of this Proposal. This includes any receptors that may be affected by land clearing, construction and operation activities, noise and dust emissions, traffic, access, and amenity issues. Include relevant maps to show the locations of the sensitive receptors likely to be affected by the proposal. Identify sites of cultural significance within a regional context, in consultation with the Traditional Owners.
	41.	Identify and assess potential impacts to any pastoral leases that may occur as a result of this proposal being implemented. Consult with pastoral leaseholders and users that may be impacted, either directly or indirectly, regarding operation and closure land uses.
	42.	Conduct and undertake meaningful surveys, investigations, consultation and engagement with relevant Traditional Owner groups to identify Aboriginal cultural heritage, as defined in the EPA's Guidance. This process includes areas within and outside the Development Envelope that could be directly or indirectly impacted by the proposal.
	43.	Undertake noise and dust modelling and assessment of noise and dust impacts to relevant Traditional Owner groups, nearby landholders and public sensitive receptors.
	44.	Undertake a visual impact assessment (VIA) to inform mine design and to assess potential impacts to visual amenity as viewed from sites and places of cultural significance as determined through consultation and engagement with Traditional Owner groups.

	45.	Assess how the changes to hydrological regimes and water quality have the potential to impact culturally significant waters, flora and fauna species considered culturally significant to the Traditional Owners.
Landforms		
Required work	46.	Identify landforms likely to be impacted, including those areas that will be altered, both temporarily and permanently, those that will remain as a structural or visual impact on the landform, and those that are proposed to be restored and/or revegetated as part of closure.
	47.	Describe and assess the significance of potential direct, indirect and cumulative impacts to the significant landform features or systems within and directly adjacent to the proposal area. Include an analysis of the nature, magnitude and duration of the impacts (including extent, severity and duration). Provide information on the cumulative impacts of the proposal in the context of other existing or reasonably foreseeable development within the Giles Point and Ophthalmia Range.
	48.	A large portion of Weeli Wolli Creek, Mindy Mindy Creek and Coondiner Creek, which feed into the Fortescue Marsh, will be part of the proposed Fortescue Marsh Nature Reserve, as outlined in the Government's Plan for Our Parks Initiative. Consider any potential risks or impacts (direct, indirect and cumulative) to the proposed reserve that may result from proposal implementation, including post closure.
	49.	Synthesise the above information (i.e. tables, geospatial information, photos, aerials) to describe, spatially define and visually represent the extent of temporary (define timescales) and permanent impacts to the significant landform features, its ecological function and environmental values.

2.3 Cumulative impact assessment – scoping of activities, boundaries and environmental values for relevant environmental factors

The potential cumulative effects of the proposal will be assessed in the ERD. The cumulative impact assessment (CIA) will consider the environmental effects of the proposal in context with the environmental effects of past and existing projects in the area, including reasonably foreseeable projects which have not yet commenced.

Noting the increased level of development in the region, assessment of cumulative impacts will be required to address how the objectives of the environmental factors will be met. The proponent will be required to examine the cumulative impacts of this proposal, the Rhodes Ridge Iron Ore Project, alongside the proposed impacts of past, current and reasonably foreseeable proposals.

The CIA of this proposal must also include other development and industries in the catchment area as well as any approved Native Vegetation Clearing Permit (NVCP) applications and developments (e.g. mines and associated infrastructures) that intersect with Rhodes Ridge Iron Ore Project. The proponent will seek to use available information such as the EPA website and Clearing Permit Systems (CPS) through the link (<u>CPS-DWER</u>) to gather data in addressing this aspect.

The ERD will include a CIA of combined effects of different cumulative impacts upon the following environmental factors: Flora and Vegetation, Terrestrial Fauna, Subterranean Fauna, Inland Waters, Social Surroundings, Landforms and Greenhouse Gas emissions.

Throughout the preparation of the ERD, there may be additional environmental values identified.

