PRCP schedule

Environmental Protection Act 1994

PRCP schedule P_PRCP_100988904

This is the approved form for a PRCP schedule issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994*.*

PRCP schedule: P_PRCP_100988904_V1

PRCP schedule holder(s)

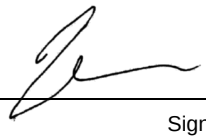
Name(s)	Registered address
Coronado Curragh Pty Ltd	Level 33, Central Plaza One, 345 Queen Street, Brisbane City, QLD 4000

Location details

Location(s)
Mining Lease (ML)1878, ML1990, ML80010, ML80011, ML80012, ML80086, ML80110, ML80112, ML80123, ML80171, ML700006, ML700007, ML700008, ML700009.

Take effect

In accordance with section 202B of the *Environmental Protection Act 1994* (EP Act), the PRCP schedule has effect on the day the environmental authority for carrying out relevant activities on land to which the schedule relates takes effect. Pursuant to section 202C of the EP Act, a PRCP schedule continues in force until the environmental authority for the relevant activities to which the PRCP schedule relates is cancelled or surrendered, even if the resource tenure expires or is cancelled and even if the relevant environmental authority is suspended under Chapter 5, part 11 or 11A of the EP Act.

	4 December 2025
Signature	Date

Juliana McCosker

Department of the Environment, Tourism, Science and Innovation

Delegate of the administering authority

Environmental Protection Act 1994

Enquiries:

Business Centre Coal

Department of the Environment, Toursim, Science and Innovation

Phone: (07) 4987 9320

Email: CRMining@detsi.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

Pursuant to section 202E of the EP Act, if there is an inconsistency between an environmental authority and a PRCP schedule, the environmental authority prevails to the extent of the inconsistency.

Pursuant to section 285 of the EP Act:

- the holder of a PRCP schedule must commission an audit of the schedule by a rehabilitation auditor for the following periods (each an audit period) —

  (a) the 3-year period starting on the day the schedule takes effect

  (b) each 3-year period starting on the day after the previous audit period ended.

- the holder must, within 4 months after the end of each audit period, give the administering authority -

  (a) the rehabilitation auditor's report (an audit report) about the audit that complies with section 286 of the EP Act, and

  (b) a declaration for the audit report that complies with section 285 of the EP Act.

In addition to the requirements found in the conditions of this PRCP schedule, the holder must also meet their obligations under the environmental authority, the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the EP Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443).

PRCP schedule

The PRCP schedule incorporates the following sections:

- Section A - Conditions of PRCP schedule
- Section B - Final site design and reference maps
- Section C – Definitions
- Section D - Post mining land uses
- Section E - Non-use management areas.

Section A - Conditions of PRCP schedule

Pursuant to section 206A of the EP Act:

- it is a condition of this PRCP schedule that, in carrying out a relevant activity under the schedule, the holder must comply with a requirement stated in the environmental authority relevant to carrying out the activity.
- it is a condition of this PRCP schedule that the holder must comply with the following matters stated in the schedule -

    (a) each rehabilitation milestone and management milestone

    (b) when each rehabilitation milestone and management milestone is to be achieved

There are no conditions beyond those contained in section 206A of the *Environmental Protection Act 1994* that apply to this PRCP schedule.

General conditions

PRCP1 The holder must, for each rehabilitation and improvement area, achieve the corresponding rehabilitation or management milestone criterion (RM1- RM8):

(a) for the cumulative area available specified in this schedule; and

(b) by the milestone completion date specified in this schedule.

PRCP2 Where land becomes ‘available for rehabilitation’ earlier than the date nominated in this schedule, the holder must:

(a) notify the administering authority in writing within 30 days of the land becoming ‘available for rehabilitation’.

(b) describe in the notification why or why not it considers that it would be reasonable and appropriate to amend this schedule; and

(c) unless otherwise agreed to by the administering authority in writing, amend this schedule in a way that maximises the progressive rehabilitation to a stable condition within the timeframe specified by the administering authority

Notes:

1. Reference to "earlier than the nominated date in the schedule" means a date that is greater than 1 year prior to the date nominated in the schedule.

2. The written notification must include precise details of the relevant land area and the date when that land became ‘available for rehabilitation’; and

3. Assessment of land becoming available is undertaken on a nominally annual basis

4. Rehabilitation of land size must be practicable

PRCP3 Where an area achieves a rehabilitation or management milestone, the holder must continue to achieve the milestone criteria until a surrender is approved.

PRCP4 The holder must maintain a risk register that identifies the risks to not achieving:

(a) a stable condition for post-mining land uses, and

(b) sufficient improvement for non-use management areas, and

(c) how the risks are being managed or minimised.

The risk register must be reviewed every three years and include consideration of the outcomes of PRCP monitoring data.

PRCP5 The holder must carry out monitoring in accordance with:

(a) the monitoring and maintenance program described in the rehabilitation planning part for the activity version 3 or a more recent version

(b) any requirement under this schedule; and

(c) as necessary to demonstrate achievement of each rehabilitation milestone or management milestone criteria.

Note: where there is any inconsistency between this schedule and the rehabilitation planning part the schedule criteria prevail to the extent of the inconsistency.

PRCP6 The holder must make and keep up to date any evidence and/or records on which the holder relies on to demonstrate the achievement of each rehabilitation milestone criteria in this schedule. Records must be sufficient to demonstrate that these rehabilitation achievements are maintained for the duration of the environmental authority.

PRCP7 Records made under **PRCP6** must be provided to the administering authority in the specified format within 10 business days of a written request or a longer duration as agreed by the administering authority.

PRCP8 Disturbance due to exploration in areas not planned to be mined and not within a Rehabilitation Area in this Schedule must be rehabilitated in accordance with the provisions detailed in the '*Eligibility criteria and standard conditions for exploration and mineral development projects'* or its successor, with the exception that land must be rehabilitated to a stable condition which includes achieving the relevant post mining land use for the disturbance location as detailed in **Figure 1 – Final Site Design**.

PRCP9 Within 2 years of approval of this Schedule, the closure groundwater model and water balance model must be updated to reflect the outcomes of the landform evolution model and submitted to the administering authority.

PRCP10 A closure groundwater model and water balance model must be maintained with predictions rerun if the final landform design changes or if the mine progression varies substantially in a way that would significantly affect the water balance modelling, and at the last rehabilitation milestone in this schedule.

PRCP11 Groundwater quality must be monitored quarterly at, but not limited to, compliance bores specified in **Appendix 11– Groundwater Monitoring Points and Values**, for all quality characteristics listed in **Appendix 11 – Groundwater Monitoring Points and Values** , for a minimum of five consecutive years immediately prior to surrender.

PRCP12 Groundwater levels for bores specified in **Appendix 11 – Groundwater Monitoring Points and Values** must not exceed a drawdown ≥2m from end of mining groundwater levels (excluding changes from pumping of licensed bores) within the five-year period immediately prior to surrender.

PRCP13 Groundwater quality results for bores must not exceed the limits **Appendix 11 – Groundwater Monitoring Points and Values** for 3 consecutive results within the five-year period immediately prior to surrender.

PRCP14 Surface water quality must be monitored during natural flow events at, but not limited to, the locations specified in **Appendix 9: Surface Water Quality Monitoring Locations** for all quality characteristics listed in **Appendix 10– Surface Water Quality Limits**, for a minimum of five consecutive years within the five-year period immediately prior to surrender.

PRCP15 Surface water quality at downstream sites must not exceed the limits specified in **Appendix 10– Surface Water Quality Limits** within the five-year period immediately prior to surrender.

PRCP16 If the surface water quality at downstream sites exceeds the limits specified in **Appendix 10 – Surface Water Quality Limits**, the applicable upstream site must be compared to the downstream site result; and the quality result measured at a downstream site must be equal to or less than the quality result measured at the applicable upstream site[1].

PRCP17 Where the surface water quality at the downstream site exceeds the upstream site result as per **PRCP15**, an AQP must complete an assessment of the cause of the exceedance and risk of rehabilitation not achieving a stable condition within the schedule timeframe and:

(a) where there is no risk to achieving a stable condition , then no further action is to be taken; or

(b) where there is a risk to achieve a stable condition, then an assessment of potential environment harm and any changes or rectification actions to rehabilitation activities must be determined and implemented.

PRCP18 If **PRCP16(a)** is triggered more than 3 consecutive times or **PRCP16(b)** is triggered once over 5 consecutive years, the five-year timeframe in **PRCP14** is reset.

PRCP19 The assessment/s under **PRCP16(b)** must be completed and provided to the administering authority within 3 months of receiving the relevant sampling results.

PRCP20 The holder of this PRCP Schedule must complete a flood risk assessment by 2030. The flood risk assessment must:

a. Be prepared by an independent appropriately qualified person/s (AQP).

b. Include a consequence category assessment (CCA) completed in accordance with the *Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933)* (or later version) for all structures/features for which the manual applies.

c. Propose flood protection measures that will prevent serious environmental harm to landforms, residual voids, and the receiving environment during flood events, including extreme events.

d. If appropriate, recommend design modifications or new protection measures other than currently stated in RM3 and MM1 to ensure flood immunity, slope stability, and environmental protection in closure, ensuring serious environmental harm is prevented when subjected to flood events.

