

Proposal Content Document

Table 1: General proposal content description

Proposal title	Brown’s Range Rare Earths Project
Proponent name	Northern Minerals Limited
Short description	A rare earth elements (REE) mine and ore processing facility at Browns Range, approximately 160 (km) southeast of Halls Creek in the Shire of Halls Creek.

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Mine pits and underground operations, infrastructure area and haul road.	Figures 1, 2, 3 and 4	Clearing of not more than 771 ha of vegetation within the development envelope of 4,384 ha.
Operational elements		
Water abstraction from borefield	Figures 1 and 4	Up to 1.3 GL/year
Mine dewatering (cumulative across all deposits)	Figures 1 and 4	Up to 0.79 GL/year
Proposal elements with greenhouse gas emissions		
Construction elements:		
Scope 1	<div> <div> <u>Land use change – vegetation clearing</u> Approximately 82,163 t CO₂-e </div> <div> <u>Power and Mobile Plant</u> Average per annum: 19,397 t CO₂-e Total: 58,191 t CO₂-e </div> <div> <u>Total Scope 1 Emissions</u> </div> </div>	

	Total: 140,354 t CO ₂ -e
Scope 2	None
Scope 3	<u>Inputs - people movement, diesel deliveries and construction freight</u> Approximately 7,195 t CO ₂ -e per annum <u>Outputs - people movement, waste removal</u> Approximately 1,977 t CO ₂ -e per annum Total: 9,172 t CO ₂ -e per annum
Operation elements:	
Scope 1	<u>Power generation</u> Average Per Annum: 10,559 t CO ₂ -e <u>Mobile Plant</u> Average Per Annum: 7,110 t CO ₂ -e <u>Total</u> Total Average per Annum: 17,669 t CO ₂ -e Total: 176,689 t CO ₂ -e Maximum per Annum: 52,610 t CO ₂ -e (assumes no renewables)
Scope 2	None
Scope 3	<u>Inputs - people movement, diesel deliveries and general freight</u> Approximately 3,043 t CO ₂ -e per annum <u>Outputs - people movement, product transport, waste removal</u> Approximately 5,345 t CO ₂ -e per annum Total: 8,388 t CO ₂ -e per annum
Rehabilitation	

Rehabilitation and closure will include progressive rehabilitation of disturbed areas and backfill to above the pre-mining groundwater level if further investigation to the end of Year 3 of the mining operation does not encounter additional mineable mineral resources.

Commissioning

Commissioning of processing facility to be undertaken subject to operational limits above.

Decommissioning

Removal of all process related infrastructure following cessation of operations (excluding periods of care and maintenance).

Other elements which affect extent of effects on the environment

Proposal time*	Maximum project life	14 years
	Construction phase	2.5 years
	Operations phase	10 years
	Decommissioning phase	1.5 years

** 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).*