# 4. Rehabilitation Objectives and Rehabilitation Completion Criteria

### 4.1 Rehabilitation Objectives and Rehabilitation Completion Criteria

**Table 12** presents the rehabilitation objectives and rehabilitation completion criteria for individual final land use domains at the Mine Site. Final land use domains and their respective mining domains are shown on **Plan 1**.

### 4.2 Rehabilitation Objectives and Rehabilitation Completion Criteria – Stakeholder Consultation

**Table 11** presents a summary of consultation undertaken with relevant stakeholders with regards to the rehabilitation objectives, rehabilitation completion criteria and proposed final land uses and landforms presented in this Plan. This table will be updated with each revision to this Plan to include details of further consultation with relevant and interested stakeholders.

Stakeholder	Consultation Activities
Bogan Shire	Form of Consultation: Letter (email transmission).
Council	Date: XX
	<ul> <li>Matters Subject to Consultation: Rehabilitation Objectives and Rehabilitation Completion Criteria, and Final Land Use Domain Plans.</li> </ul>
	Outcomes: XX.
Heritage NSW	<ul> <li>Form of Consultation: Letter (email transmission).<sup>1</sup></li> </ul>
	Date: 30 November 2022.
	<ul> <li>Matters Subject to Consultation: Rehabilitation Objectives and Rehabilitation Completion Criteria, and Final Land Use Domain Plans.</li> </ul>
	<ul> <li>Outcomes: Response received 5 December 2022. No comments provided. Request to ensure consultation regarding heritage is maintained where relevant.</li> </ul>
NSW	<ul> <li>Form of Consultation: Letter (email transmission).<sup>1</sup></li> </ul>
Biodiversity, Conservation	Date: 30 November 2022.
and Science Directorate	<ul> <li>Matters Subject to Consultation: Rehabilitation Objectives and Rehabilitation Completion Criteria, and Final Land Use Domain Plans.</li> </ul>
	<ul> <li>Outcomes: Response received 5 December 2022. No comments or actions required.</li> </ul>

# Table 11 Community Consultation Activities



Page 1 of 2

# Table 11 (Cont'd)Community Consultation Activities

	Page 2 of 2
Stakeholder	Consultation Activities
NSW DPE	<ul> <li>Form of Consultation: Letter (email transmission).<sup>1</sup></li> </ul>
Water	Date: 30 November 2022.
	<ul> <li>Matters Subject to Consultation: Rehabilitation Objectives and Rehabilitation Completion Criteria, and Final Land Use Domain Plans.</li> </ul>
	Outcomes: XX
Nyngan Local	<ul> <li>Form of Consultation: Letter (email transmission).<sup>1</sup></li> </ul>
Aboriginal Land Council	Date: 30 November 2022.
Counter	<ul> <li>Matters Subject to Consultation: Rehabilitation Objectives and Rehabilitation Completion Criteria, and Final Land Use Domain Plans.</li> </ul>
	Outcomes: Response received 21 December 2022. No actions required. General comment to ensure consideration of <i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales</i> (NSW DECCW 2010)
Crown Lands	<ul> <li>Form of Consultation: Letter (email transmission).<sup>1</sup></li> </ul>
	Date: 30 November 2022.
	<ul> <li>Matters Subject to Consultation: Rehabilitation Objectives and Rehabilitation Completion Criteria, and Final Land Use Domain Plans.</li> </ul>
	<ul> <li>Outcomes: Response received 10 January 2023. No comments or actions required.</li> </ul>
Note 1: An example	e of this consultation letter is provided as <b>Appendix XX</b>