PRCP21 Depending on the outcomes of **PRCP20(d)**, EA holder must implement additional flood protection measures to ensure flood immunity, slope stability, and environmental protection post closure, prior completion of RM3 and MM1.

END OF CONDITIONS

[1] For pH, the quality result measured at the downstream location must be within the prescribed range. However, where pH at the downstream location is greater-than (>) the highest limit in the range, the pH at the applicable upstream location must be greater-than or equal-to (≥) the downstream location. Conversely, where pH at the downstream location is less than (<) the lowest limit in the range, the upstream pH at the applicable upstream location must be less-than or equal-to (≤) the downstream location.

Section B - Final site design and reference maps

Figure 1 – Final Site Design

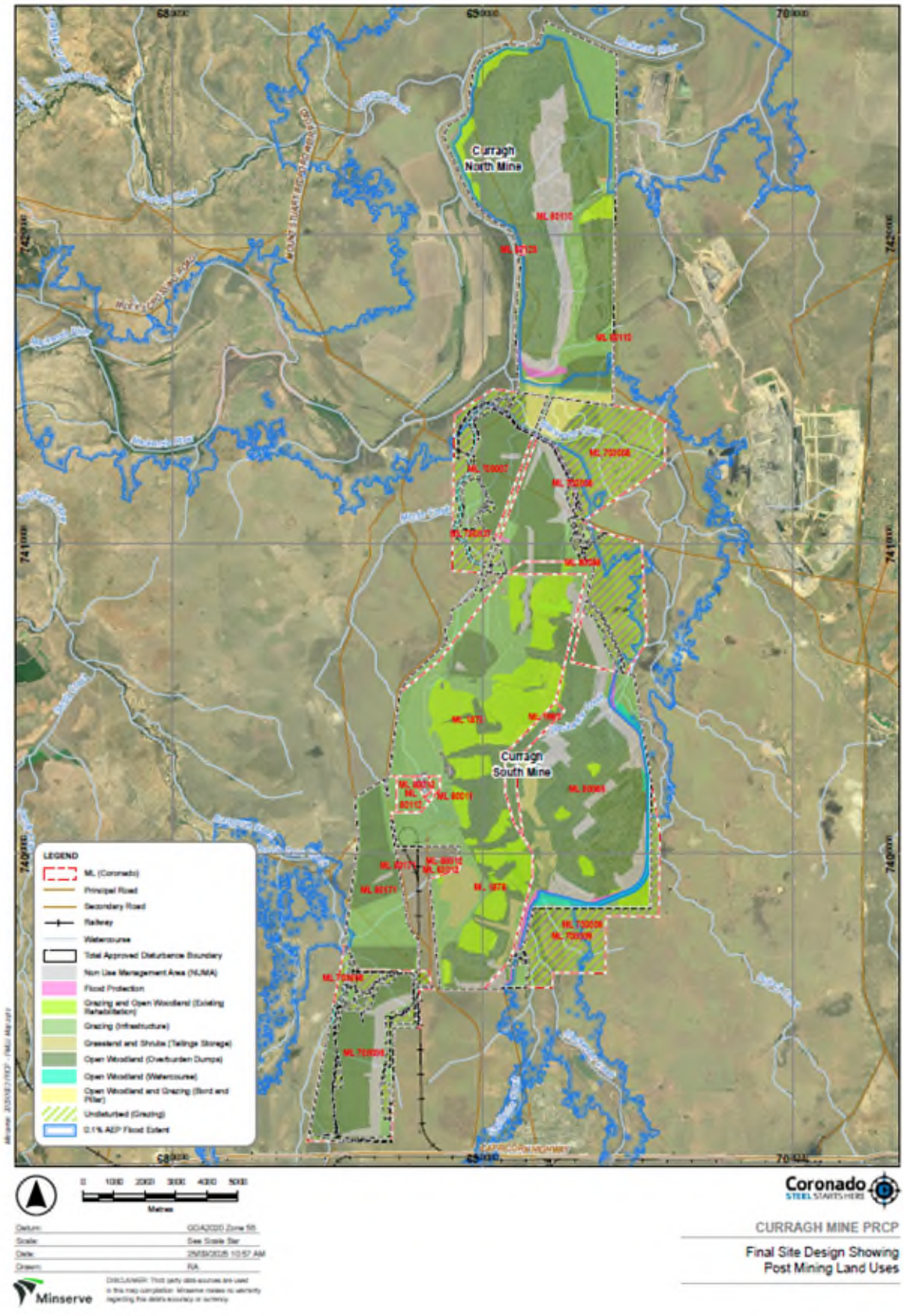


Figure 2: Curragh Complex Rehabilitation Areas

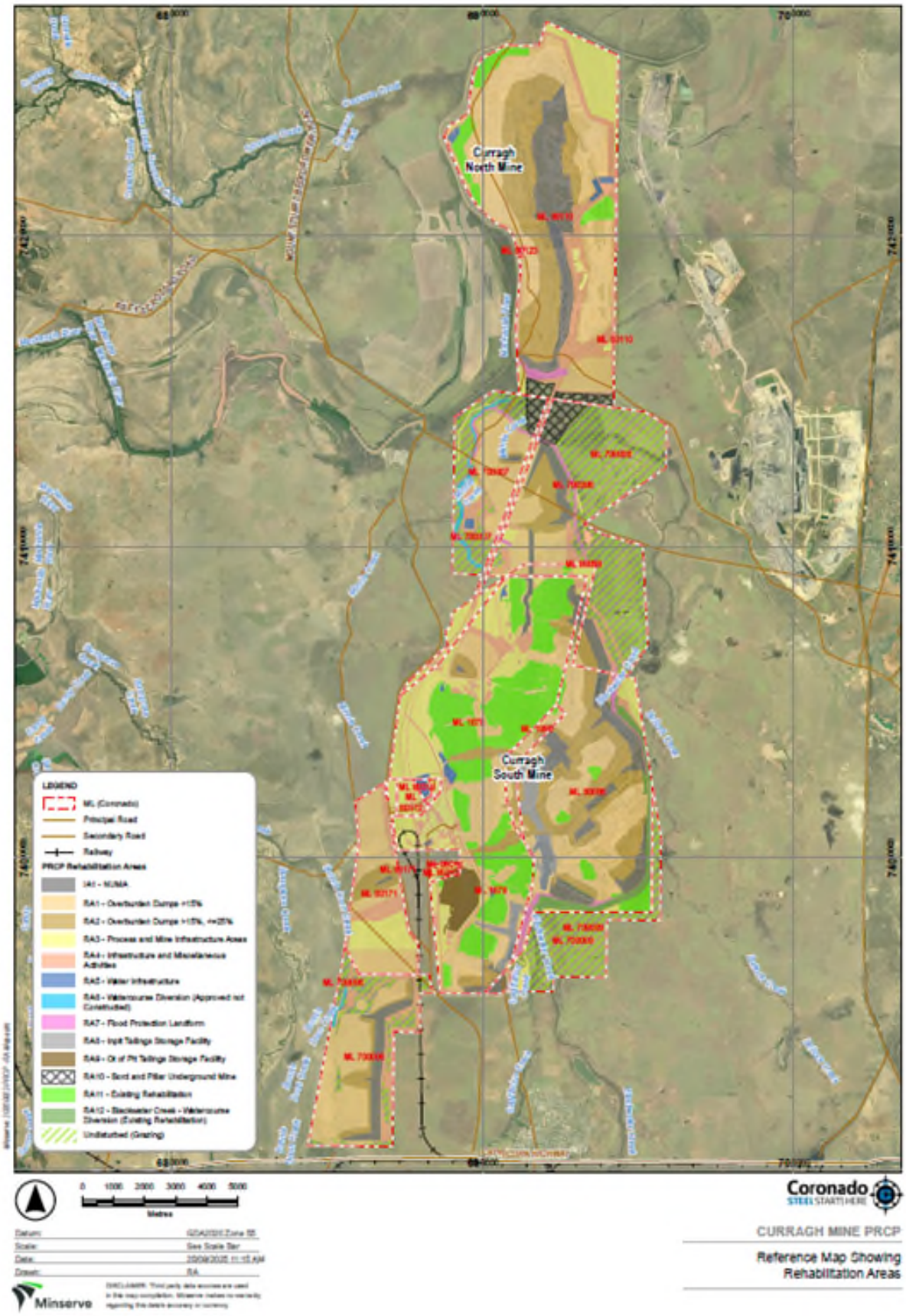
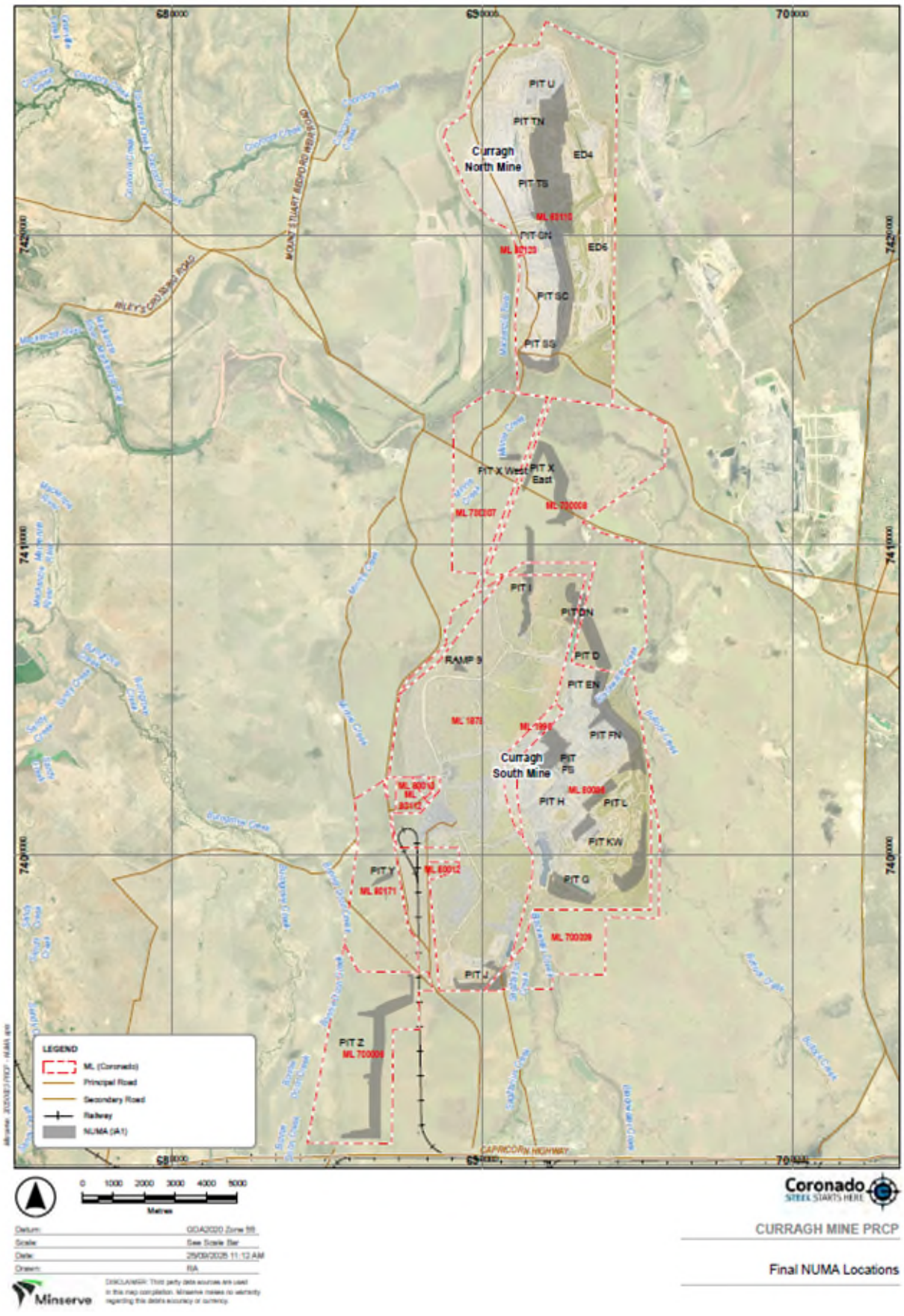


