

Appendix 4

Statement of Commitments

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PREAMBLE

This Statement of Commitments has been prepared to provide a compilation of the actions and initiatives the Applicant has committed to implement if the Proposal receives development consent. These commitments are designed to effectively manage, mitigate, guide and monitor the Proposal through the site establishment and construction, operational and rehabilitation phases.

The Environmental Impact Statement for the Proposal has identified a range of environmental, social and economic management outcomes and measures which would be required to avoid or reduce the potential adverse environmental and socio-economic impacts of the Proposal.

All parties involved in all phases of the Proposal would be required to undertake their work in accordance the conditions of the development consent that will incorporate a final set of commitments.

For each commitment, the desired outcomes are provided together with the intended actions and timing for implementation.

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Desired Outcome	Action	Timing*		
1. Area of Activities				
All approved components are constructed and activities are undertaken in the area(s) nominated on the approved plans and figures.	1.1 Identify and mark on the ground the boundaries of the approved areas of disturbance.	Prior to the commencement of site establishment and construction operations.		
2. Mining and Processing Activities				
Mining and processing rates do not exceed assessed maximum rates.	2.1 Ensure run-of-mine ore production rates do not exceed 318 000t per year.	Continuous during operations.		
3. Operating Hours				
Management of operating hours in accordance with approval conditions.	3.1	Continuous during operations.		
	Activity		Proposed Days of Operation	Proposed Hours of Operation
	Vegetation clearing and topsoil stripping		7 days a week	Daylight hours
	Site establishment operations, including box cut establishment			24 hours per day
	Underground mining operations			Daylight hours
	Transportation operations			
Maintenance operations				
Rehabilitation operations				
4. Aboriginal Heritage				
Site activities are undertaken without impacting upon any Aboriginal heritage items.	4.1 Ensure each identified site is permanently fenced and signposted as a 'no go' area in accordance with the Applicant's policy <i>Community and Heritage Policy and Straits Procedures – Heritage Management Planning (Australia)</i> .	Prior to the commencement of site establishment and construction operations.		
	4.2 Inclusion of bush fire fuel load management within the Proposal's <i>Environmental Management Strategy</i> for the Avoca Tank 4 fenced area to reduce the potential for bush fires to affect the scarred tree.			
	4.3 Provide for a buffer of 50m between the identified sites and proposed mine infrastructure, ensuring that all mine site personnel are aware of the location of each site and show the location of the sites on accessible plans.			

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Desired Outcome	Action	Timing*
Aboriginal Heritage (Cont'd)		
Site activities are undertaken without impacting upon any Aboriginal heritage items (Cont'd).	4.4 Ensure that work crews in the vicinity of the identified sites are informed by way of an induction as to the location of each site and its legislative protection under the <i>National Parks Wildlife Act 1974</i> . All work crews would be informed that the fenced area remains a "no-go" area for the duration of the works.	Prior to the commencement of site establishment and construction operations.
5. Ecology		
Avoid and minimise impacts on native vegetation and native animal habitats to the greatest extent practicable.	5.1 Draft and implement the following plans to manage potential biodiversity impacts. <ul style="list-style-type: none"> • <i>Pest Animal Management Plan.</i> • <i>Weed Management Plan.</i> • <i>Fauna Management Plan.</i> • <i>Threatened Species Monitoring Plan.</i> 	Prior to the commencement of site establishment and construction operations.
	5.2 Clearly mark-out the proposed disturbance footprint boundaries and identify vegetation to be cleared.	
	5.3 Implement a hollow-bearing tree pre-clearance survey where a qualified professional inspects all hollows and immediate surrounds for any species prior to clearing activities. If any fauna is identified, these would be relocated to areas outside of the proposed disturbance footprint prior to clearing.	
	5.4 Ensure machinery required for the Proposal remains existing on vehicular access tracks or within the proposed disturbance footprint, where practicable. Where this is not possible, machinery would be manoeuvred to avoid saplings or remaining canopy trees wherever possible.	Ongoing
	5.5 Place felled canopy trees in adjacent vegetation areas outside of the proposed disturbance footprint to improve existing habitats.	During site establishment and construction operations.
	5.6 Eradicate any identified noxious weed and other weed material encountered, ensuring that the weed is destroyed and/or removed using appropriate methods to ensure weeds do not spread into the remainder of the Project Site.	Ongoing
	5.7 Install sediment and erosion control structures where appropriate.	During site establishment and construction operations.
	5.8 Stabilise exposed soils to prevent potential erosion.	