Table 4: Scope of the cumulative impact assessment

Flora and Vegetation	on
Scoping	• The boundaries of assessment include the proposal development envelope, and any direct or indirect impacts that may occur outside the development envelope, including the Ben's Oasis and Mindy Mindy Spring, and Fortescue River Upper Catchment area.
	• Environmental values include the following, which may be considered preliminary until further surveys are completed and additional values may be included (exclusion of any environmental values require justification):
	 Fortescue Marsh Management Areas
	 West Angelas Cracking-Clays Priority 1 Priority Ecological Community (PEC)
	 Weeli Wolli spring community Priority 1 Priority Ecological Community (PEC)
	 Coolibah – lignum flats: sub type 1 Priority 3 Priority Ecological Community (PEC)
	 Kumina Land System Priority 3 Priority Ecological Community (PEC),
	\circ (Beard) Vegetation Association 18, 29, 82 and 175
	 Significant native vegetation types identified within the DE through flora and vegetation surveys
	 Conservation significant species that occur within the development envelope, and outside the development envelope that may be directly or indirectly impacted by proposal activities
	 Other environmental values as identified in future studies.
	• Activities considered include clearing 14,850 hectares (ha) of native vegetation, groundwater abstraction, alteration to surface water flows and groundwater systems, and surplus water management.
Subterranean Faun	12
Scoping	• The boundaries of assessment include proposal development envelope, and any direct or indirect impacts that may occur outside the development envelope, including but not limited to the Ben's Oasis and Mindy Mindy Spring, Fortescue Marsh Management Zone, Ophtalmia and Fortescue Marsh subcatchments, and Fortescue River Upper Catchment area.
	 Environmental values at the time of ESD publication are preliminary pending further surveys and will be required to address impacts to significant or restricted subterranean fauna species and habitat.

	Ethel Gorge aquifer stygobiont community – Critically Endangered
	 Activities considered include mine pit excavation, blasting, ground disturbance, groundwater abstraction, surplus water discharge/reinjection, managed aquifer recharge, aquifer storage and recovery, placement of infrastructure and waste landforms, exposure of potential acid forming materials and post-closure formation of pit lake, storage and handling of hazardous materials and wastes.
Terrestrial Fauna	
Scoping	• The boundaries of assessment include proposal development envelope, and any direct or indirect impacts that may occur outside the development envelope, including the Ben's Oasis and Mindy Mindy Spring, Fortescue Marsh Management Zone, Ophtalmia and Fortescue Marsh subcatchments, and Fortescue River Upper Catchment area.
	 Environmental values include the following, which may be considered preliminary until further surveys are completed and additional values may be included (exclusion of any environmental values require justification):
	o Fauna habitat
	 Conservation significant terrestrial fauna species (including short range endemic species and assemblages)
	 Aquatic invertebrate species
	 Other environmental values as identified in additional studies.
	 Activities considered include clearing of 14,850 ha of fauna habitat, vehide and machinery movements, dewatering, alterations and disruptions to surface water flows, surplus water management and waste disposal.
Inland Waters	
Scoping	• The boundaries of assessment include proposal development envelope, and any direct or indirect impacts that may occur outside the development envelope, including the Ben's Oasis and Mindy Mindy Spring, Fortescue Marsh Management Zone, Ophtalmia and Fortescue Marsh subcatchments, and Fortescue River Upper Catchment area.
	• Environmental values include the following, which may be considered preliminary until further surveys are completed and additional values may be included (exclusion of any environmental values require justification):
	 Fortescue Marsh,
	o Weeli Wolli Creek,
	 Mindy Mindy Creek,
	• Western Creek,
	 Spearhole Creek,
	• Coondiner Creek,
	• Fortescue River,
	 Other key water features, including major drainage lines, aquifers and

	sheetflow areas, as identified in other studies.
	 Activities considered include groundwater abstraction for abstraction during construction, water supply management, alteration of surface water flows, use and storage of hydrocarbons, storage of waste rock and other materials, pit lake formations and closure impacts.
Greenhouse Gas	
Scoping	• Boundaries of assessment include emissions contributions to the Western Australian resource sector (mining, processing, transport, oil and gas), and the cumulative emissions contributed to total West Australian greenhouse gas emissions.
	• Environmental values include scope 1 and 2 generations, and other environment receptors at risk due to climate change.
	 Activities considered include diesel combustion, use of equipment, vehicles and clearing.

2.4 Holistic impact assessment

Where the combination of the environmental effect of two or more environmental factors or values has the potential to result in a significant impact, provide a holistic impact assessment of the proposal on the environment, applying the EPA's principles and the EPA's objectives for environmental factors:

- Outline the connections and interactions between environmental factors or values that in combination have the potential to have a significant effect on the environment.
- Provide a diagram of the links between environmental factors or values.
- Summarise the potential combined environmental effects.
- Summarise any additional mitigation measures proposed to mitigate combined environmental effects.
- Summarise any significant residual combined environmental effects.
- Summarise proposed additional environmental outcomes for the proposal on the environment as a whole, and (optional) any proposed conditions for consideration by the EPA.

Provide a summary of the environmental effect of the proposal on the environment as a whole (as distinct from a summary of the effect for each individual environmental factor or environmental value).