Figure 3: Curragh Complex Improvement Areas



Section C – Definitions

Appropriately qualified person (AQP)	means a person who has professional qualifications, training, skills and experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods or literature.
Activity (EP Regulation)	includes that part, if any, of an activity relating to the following— (a) preparing a place for the activity before carrying out the activity; (b) rehabilitating a place after it has been used for carrying out the activity.
Contaminants	can be a gas, liquid or solid; or an odour; or an organism (whether alive or dead), including a virus; or energy, including noise, heat, radioactivity and electromagnetic radiation; or a combination of contaminants.
Growth media	is defined as all soil and soil-like material that will support the final vegetation cover. This includes the topsoil and subsoil where these materials are applied independently. Where the topsoil is incorporated into the underlying subsoil/spoil, topsoil refers to the depth of incorporation and the remaining depth is regarded as subsoil. The total depth of growth media is nominally considered to be the effective plant root zone.
Gully	a gully is a channel excavated by water, more than 0.3 m deep.
Major earthworks	large scale movement of materials like soil, rock with use of machines to reshape, regrade the landscape, stabilise slopes to create safe, stable landform to sustain a designated post-mine land use or a non-use management area.
Light grazing	means grazing on land suitability assessment (LSA) Class 4 which is not suitable for a sustained grazing PMLU but may be grazed for short periods (e.g., land stewardship purposes). This requires careful management of stocking rates and pasture condition to prevent land and water degradation.
Rehabilitation activity	means any activity that the holder is required to carry out in relation to this PRCP schedule.
Relevant material	includes: i. Final landform design report, ii. All monitoring data iii. Assessment of monitoring data, iv. All maintenance records; and v. Modelling and technical assessments.
Rill	A rill is a channel excavated by water, less than 0.3 m deep.
Stable	in relation to land, means landform dimensions are or will be stable within tolerable limits now and in the foreseeable future. Stability includes consideration of environmental context, geotechnical stability, settlement and consolidation allowances, bearing capacity (trafficability), erosion resistance and geochemical stability with respect to seepage, leachate and related contaminant generation.

Stabilised	means one or both of the following conditions apply: no evidence of sediment movement; sides and/or floors of erosion form are revegetated (Australian Soil and Land Survey Field Handbook Fourth Edition).
Stable condition	see section 111A of the *Environmental Protection Act 1994*.
Suitably qualified and experienced person (SQP)	for performing a regulatory function under chapter 7, part 8 (Contaminated Land) of the EP Act or another function prescribed under a regulation, means a person who— (a) has qualifications and experience relevant to performing the function; and (b) if a regulation prescribes an organisation for this paragraph—is a member of the organisation.
Vegetative groundcover	means plants, plant litter, tree leaf litter, twigs, mulch and woody debris capable of protecting the soil surface from erosion
Weed	Weeds include: • Category 3 restricted invasive plant species, defined by the Biosecurity Act 2014; and • Weeds of National Significance, defined by Invasive Plants and Animals Committee 2016, Australian Weeds Strategy 2017 to 2027, Australian Government Department of Agriculture and Water Resources, Canberra.

Section D – Post mining land uses

(RA1) Rehabilitation area 1

		Post-mining land uses (PMLU)									
		Rehabilitation area				RA1					
		Relevant activities				Overburden Dumps and Ramps ≤15%					
		Total rehabilitation area size (ha)				5,341					
		Commencement of first milestone: RM2				2025					
		PMLU				Open Woodland					
Date area is available	10/12/2025	10/12/2030	10/12/2035	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065		
Cumulative area available (ha)	346	780.0	2251	4122	5341	5341	5341	5341	5341		
Milestone completed by	10/12/2030	10/12/2035	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070		
Milestone Reference	**Cumulative area achieved (ha)**										
RM2	346	780	1760	2850	4200	5316					
RM3	346	780	1280	2150	3600	5316					
RM4		371	780	1280	2150	3600	5341				
RM6		371	780	1280	2150	3600	5341				
RM7			371	780	1280	2150	3600	5341			

RM8				371	780	1280	2150	3600	5341		

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)									
Rehabilitation area	RA2								
Relevant activities	Overburden Dumps and Ramps > 15%, <=≤25%								
Total rehabilitation area size (ha)	2,538								
Commencement of first milestone: RM2	2035								
PMLU	Open Woodland								
Date area is available	10/12/2035	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065		
Cumulative area available (ha)	400	1200	2538	2538	2538	2538	2538		
Milestone completed by	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070		
Milestone Reference	**Cumulative area achieved (ha)**								
RM2	400	1200	1850	2538					
RM3	400	1200	1850	2538					

RM6		400	1200	1850	2538				
RM5		400	1200	1850	2538				
RM7			400	1200	1850	2538			
RM8				400	1200	1850	2538		

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)										
Rehabilitation area	RA3									
Relevant activities	Infrastructure activities requiring a land contamination study									
Total rehabilitation area size (ha)	2274									
Commencement of first milestone: RM1	2049									
PMLU	Light Grazing									
Date area is available	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070				
Cumulative area available (ha)	1800	2274	2274	2274	2274	2274				
Milestone completed by	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070	10/12/2075				
Milestone Reference	**Cumulative area achieved (ha)**									
RM1	900	1800	2273							
RM2	900	1800	2273							
RM3	900	1800	2273							

