

Proposal Content Document

Simcoa Operations Pty Ltd (**Simcoa**, the **Proponent**) currently operate the Moora Quartzite Mine (the Existing Mine), approximately 15 km north of Moora, in the Wheatbelt of Western Australia (WA). The Existing Mine is located on tenements M70/191, G70/91, G70/92, G70/93 and M70/1292 [with activities on M70/1292 limited to mine dewater discharge to Kyaka Brook], and is regulated under Ministerial Statement 813 (MS 813).

Simcoa is proposing to establish a new quartzite mine immediately north of the Existing Mine (with the mine pit located approximately 1.5 – 2 km north of Kiaka Road and the Existing Mine). The proposed development at North Kiaka (**North Kiaka Mine**) (the **Proposal**) is located within tenement M70/1292 (Figure 1-1). The Proposal is expected to generate up to 130,000 tonne per annum (tpa) of lump quartz for up to 18 years.

Table ES1.2 General proposal content description

Proposal title	North Kiaka Project
Proponent name	Simcoa Operations Pty Ltd
Short description	<p>The Proposal is for the development of a new quartzite mine at North Kiaka, approximately 15 km north of Moora, WA (Figure 1-1). The Proposed North Kiaka Mine is approximately 1.5-2 km NNE of the existing Moora Quartzite Mine. The Proposal is expected to generate up to 130,000 tpa of lump quartz for downstream processing at the Kemerton Silicon Smelter located in the Kemerton Strategic Industrial Area 17 km north-east of Bunbury, WA.</p> <p>The Proposed North Kiaka Mine will be open-cut and above the water table and has a predicted Life of Mine of 18 years based on current resource estimates.</p> <p>Ore mined at North Kiaka will be pre-processed (crushed and screened) at the existing Moora Quartzite Mine ahead of transport to Kemerton, as Moora Mine has an established network of power, water and roads.</p>

Table ES1.1 Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Mine Development Envelope (MDE) Including a mine pit, waste rock landform (WRL), run of mine area (ROM), laydown and stockpile areas, access corridor and associated infrastructure	Figure 1-3	Disturbance of up to 44.59 ha (including up to 17.12 ha of clearing) within a 216.42 ha Mine Development Envelope.
Construction elements		
Key construction elements will include clearing for all identified physical and operational elements, installation of temporary offices/ ablutions, movement of topsoil, and bulk earthworks to support construction of project ancillary facilities.		
Operational elements		
Mine pit	Figure 1-3	The mine pit footprint is 25.48 ha. An estimated 236,000 tonne per annum (tpa) of ore will be processed (crushed and screened) to produce approximately 130,000 tpa of lump quartz.
Tonkin Waste Rock Dump (Tonkin WRD)	Figure 1-3	Tonkin WRD has a footprint of 9.69 ha and is located approximately 0.5 km south of the mine pit, on farmland previously cleared of native vegetation. It is estimated that up to 2.15 million m ³ of waste rock will be disposed to the Tonkin WRD, assuming a swell factor of 30%. The final height of the WRL is expected to be 21 - 45 m below the tallest landform in the Proposal DE (pre-development).

Proposal element	Location / description	Maximum extent, capacity or range
		The WRL is positioned in a valley to further reduce visibility of the landform from surrounding areas.
ROM	Figure 1-3	Short-term ROM (1.22 ha, approximately 80 m x 100 m) allowing for up to 20 days per year to be stockpiled
Ancillary Facilities	Figure 1-3	Access corridor (connecting North Kiaka to the existing Moora Mine) (7.31 ha) and associated infrastructure (0.88 ha) including an administration building, car park, weighbridge, workshops, ablution facilities, laydown and stockpile areas, hydrocarbon storage, refuelling facility, and washdown bays
Power	Figure 1-3	One onsite generator (noting that crushing and screening of ore will occur at the existing Moora Quartzite Mine)
Groundwater abstraction (water demand)	Figure 1-3	<p>No dewatering or groundwater abstraction is currently proposed.</p> <p>Simcoa will seek an amendment to the Existing Mine groundwater licence (GWL 104693(6)) to authorise the use of abstracted water within tenement M70/1292. The groundwater abstraction volume approved in Licence GWL 104693(6) is expected to provide sufficient water for dust suppression within the Proposal DE, as well as continuing dust suppression at the Existing Mine.</p> <p>If additional water (or a more localised source of water) is required at a later date, Simcoa will seek the necessary approvals under the RIWI Act to install and abstract groundwater within M70/1292.</p>
Proposal elements with greenhouse gas emissions		
Construction (total)		
Scope 1	2,042	
Scope 2	None	
Scope 3	776	
Operation (annual)		
Scope 1	1,170	
Scope 2	None	
Scope 3	7,530	
Rehabilitation		
<p>Rehabilitation of the Proposal will be undertaken in line with commitments in the s.38 Supporting Document, Ministerial Statement conditions (following approval of the Proposal by the Minister), and the Project Mine Closure Plan (to be assessed and approved by DMIRS). Some key rehabilitation commitments are listed below:</p> <ul style="list-style-type: none"> – Rehabilitation will be undertaken progressively. – Rehabilitated landforms (Tonkin WRD) will be stable and non-polluting (i.e. batter slope of 18°, placement of structurally stable soils at the surface, contoured/ ripped/ logs and rocks placed to reduce erosion risk). – The Tonkin WRD will be rehabilitated using local native species to meet post-closure goals and outcomes as specified in the Mine Closure Plan – Waste rock that is stable and non-acid forming will be used as growth medium for rehabilitation of landforms, as this method is proven to successfully re-establish native provenance species at the existing Moora Mine. – Topsoil comprising sandy gravels will be collected, stockpiled (<2 m height) and used to rehabilitate areas previously used for agriculture that will be returned to their pre-mining land use. – Weed management will be undertaken for the first three years following rehabilitation. Any requirement for further weed control will be assessed after the three year timeframe. 		
Commissioning		
Limited commissioning works are required as all crushing activities will be occur off site from this Proposal and undertaken at the Existing Mine.		

Proposal element	Location / description	Maximum extent, capacity or range
Decommissioning		
<p>Simcoa intends to enable regrowth of local native flora species on the WRD, close the mine pit with an abandonment bund, and return all other disturbance footprints to pre-mining agricultural land use (including the removal of buildings and infrastructure).</p> <p>Simcoa will develop a Mine Closure Plan (MCP) in accordance with the Department of Mines, Industry, Regulation and Safety 2020 Guidelines for Mining Proposals in WA, to support the development of the project under the <i>Mining Act 1978</i>. The MCP will be assessed and approved by DMIRS prior to commencement of project activities.</p>		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	18 years
	Construction phase	1 year
	Operations phase	18 years
	Decommissioning phase	Approximately 1 year