

PRCP Schedule

Environmental Protection Act 1994

PRCP schedule P_PRCP_100807509

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

PRCP schedule: P_PRCP_100807509

PRCP schedule holder(s)

Name(s)	Registered address
CAML Resources Pty Ltd	Level 12, 300 Queen Street, Brisbane City QLD 4000.
Nippon Steel Australia Pty Limited	
Foxleigh Coal Pty Ltd	

Location details

Location(s)
ML70171, ML70309, ML70310, ML70429, ML70430, ML70431, ML70470.

Take effect

In accordance with section 202B of the *Environmental Protection Act 1994* Qld (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.



Signature

6 February 2025

Date

Jessica Johnson

Department of the Environment, Tourism, Science
and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

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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 - Post mining land uses
- Section D - 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.

General conditions

- PRCP1** All mining disturbance authorised under environmental authority EPML00744813 must have an associated rehabilitation outcome provided in this PRCP Schedule.
- PRCP2** The holder must, for each rehabilitation area, achieve the rehabilitation milestone criterion (milestone reference):
- a) for the cumulative area available specified in this schedule; and
 - b) by the milestone completion date specified in this schedule.
- PRCP3** Where land becomes available for rehabilitation earlier than the nominated 'Date area is available', progressive rehabilitation for that land, the holder must:
- a) notify the administering authority in writing within 30 days of the land becoming 'available for rehabilitation'. The written notification must include precise details of the relevant land area and the date when that land became 'available for rehabilitation'; and
 - b) unless otherwise agreed to by the administering authority in writing, within 90 days of the land becoming 'available for rehabilitation', apply to the administering authority to amend this schedule in a way that maximises the progressive rehabilitation of the land to a stable condition, including bring forward achievement of relevant milestones and criteria.
- Note: 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.
- PRCP4** The holder must maintain a risk register that identifies the risks to not achieving a stable condition for post-mining land uses, and how the risks are being managed or minimised. The risk register must be reviewed annually and include consideration of the outcomes of PRCP monitoring data.
- PRCP5** Where an area achieves a rehabilitation milestone, the holder must continue to achieve the rehabilitation milestone criteria for that rehabilitation milestone until the next rehabilitation milestone is achieved.
- PRCP6** Where an area has achieved the final rehabilitation management (RM8/RM9) and improvement area milestone (MM3), it must be maintained and continue to comply with the rehabilitation and improvement area milestone criteria for the final milestone and continue to be in a stable condition, until the area is progressively certified according to the requirements of the EP Act, or that area is surrendered.
- PRCP7** The holder must carry out monitoring of the rehabilitation activities in the rehabilitation areas in accordance with:
- a) the monitoring and maintenance program described in the rehabilitation planning part for the activity version Foxleigh PRCP_V1.2_PART A, 30 May 2024;
 - b) any requirement under this PRCP 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.

PRCP8 The holder must keep up to date records on:

- a) achievement and maintenance of each rehabilitation milestone criteria of this schedule;
- b) rehabilitation activities and the results of these activities (including but not limited to, actions taken, date, location, methods, data collected and additional records where relevant e.g. QA/QC, photos, waste tracking and disposal records, appropriately qualified person details and assumptions);
- c) maintenance of rehabilitation and the results of maintenance activities;
- d) monitoring of rehabilitation and the results of monitoring;
- e) details and results of rehabilitation trials;
- f) designs, drawings, specifications and any similar documents developed in accordance with good professional practice in relation to rehabilitation milestones or milestone criteria;
- g) all documents in relation to the requirements of this schedule, including reports (e.g. site investigation report), statements (e.g. site suitability statement), certifications, assessments, investigations, inspections, audits or any similar documents developed in relation to rehabilitation milestones or milestone criteria;
- h) landholder agreements; and
- i) details of community consultation in the community consultation register relating to rehabilitation and closure activities.