RM4		900	1800	2273						
RM6		900	1800	2273						
RM7			900	1800	2273					
RM8				900	1800	2273				

(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)									
Rehabilitation area	RA4								
Relevant activities	Miscellaneous Activities - topsoil stockpiles, roads, laydowns, cleared areas								
Total rehabilitation area size (ha)	1694								
Commencement of first milestone: RM1	2049								
PMLU	Light Grazing								
Date area is available	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065			
Cumulative area available (ha)	280	1694	1694	1694	1694	1694			
Milestone completed by	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070			
Milestone Reference	**Cumulative area achieved (ha)**								
RM1	280	840	1694						

RM2	280	840	1694						
RM3	280	840	1694						
RM4		280	840	1694					
RM6		280	840	1694					
RM7			280	840	1694				
RM8				280	840	1694			

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)						
Rehabilitation area	RA5					
Relevant activities	Water Infrastructure					
Total rehabilitation area size (ha)	97					
Commencement of first milestone: RM6	2044					
PMLU	Light Grazing					
Date area is available	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065	
Cumulative area available (ha)	26	97	97	97	97	
Milestone completed by	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070	
Milestone Reference	**Cumulative area achieved (ha)**					

RM1	26	97							
RM2	26	97							
RM3		26	97						
RM4		26	97						
RM6		26	97						
RM7			26	97					
RM8				26	97				

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)				
Rehabilitation area				RA6
Relevant activities				Minne Creek and Bonnie Doon Creek Watercourse Diversion
Total rehabilitation area size (ha)				74
Commencement of first milestone: RM9				
PMLU				Water Course
Date area is available	10/12/2035	10/12/2040	10/12/2045	
Cumulative area available (ha)	74	74	74	
Milestone completed by	10/12/2040	10/12/2045	10/12/2050	

Milestone Reference	Cumulative area achieved (ha)									
RM2	74									
RM3	74									
RM4	74									
RM6	74									
RM7		74								
RM8			74							

(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)										
Rehabilitation area	RA7									
Relevant activities	Flood Protection Landform									
Total rehabilitation area size (ha)	177									
Commencement of first milestone: RM8	2042									
PMLU	Flood Protection Landform									
Date area is available	10/12/2040	10/12/2045	10/12/2050							
Cumulative area available (ha)	177	177	177							
Milestone completed by	10/12/2045	10/12/2050	10/12/2055							
Milestone Reference	Cumulative area achieved (ha)									
RM2	177									
RM3	177									

RM4	177									
RM6	177									
RM7		177								
RM8			177							

(RA8) Rehabilitation area 8

Post-mining land uses (PMLU)									
Rehabilitation area	RA8								
Relevant activities	In-pit tailings								
Total rehabilitation area size (ha)	265								
Commencement of first milestone: RM12	2042								
PMLU	Light Grazing								
Date area is available	10/12/2035	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065		
Cumulative area available (ha)	70	160	265	265	265	265	265		
Milestone completed by	10/12/2040	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070		
Milestone Reference	**Cumulative area achieved (ha)**								
RM1	70	160	265						
RM2	70	160	265						
RM3		70	160	265					
RM4			70	160	265				

RM5			70	160	265				
RM6			70	160	265				
RM7				70	160	265			
RM8					70	160	265		

(RA9) Rehabilitation area 9

Post-mining land uses (PMLU)									
Rehabilitation area	RA9								
Relevant activities	Out-of-Pit Tailings Storage Facility								
Total rehabilitation area size (ha)	185.0								
Commencement of first milestone: RM7	2045								
PMLU	Light Grazing								
Date area is available	10/12/2045	10/12/2050	10/12/2055	10/12/2060	10/12/2065				
Cumulative area available (ha)	60.0	185.0	185.0	185.0	185.0				
Milestone completed by	10/12/2050	10/12/2055	10/12/2060	10/12/2065	10/12/2070				
Milestone Reference	**Cumulative area achieved (ha)**								
RM1	60.0	185.0							

RM2	60.0	185.0							
RM3	60.0	185.0							
RM4		60.0	185.0						
RM5		60.0	185.0						
RM6		60.0	185.0						
RM7			60.0	185.0					
RM8				60.0	185.0				

(RA10) Rehabilitation area 10

Post-mining land uses (PMLU)				
Rehabilitation area				RA10
Relevant activities				Bord and Pillar Underground Mine
Total rehabilitation area size (ha)				264
Commencement of first milestone: RM9				2035
PMLU				Light Grazing
Date area is available	10/12/2035	10/12/2040	10/12/2045	
Cumulative area available (ha)	264	264	264	
Milestone completed by	10/12/2040	10/12/2045	10/12/2050	
Milestone Reference	**Cumulative area achieved (ha)**			

RM3	264									
RM4	264									
RM6	264									
RM7		264								
RM8			264							

(RA11) Rehabilitation area 11

Post-mining land uses (PMLU)										
Rehabilitation area	RA11									
Relevant activities	Existing Overburden Rehabilitation									
Total rehabilitation area size (ha)	1874									
Commencement of first milestone: RM9	2023									
PMLU	Light Grazing									
Date area is available	10/12/2025	10/12/2030	10/12/2035	10/12/2040						
Cumulative area available (ha)	500	1000	1874	1874						
Milestone completed by	10/12/2030	10/12/2035	10/12/2040	10/12/2045						
Milestone Reference	**Cumulative area achieved (ha)**									
RM7	500	1000	1874							
RM8		500	1000	874						

(RA12) Rehabilitation area 12

Post-mining land uses (PMLU)										
Rehabilitation area	RA12									
Relevant activities	Blackwater Creek Watercourse Diversion									
Total rehabilitation area size (ha)	186									
Commencement of first milestone: RM10	2044									
PMLU	Watercourse									
Date area is available	10/12/2040									
Cumulative area available (ha)	186									
Milestone completed by	10/12/2045									
Milestone Reference	**Cumulative area achieved (ha)**									
RM8	186									

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	1.1 Other than as required by this schedule or agreed to be retained by the landholder (as evidenced by a signed landholder agreement): a) All services (water, electricity, gas) is disconnected, terminated and removed. b) Infrastructure required for the ongoing health and safety of operators, as defined by the *Coal Mining Safety and Health Act 1999*, is to be retained until deemed safe to remove. c) All buildings and infrastructure dismantled and removed. d) All hardstand, concrete areas and roads removed. e) All fencing and associated foundations removed. f) All pipelines drained and removed. g) All general and demolition waste not authorised to be disposed of on-site is removed or disposed of and handled in accordance with relevant waste legislation. h) Dams are decommissioned and where present liners and contaminated sediment is removed. i) All surface water drainage infrastructure that does have a PMLU or forms part of a Non-use management area (NUMA) is removed. j) All machinery and equipment, not required for rehabilitation works removed from site. **Water Infrastructure (RA3,RA5)** 1.2 All dams which are retained under criterion RM1.1, comply with the following: a) Where present, liners are removed; and b) All contaminated sediment has been removed;
RM2	Identification, remediation and removal of contaminated land	2.2 Contaminated land investigation completed by a suitability qualified person (SQP) in accordance with the Environmental Protection Act 1994 including: a) Contaminated and hazardous material either remediated in-situ or removed/transported to an approved landfill for disposal and waste tracking information recorded and submitted. b) Validation testing confirms that contaminated and hazardous materials have been removed or remediated successfully. c) Contaminated land assessment indicates that no contamination unsuitable for the post-mining land use remains or is occurring d) If required, a site investigation report including a site suitability statement must be prepared and submitted in accordance with the provisions of Chapter 7, Part 8 of the EP Act.

		e) If RM 2(a) applies, a site suitability statement from a SQP confirms the uses or activities for which the land is suitable, aligns to the approved PMLUs for the site.
RM3	Landform establishment	**All Rehabilitation Areas** 3. 1 Engineering and design plans where required including drainage are developed and finalised by Appropriately Qualified Person (AQP). 3. 2 All major earthworks completed, slopes and general reshaping and pushing/trimming are completed in accordance with the design specification provided by an AQP. 3. 3 Erosion and sediment control systems are installed where required, fit for purpose and certified by an AQP. 3. 4 Protection measures (such as rock/log armouring) are installed in areas of the final landform where flood velocities are modelled to reach >2.5 m/s during 0.1% AEP flood events. 3. 5 An AQP certifies that as constructed landform achieves design criteria for geotechnical stability with a Factor of Safety of ≥1.5. 3. 6 Landforms and slopes are free draining. **Light Cattle grazing (RA3, RA4, RA5)** 3. 7 Landforms reshaped to maximum 15% overall slope. **Woodland Habitat PMLU (RA1 and RA2)** 3. 8 Landforms reshaped with maximum 25% overall slope. 3. 9 Areas >20% overall slope to have rock mulch or other effective erosional stability controls as per the design specifications of an AQP. **Watercourse (RA6)** 3. 10 Diversions are constructed in accordance with AQP developed design plans. 3. 11 Updated hydraulic flood modelling incorporating drainage, is completed. 3. 12 A hazard assessment is completed to verify that safety hazards are not significantly different to surrounding unmined landscapes. **Flood Protection Landform (R7)** 3. 13 Selective placement of non-erosive materials and/or rock mulch protection to ensure landform stability as per AQP's advice. 3. 14 All flood protection landforms and flood protection measures constructed consistent with the findings of **PRCP20** and **PRCP21**. **Grassland and Shrubland (TSF) (RA8 and RA9)** 3. 15 Selective placement of non-erosive materials and/or rock mulch protection to ensure landform stability as per AQP's advice. 3. 16 All TSFs will achieve a non-ponding landform. **Bord and Pillar Underground Mining (RA10)** 3. 17 Backfilling and sealing of declines/portal area and ventilation shafts with waste rock material in accordance with engineering designs.