Table 12
Rehabilitation Objectives and Completion Criteria

		Renabilitati	on Objectives and Completion Criteria	Page 1 of 15			
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method			
Final Land Use	Decommissioning Phase						
Domain	All infrastructure and	Presence of services	All relevant services disconnected.	Single occurrence relinquishment inspection and			
Infrastructure Area Mining Domain	services not required for the final land use are removed.	Presence of infrastructure	All relevant infrastructure removed.	report, including photographs, following decommissioning (unless follow up actions are identified).			
Infrastructure Area Spatial Reference <sup>1</sup>	Domain is free from hazardous materials and contaminants.	Presence of contaminated land	Contaminated land identified and remediated. Assessment indicates contamination within established NEPM criteria (applicable to final land use).	Contamination report prepared by qualified person following decommissioning with follow up validation testing, as required.			
11		Presence of hazardous materials.	All hazardous materials removed.	Assessment, identification and removal of hazardous materials (such as asbestos, radiation devices, chemicals etc). Documented report by suitably qualified person verifying all materials removed.			
		Presence of waste	All rubbish and waste materials are removed from site or disposed of in areas designated in this plan.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).			
				Waste tracking documentation for required waste streams removed from site.			
	Landform Establishment Phase						
	Roads/tracks to be retained for a lawful final	Retained access road is in suitable condition.	Roads not required for final land use rehabilitated unless specified to be retained.	Single occurrence relinquishment inspection and report, including photographs and post closure plans			
	land use reduced in width / size to that suitable for final land use.		Road to be retained are reduced to 4m width suitable for final land use.				
	Free draining, stable and permanent landform	Visual evidence of erosion.	Erosion within the landscape is not limiting final land use.	Visual inspections undertaken and documented on a quarterly basis until site relinquishment. Records of			
	established and suitable for a lawful final land use.		Erosion does not exceed the natural erosion rate.	any required corrective actions undertaken. Visual inspections undertaken following significant rainfall events (i.e. ≥25mm of rainfall within 24 hours).			
	Rehabilitation Completie	on / Relinquishment Pl	nase				
	Relinquish lease and return of rehabilitation security.	Demonstrated compliance with all performance indicators.	Demonstrated compliance with all completion criteria.	Relinquishment report prepared by suitably qualified or experienced person(s).			



				Page 2 of 15
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method
Final Land Use	Decommissioning Phase	e		
Domain Water Storage Area Mining Domain	All infrastructure not suitable for lawful final land use will be removed.	Presence of infrastructure	All infrastructure not required for final land use to be removed.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).
Infrastructure Area, Water Management Area – Clean	Contamination is not limiting final land use.	Presence of contaminated land.	Contaminated land identified and remediated. Assessment indicates contamination within established NEPM criteria (applicable to final land use).	Contamination report prepared by qualified person with follow up validation testing as required.
Water, Water Management	Landform Establishmen	t Phase		
Area – Contaminated Water Spatial Reference <sup>1</sup> G3	Retained water management structures are stable and permanent overflow drainage is	Presence of suitable water management structures.	Water management structures are capable of retaining and conveying water without causing pollution.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).
	constructed.	Maintenance requirements (cost and frequency of works)	After 5 years maintenance levels for retained water management structures are commensurate with maintenance requirements for farm dams.	Review of dam maintenance recorded in annual reporting and comparison against local farm dam maintenance requirements (determined through interview with local landholders).
	Retained water management structures are not a source of pollution.	Domain is non-polluting	Monitoring of water discharged from the Mine Site indicates that water quality is suitable for final land use through compliance with the ANZECC (2000) trigger values for slightly- moderately disturbed ecosystems or is consistent with ambient water quality.	Water quality testing, as per the <i>Water Management</i> <i>Plan 2016</i> (Aeris, 2023), occurring monthly during and immediately following operations with frequency to be reduced progressively post-closure. Comparison (and documentation) of results against completion criteria
	Rehabilitation Completion	on / Relinquishment Pl	nase	
	Relinquish lease and return of rehabilitation security.	Demonstrated compliance with all performance indicators.	Demonstrated compliance with all completion criteria.	Relinquishment report prepared by suitably qualified or experienced person(s).





Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method
Final Land Use	Decommissioning Phase	е		
Domain Final Void Area Mining Domain	All infrastructure not suitable for lawful final land use will be removed.	Presence of infrastructure	All infrastructure not required for final land use to be removed.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).
Void <b>Spatial</b> <b>Reference</b> <sup>1</sup> J5		Presence of waste	All rubbish and waste materials are removed from site or disposed of in areas designated in this plan.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).
	Landform Establishmen	t Phase		
	Stable and permanent landform established.	Geotechnical stability of terminal benches/pit walls	Geotechnical assessment, by suitability qualified geotechnical engineer, based on site specific review, determines that the retained slopes are not likely to actively erode or 'slip' to an extent requiring further earthworks and profiling.	Single occurrence geotechnical review / report plan(s) prepared by surveyor and photographs included in relinquishment report, following completion of final landform establishment (unless further earthworks required).
	Safe landform established.	Access to open cut and portal	Access to open cut, portal and decline sealed.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).
		Presence of safety bunds and fencing	Final void perimeter safety bund and fencing constructed to provide appropriate exclusion of access.	Visual inspection completed by site personnel, as part of regular site operation. Single occurrence relinquishment inspection and
	Minimisation of final void catchments.	Presence of water management infrastructure	Final void perimeter safety bund and other water diversion structures constructed to minimise the catchment entering the void.	report, including photographs, following decommissioning (unless follow up actions are identified).