Note: It is acknowledged that for works that pre-date this PRCP schedule (i.e. RA7 – Historical Rehabilitation), there may be records that will not have been taken or kept, but all relevant records that do exist will be included.

PRCP9 Records made under **PRCP8** must be kept until the relevant environmental authority has been surrendered.

PRCP10 Records made under **PRCP8** must be provided to the administering authority in the specified format within 10 business days of a written request.

PRCP11 All AQP^{1,2} designs, specifications, certifications, assessments and any similar documents developed in accordance with good professional practice must include a documented reference to any relevant guideline or publication material that was relied upon.

PRCP12 With respect to improvement area (IA1-IA7), the EA holder must develop a 'Groundwater Level Monitoring Program'(GLMP) inclusive of following steps:

- a) identify relevant regional aquifers (hydrogeological units) likely to be affected individually or collectively by each residual void listed in PRCP Schedule **Appendix 11: Approved residual voids**;
- b) identify location of existing groundwater bores (From PRCP schedule **Appendix 9**) and as required additional new groundwater monitoring bores to ensure sufficient monitoring coverage for each relevant regional aquifer mapped in accordance with **PRCP8(a)** by 2045 or 10-years prior mine closure whichever is earlier;
- c) include a table in the PRCP Schedule of existing and additional new groundwater monitoring bores with coordinates, hydrogeological unit and water level (mAHD); and
- d) a report by AQP¹ demonstrating the proposed GLMP is fit for purpose that is, to monitor and support predictions of residual voids behaviour as a sink.

- PRCP13** EA holder must carry out a peer review or obtain a third-party AQP¹ certification on suitability of the GLMP developed in accordance with **PRCP12** by 2050 or 5-years prior mine closure whichever is earlier.
- PRCP14** The GLMP developed in accordance with **PRCP12** and approved in accordance with **PRCP13**, must be implemented by the EA holder by 2054 or 10 years prior to mine closure whichever is earlier, inclusive of bore installation, and groundwater level monitoring.
- PRCP15** Groundwater level must be monitored quarterly, for 10 years at the bores identified under the GLMP, starting from 2054 or mine closure whichever is earlier, in accordance with **PRCP14**.
- PRCP16** With respect to groundwater, following must be demonstrated prior to surrender:
- the groundwater levels and quality must be monitored quarterly at, but not limited to, bores specified in PRCP Schedule **Appendix 9: Groundwater monitoring bores**, for all quality characteristics listed in PRCP schedule **Appendix 10: Groundwater quality limits**; and
 - groundwater quality results must not exceed the limits in PRCP schedule **Appendix 10: Groundwater quality limits**, for 3 consecutive results within the five-year period immediately prior to surrender.
- PRCP17** Review and update the existing predictive groundwater modelling (in accordance with the Australian Groundwater Modelling Guidelines, current version) and void hydrology water balance using monitoring data collected in accordance with **PRCP16** and **PRCP14** (For PRCP14 after 2054):
- at the completion of all mining; and/or
 - if significant changes to the design input to the models occurs, such as but not limited to mined pit shells, void depths, void catchment depths etc.
- PRCP18** With respect to surface water following must be demonstrated prior to surrender:
- EA holder must monitor surface water quality results monthly during flow at, *but not limited to*, downstream locations specified in PRCP schedule **Appendix 6: Surface water monitoring locations**, must not exceed the limits in PRCP schedule **Appendix 8: Surface water quality limits**, for a minimum of 5 consecutive years prior to surrender.
 - if the surface water quality exceeds **PRCP18. a)**, the applicable upstream site must be compared to the downstream site result; and quality result measured at a downstream site must be equal to or less than the quality result measured at the applicable upstream site.
- PRCP19** Where the surface water quality at the downstream site exceeds the upstream site result as per **PRCP18(b)**, an AQP¹ must complete an assessment of the cause of the exceedance and risk of rehabilitation not achieving a stable condition (**PRCP18**) within the schedule timeframe and:
- where there is no risk to achieving a stable condition from the mining tenure (ML70171, ML70309, ML70310, ML70429, ML70430, ML70431, ML70470), then no further action is to be taken; or
 - 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.
 - the EA holder will be non-compliant with **PRCP18(a)**, if **PRCP19(b)** is triggered more than 3 times over 5 consecutive years and **PRCP18(a)** is reset.