		3. 18 An AQP has prepared an as constructed report that details the works undertaken, and certifies: a) Construction and backfilling of underground operations meets the design intent; b) Underground openings certified as safe, and c) A survey of subsidence cracking completed by an AQP to locate individual cracks (if present) and determine the method of rehabilitation required.
RM4	Surface preparation	4.1 RA1, RA2, RA7, RA8, RA9 topsoil depth of at least 100mm. 4.2 Excluding retained infrastructure, topsoil depth for light grazing (RA2, RA4) and Watercourse (RA6) is at least 150mm. 4.3 An assessment of growth media characteristics is completed by an AQP that identifies amelioration and other treatments required to achieve the relevant PMLUs. 4.4 Primary growth media suitability meets the following key soil criteria: a) Cation exchange capacity of above 14 meq/100g for clays and 6 meq/100g for loams. b) Major macronutrient concentrations in root zone (0–0.3m): i. Total nitrogen (N) above 1000 mg/kg. ii. Available phosphorus (P) above 10 mg/kg. iii. Potassium (K) above 200 mg/kg. iv. Total organic carbon (TOC) above 1%. c) Key soil chemical indicators in entire root zone (0–0.5m): i. pH range of soil is between 5.5–9.0. ii. Primary growth media salinity (EC1:5) is ≤ 0.75dS/m. iii. Sodicity (ESP) is ≤14%; or 4.5 Growth media health and suitability is assessed and documented by an AQP as suitable for the PMLU vegetation establishment 4.6 Deep rip at least 300-500mm into soil/subsoil profile along contour of slopes. 4.7 The surface and groundwater monitoring network, including, but not limited to, to those locations identified in Appendix 9: Receiving Water Upstream and Downstream Locations and Appendix 11: Groundwater Locations, is installed and monitoring is underway. 4.8 An independent or third party AQP has confirmed the achievement of RM4.1 – 4.7
RA5	Installation of a cover system	**Tailings Storage Facilities (RA 8 and 9)** 5.1 Installation of cover system is designed and signed off by an AQP. 5.2 The out-of-pit TSF is designed and completed to the following: a) Geotechnical analysis confirms the tailings storage facility (TSF) is geotechnically stable. b) The TSF has been fully encapsulated with a cap of ≥2m of non-acid forming (NAF) material. Additional cover material may be required to maintain final design heights following settlement. c) The TSF maintains a water shedding profile, other than minor ponding. 5.3 The in-pit TSF is designed and completed to the following: a) At least 1 m of inert material covers the tailings. Additional cover material has been added as required to maintain final design heights following settlement.
RM6	Revegetation	**Light Cattle Grazing (RA3, RA4, RA5)** 6.1 Completed seeding using a selection of species outlined in Appendix 1: Recommended species list and seeding rates for cattle grazing PMLU. 6.2 For grazing PMLU, the seed mixture must include:

		a) At least 4 species of 3P (Perennial, productive and palatable) native pasture species b) Two native legumes; and c) Two native shade tree species 6.3 Light grazing seed mix applied at a rate of ≥10 kilograms per hectare. 6.4 Livestock are excluded from newly seeded areas via physical or virtual fencing. **Open Woodland (RA1 and RA2)** 6.5 Completed seeding using a selection of species outlined in Appendix 3: Recommended Species to be Established for the Open Woodland Habitat. 6.6 Completed seeding as per recommended sowing rates for individual species where possible and total recommended seeding rates for dominant tree species (5kg/ha), mid-storey species (5kg/ha), and groundcover species (5kg/ha). **Woodland Habitat (Watercourse) (RA6)** 6.7 Completed seeding using a selection of species outlined in Appendix 5: Recommended Species to be Established at the Minnie Creek and Bonnie Doon Diversions (RE 11.3.25). 6.8 Completed seeding as per recommended sowing rates for individual species where possible and total recommended seeding rates for upper bank (5kg/ha), mid bank (5kg/ha), and lower bank (5kg/ha). **Flood Protection Landform (RA7)** 6.9 Completed seeding of any new areas using a selection of native grass species outlined in Appendix 4: Recommended Species to be Established for Flood Protection Landform 6.10 Reseeding of re-maintenance areas to be generally in accordance with Appendix 4: Recommended Species to be Established for Flood Protection Landform. **Grassland and Shrubland (TSF) (RA8 and RA9)** 6.11 Completed seeding using a selection of species outlined in Appendix 6: Recommended Species to be Established at the Grassland and Shrubs PMLU. **Bord and Pillar Underground Mining (RA10)** 6.12 Completed seeding of topsoil surfaces for disturbed areas using a seed mix that aligns with the surrounding species composition
RM7	Achievement of Surface requirements	**All Rehabilitation Areas** 7.1 Presence of rocks, logs or other effective erosion control cover is limited to 30% of total vegetative groundcover unless otherwise authorised in writing by the administering authority. 7.2 Restrictive and invasive plants (as defined in the *Biosecurity Act 2014*) is less than 10% of total vegetative groundcover confirmed by an AQP. 7.3 Evidence that erosion does not exceed the classification of 'moderate' or ‘severe’ as defined by Appendix 8: Erosion Classification Framework. 7.4 Final landform has achieved >1.5 factor of safety 7.5 Independent or third party AQP confirms achievement of RM7.1 – 7.5 **Light Cattle Grazing (RA4 and RA5)**

		7.6 Overall slopes ≤15%. 7.7 Minimum 80% established and persistent vegetative cover. 7.8 Presence of at least 4 native pasture species in accordance with Appendix 1 - Recommended Species to be Established in Cattle Grazing PMLU, with a ground cover of average 30% per hectare. **Open Woodland Habitat (RA1 and RA2)** 7.9 Overall slopes ≤25%. 7.10 Minimum 50% established and persistent vegetative groundcover (RA2). 7.11 BioCondition assessment is completed by an AQP using the methodology outlined in the latest version of the Queensland Herbarium's BioCondition Assessment Manual. 7.12 The BioCondition assessment required by RM7.11 demonstrates achievement of the >20/60 Modified PRCP Benchmark for each assessable attribute for RE 11.10.1 as per Appendix 7: Representative RE Benchmark Criteria for Woodland Habitat. **Woodland Habitat (Watercourse) (RA6 & RA12)** 7.13 Geomorphic index (IDC method) used to verify that Rehabilitation for RA6 and RA8 is erosionally stable with scores greater or equal to upstream or downstream values (IDC method). **Flood Protection Landform (RA7)** 7.14 Vegetation and/or rock and logs groundcover is ≥80%. 7.15 At least 2 native grass species established. 7.16 Restricted invasive species (as defined by in the *Biosecurity Act 2014*) <10% (excluding pasture species) 7.17 Construction of all permanent flood protection landforms has been completed as per the outcomes of **PRCP19** and **PRCP20**. **Grassland and Shrubland (RA 8 and 9)** 7.18 Vegetation and/or rock and logs groundcover is ≥80%, 7.19 At least 2 native grass species established. 7.20 Restrictive and invasive plants (as defined in the *Biosecurity Act 2014*) <10% (excluding pasture species). **Bord and Pillar Underground Mining (RA10)** 7.21 Vegetation and/or rock and logs groundcover is ≥80%, 7.22 Restrictive and invasive plants (as defined in the *Biosecurity Act 2014*) <10% (excluding pasture species).
RM8	Achievement of PMLU to a stable condition	**The following criteria apply to all RA's unless otherwise specified:** 8.1 Safety hazards in the rehabilitation area are not significantly different to surrounding unmined landscapes subject to the same land use. 8.2 Restricted invasive plants (as defined in the *Biosecurity Act 2014*) comprise ≤5% of vegetation groundcover. 8.3 Final landform survey confirms no buildings or structures remain.

8.4 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur and it is safe to do so.
8.5 Surface water runoff complies with Appendix 10: Surface Water Quality Limits.
8.6 No evidence of erosion classified as moderate or severe as defined by Appendix 8: Erosion Classification Framework.
8.7 All other erosion requiring intervention has been remediated and does not impact achieving the PMLU.
8.8 No evidence of scouring, overtopping or destabilisation in or associated with erosion and sediment control and engineered drainage structures.
8.9 Removal of any bunds used to initially control runoff from slopes, once target vegetation has been achieved and erosion levels are deemed acceptable by an AQP.
8.10 Third party AQP confirms achievement of RM8.1 -8.9

Light Cattle Grazing (RA3, RA4, RA5)

8.11 Pasture meets pasture condition rating ≤3, based on the Pasture Condition Assessment Table as per "Stocktake: Balancing Supply and Demand" (Developed by FutureBeef –futurebeef.com.au), as provided in Appendix 2: Pasture Condition Assessment, including:

a) Preferred pasture species (3P grasses^) diversity ≥4 species.
b) Preferred pasture (3P) % DM yield ≥10%.
c) Annual grass DM yield % <70%.
d) Grasses other than 3P grasses and other weeds % DM yield <80%.