2.5 Offsets

Identify and quantify the significant residual impacts and proposed offsets, including completing the offset template (an example is in Appendix 1 of the WA Offsets Guidelines) and the residual impact significance model table (an example is on Page 11 of the WA Environmental Offsets Guideline).

Where significant residual impacts remain, propose an appropriate offsets package and demonstrate how the proposed offset will counterbalance the significant residual impact.

Provide details of the proposed offset including but not limited to:

- objectives and outcomes
- description of actions to be undertaken
- specific and measurable success criteria
- timelines and milestones

- monitoring to assess offset implementation
- reporting details and timing
- financial arrangements
- risks and contingency measures
- governance arrangements including responsibilities and legal obligations
- provide evidence of consultation on offset with relevant stakeholders.

Demonstrate consideration of the six Principles outlined in the WA Environmental Offsets Policy and WA Environmental Offset Guideline.

Outline how the offset aligns with relevant plans and policies, such as recovery plans.

Evidence that supports the success or viability of the offset (include as an appendix where required).

Where a contribution to the Pilbara Environmental Offsets Fund is proposed to offset the significant residual impacts, provide an Impact Reconciliation Procedure, including the relevant spatial data, prepared in accordance with Instructions: Preparing Impact Reconciliation Procedures and Impact Reconciliation Reports (or any subsequent revisions).

Refer to the relevant guidance for further information on offsets:

- Statement of environmental principles, factors, objectives and aims of EIA
- Environmental factors: WA Environmental offsets policy and WA environmental offset guidelines.
- Public Advice: Considering Environmental Offsets at a Regional Scale
- Greenhouse Gas Emissions factor: Government of Western Australia's Greenhouse gas emissions Policy for major projects
- EPA's Environmental factor guideline Greenhouse gas emissions.

Note: Offsets are not appropriate for all proposals. They should usually only be considered as the final step in the mitigation hierarchy, and only for significant residual impacts for environmental factors.

Proponents must provide sufficient evidence about and assess whether (and how) an offset is likely to counter-balance a significant residual impact. Conclusions about this cannot be based on assumptions or conjecture.

2.6 Stakeholder consultation

The proponent must consult with stakeholders who are affected by or are interested in the proposal. This includes the decision-making authorities, other relevant state (and Commonwealth) government agencies and local government authorities, Traditional Owners, the local community and environmental non-government organisations.

Additional stakeholders that must be meaningfully consulted include, but are not limited to:

- Nyiyaparli People and Elders
- Ngarlawangga People and Elders
- Karlka Nyiyaparli Aboriginal Corporation
- Ngarlawangga Aboriginal Corporation
- Yamatji Marlpa Aboriginal corporation
- Pastoral leaseholders, where the development envelope overlaps the pastoral lease or may

otherwise, directly or indirectly, affect the pastoral lease.

The proponent must document the following in the ERD:

- List the key stakeholders for the proposal.
- Discuss the stakeholder identification process.
- Discuss the process for stakeholder engagement for the proposal, including ongoing consultation.
- Include outcomes of consultation with stakeholders and a detailed response to issues raised by them (or reference the section in the ERD where they are addressed) (ERD Template Table 5).
 Identify who was consulted, summary of discussions, key issues / matters raised, outcomes and whether matters raised were resolved or outstanding.
- Do not include generic outcomes of discussions with decision making authorities or stakeholders do include specific outcomes.
- Justify if consultation has not been undertaken

3. Decision-making authorities

The Proponent has identified the State decision-making authorities listed in Table 4 for this Proposal. Additional decision-making authorities may be identified during the course of the assessment. The proponent is required to update and complete the information in Table 5 and Table 6, which is to be provided in the ERD on a per impact basis.

Information about how DMAs processes can meet expected outcomes and EPA objectives is preliminary or may be unknown at this ESD stage.

Table 5: Decision making authorities and processes

Decision-making authority	Legislation or Agreement regulating the activity	Approval required (and specify which proposal element the approval is related to)		
Minister for Aboriginal Affairs	Aboriginal Heritage Act 1972	Section 18 consent to impact a registered Aboriginal heritage site		
Minister for Environment	Biodiversity Conservation Act 2016	Biodiversity Conservation Act 2016 Section 40 authority to take or disturb threatened species Section 45 authority to modify occurrence of a threatened ecological community.		
Minister for State Development	Iron Ore (Rhodes Ridge) Agreement Authorisation Act 1972 (WA) Iron Ore (Hamersley Range) Agreement Act 1963 (WA) Iron Ore (Hope Downs) Agreement Act 1992 (WA)	State Agreement proposals		
Minister for Water	Rights in Water and Irrigation Act 1914	Section 17 permit to interfere with beds and banks Section 5C licence required for the abstraction of groundwater Section 26D licence required to construct dewatering and water supply bores		
	Waterways Conservation Act 1976 and Waterways Conservation Regulations 1981	Section 47 disposal licence		
Minister for Mines and Petroleum	Mining Act 1978	Grant of appropriate tenure - granting of a mining lease/exploration licence/general purpose lease/retention licence - Section 16 approval to lease, transfer or otherwise dispose of land under the Land Administration Act (note: applies when land is leased or disposed of under the LAA)		