¹ **Appropriately qualified person (AQP)** means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis on performance relating to the subject matter using the relevant protocols, standards, methods or literature.

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

PRCP20 Within 5 years post approval of the PRCP schedule, a third party AQP² reviews existing temporary and permanent Erosion and Sediment Control (ESC), drainage structures and creek diversions and certifies that they are appropriate to the landform, materials and PMLU, with consideration given to their performance, stability, maintenance requirements, and residual risk in a post closure context.

PRCP21 As a result of **PRCP20**, any existing temporary and permanent Erosion and Sediment Control (ESC), drainage structures and creek diversions that do not meet the criteria will require remedial ESC designs to be reviewed and endorsed by the third party AQP².

PRCP22 The holder must provide to the Department, surface water quality limits and bore specific groundwater limits for quality characteristics identified in PRCP schedule **Appendix 8 and 10** respectively, by 19 December 2026.

END OF CONDITIONS

² **Appropriately qualified person (AQP)** here means a Registered Soil Practitioner – Erosion and Sediment Control (RSP-ESC) accredited by Soil Science Australia [Registered Soil Practitioner - Erosion and Sediment Control Accreditation - Soil Science Australia](#).

Section B - Final site design and reference maps

Figure 1 - Final site design

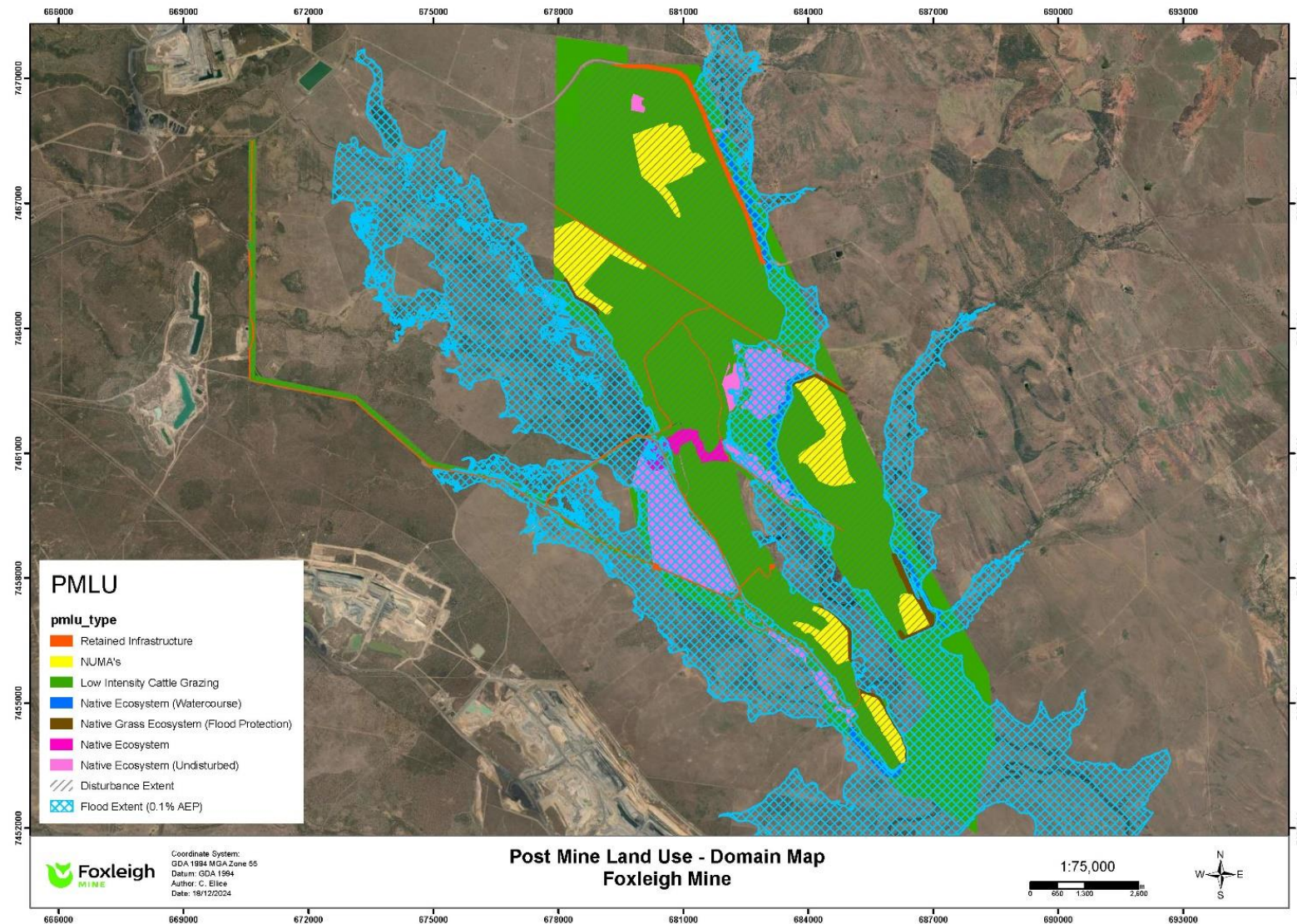
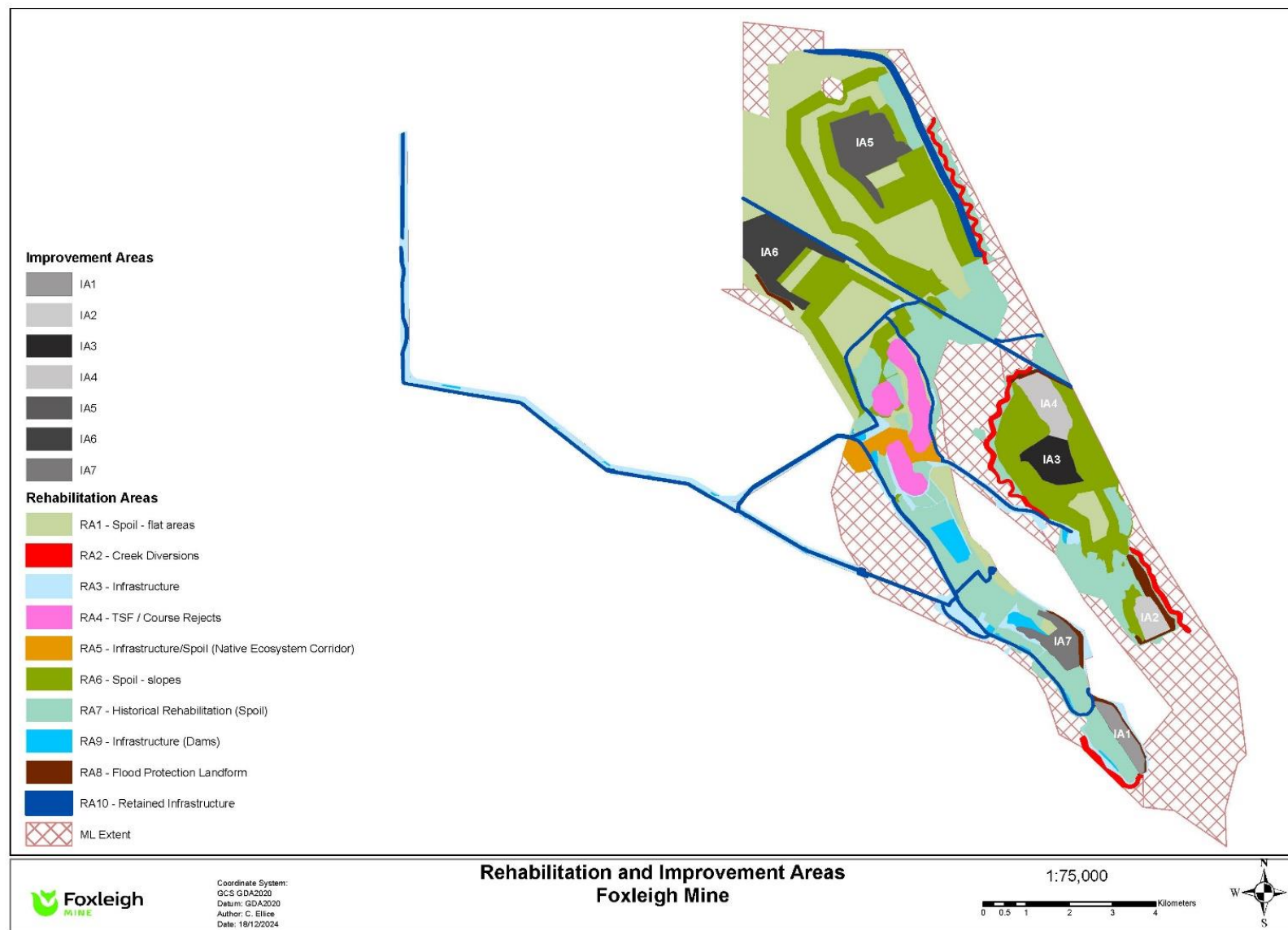