8.12 Rehabilitation is resilient to fire and grazing pressures.
8.13 Land suitability class ≤3 or not different from pre-mining if ≥4^.

^Assessment completed in accordance with LSA Framework for Open-Cut Coal 2018 (A ruleset for land suitability assessment of sustainable beef cattle grazing on land rehabilitated after open-cut coal mining in the Bowen Basin Queensland) unless otherwise agreed in writing between the administering authority and the environmental authority holder.

8.14 Stored water quality meets the requirements for stock watering under the ANZEEC Guidelines.
8.15 All fencing used to prevent stock access to revegetation has been removed, except where fencing is agreed to be retained by the landholder as evidenced by a signed landholder agreement.

Woodland Habitat (RA1 and RA2)

8.16 A BioCondition assessment is completed by an AQP using the methodology outlined in the latest version of the Queensland Herbarium's BioCondition Assessment Manual.
8.17 The BioCondition assessment required by RM8.16 demonstrates achievement of the >40/60 Modified PRCP Benchmark for each assessable attribute for RE 11.10.1 as per Appendix 7: Representative RE Benchmark Criteria for Open Woodland Habitat.

Diversion & Watercourse (RA6)

8.18 Assessment report completed by an AQP confirming that the diversions are in a stable condition and suitable for relinquishment.
8.19 Riparian vegetation condition is greater or equal to upstream or downstream values using Riparian Vegetation Index (IDC method).

		8.20 A BioCondition assessment undertaken by an AQP using the methodology outlined in the latest version of the Queensland Herbarium's 'BioCondition' Assessment Manual' achieves a score of at least >40/60 of the reference site based on the benchmark criteria in Appendix 5: Recommended Species to be Established at the Minne Creek and Bonnie Doon Diversions (RA6) Watercourse PMLU. **Flood Protection Landform (RA7)** 8.21 Vegetation and or rock or logs groundcover is ≥80%. 8.22 At least 2 native grass species established. 8.23 Construction of all permanent flood protection landforms has been completed as per the agreed outcomes of **PRCP20** and **PRCP21**. **Existing Rehabilitation: Blackwater Creek Diversion (RA12)** 8.24 Vegetation and/or rock and logs groundcover is ≥75%, 8.25 At least 5 native shade tree species established. 8.26 Assessment report completed by an AQP confirming that the diversions are in a stable condition and suitable for relinquishment. **Existing Rehabilitation: Light Cattle Grazing (RA 11)** 8.27 Presence of rocks, logs or other effective erosion control cover is limited to 50% of total vegetative groundcover unless otherwise authorised in writing by the administering authority. 8.28 Vegetation and/or rock and logs groundcover is ≥80%. 8.29 At least 2 native grass species established. 8.30 Leucaena leucocephala must be actively managed to ensure plants >2m high do not exceed a stem density of 250 stems per hectare (1 per 40m2) mean of total area. 8.31 Evidence that erosion does not exceed the classification of 'moderate' or 'severe' as defined by Appendix 8: Erosion Classification Framework. 8.32 Final landform has achieved >1.5 factor of safety 8.33 Independent or third party AQP confirms achievement of RM8.27 – 8.32 **Existing Rehabilitation: Open Woodland (RA11)** 8.34 Presence of rocks, logs or other effective erosion control cover is limited to 50% of total vegetative groundcover unless otherwise authorised in writing by the administering authority. 8.35 Vegetation and/or rock and logs groundcover is ≥80%. 8.36 At least 2 native grass species established. 8.37 At least 2 native shade tree species. 8.38 Evidence of second-generation recruitment of tree/shrub species. 8.39 Evidence that erosion does not exceed the classification of 'moderate' or 'severe' as defined by Appendix 8: Erosion Classification Framework. 8.40 Final landform has achieved >1.5 factor of safety

		8.41 There is no evidence indicating an adverse change to the contaminated land status has occurred post the completion of RM2. **Bord and Pillar Underground Mining (RA10)** 8.42 Vegetation and/ or rock and logs groundcover is >80% 8.43 Restrictive and invasive plants (as defined in the *Biosecurity Act 2014*) <10% (excluding pasture species). 8.44 Monitoring indicates no change to baseline vegetation species composition and structure in comparison to the surrounding undisturbed landscape

Section E – Non-use management areas

(IA1) Improvement area 1

Non-use management area (NUMA)										
Improvement area	IA1									
Relevant activities	Voids									
Total size (ha)	1692									
Commencement of first milestone: MM1	2035									
NUMA	Residual Void									
Date area is available	10/12/2035	10/12/2040	10/12/2045	10/12/2050						
Cumulative area available (ha)	300	650	1692	1692						
Milestone completed by	10/12/2040	10/12/2045	10/12/2050	10/12/2055						
Milestone Reference	Cumulative area achieved (ha)									
MM1	300	650	1692							
MM2		300	650	1692						
MM3		300	650	1692						

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Achievement of structural stability	1.1 The final design for highwall landform must be completed by an AQP based on the latest flood modelling and materials data prior to construction. 1.2 Final residual voids are not subject to inundation from floodwaters up to and including the 0.1% AEP. 1.3 Confirmation by a third party AQP that final voids are stable, including: i. That the highwall and end walls (where not backfilled) have: overall slope angle ≤65° void highwall and end wall in competent (unweathered) rock; ii. overall slope angle ≤45° highwall and end walls in non-competent (weathered) rock; iii. The establishment of the final landform has followed accepted practice and is geotechnically stable.
MM2	Achievement of surface requirements	2.1 Pits Y and Ramp 9 partially backfilled or reshaped with slopes <25% 2.2 All residual voids with the exception of Pits Y and Ramp 9 are required to have fencing, safety bunds and the required geotechnical set back areas. 2.3 Safety bund setback distance is in accordance with a calculated geotechnical FoS of ≥1.5 between 50 m and 120 m set back from the as cut highwall crest, or as determined by an AQP. 2.4 The safety bund is constructed in accordance with engineering requirements including: i. constructed from non-weathered dumped rockfill; ii. a minimum 2 m in height; iii. a minimum of 7 m base width; and iv. 1 in 1.5 batters. 2.5 Bunding confirmed to be geotechnically stable by an AQP. 2.6 Appropriate signage placed at suitable intervals around the perimeter of the fence to clearly identify and convey the purpose (e.g. EP Act 1994 Non-Use Management Area No Entry). 2.7 Installation of fencing completed for the residual void management areas to limit human and livestock access. 2.8 Third party AQP confirms achievement of MM2.1 – 2.7
MM3	Achievement of sufficient improvement	3. 1 The final void is stable, including: a) certification that the highwall and end wall (where not backfilled) have: b) Overall slope angle ≤65° for void highwall and end wall in competent (unweathered) rock; c) Overall slope angle ≤45° for highwall and end wall in non-competent (weathered) rock; d) The high-wall, end-wall and low-wall achieve a FoS ≥1.5 within the NUMA extents as determined by an AQP geotechnically stable; e) evidence that erosion will not cause instability beyond IA1;

		3. 2 inspections must occur following rainfall events equal or greater than 0.1% AEP that may occur prior to surrender and any identified maintenance or mitigation measures must be implemented as soon as practicable. 3. 3 drainage measures and structures have been appropriately established and are directing overland flow away from the highwall edge; and erosion and sediment control measures have been installed and are operating as per design. 3. 4 The total NUMA size is ≤1692ha. 3. 5 The safety bund and fencing are present and functional. 3. 6 Final void walls confirmed to drain internally to the final void. 3. 7 Floodwater ingress and water levels in the residual void will not cause environmental harm to the surrounding environment and should be consistent with the findings of PRCP20 as confirmed under PRCP21. 3. 8 Residual voids collectively act as groundwater sinks within the tenure boundary post-closure as demonstrated by groundwater modelling defined in condition PRCP12. 3. 9 The voids and associated safety bunds do not cause instability or degradation to the land outside of the mining lease boundaries. 3. 10 Final void lakes will not overflow nor potentially contaminate any other surface water bodies, based on water quality data and up-to-date groundwater modelling. 3. 11 The residual void is safe to humans and livestock. 3. 12 Third party AQP confirms achievement of MM3 3.1- 3.11

END OF PRCP SCHEDULE

Section E – Appendices

Appendix 1 – Recommended Species to be Established in Cattle Grazing PMLU

Common Name	Scientific Name	Sowing Rate (kg/ha)	Comments
Rhodes grass	*Chloris gayana cvv. Callide*[1]	3*	3P grass; Tolerates a range of soils
Rhodes grass	*Chloris gayana* cvv. Katambora[1]	4*	3P grass; Tolerates a range of soils; Salt tolerant
Bisset Creeping Bluegrass	*Bothriochloa insculpta* cvv. Bisset	4*	3P grass; Drought tolerant
Qld Blue grass	*Dichanthium sericeum*	2	3P grass; Suitable for clay soils
Bambatsi panic	*Panicum coloratum cvv. makarikariense*	3*	3P grass
Purple pigeon	*Setaria incrassata*	2	3P grass
Kangaroo grass	*Themeda triandra*		Native
Black Spear Grass	*Heteropogon contortus*		Native
Burgundy bean[2]	*Macroptilium bracteatum*	2	Legume; requires specific rhizobium inoculum strain CB1717
Stylo[2]	*Stylosanthes seabrana cvv. caatinga*	2	Legume; requires specific rhizobium inoculum strain CB3481

Shirohie millet	E.g., *Echinochloa esculenta*[1]	5	Cover crop for soil protection (where required)
Persistent Non-Seeded Species	Buffel grass	*Cenchrus ciliaris*	Includes native and non-native pasture grasses. Non-native; not included in seed mix. Persistent in topsoil/seedbank; contributes positively to surface stability and resilience on nutrient-poor or dispersive substrates.