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Desired Outcome	Action	Timing*
6. Groundwater		
Ensure that surface and groundwater is appropriately managed throughout the life of the Proposal.	6.1 Prepare and implement a Water Management Plan prior to the commencement of site establishment and construction operations. The plan would describe management of the following. <ul style="list-style-type: none"> • Sediment and erosion control. • Hydrocarbons and chemicals. • Water balance, including separation of clean, dirty and mine water and monitoring of water flows within the Project Site. • Surface water and groundwater monitoring. 	Prior to site establishment and construction operations and ongoing
Prevent contamination of groundwater as a result of Proposal activities.	6.2 Store all hydrocarbon and chemical products within a bunded area complying with the relevant Australian Standard.	Ongoing
	6.3 Refuel all equipment within designated, sealed areas of the Project Site, where practicable.	
	6.4 Undertake all maintenance works involving hydrocarbons, where practicable, within designated areas of the Project Site such as the workshop.	
	6.5 Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	
	6.6 Ensure all hydrocarbon and chemical storage tanks are either self-bunded or bunded with an impermeable surface and a capacity to contain a minimum 110% of the largest storage tank capacity.	
Determine groundwater inflows to the proposed mine.	6.7 Ensure that volumes of water pumped into and out of the proposed mine are monitored and recorded to enable net groundwater inflows to be determined.	
Determine the extent of groundwater drawdown.	6.8 Ensure that standing water levels in surrounding monitoring bores and groundwater inflow rates to the proposed mine are monitored monthly and should the actual groundwater inflows or reduction in standing water levels be greater than that assessed, ensure that the advice of a suitable qualified hydrogeologist is sought.	

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Desired Outcome	Action	Timing*
7. Noise		
Manage noise generated by the Proposal to levels that are compliant with conditional criteria.	7.1 Regularly service all on-site equipment to ensure sound power levels of each item remains at or below the default/or factory-set values.	Ongoing
	7.2 Install frequency modulated reversing alarms to all mobile equipment.	
	7.3 Ensure that all truck drivers are be required to comply with the Applicant's Drivers Code of Conduct outlining procedures for reducing noise impacts during transportation within the Project Site and off site.	
	7.4 Maintain an open dialogue with the surrounding community and neighbours to ensure any concerns over noise or vibration are addressed.	
8. Blasting and Vibration		
Compliance with blasting criteria at all privately-owned receptors.	8.1 The Applicant would ensure that initial blasts are monitored to determine compliance with the criteria identified in Section 4.6.2 at distances less than 2.4km from the box cut. Once compliance has been demonstrated, monitoring would be discontinued.	During initial blasting operations until compliance established
9. Historic Heritage		
Site activities are undertaken without impacting upon any historic heritage items.	9.1 Ensure Avoca Tank 4 is fenced with a suitable buffer for the life of the Proposal.	During site establishment and construction operations and ongoing
	9.2 Ensure that mine site personnel are aware of the location of Avoca Tank 4 and provide the location of the site on mine plans.	
	9.3 Ensure all work crews would be informed that the fenced area are "no-go" areas for the duration of the works.	
	9.4 Ensure that mine site personnel do not disturb historic artefacts at Avoca Tank 6 and Avoca Tank 7.	
	9.5 Ensure that mine site personnel report any additional historic finds they may find and not remove or disturb historic artefacts.	
10. Air Quality		
Site activities are undertaken without exceeding relevant air quality criteria or adversely impacting on surrounding privately-owned receptors.	10.1 Limit, where practicable, excavation of material during periods of high winds.	Ongoing
	10.2 Limit disturbance to the minimum area necessary for mining and associated activities.	
	10.3 Operate the largest practical truck size to reduce the number of movements necessary to transport the ore and waste rock.	

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Desired Outcome	Action	Timing*
Air Quality (Cont'd)		
Site activities are undertaken without exceeding relevant air quality criteria or adversely impacting on surrounding privately-owned receptors (Cont'd).	10.4 Adhere to all vehicle speed limits.	Ongoing
	10.5 Profile all surfaces to reduce velocity of overland winds.	
	10.6 Apply vegetative cover to non-operational exposed surfaces such as water management structures and soil stockpiles as soon as practical after disturbance.	
	10.7 Maintain ore handling areas / stockpiles in a moist condition by using water carts to water down areas likely to generate wind-blown and traffic-generated dust.	
	10.8 Apply water to all roads and trafficked areas using water trucks to minimise the generation of dust.	
	10.9 Water stockpiles to maintain moisture content and minimise the generation of dust.	
	10.10 Minimise drop heights when loading ore material for transportation to the Tritton Copper Mine.	
	10.11 Clearly define all haul roads edges with marker posts or equivalent to control their locations, especially when crossing large areas of non-descript disturbance.	
	10.12 Close, rip and revegetate all obsolete roads.	
	10.13 Reshape, topsoil and rehabilitate all completed areas as soon as practicable after the completion of mining operations.	
11. Surface Water		
Ensure that surface and groundwater is appropriately managed throughout the life of the Proposal.	11.1 Prepare and implement a Water Management Plan prior to the commencement of site establishment and construction operations. The plan would describe management of the following. <ul style="list-style-type: none"> • Sediment and erosion control. • Hydrocarbons and chemicals. • Water balance, including separation of clean, dirty and mine water and monitoring of water flows within the Project Site. • Surface water and groundwater monitoring. 	Prior to site establishment and construction operations and ongoing