Figure 2 – Rehabilitation Areas



Section C – Post mining land uses

(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)									
Rehabilitation area	RA1								
Relevant activities	Spoil emplacement flat areas - slopes $\leq 10\%$								
Total rehabilitation area size (ha)	1414								
Commencement of first milestone: RM1	2024								
PMLU	Low intensity Cattle Grazing								
Date area is available	1/12/2024	1/12/2029	1/12/2034	1/12/2039	1/12/2044	1/12/2049	1/12/2054	1/12/2059	1/12/2064
Cumulative area available (ha)	20	134	424	754	1414	1414	1414	1414	1414
Milestone completed by	1/12/2029	1/12/2034	1/12/2039	1/12/2044	1/12/2049	1/12/2054	1/12/2059	1/12/2064	1/12/2069
Milestone Reference	Cumulative area achieved (ha)								
RM1	20	134	424	754	1414	1414	1414	1414	1414
RM2	20	134	424	754	1414				
RM4	20	134	424	554	854				
RM5	20	134	324	554	854				
RM6	20	134	324	454	754	1274	1414	1414	1414
RM7		20	134	274	454	754	1274		
RM8				20	134	324	554	854	1414

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)								
Rehabilitation area	RA2							
Relevant activities	Creek Diversions							
Total rehabilitation area size (ha)	137							
Commencement of first milestone: RM6	2026							
PMLU	Native Ecosystem							
Date area is available	1/12/2026	1/12/2027	1/12/2028	1/12/2029	1/12/2030	1/12/2046	1/12/2047	1/12/2048
Cumulative area available (ha)	24	48	95	137	24	48	95	137
Milestone completed by	1/12/2027	1/12/2028	1/12/2029	1/12/2030	1/12/2046	1/12/2047	1/12/2048	1/12/2049
Milestone Reference	Cumulative area achieved (ha)							
RM7	24	48	95	137				
RM8					24	48	95	137