[1]commercially available cultivars commonly used in Central Queensland for pasture establishment. Sowing rates provided are based on pure live seed (PLS) equivalents.
[2] legume species requiring inoculation with the appropriate rhizobium strain prior to sowing to ensure effective nitrogen fixation.
** Indicates sowing rate provided as pure live seed (PLS) equivalent, adjusted for germination and/or coating weight.*

Appendix 2: Pasture Condition Assessment

Condition Rating	Preferred Pasture Species % DM Yield	Preferred Pasture Species Crown Cover	Annual Grass % DM Yield	Undesirable Grasses & Other Weeds % DM Yield	Preferred Pasture Species Diversity
1	>80%	Dense and plants healthy	<20%	<20%	>5 species
2	60–80%	High to moderate density and some plants unhealthy	20–40%	20–30%	3–5 species
3	10–60%	Moderate to low density and some plants dead	40–70%	30–80%	2–3 species
4	<10%	Sparse and many plants dead	>70%	>80%	0 or 1 species

Appendix 3: Recommended Species to be Established for the Open Woodland Habitat (RA1)

BVG	Upper-Storey Tree Species	Mid and Lower Storey Tree and Shrub Species	Groundcover Species
10a	*Corymbia citriodora* *Eucalyptus crebra* *Eucalyptus fibrosa* *Corymbia hendersonii* *Corymbia clarksoniana* *Angophora leiocarpa* *Corymbia thozetiana* *Eucalyptus cambageana* *Acacia harpophylla* *Acacia cambagei* *Casuarina cristata* *Eucalyptus moluccana* *Eucalyptus persistens*	*Alphitonia excelsa* *Acacia leiocalyx* *Acacia cretata* *Acacia longispicata* *Petalostigma pubescens* *Breynia oblongifolia* *Capparis canescens* *Flindersia dissosperma* *Erythroxylum australe* *Acacia maidenis* *Lophostemon confectus*	*Cymbopogon refractus* *Themeda triandra* *Heteropogon contortus* *Eremochloa bimaculata* *Arundinella nepalensis* *Panicum effusum* *Desmodium varians* *Brunoniella australis* *Cyanthillium cinereum* *Chrysocephalum apiculatum* *Eustrephus latifolius* *Dianella revoluta* *Phyllanthus virgatus* *Evolvulus alsinoides* *Lomandra confertifolia subsp. pallida* *Lomandra multiflora subsp. multiflora* *Glossocardia bidens* *Paspalidium distans* *Cleistochloa subjuncea* *Entolasia stricta* *Bothriochloa decipiens* *Chrysopogon fallax*

Persistent Non-Seeded Species Non-native; not seeded but persistent in seedbank. Provides stability and resilience on poor soils.	-	-	*Cenchrus ciliaris* *Other native and non-native pasture grass*

Appendix 4: Recommended Species to be Established in Flood Protection Landform (RA7)

Vegetation Layer	Common Name	Scientific Name	Functional Role / Comments
Groundcover – Native Pasture Grasses	Kangaroo grass	*Themeda triandra*	3P native grass; deep-rooted perennial; provides excellent erosion control and persistent cover.
	Black speargrass	*Heteropogon contortus*	3P native grass; drought tolerant; stabilises poor soils and supports resilience under low fertility conditions.
	Bottle washer grass	*Enneapogon avenaceus*	Hardy coloniser; suited to sodic and nutrient-poor soils; provides persistent groundcover.
	Native lovegrass	*Eragrostis sororia*	Dense sward former; effective on dispersive soils; stabilises slopes.
	Wiregrass	*Aristida leptopoda*	Tolerant of infertile substrates; persistent cover for erosional stability.
	Barbed-wire grass	*Cymbopogon refractus*	Perennial tussock grass; tolerant of poor soils; contributes to slope stabilisation.
Groundcover – Hardy Graminoids / Forbs	Blady grass	*Imperata cylindrica*	Rapid coloniser; stabilises loose or dispersive tailings; assists early erosion control.
	Lomandra species	*Lomandra confertifolia*, *L. multiflora*	Rhizomatous graminoids; excellent erosion control and surface binding.
	Native daisy	*Chrysocephalum apiculatum*	Forb; adds cover diversity; stabilises fine substrates.
Low Shrubs	Golden-flowered wattle	*Acacia leiocalyx*	Hardy nitrogen-fixing shrub; improves soil fertility and stability.
	Quinine bush	*Petalostigma pubescens*	Shrub tolerant of poor soils; provides habitat and structural diversity.
	Coffee bush	*Breynia oblongifolia*	Hardy shrub; establishes on poor substrates; contributes to shrubland structure.
Persistent Non-Seeded Species	Buffel grass	*Cenchrus ciliaris*	Includes native and non-native pasture grasses Non-native; not included in seed mix. Persistent in topsoil/seedbank; contributes positively to surface stability and resilience on nutrient-poor or dispersive substrates.

Appendix 5: Recommended Species to be Established at the Minne Creek and Bonnie Doon Diversions (RA6)

Vegetation Layer	Common Name	Scientific Name	Functional Role / Comments
Upper-storey Trees	River red gum	*Eucalyptus camaldulensis*	Riparian canopy species; stabilises banks; provides habitat and shading.
	Forest red gum	*Eucalyptus tereticornis*	Riparian canopy tree; stabilises floodplains and terraces.
	Coolibah	*Eucalyptus coolabah*	Floodplain species; tolerates periodic inundation.
	Paperbarks	*Melaleuca spp.*	Waterlogging tolerant; stabilises banks and wet areas.
	Moreton Bay ash	*Corymbia tessellaris*	Contributes to riparian canopy structure and diversity.
	River oak	*Casuarina cunninghamiana*	Strong root systems stabilise banks and resist erosion.
	Angophora species	*Angophora spp.*	Adds canopy diversity; important for habitat resilience.
Groundcovers	Black speargrass	*Heteropogon contortus*	3P grass; drought tolerant; stabilises banks and provides resilient sward.
	Kangaroo grass	*Themeda triandra*	3P grass; binds soils; persistent cover under variable hydrology.
	Golden beard grass	*Chrysopogon fallax*	hardy groundcover; stabilises riparian terraces.
	Blady grass	*Imperata cylindrica*	Rapid coloniser; reduces erosion risk along channel margins.
	Silky browntop	*Eulalia aurea*	Dense cover; tolerant of poor soils; supports slope stability.
	Cyanthillium	*Cyanthillium cinereum*	Forb; enhances floristic diversity in riparian understorey.
	Leaf-flower	*Phyllanthus virgatus*	hardy shrub/forb; supports groundcover diversity.
	Wombat berry	*Eustrephus latifolius*	Climber; provides additional habitat value.
	Native brunoniella	*Brunoniella australis*	Forb; soil stabilisation and floristic diversity.
	Blue convolvulus	*Evolvulus alsinoides*	Forb; drought tolerant; persistent groundcover.
	Sida species	*Sida spp.*	hardy groundcover; stabilises disturbed soils.
	Rostellularia	*Rostellularia adscendens*	Forb; adds to species diversity and ground stabilisation.