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Desired Outcome	Action	Timing*	
Surface Water (Cont'd)			
Separate clean, dirty and mine water streams and ensure that each is managed in a manner that ensures impacts are minimised to the greatest extent practicable	11.2	Ensure that clean water is diverted away from areas of proposed disturbance and permitted to flow to natural drainage.	Ongoing
	11.3	Ensure that dirty water is retained until the suspended sediment concentration is less than 50mg/L prior to discharge. Alternatively use that water for mining related purposes. .	
	11.4	Ensure that mine water, including saline groundwater, is retained and is not be permitted to flow to natural drainage.	
	11.5	Manage the flow of make up water to ensure that discharge of water from the Mine Water Pond does not occur.	
	11.6	Treat waste water would be using a suitable waste water treatment or pump out septic system.	
12. Traffic and Transportation			
Achieve safe and efficient road transport operations.	12.1	Water or treat internal roads with chemical suppressants, where appropriate, to minimise dust generation.	Ongoing
	12.2	Restrict vehicle speed on the Site Access Road to 80km/hr.	
	12.3	Ensure that all vehicles transporting ore are loaded using a front-end loader fitted with a bucket load indicator to avoid overloading.	
	12.4	Ensure that the trays of all heavy vehicles transporting ore are covered prior to leaving the ROM Pad.	
	12.5	Prepare, implement and enforce a Driver's Code of Conduct for all heavy vehicle drivers accessing the Project Site regularly.	
	12.6	Investigate any complaints in relation to transportation operations promptly.	
13. Visual Amenity			
Ensure that the visual amenity of surrounding residences is not adversely impacted.	13.1	Design surface infrastructure to ensure that the height of any stockpiles (ROM Pad and waste rock emplacement) or buildings (workshop, office and crib room) are constructed to the lowest manageable height to reduce the potential for components to be visible on the horizon from surrounding locations.	During site establishment and construction operations and ongoing
	13.2	Construct built structures from dull coloured, non-reflective materials.	

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Desired Outcome	Action	Timing*
Visual Amenity (Cont'd)		
Ensure that the visual amenity of surrounding residences is not adversely impacted (Cont'd).	13.3 Undertake active dust suppression to reduce the potential for the creation of a 'dust cloud' over the Project Site.	During site establishment and construction operations and ongoing
	13.4 Include appropriate waste management to ensure that wind-blown rubbish does not spread from the Project Site.	
	13.5 Orientate night lighting towards the active areas of operation and towards the ground, minimising the light spill from the Project Site.	
	13.6 Ensure that lighting not required is turned off.	
	13.7 Decommission and remove surface infrastructure following the completion of extraction operations, ultimately returning the Project Site to a post-mining comparable landform through rehabilitation and revegetation activities.	
14. Bushfire Management		
Ensure that risks associated with bushfire are managed appropriately	14.1 Ensure that personnel are evacuated from the underground mine in the event of a bush fire encroaching upon or starting within the Project Site.	Ongoing
	14.2 Consider evacuation of all non-essential personnel from the Project Site if required.	
	14.3 Liaise with Rural Fire Service or other emergency service personnel, in the event of a bush fire and provide all assistance required, including equipment and personnel, and follow all instructions in relation to fire management.	
	14.4 Undertake refuelling within the designated refuelling bay or within cleared areas, with all vehicles turned off during refuelling.	
	14.5 Enforce a no smoking policy in designated areas of the Project Site.	
	14.6 Maintain fire extinguishers within site vehicles and refuelling areas.	
	14.7 Ensure housekeeping activities are maintained to limit potential fuel loads within the active sections of the Project Site.	
	14.8 Ensure a water cart with fire fighting capabilities would be available to assist in extinguishing any fire ignited.	
	14.9 Ensure a cleared area of at least 15m is maintained around all buildings and other infrastructure within the Project Site.	

