

Template

Proposal Content Document

Table 1: General proposal content description

Proposal title	Karara Iron Ore Project – Mine Life Extension (KIOP MLE)
Proponent name	Karara Mining Limited (KML)
Short description	<p>This Proposal is to revise the existing Karara Iron Ore Mine, located 320km north-northeast of Perth in the Midwest Region of Western Australia.</p> <p>The Proposal includes additional ground disturbance to support the revised Life of Mine strategy, including a revised development envelope, extension of the tailings storage facility and waste rock landform, incorporation of the areas previously approved under MIOP (MS806) and areas required for maintenance of the infrastructure previously approved under Part V of the EP Act (clearing permit), which will be utilized for the ongoing operations at Karara.</p>

Table 2: Proposal content elements – More information is provided in Table 2-2, Table 2-3 and Section 2.2 – 2.4 of the attached amended referral supporting document.

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Development envelope	Figure 1-2: Project Development Envelope of the attached supporting document	No greater than 13,557 ha
Area of disturbance	Figure 2-1: Development Envelope, Indicative Footprint and Conceptual Design of the attached supporting document	Additional 1,522 ha; No greater than 5,040 ha within the development envelope
Construction elements		
Waste dump	Figure 2-1: Development Envelope, Indicative Footprint and Conceptual Design of the attached supporting document	<p>Karara waste dump:</p> <p>Additional 630 ha; No greater than 995 ha in total</p> <p>Maximum height: 450 mRL / 106 mAGL</p>

Proposal element	Location / description	Maximum extent, capacity or range
		MIOP waste dumps (rehabilitated) and ROM pads (approved under MS806): Blue Hills North pit – 135ha; Terapod – 58ha.
Tailing Storage Facility	Figure 2-1: Development Envelope, Indicative Footprint and Conceptual Design of the attached supporting document	Additional 486 ha; No greater than 1,090 ha in total Maximum height: 402 mRL
Site Infrastructure	Figure 2-1: Development Envelope, Indicative Footprint and Conceptual Design of the attached supporting document	Additional 174 ha to accommodate the construction of new infrastructure surrounding the WRD and TSF expansion areas at the KIOP. Incorporate of infrastructure (224 ha) previously approved under MIOP (MS806) to support ongoing mine operations at the KIOP.
Operational elements		
Waste Rock	Stage 2 (first expansion) to Stage 8 (final expansion) – Approx. 17 Mtpa	Additional 245 Mt Life of Mine: 462 Mt
Potentially Acid Forming (PAF) Material	Approx. 20% of the waste rock is classified as PAF and would be contained inside isolation cells in the waste dump.	Up to 9.4Mtpa
Pit	KIOP: Single open cut pit: <ul style="list-style-type: none"> • Approx. 3,400m long; • Approx. 1,300m wide; • Approx. 300m deep. MIOP (approved under MS806): Two open cut pits with final dimensions of:	N/A

Proposal element	Location / description	Maximum extent, capacity or range
	<ul style="list-style-type: none"> • Blue Hills North - 1,390 m long, 360 m wide, 133 m deep; and • Terapod – 1,440 m long, 360 m wide, 140 m deep. 	
Tailings	Dry-stack and wet tailings cells within the final tailings storage facility landform, being a single dry stack tailings storage facility.	N/A
Production Rate	<p>Stage 2 (first expansion) to Stage 8 (final expansion) – Approx. 8.2 Mtpa of concentrate</p> <p>Stage 2 (first expansion) to Stage 8 (final expansion) - Approx. 21 Mtpa of magnetite ore</p>	N/A
Dewatering	<p>The groundwater table is predicted to be intersected by the pit in year 3 which would require pit dewatering of approx. 600 kL/d:</p> <ul style="list-style-type: none"> • Increasing to approx. 1,300 kL/d in year 16; and • Decreasing to approx. 830 kL/d in year 23. 	N/A
Site Access	<p>Upgrading a number of existing roads, part of which would run parallel to the LIC.</p> <p>Borrow material for road base would be sourced from three pits alongside the LIC.</p>	Additional 87ha is proposed to maintain the existing Syncline Turner haul road.

Proposal element	Location / description	Maximum extent, capacity or range
Site Infrastructure	<ul style="list-style-type: none"> • Processing plant; • ROM pad; • Bulk fuel storage and refuelling pads; • Explosive compound and magazine; • Wastewater treatment facility; • Reverse osmosis plant; • Landfill; • Air strip; • Borefields; • Power line; and • Rail siding. 	<p>The following area is proposed to support the existing infrastructure:</p> <ul style="list-style-type: none"> • 76 ha of area supporting the western portion of Yandanooka water pipeline; and • 31 ha of area supporting rail loop.
Proposal elements with greenhouse gas emissions		
Construction elements: Construction of the KIOP MLE project, including expansion of the WRD, TSF and other site facilities		
	Scope 1: Annual: 91,921 tCO ₂ -e; Project Life (2022-2050) Total: 2,573,782 tCO ₂ -e	
	Scope 2: Annual: 442,621 tCO ₂ -e; Project Life (2022-2050) Total: 12,393,381 tCO ₂ -e	
	Scope 3 - Nil	
	Mine lifetime emissions from land clearing: 233,049 tCO ₂ -e	
Operation elements: Producing ore and downstream steel production.		
	Scope 1 - Nil	
	Scope 2 – Nil	
	Scope 3: Annual: 16,446,991 tCO ₂ -e; Project Life (2022-2050) Total: 460,515,739 tCO ₂ -e	
Rehabilitation		
<p>Please refer Section 5.3.6, Section 5.4.5, Section 5.5.6 and Section 6.2.6 in the attached supporting document for rehabilitation details as part of the mitigation measures to minimise potential impacts on the environmental factors associated with this revised Proposal. Rehabilitation will be undertaken in accordance with the following KML environmental procedures/plan/schedule:</p> <ul style="list-style-type: none"> • CORP-EN-PRO-1002 – Land Rehabilitation • CORP-EN-PRO-1040 – Rehabilitation Performance Monitoring 		

Proposal element	Location / description	Maximum extent, capacity or range
	<ul style="list-style-type: none"> CORP-EN-SCH-1006 - Rehabilitation Schedule CORP-EN-PLN-1038 – Mine Closure Plan 	
Commissioning		
Details regarding commissioning and operations of the mine infrastructure included in this revised proposal are provided in Section 2.4 of the attached supporting document.		
Decommissioning		
Decommissioning of the mine infrastructure will be managed through the KML's Mine Closure Plan (CORP-EN-PLN-1038). Details of implementation of the Mine Closure Plan as part of the proposed mitigation measures to minimise potential impacts on the environmental factors associated with this revised Proposal are also provided in the sections of the attached supporting document as provided in Rehabilitation.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	~40 years (expect to end in 2050)
	Construction phase	~24 months
	Operations phase	~40 years (2010 – 2048)
	Decommissioning phase	~2 years (2048 – 2050)

* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).