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)									
Rehabilitation area	RA3								
Relevant activities	Mine Infrastructure								
Total rehabilitation area size (ha)	494								
Commencement of first milestone: RM1	2028								
PMLU	Low intensity Cattle Grazing								
Date area is available	1/12/2028	1/12/2034	1/12/2039	1/12/2048	1/12/2053	1/12/2057	1/12/2062	1/12/2067	1/12/2073
Cumulative area available (ha)	19	19	19	42	422	494	494	494	494
Milestone completed by	1/12/2034	1/12/2039	1/12/2044	1/12/2052	1/12/2057	1/12/2062	1/12/2067	1/12/2073	1/12/2077
Milestone Reference	Cumulative area achieved (ha)								
RM1	19			42	422	494			
RM2	19			42	422	494			
RM4	19			42	422	494			
RM5	19			42	422	494			
RM6	19				42	422			
RM7		19				42	422	494	
RM8				19			42	422	494

(RA4) Rehabilitation Area 4

Post-mining land uses (PMLU)								
Rehabilitation area	RA4							
Relevant activities	Coarse rejects emplacement (CRE) and Tailings Storage Facility (TSF)							
Total rehabilitation area size (ha)	199							
Commencement of first milestone: RM1	2048							
PMLU	Low Intensity Cattle Grazing							
Date area is available	1/12/2048	1/12/2053	1/12/2058	1/12/2063	1/12/2068	1/12/2073	1/12/2078	1/12/2083
Cumulative area available (ha)	57	162	199	162	199	199	162	199
Milestone completed by	1/12/2053	1/12/2058	1/12/2063	1/12/2068	1/12/2073	1/12/2078	1/12/2083	1/12/2088
Milestone Reference	Cumulative area achieved (ha)							
RM1	57	162	199					
RM3		57		162	199			
RM4			57	162	199			
RM5			57	162	199			
RM6			57	162	199			
RM7				57	162	199	162	199
RM8						57		

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)			
Rehabilitation area	RA5		
Relevant activities	Infrastructure, Spoil Dumps		
Total rehabilitation area size (ha)	86		
Commencement of first milestone: RM1	2053		
PMLU	Native ecosystem (Corridor)		
Date area is available	1/12/2053	1/12/2058	1/12/2063
Cumulative area available (ha)	86	86	86
Milestone completed by	1/12/2058	1/12/2063	1/12/2083
Milestone Reference	Cumulative area achieved (ha)		
RM1	86		
RM2	86		
RM4	86		
RM5	86		
RM6	86		
RM7		86	86
RM8			

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)									
Rehabilitation area	RA6								
Relevant activities	Spoil emplacement sloped areas – Slopes ≤14%								
Total rehabilitation area size (ha)	1413								
Commencement of first milestone: RM1	2024								
PMLU	Low intensity Cattle Grazing								
Date area is available	1/12/2024	1/12/2029	1/12/2034	1/12/2039	1/12/2044	1/12/2049	1/12/2054	1/12/2059	1/12/2064
Cumulative area available (ha)	127	246	851	1126	1357	1413	1413	1413	1413
Milestone completed by	1/12/2029	1/12/2034	1/12/2039	1/12/2044	1/12/2049	1/12/2054	1/12/2059	1/12/2064	1/12/2070
Milestone Reference	Cumulative area achieved (ha)								
RM1	127	246	851	1126	1357	1413			
RM2	127	246	851	1126	1357	1413			
RM4	127	246	662	1013	1335	1413			
RM5	127	246	607	913	1126	1413			
RM6	127	246	507	851	1113	1357	1413		
RM7		127	246	507	851	1113	1357	1413	
RM8				127	246	507	851	1113	1413

(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)										
Rehabilitation area	RA7									
Relevant activities	Existing Rehabilitation									
Total rehabilitation area size (ha)	1227									
Commencement of first milestone: RM7	2025									
PMLU	Low intensity Cattle Grazing									
Date area is available	1/12/2025	1/12/2026	1/12/2027	1/12/2028	1/12/2029	1/12/2030	1/12/2031	1/12/2032	1/12/2037	1/12/2039
Cumulative area available (ha)	266	439	574	704	835	966	1097	1227	704	1227
Milestone completed by	1/12/2026	1/12/2027	1/12/2028	1/12/2029	1/12/2030	1/12/2031	1/12/2032	1/12/2037	1/12/2039	1/12/2044
Milestone Reference	Cumulative area achieved (ha)									
RM7	266	439	574	704	835	966	1097	1227		
RM8								439	704	1227