Page 3 of 15

Page 4 of 15

		1		raye 4 01 1		
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method		
Final Land Use Domain	Non-polluting landform established.	Residual void does not risk serious		Visual inspection completed by site personnel, as part of regular site operation.		
Final Void Area		environmental harm to land, surface waters		Single occurrence relinquishment inspection and report, including photographs, following		
Mining Domain		groundwater, other		decommissioning (unless follow up actions are		
Void		than the environmental harm constituted by the		identified).		
<b>Spatial Reference<sup>1</sup></b> J5		harm constituted by the existence of the residual void itself.	Final Void water balance and groundwater modelling conducted by suitably qualified person(s) verify the final void will be a groundwater sink.	Modelling report prepared by suitably qualified person(s) prior to completion of mining.		
			Surrounding landholders ability to use groundwater resources is not compromised.	Monthly water quality testing, as per the <i>Water</i> <i>Management Plan 2023</i> (Aeris, 2023), during and immediately following operations with frequency to be reduced progressively post-closure.		
	Rehabilitation Completie	on / Relinquishment Pl	nase	-		
	Relinquish lease and return of rehabilitation security.	Demonstrated compliance with all performance indicators.	Demonstrated compliance with all completion criteria.	Relinquishment report prepared by suitably qualified or experienced person(s).		
	Decommissioning Phase					
<b>Domain</b> Native Ecosystems – Grassland	All infrastructure not suitable for lawful final land use will be removed.	Presence of infrastructure.	All exposed pipework and infrastructure removed, where it is safe to do so.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).		
Mining Domain	Contamination is not	Presence of waste	All rubbish and waste materials are removed	Single occurrence relinquishment inspection and		
Heap Leach Pads (referenced as	limiting final land use.		from site or disposed of in areas designated within this Plan.	report, including photographs, following decommissioning (unless follow up actions are identified).		
Tailings Storage Facility in the portal)		Presence of contaminated land	Contaminated land assessment indicates landform is acceptable for final land use.	Contamination report prepared by qualified person with follow up validation testing as required.		
Spatial Reference <sup>1</sup>						
A2						



Page 5 of 15

Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method
Final Land Use Domain Native Ecosystems – Grassland Mining Domain	Contamination is not limiting final land use. (Cont'd)	Contamination of groundwater is contained or remediated.	Known groundwater contamination in the vicinity of the Heap Leach Pads is contained within the mining lease ML1280. Groundwater quality is consistent with criteria levels established in the <i>Water Management Plan 2016</i> , or is consistent with ambient water	Water quality testing, as per the <i>Water Management</i> <i>Plan 2016</i> , occurring monthly during and immediately following operations with frequency to be reduced progressively post-closure. Groundwater contamination report prepared by qualified person.
Heap Leach	Landform Establishmen	t Phase	quality.	
Pads (referenced as Tailings Storage Facility in the	Free-draining, stable and non-polluting landform established.	Presence of domestic grazing animals or pest species	Domestic grazing animals are excluded from the rehabilitation areas via protective fencing	Annual pest species inspection report (and subsequent control program, if required) included in annual rehabilitation revegetation reporting.
portal) <b>Spatial</b> <b>Reference</b> <sup>1</sup> A2		Landform suitable for growth media establishment.	<ul> <li>Landform to be constructed to the following specifications.</li> <li>Heap Leach Pad final landform to be no greater than approximately 20m in height.</li> <li>Drainage network to be constructed in accordance with surface water design specifications.</li> </ul>	Landform as presented in as constructed 'as built' survey plans is consistent with engineering design specifications and surface water drainage plans. Geotechnical report of final landform indicates adequate stability to achieve final land use. Inspection and testing report, including photographs, prepared by a qualified person during and following landform construction.
		Construction of overlying store and release cover of Heap Leach Pads with appropriate geochemical and geotechnical composition of surface materials for final land use.	Heap Leach Pads are capped in accordance with engineered design specifications <sup>1</sup> including a minimum 400mm covering of NAF waste rock or other suitable material.	Landform as presented in as constructed 'as built' survey plans is consistent with engineering design specifications. Geotechnical report and geochemical characterisation of capping material indicate adequate composition to achieve final land use. Inspection and testing report, including photographs, prepared by a qualified person during and following landform construction.