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Desired Outcome	Action	Timing*
15. Soil and Land Capability		
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion.	15.1 Minimise handling of all soils, so that they retain their structural integrity, by: <ul style="list-style-type: none"> • locating soil stockpiles adjacent to or as close as possible to disturbance areas; • stripping soil using a bulldozer or scrapper and directly placing that material into stockpiles; and • clearly marking areas for stripping and stockpiling. 	During soil stripping and stockpiling operations
	15.2 Strip topsoil from all areas of disturbance to a depth of approximately 20cm and store in stockpiles no more than 2m high.	
	15.3 Strip subsoil within the footprint of the Boxcut, Mine Water Pond, ROM Pad and waste rock emplacement to a depth of 50cm below the base of the topsoil and store in stockpiles no more than 3m high. Subsoil would not be removed from other areas of disturbance because those areas would not be subject to further excavation or compaction of the subsoil.	
	15.4 Spread 100mm topsoil on the subsoil stockpile to facilitate revegetation.	
	15.5 Refrain from stripping or placing soils during wet conditions.	
	15.6 Ensure that the formed soil stockpile surfaces have a surface that is as 'rough' as possible, in a micro-scale, to assist in surface water runoff control and seed retention and germination.	
	15.7 Spread seed of a suitable non-persistent cover crop on all soil stockpiles.	
	15.8 Ensure that soil stockpiles are constructed with side slopes of 1:3 (V:H) or less and that the surface of all stockpiles achieves an effective 70% cover within 10 days of formation. This may be achieved through the use of mulches, spray on polymer-based products or hessian that would allow a vegetative cover to become established.	
	15.9 Fence and signpost all soil stockpiles and limit operation of machinery on the stockpiles to minimise compaction and further degradation of soil structure.	

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Desired Outcome	Action	Timing*
Soil and Land Capability (Cont'd)		
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion (Cont'd).	15.10 Construct clean water diversions/dirty water retention banks to direct overland surface water flow away from the soil stockpiles and retain sediment laden water.	During soil stripping and stockpiling operations
	15.11 Maintain an inventory of all soil stripped, stockpiled and used during rehabilitation within the Project Site and elsewhere at the Applicant's operations.	Ongoing
16. Agricultural Resources		
Maintain the agricultural productivity of the Project Site and surrounding district	16.1 Ensure that appropriate weed and pest management programs are implemented in consultation with surrounding landholders and the Bogan Shire Council weeds officer.	Ongoing
	16.2 Ensure that appropriate bush fire management measures as identified in Section 4.12 are implemented to prevent initiation of a fire within the Project Site or management of any fire that may impact on the Project Site.	
17. Socio-economic		
Minimise potential socio-economic impacts and maximise socio-economic benefits.	17.1 Continue to engage in regular dialogue with surrounding neighbours in relation to the Applicant's activities and maintain an "open door" policy for interested parties to discuss aspects of those activities that may be perceived as problematic.	Ongoing
	17.2 Support community organisations, groups and events, as appropriate, and review any request by a community organisation for support or assistance.	
	17.3 Form and maintain a Community Consultative Committee (CCC) in accordance with the guidelines established in the document <i>Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects - June 2007</i> .	
	17.4 Regularly brief the CCC and wider community on the Applicant's activities and seek feedback in relation to any actual or perceived adverse impacts. Seek advice on how to provide assistance to resolve issues raised by any member of the community in an effective, fair and equitable manner.	

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Desired Outcome	Action	Timing*	
Socio-economic (Cont'd)			
Minimise potential socio-economic impacts and maximise socio-economic benefits (Cont'd).	17.5	Maintain a community complaints telephone line and ensure that the existence of the number is advertised widely.	Ongoing
	17.6	Give preference when engaging new employees, where practicable, to candidates from the surrounding communities over candidates with equivalent experience and qualifications from elsewhere and ensure that the mining and other contractors do so as well.	
	17.7	Encourage the involvement of the local Aboriginal community in the workforce.	
	17.8	Encourage and support participation of locally-based employees and contractors in training or education programs to impart the appropriate skillsets and qualifications in them for continued development and economic growth within the surrounding communities following completion of the Proposal.	
	17.9	Give preference, where practicable and cost-competitive, to suppliers of equipment, services or consumables located within the surrounding communities.	
	17.10	Assist community members and others, as appropriate, to establish complementary businesses, where those businesses would provide a benefit to the community through increased economic development.	
	17.11	Assist Bogan Shire Council to promote and encourage economic development that would continue beyond the life of the Proposal.	
	17.12	Encourage and support, in consultation with the local community, the provision of services to the community. These may include health, education, transportation and other services.	
	17.13	Ensure that the land capability of those sections of the final landform to be used for grazing is similar to the current land capability.	