OFFICIAL

Executive Director Resource and Environmental Compliance.	Mining Act 1978	Mining Proposal and Mine Closure Plan	
Department of Energy, Mines, Industry Regulation			
Chief Inspector of Mines, Department of Energy, Mines, Industry Regulation and Safety	Work Health and Safety Act 2020, Work Health and Safety (mines) Regulations 2022	Health and safety management plan	
Chief Executive Officer, Department of Water and Environmental Regulation	Environmental Protection Act 1986	Part V works approval and licence.	
Chief Dangerous Goods Officer, Department of Energy, Mines, Industry Regulation and Safety	Dangerous Goods Safety Act 2004	Storage and handling of dangerous goods.	
Chief Executive Officer, Department of Biodiversity, Conservation and Attractions (DBCA)	Biodiversity Conservation Act 2016 Biodiversity Conservation Regulations 2018	Section 5 – licence to take flora and fauna (other than threatened species)	
Shire of East Pilbara	Building Act 2011	Building permit (worker accommodation, offices etc).	
Newman Township	Planning and Development Act 2005	Development approval	
	Health Act 1911 and Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulation 1974	Treatment of sewage for a single dwelling or any other building that produces less than 540 litres of sewage per day	

Table 6: Other statutory decision-making process which can mitigate potential impacts on the environment

Environmental impact	How is the impact regulated by other decision- making process(es)?	Limit(s) of the decision-making process(es) to regulate the impact e.g., time limits, excluded operations	Likely environmental outcome of decision-making process(es), and consistency with EPA objective	Conditions, enforcement, and review process required by decision- making process(es)	Stakeholder engagement in decision-making process(es)
Proponent to populate and provide in the environmental review document.					

OFFICIAL





Path: S: (Projects)EIA(s38)2024_APP0025093_RhodesRidgetronOreProject(__Referral/ArcGISPro)2024_APP0025093_RhodesRidgetronOreProject2024_APP0025093_RhodesRidgetronOreProject_aprx



Figure 2: Development envelope of the Rhodes Ridge Iron Ore Project.

Path: S:\Projects\EIA\s38\2024_APP0025093_RhodesRidgeTronOreProject\1_Refemal\ArcGISPro\2024_APP0025093_RhodesRidgeTronOreProject\

Appendix 1 – Policy and Guidance

Flora and Vegetation

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Instructions on how to prepare an environmental review document (2021)
- Environmental factor guideline Flora and vegetation (2016)
- Technical guidance: Flora and vegetation surveys for environmental impact assessment (2016)
- Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA) (2021)
- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Instructions for preparing Impact Reconciliation Procedures and Impact Reconciliation Reports (2021)
- Evaluating the environmental condition of Weeli Wolli Creek (2018)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy, Department of Sustainability, Environment, Water, Population and Communities (2012)
- WA Environmental Offsets Policy, Government of Western Australia (2011)
- WA Environmental Offsets Guidelines, Government of Western Australia (2014)
- WA Environmental Offsets Template (2014)
- Fortescue Marsh Management Strategy 2018-2024, Department of Biodiversity, Conservation and Attractions (2018)
- Pilbara Conservation Strategy, Government of Western Australia (2018)
- DBCA's Impact and Invasiveness Rating for the Pilbara Region (2023)

Subterranean Fauna

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Instructions on how to prepare an environmental review document (2021)
- Environmental factor guideline Subterranean fauna (2016)
- Technical guidance: Subterranean fauna survey for environmental impact assessment (2021)
- Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA) (2021)

- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy, Department of Sustainability, Environment, Water, Population and Communities (2012)
- WA Environmental Offsets Policy, Government of Western Australia (2011)
- WA Environmental Offsets Guidelines, Government of Western Australia (2014)
- WA Environmental Offsets Template (2014)
- Fortescue Marsh Management Strategy 2018-2024, Department of Biodiversity, Conservation and Attractions (2018)
- Pilbara Conservation Strategy, Government of Western Australia (2018)