<sup>&</sup>lt;sup>1</sup> See O'Kane Consulting, 2018. Murrawombie HLF Cover System and Landform Design. Prepared for Aeris Resources 28 August 2018.



Table 12 (Cont'd)
Rehabilitation Objectives and Completion Criteria

Paga	6	of	15
Page	ь	OT	15

Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method		
Final Land Use Domain	Free-draining, stable and non-polluting landform	Landform is non- polluting.	Surface water (rainfall runoff) captured on the Heap Leach Pad surface is captured in a	Landform as presented in 'as constructed' survey plans is consistent with engineering surface water		
Native Ecosystems –	established. (Cont'd)		water management structure and diverted to the Open Cut Void.	design and specifications. Inspection and testing report, including photographs,		
Grassland			An engineered drain with a 1 in 100 year ARI	prepared by a qualified person during and following		
Mining Domain			capacity would be used to direct surface water to the Open Cut Void in accordance with	landform construction.		
Heap Leach Pads			surface water designs <sup>1</sup> .			
(referenced as Tailings Storage			No pooling of water on upper surface of the Heap Leach Pad facility is observed.			
Facility in the portal)			Contour/catch banks and drop-down water diversion structures are constructed at	Landform as presented in as constructed survey plans is consistent with engineering surface water		
Spatial		locations and as speci	locations and as specified in engineering	design and specifications.		
Reference <sup>1</sup>			design plans and specifications <sup>1</sup> .	Inspection (document) and repair (record) of any corrective actions to repair erosion.		
	Growth Medium Development Phase					
	medium suitable for	Growth medium depth	Minimum growth medium depth of 100mm spread over domain.	Photographs included in a relinquishment report following growth medium spreading.		
		Key soil characteristics	Analysis of growth medium indicates suitability for optimum vegetation growth of target communities including: <sup>2</sup> .	Soil testing program and report, undertaken every year (or as specified by soil scientist) as part of regular rehabilitation monitoring and reporting, until		
			• pH between 5.6 and 7.3	revegetation criteria achieved.		
			Organic matter levels at 4.5%			
			Available Phosphorous is 50mg/kg			
			Or, analysis of representative soil samples indicates these parameter are within 20% of analogue sites.			

 $<sup>^2</sup>$  Primary performance indicators have been established through previous rehabilitation monitoring and sampling at analogue sites. See DnA Environmental 2020 Rehabilitation Monitoring Report. Secondary performance indicators are monitored to inform remediation requirements. See Section XXXX for more information.



	1	1		Page 7 of 15
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method
Final Land Use	Ecosystem and Land Us	e Establishment and L	Development Phase	
Domain Native Ecosystems – Grassland Mining Domain	Successful revegetation with suitable groundcover species.	Vegetation dominated by shallow rooted grassland species	Revegetation monitoring reports confirm that the mix of species spread/planted in revegetated areas can provide a minimum of 50% perennial ground cover and is capable of supporting the store and release cover system	Monitoring of revegetation success will involve a combination of quarterly visual assessments of plant establishment, groundcover and erosion by site personnel. Rehabilitation monitoring and reporting prepared by a
Heap Leach Pads (referenced as Tailings Storage Facility in the portal) <b>Spatial</b> <b>Reference</b> <sup>1</sup> A2		Vegetation is self- sustaining	<ul> <li>Revegetation monitoring reports confirm that revegetated areas achieve the following vegetation community characteristics<sup>3</sup>.</li> <li>Landscape function analysis indices for landscape organisation, stability, infiltration and nutrient recycling are within 25% of analogue grassland sites or consistently trending towards them.</li> <li>Perennial plant cover is at a minimum of 50% to support store and release function of landform cover.</li> <li>The presence of reproductive structures provides evidence that the ecosystem is maturing, capable of recruitment and is self-sustaining</li> </ul>	Rehabilitation monitoring and reporting prepared by a suitably qualified person on rehabilitation condition, with results reported on in the Annual Rehabilitation Report, every year and for a minimum of 5 years post-closure or otherwise until site relinquishment.
		Presence of weeds	Foliage cover of non-native and non-target species (weeds) is no greater than the surrounding vegetation / grassland analogue sites not disturbed by mining activities or impacting rehabilitated area.	Biannual weed inspection report (and subsequent control program, if required) included in annual rehabilitation revegetation reporting.