Appendix 6: Recommended Species to be Established at the Grassland and Shrub PMLU at RA 8 &9

Vegetation Layer	Common Name	Scientific Name	Functional Role / Comments
Groundcover – Native Pasture Grasses	Kangaroo grass	*Themeda triandra*	3P native grass; deep-rooted perennial; provides excellent erosion control and persistent cover.
	Black speargrass	*Heteropogon contortus*	3P native grass; drought tolerant; stabilises poor soils and supports resilience under low fertility conditions.
	Bottle washer grass	*Enneapogon avenaceus*	hardy coloniser; suited to sodic and nutrient-poor soils; provides persistent groundcover.
	Native lovegrass	*Eragrostis sororia*	Dense sward former; effective on dispersive soils; stabilises slopes.
	Wiregrass	*Aristida leptopoda*	Tolerant of infertile substrates; persistent cover for erosional stability.
	Barbed-wire grass	*Cymbopogon refractus*	Perennial tussock grass; tolerant of poor soils; contributes to slope stabilisation.
Groundcover – hardy Graminoids / Forbs	Blady grass	*Imperata cylindrica*	Rapid coloniser; stabilises loose or dispersive tailings; assists early erosion control.
	Lomandra species	*Lomandra confertifolia, L. multiflora*	Rhizomatous graminoids; excellent erosion control and surface binding.
	Native daisy	*Chrysocephalum apiculatum*	Forb; adds cover diversity; stabilises fine substrates.
Low Shrubs	Golden-flowered wattle	*Acacia leiocalyx*	Hardy nitrogen-fixing shrub; improves soil fertility and stability.
	Quinine bush	*Petalostigma pubescens*	Shrub tolerant of poor soils; provides habitat and structural diversity.
	Coffee bush	*Breynia oblongifolia*	hardy shrub; establishes on poor substrates; contributes to shrubland structure.
Persistent Non-Seeded Species	Buffel grass	*Cenchrus ciliaris*	Non-native; not included in seed mix. Persistent in topsoil/seedbank; contributes positively to surface stability and resilience on nutrient-poor or dispersive substrates. Managed to prevent dominance over native species.

Appendix 7: Representative RE Benchmark Criteria for Open Woodland Habitat

Regional Ecosystem	RE 11.10.1 Benchmark Value	Weighting	RE 11.10,1 indicative benchmark (>20/60)	Indicative BioCondition Score	RE 11.10.1 (BV10a) ModifiedPRCP Benchmark (>40/60)	Modified BioCondition Score
Short description	*Corymbia citriodora* +/- *Eucalyptus crebra* +/- *Corymbia clarksoniana* woodland				*Corymbia citriodora* +/- *Eucalyptus crebra* +/- *Corymbia clarksoniana* woodland	
Recruitment	100%	5	100%	5	100%	5
Non-native plant cover^	0	10	<10%	5	<10%	5
Tree species richness	4	5	>2 species	2	≥3 (inc. *Corymbia citriodora*)	3
Native shrub species richness	4	5	>2 species	2	≥3	3
Native grass species richness	9	5	>3 species	2	≥4	4
Native forb other species richness	17	5	>3 species	2	≥5	4
Tree canopy cover	30%	5	5% canopy cover	2	≥15%	5
Shrub canopy cover	13%	5	3%	3	6.5%	5

Regional Ecosystem	RE 11.10.1 Benchmark Value	Weighting	RE 11.10,1 indicative benchmark (>20/60)	Indicative BioCondition Score	RE 11.10.1 (BV10a) ModifiedPRCP Benchmark (>40/60)	Modified BioCondition Score
Native perennial grass	16%	5	>10	2	≥10%	3
Litter grid cover	50%	5	0	0	≥10%	5
Overall Totals		60		25/60		42/60

^*Does not include non-native pasture grass*

Appendix 8: Erosion Classification Framework

Erosion classification	Minor	Moderate	Severe
Sheet erosion	Shallow soil deposits downslope	Partial exposure of roots; moderate soil deposits downslope, etc.	Loss of surface horizon; root exposure; moderate substantial soil deposits downslope
Rill erosion	<15 rills and <0.3m deep	15-30 rills and <0.3m deep	>30 rills and/or any >0.3m deep.
Gully erosion	>0.3 m deep; Gullies are isolated, linear, discontinuous, and restricted to primary or minor drainage lines	>0.3 m deep; Gullies are linear, continuous, and restricted to primary or minor drainage lines	>0.3 m deep; Gullies are continuous or discontinuous, and either tend to branch away from primary drainage lines and on to foot slopes, or have multiple branches within drainage lines
Tunnel erosion	Absent	Absent	Present
Mass movement	Absent	Absent	Present

Based on the 'Australian Soil and Land Survey Field Handbook' Third Edition by the National Committee on Soil and Terrain (2009).

Appendix 9: Surface Water Quality Monitoring Locations

Monitoring Locations	Receiving waters location description	Latitude (decimal degree, GDA94)	Longitude (decimal degree, GDA94)
Upstream monitoring locations			
MP1	Blackwater Creek upstream Curragh South	-23.519	148.8773
MP6	Blackwater Creek upstream Curragh North	-23.3729	148.8767
MP7	Mackenzie River upstream Curragh North	-23.3571	148.8648
MP12	Mackenzie River upstream Curragh North	-23.3721	148.8414
Downstream monitoring locations			
MP4	Blackwater Creek downstream Curragh South	-23.4061	148.9158
MP8	Mackenzie River downstream Curragh North	-23.3499	148.8688
MP13	Mackenzie River downstream Curragh North	-23.3161	148.8679
MP11	Mackenzie River downstream Curragh North	-23.2631	148.9014

Appendix 10: Surface Water Quality Limits

Quality characteristic (units)	Limit	Comment on limit
pH	6.5-8.5	
Electrical Conductivity (µS/cm) – Blackwater Creek	720	2021 REMP
Electrical Conductivity (µS/cm) – Mackenzie River	400	2021 REMP
Turbidity (NTU) – Blackwater Creek	630	2021 REMP
Turbidity (NTU) – Mackenzie River	516	2021 REMP
Sulphate (mg/L)	54	Site-specific
Arsenic - dissolved (µg/L)	13	ANZG 2018
Molybdenum - dissolved (µg/L)	34	ANZG 2018
Selenium - dissolved (µg/L)	5	ANZG 2018
Total recoverable hydrocarbons (C6-C9) (µg/L)	20	

Quality characteristic (units)	Limit	Comment on limit
Total recoverable hydrocarbons (C10-C36) (µg/L)	100	
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes only	

Appendix 11: Groundwater Monitoring Bores and Values

Bore ID	Monitored Aquifer	EC (µS/cm)	pH	Sulfate as SO4 (mg/L)	Molybdenum Dissolved (mg/L)	Selenium Dissolved (mg/L)	TPH C6- C9 Fraction (mg/L)	TPH C10 - C36 Fraction (sum) (mg/L)
1301BMB	Alluvium	17562	6.0-7.5	638	0.034	0.005	0.02	0.1
1304AMB	Alluvium	11000	6.0-7.5	1100	0.034	0.005	0.02	0.1
1304BMB	Alluvium	30436	6.0-7.5	761	0.034	0.005	0.02	0.1
1309MB	Alluvium	4992	6.0-7.5	283	0.034	0.005	0.02	0.1
1410MB	Alluvium	4350	6.0-7.5	166	0.034	0.005	0.02	0.1
1411MB	Alluvium	4154	6.0-7.5	180	0.034	0.005	0.02	0.1
1419MB	Alluvium	3622	6.0-7.5	70	0.034	0.005	0.02	0.1
1426MB	Alluvium	696	6.0-7.5	109	0.034	0.005	0.02	0.1
1531MB	Alluvium	630	6.0-7.5	3	0.034	0.005	0.02	0.1
1533MB	Alluvium		6.0-7.5		0.034	0.005	0.02	0.1
1536MB	Alluvium	16876	6.0-7.5		0.034	0.005	0.02	0.1
1301AMB	Burngrove	17076	6.0-7.5	1690	0.034	0.005	0.02	0.1
1323MB	Burngrove	17446	6.0-7.5	381	0.034	0.005	0.02	0.1
1417MB	Burngrove	8739	6.0-7.5	218	0.034	0.005	0.02	0.1
1418MB	Burngrove	2870	6.0-7.5	110	0.034	0.005	0.02	0.1
1537MB	Burngrove	13773	6.0-7.5	1	0.034	0.005	0.02	0.4
BH4	Burngrove	7974	6.0-7.5	593	0.034	0.005	0.02	0.1
1529MB	Rangal	2709	6.0-7.5	50	0.034	0.005	0.02	0.1
1534MB	Rangal	2116	6.0-7.5	553	0.034	0.005	0.02	0.4
1538MB	Rangal	20204	6.0-7.5	3	0.034	0.005	0.02	0.1
1539MB	Rangal	22722	6.0-8.5	28	0.034	0.005	0.02	0.1
BH1	Rangal	16000	6.0-7.5	1293	0.034	0.005	0.02	0.1
BH2	Rangal		6.0-8.0		0.034	0.005	0.02	0.1
BH3	Rangal	9075	6.0-8.0	788	0.034	0.005	0.02	0.1

Appendix 12 – NUMA areas

Pit	Void Surface area	Total NUMA including setback, fence and bunds
Pit S, T and U	581.2	635.7
Pit D, E and F	347.5	374.4
Pit G, H and I	128.6	158.8
Pit L	26.8	31.8
Pit K	68.1	81.3
Ramp 9	5.9*	5.9
Pit J	46.7	59.0
Pit X	125.2	132.4
Pit Y	8.0*	8.0
Pit Z	175.9	204.5
Totals	**1513.9**	**1691.8**