Terrestrial Fauna

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Instructions on how to prepare an environmental review document (2021)
- Environmental factor guideline Terrestrial fauna (2016)
- Technical guidance: Terrestrial vertebrate fauna surveys for environmental impact assessment (2020)
- Technical guidance: Sampling of short range endemic invertebrate fauna (2016)
- Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA) (2021)
- Instructions for preparing Impact Reconciliation Procedures and Impact Reconciliation Reports (2021)
- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Guidelines for determining the likely presence and habitat usage of night parrot (Pezoporus occidentalis) in Western Australia (2024)
- Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy, Department of Sustainability, Environment, Water, Population and Communities (2012)
- WA Environmental Offsets Policy, Government of Western Australia (2011)

- WA Environmental Offsets Guidelines, Government of Western Australia (2014)
- WA Environmental Offsets Template (2014)
- Fortescue Marsh Management Strategy 2018-2024, Department of Biodiversity, Conservation and Attractions (2018)
- Pilbara Conservation Strategy, Government of Western Australia (2018)
- National Light Pollution Guidelines for Wildlife (2023)
- Environmental Management Plan Guidelines (2014)
- A review of ghost bat ecology, threats and survey requirements (2022)
- A review of Pilbara leaf-nosed bat ecology, threats and survey requirements (2022)

Terrestrial Environmental Quality

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Environmental Factor Guideline Terrestrial Environmental Quality (2016)
- Instructions on how to prepare an environmental review document (2021)
- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Guidelines for preparing Mine Closure Plans (2015)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Prepare a mine closure plan, Department of Mines, Industry Regulation and Safety (2020)
- Pilbara Conservation Strategy, Government of Western Australia (2018)
- Preventing acid and metalliferous drainage, Australian Government Department of Industry, Tourism and Resources (2016)
- Tailings Storage Facilities in Western Australia Code of Practice, Department of Mines and Petroleum (2013)
- Guide to the Preparation of a Design Report for Tailings Storage Facilities (TSFs), Department of Mines and Petroleum (2015)

Inland Waters

EPA Policy and Guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Environmental Factor Guideline Inland Waters (2018)
- Instructions on how to prepare an Environmental Review Document (2021)
- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Guidelines for Preparing Mine Closure Plans, (2020)

- Evaluating the environmental condition of Weeli Wolli Creek, (2018)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Pilbara Conservation Strategy, Government of Western Australia (2018)
- Fortescue Marsh Management Strategy 2018-2024, Department of Biodiversity, Conservation and Attractions (2018)

Greenhouse Gas Emissions

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Environmental Factor Guideline Greenhouse Gas Emissions (2023) or as revised
- Instructions on how to prepare an environmental review document (2021)

Other policy and guidance

- Western Australian Climate Policy 2020
- Greenhouse Gas Emissions Policy for Major Projects Government of Western Australia (2024)

Social Surroundings

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Environmental Factor Guideline Social Surroundings (2023)
- Instructions on how to prepare an environmental review document (2021)
- Technical Guidance Environmental impact assessment of Social Surroundings Aboriginal cultural heritage (2023)
- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Environmental Protection (Noise) Regulations 1997
- Guideline for managing the impacts from dust and associated contaminants from land development sites, contaminated sites remediation and other related activities. Department of Water and Environmental Regulation (2011)
- Mine sites, exploration camps and construction villages Scoping Tool: Public Health Considerations, Department of Health (2011)

- Fortescue Marsh Management Strategy 2018-2024, Department of Biodiversity, Conservation and Attractions (2018)
- The Interim Engaging with First Nations People and Communities on Assessments and Approvals under Environment Protection and Biodiversity Conservation Act 1999 (interim guidance) (2023)
- Aboriginal Heritage Act (1972)
- Aboriginal Heritage Act Regulations (1974)
- Aboriginal Heritage Act 1972 Guidelines Department of Planning, Lands and Heritage
- Consultation policy for section 18 Applications Department of Planning, Lands and Heritage

Landforms

EPA policy and guidance

- Statement of Environmental Principles, Factors and Objectives (2023)
- Instructions on how to prepare an environmental review document (2021)
- Instructions on how to prepare Environmental Protection Act 1986 Part IV Environmental Management Plans (2023)
- Environmental Factor Guideline Landforms (2018)
- Cumulative environmental impacts of development in the Pilbara region, s16(e) of the Environmental Protection Act, 1986 (2014)
- Environmental and water assessments relating to mining and mining-related activities in the Fortescue Marsh management area, s16(e) of the Environmental Act 1986 (2013)

Other policy and guidance

- Pilbara Conservation Strategy, Government of Western Australia (2018)
- Plan for Our Parks (2023)