<sup>&</sup>lt;sup>3</sup> Primary performance indicators have been established through previous rehabilitation monitoring and sampling at analogue sites. See DnA Environmental 2020 Rehabilitation Monitoring Report. Secondary performance indicators are monitored to inform remediation requirements. See section XXXX for more information.



Page 7 of 15

		Konabintati	on objectives and completion criteria	Page 8 of 15	
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method	
Final Land Use	Ecosystem and Land Us	e Establishment and L	Development Phase		
Domain Native Ecosystems –	Successful revegetation with suitable groundcover species. (Cont'd)	Presence of domestic grazing animals or pest species	Access by domestic grazing animals is limited to ensure only controlled grazing may occur in rehabilitated area.	Annual pest species inspection report (and subsequent control program, if required) included in annual rehabilitation revegetation reporting.	
Grassland Mining Domain			Feral and native animal control programs implemented. Pest species actively managed		
Heap Leach			in consultation with neighbours.		
Pads (referenced on	Rehabilitation Completion	on / Relinquishment Pl	nase		
(referenced as Tailings Storage Facility in the portal)	Relinquish lease and return of rehabilitation security.	Demonstrated compliance with all performance indicators.	Demonstrated compliance with all completion criteria.	Relinquishment report prepared by suitably qualified or experienced person(s).	
Spatial Reference <sup>1</sup>					
A2					
Final Land Use	Decommissioning Phase				
<b>Domain</b> Native Ecosystems – Woodland	All infrastructure not suitable for lawful final land use will be removed.	Presence of infrastructure.	All infrastructure removed, where it is safe to do so.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).	
Mining Domain	Contamination is not	Presence of waste	All rubbish and waste materials are removed	Single occurrence relinquishment inspection and	
Waste Rock Emplacement	limiting final land use.		from site or disposed of in areas designated within this plan.	report, including photographs, following decommissioning.	
Spatial Reference <sup>1</sup> A4		Presence of contaminated land	Contaminated land identified and remediated. Assessment indicates contamination within established NEPM criteria (applicable to final land use).	Contamination report prepared by qualified person with follow up validation testing as required.	



Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method			
Final Land Use	Landform Establishmen	Landform Establishment Phase					
<b>Domain</b> Native Ecosystems – Woodland	Appropriate geochemical, geotechnical composition of surface materials for final land use.	Waste Rock Emplacement is constructed of suitable material to achieve the final land use.	Geotechnical and geochemical characterisation, and (growth zone) soil sampling of surface material indicates adequate composition, fertility and parameters to achieve final land use.	Geotechnical, geochemical characterisation and soil analysis report verifies that there are no impediments for achieving the final land use.			
Mining Domain Waste Rock				Inspection and testing report, including photographs, prepared by a qualified person during and following landform construction.			
Emplacement Spatial				Relinquishment inspection and report, including photographs upon closure.			
Reference <sup>1</sup> A4	Free-draining, stable and non-polluting landform established.	Landform suitable for growth media establishment.	Waste Rock Emplacement constructed with three tiers each with a 10m vertical height.	Landform as presented in as constructed survey plans is consistent with engineering design specifications and surface drainage plan.			
			Waste Rock Emplacement would remain stable post-closure.	Landform evolution modelling of final landform.			
		Suitable erosion and sediment controls are installed and operating effectively.	No pooling of water on upper surface of the Waste Rock Emplacement is observed. Contour/catch banks and drop-down water	Geotechnical report of final landform indicates adequate composition and stability to achieve final land use.			
			diversion structures are constructed at locations and as specified in engineering design specifications.	Inspection and testing report, including photographs, prepared by a qualified person during and following landform construction.			
				Relinquishment inspection and report, including photographs upon closure.			



Page 9 of 15

	Page 10 of 1					
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method		
Final Land Use	Growth Medium Develop	oment Phase				
<b>Domain</b> Native	Establish soil / growing medium suitable for	Compacted surfaces	Compacted surfaces deep ripped along contour.	Photographs included in a relinquishment report following deep ripping.		
Ecosystems – Woodland	woodland establishment.	Growth medium depth	Minimum growth medium depth of 100mm spread over domain.	Photographs included in a relinquishment report following growth medium spreading.		
Mining Domain Waste Rock Emplacement Spatial Reference <sup>1</sup> A4		Key soil characteristics	<ul> <li>Analysis of growth medium indicates suitability for optimum vegetation growth of target communities according to recommended agricultural guidelines including<sup>4</sup>.</li> <li>pH between 5.6 and 7.3</li> <li>Organic matter levels at 4.5%</li> <li>Available Phosphorous is 50mg/kg</li> <li>Or, analysis of representative soil samples indicates these parameter are within 20% of analogue sites.</li> </ul>	Soil testing program and report, undertaken every year (or as specified by soil scientist) as part of regular rehabilitation monitoring and reporting, until criteria achieved.		
	Ecosystem and Land Us	Jse Establishment and Development Phase				
	Establishment of vegetation communities with a similar species composition to the surrounding native vegetation communities.	Revegetation species mix applied in accordance with species listed in <b>Table</b> <b>15</b> .	<ul> <li>Revegetation monitoring reports confirm that revegetated areas achieve the following vegetation community characteristics<sup>5</sup>.</li> <li>Landscape function analysis indices for stability and landscape organisation are within 25% of the woodland analogue sites or are trending in that direction</li> <li>Diversity of species is within 25% of woodland analogue sites.</li> <li>The composition of species comprising the vegetation community is within 25% of analogue sites (ecosystem composition).</li> <li>The density of species is within 25% of the woodland analogue sites.</li> </ul>	Monitoring of revegetation success will involve a combination of quarterly visual assessments of plant establishment, groundcover and erosion by site personnel. Rehabilitation monitoring reporting prepared by a suitably qualified person on rehabilitation condition, with results reported on in the Annual Rehabilitation Monitoring Report, every year and for a minimum of 5 years post-closure or otherwise until site relinquishment.		

<sup>&</sup>lt;sup>4</sup> Primary performance indicators have been established through previous rehabilitation monitoring and sampling at analogue sites. See DnA Environmental 2020 Rehabilitation Monitoring Report. Secondary performance indicators are monitored to inform remediation requirements. See Section XXXX for more information.



Page 11 of 15

Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method
Final Land Use Domain Native	Establishment of vegetation communities with a similar species	Vegetation is self- sustaining	Revegetation monitoring reports confirm that revegetated areas achieve the following vegetation community characteristics <sup>5</sup> .	
Ecosystems – Woodland	composition to the surrounding native vegetation communities.		<ul> <li>Landscape function analysis indices for infiltration and nutrient recycling are within 25% of the woodland analogue sites or</li> </ul>	
Mining Domain Waste Rock	(Cont'd)		trending in that direction.	
Emplacement			• Perennial plant cover, total groundcover and groundcover diversity are within 25%	
Spatial Reference <sup>1</sup>			of the woodland analogue sites	
A4			• Vegetation structure, composition and tree density and diversity are within 25% of the woodland analogue sites	
			• The presence of reproductive structures such as buds, flowers or fruit provides evidence that the ecosystem is maturing, capable of recruitment and can provide habitat resources comparable to the local remnant vegetation.	
		Presence of weeds	Rehabilitation monitoring of rehabilitation area confirms the diversity and foliage cover of non-native and non-target species (weeds) is equivalent to or less than surrounding vegetation / analogue sites not disturbed by mining activities or impacting rehabilitated area.	Biannual weed inspection report (and subsequent control program, if required) included in annual rehabilitation revegetation reporting.

<sup>&</sup>lt;sup>5</sup> Primary performance indicators have been established through previous rehabilitation monitoring and sampling at analogue sites. See DnA Environmental 2020 Rehabilitation Monitoring Report. Secondary performance indicators are monitored to inform remediation requirements. See section XXXX for more information.



Page 12 of 15

<b></b>		1		Page 12 of 15		
Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method		
Final Land Use Domain Native Ecosystems – Woodland Mining Domain Waste Rock Emplacement Spatial Reference <sup>1</sup>	Establishment of vegetation communities with a similar species composition to the surrounding native vegetation communities. (Cont'd)	Presence of domestic grazing animals or pest species	Domestic grazing animals are excluded from the rehabilitation areas via protective fencing. Feral and native animal control programs implemented in consultation with neighbours. Revegetation monitoring reports confirm grazing pressures are consistent with analogue sites not disturbed by mining. Monitoring confirms that, after 2 years pest species and abundance consistent with analogue sites.	Annual pest species inspection report (and subsequent control program, if required) included in annual rehabilitation revegetation reporting.		
A4	Rehabilitation Completion	on / Relinquishment Pl	hase			
	Relinquish lease and return of rehabilitation security.	Demonstrated compliance with all performance indicators.	Demonstrated compliance with all completion criteria.	Relinquishment report prepared by suitably qualified or experienced person(s).		
Final Land Use	Decommissioning Phase	е				
Domain Agricultural Area – Grazing Mining Domain Infrastructure Area, Water Management	All infrastructure not suitable for lawful final land use will be removed.	Any remaining infrastructure removed.	All infrastructure removed, where it is safe to do so.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).		
	Contamination is not limiting final land use.	Presence of waste	All rubbish and waste materials are removed from site or disposed of in areas designated within this Plan.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning.		
Area – Contaminated		Presence of contaminated land	Contaminated land assessment indicates landform is acceptable for final land use.	Contamination report prepared by qualified person with follow up validation testing as required.		
Water, Mine- Related	Landform Establishment Phase					
Disturbance, Topsoil Stockpile Area, Rehabilitation Area <b>Spatial</b> <b>Reference</b> <sup>1</sup>	Free draining, stable and permanent landform established.	Drainage structures or dams.	Surface water and groundwater monitoring indicates that water quality is suitable for final land use through compliance with the ANZECC (2000) trigger values for slightly- moderately disturbed ecosystems or is consistent with ambient water quality.	Water quality testing, as per the <i>Water Management</i> <i>Plan 2016</i> , occurring monthly during and immediately following operations with frequency to be reduced progressively post-closure based on performance.		
B1, B3, B8a, B8b, B8c						



Page 13 of 15

Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method			
<b>Final Land Use</b> <b>Domain</b> Agricultural Area – Grazing	permanent landform established. (Cont'd)	Drainage structures or dams. (Cont'd)	Decommissioned dams have been backfilled and landform constructed to blend with surrounding topography.	Single occurrence relinquishment inspection and report, including photographs, following decommissioning (unless follow up actions are identified).			
Mining Domain Infrastructure Area, Water Management		Presence of stockpiled material	All stockpiled material removed or surface appropriately profiled.	Single occurrence relinquishment inspection and report, including photographs, following completion of final landform establishment (unless follow up actions are identified).			
Area – Contaminated Water, Mine- Related		Construction of final landform.	Suitable erosion and sediment controls are installed and operating effectively.	Single occurrence relinquishment inspection and report, including photographs, following completion of final landform establishment (unless follow up actions are identified).			
Disturbance, Topsoil	Growth Medium Development Phase						
Stockpile Area, Rehabilitation		Compacted surfaces	Compacted surfaces deep ripped along contour.	Photographs included in a relinquishment report following deep ripping.			
Area Spatial Reference <sup>1</sup>		Growth medium depth	Minimum growth medium depth of 100mm spread over domain.	Photographs included in a relinquishment report following growth medium spreading.			
B1, B3, B8a, B8b, B8c		Key soil characteristics	<ul> <li>Analysis of growth medium indicates suitability for optimum vegetation growth of target communities according to recommended agricultural guidelines including<sup>6</sup>.</li> <li>pH between 5.6 and 7.3</li> <li>Organic matter levels at 4.5%</li> <li>Available Phosphorous is 50mg/kg</li> <li>Or, analysis of representative soil samples indicates these parameter are within 20% of analogue sites.</li> </ul>	Photographs included in a relinquishment report following growth medium spreading annually until site relinquishment. Soil testing program and report, undertaken every year (or as specified by soil scientist) as part of regular rehabilitation revegetation reporting, until criteria achieved.			

<sup>&</sup>lt;sup>6</sup> Primary performance indicators have been established through previous rehabilitation monitoring and sampling at analogue sites. See DnA Environmental 2020 Rehabilitation Monitoring Report. Secondary performance indicators are monitored to inform remediation requirements. See section XXXX for more information.



Page 14 of 15

Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Page 14 of 15 Validation Method		
Final Land Use	Ecosystem Establishment and Development Phase					
Domain Agricultural Area – Grazing Mining Domain Infrastructure Area, Water Management Area – Contaminated Water, Mine- Related Disturbance, Topsoil Stockpile Area, Rehabilitation Area Spatial Reference <sup>1</sup> B1, B3, B8a, B8b, B8c	Establishment of vegetation communities with a species composition conducive to grazing land use.	Revegetation species mix applied in accordance with species listed in <b>Table</b> <b>15</b> . Vegetation is self- sustaining	<ul> <li>Revegetation monitoring reports confirm that revegetated areas achieve the following vegetation community characteristics<sup>7</sup>.</li> <li>Landscape function analysis indices for stability and landscape organisation are within 25% of the woodland analogue sites or are trending in that direction</li> <li>Diversity of species is within 25% of woodland analogue sites.</li> <li>The composition of species comprising the vegetation community is within 25% of the woodland analogue sites.</li> <li>The density of species is within 25% of analogue sites (ecosystem composition).</li> <li>The density of species is within 25% of the woodland analogue sites.</li> <li>Revegetation monitoring reports confirm that revegetated areas achieve the following vegetation community characteristics<sup>7</sup>.</li> <li>Landscape function analysis indices for infiltration and nutrient recycling are within 25% of the woodland analogue sites or trending in that direction.</li> <li>Perennial plant cover, total groundcover and groundcover diversity are within 25% of the woodland analogue sites</li> <li>Vegetation structure, composition and tree density and diversity are within 25% of the woodland analogue sites</li> <li>The presence of reproductive structures such as buds, flowers or fruit provides evidence that the ecosystem is maturing, capable of recruitment and can provide habitat resources comparable to the local remnant vegetation.</li> </ul>	Monitoring of revegetation success will involve a combination of quarterly visual assessments of plant establishment, groundcover and erosion by site personnel. Rehabilitation monitoring reporting prepared by a suitably qualified person on rehabilitation condition, with results reported on in the Annual Rehabilitation Monitoring Report, every year and for a minimum of 5 years post-closure or otherwise until site relinquishment.		

<sup>&</sup>lt;sup>7</sup> Primary performance indicators have been established through previous rehabilitation monitoring and sampling at analogue sites. See DnA Environmental 2020 Rehabilitation Monitoring Report. Secondary performance indicators are monitored to inform remediation requirements. See section XXXX for more information.



Page 15 of 15

Reference	Proposed Rehabilitation Objective	Indicator	Proposed Rehabilitation Completion Criteria	Validation Method		
Final Land Use Domain Agricultural Area – Grazing Mining Domain Infrastructure Area, Water	vegetation communities with a species composition conducive to	Presence of weeds	Rehabilitation monitoring of rehabilitation area confirms the diversity and foliage cover of non-native and non-target species (weeds) is equivalent to or less than surrounding vegetation / analogue sites not disturbed by mining activities or impacting rehabilitated area.	Biannual weed inspection report (and subsequent control program, if required) included in annual rehabilitation revegetation reporting.		
Management Area –		Presence of domestic grazing animals or pest	Domestic grazing animals are excluded from the rehabilitation areas via protective fencing.	Annual pest species inspection report (and subsequent control program, if required) included in		
Contaminated Water, Mine-		species	Feral and native animal control programs implemented in consultation with neighbours.	annual rehabilitation revegetation reporting.		
Related Disturbance, Topsoil Stockpile Area, Rehabilitation Area			Revegetation monitoring reports confirm grazing pressures are consistent with analogue sites not disturbed by mining. Monitoring confirms that, after 2 years pest species and abundance consistent with analogue sites.			
Spatial Reference <sup>1</sup> B1, B3, B8a,	Land capability similar to pre-mining capability (Class V or Class VI).	Land capability	Land capability, assessed in accordance with OEH 2012, of Class V or Class VI.	Assessment report, included in relinquishment report, prepared by suitably qualified consultant.		
B8b, B8c		Agricultural productivity	Agricultural productivity trending towards analogue sites and consistent with Land Capability Class established in OEH, 2012.	Single occurrence production report, prepared a suitable independent person, post closure (unless further activities required).		
	Rehabilitation Completion / Relinquishment Phase					
	Relinquish lease and return of rehabilitation security.	Demonstrated compliance with all performance indicators.	Demonstrated compliance with all completion criteria.	Relinquishment report prepared by suitably qualified or experienced person(s).		
Note 1: Refer to Pla	an 1					