(RA8) Rehabilitation area 8

Post-mining land uses (PMLU)						
Rehabilitation area	RA8					
Relevant activities	Flood Protection Landforms					
Total rehabilitation area size (ha)	89					
Commencement of first milestone: RM1	2029					
PMLU	Native Ecosystem - Grass					
Date area is available	1/12/2029	1/12/2034	1/12/2039	1/12/2049	1/12/2059	1/12/2069
Cumulative area available (ha)	11	65	65	65	89	89
Milestone completed by	1/12/2034	1/12/2039	1/12/2049	1/12/2059	1/12/2069	1/12/2079
Milestone Reference	Cumulative area achieved (ha)					
RM1	11	65			89	
RM4	11			65	89	
RM5	11			65	89	
RM6	11			65	89	
RM7		11			65	89
RM8			11			89

(RA9) Rehabilitation area 9

Post-mining land uses (PMLU)							
Rehabilitation area	RA9						
Relevant activities	Mine Affected Water Dams						
Total rehabilitation area size (ha)	98						
Commencement of first milestone: RM1	2033						
PMLU	Low intensity Cattle Grazing						
Date area is available	1/12/2033	1/12/2038	1/12/2043	1/12/2053	1/12/2058	1/12/2063	1/12/2068
Cumulative area available (ha)	3	3	3	69	98	98	98
Milestone completed by	1/12/2038	1/12/2043	1/12/2053	1/12/2058	1/12/2063	1/12/2068	1/12/2078
Milestone Reference	Cumulative area achieved (ha)						
RM1	3			69	98		
RM2	3			69	98		
RM4	3			69	98		
RM5	3			69	98		
RM6	3			69	98		
RM7		3			69	98	
RM8				3			98

(RA10) Rehabilitation area 10

Post-mining land uses (PMLU)								
Rehabilitation area	RA10							
Relevant activities	Retained Infrastructure							
Total rehabilitation area size (ha)	170							
Commencement of first milestone: RM1	2058							
PMLU	Permanent Infrastructure							
Date area is available	1/12/2058							
Cumulative area available (ha)	170							
Milestone completed by	1/12/2063							
Milestone Reference	Cumulative area achieved (ha)							
RM1	170							
RM9	170							

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	With the exception of any infrastructure to remain as part of the PMLU, and agreed to be retained by the landholder as evidenced by a signed landholder agreement, the following are complete: All redundant services to be disconnected by of end of closure phase, as evidenced by formal notice: a) all services (such as water, electricity, and gas) disconnected, terminated, and removed. b) remove HV and LV power lines. All redundant buildings and infrastructure to be removed from RA: c) all buildings and associated infrastructure dismantled and removed off site or buried. d) concrete slabs and footings removed or buried within overburden dump final rehabilitation areas. e) demolish and remove above ground tanks. f) sealed asphalt roads, car parks and hardstand areas will have the asphalt removed for reuse or removed for licensed disposal. g) all pipelines drained and removed. h) watercourse crossings and culverts removed. i) all exploration drillholes, bores, and sumps decommissioned. j) all fencing that is not part of PMLU requirements removed. k) all dams dewatered and desilted (where required). l) all general waste removed m) all redundant plant and equipment to be removed from RA.
RM2	Identification and remediation of contaminated land	a) Preliminary Site Assessment including review of previous activities to assess whether contamination has the potential to exist in a mine domain and whether further investigation is needed to be completed by a Suitably Qualified Person (SQP)³. b) Depending on the results of RM2.a), following actions stipulated in RM2.c) to e) to be completed for identified contaminated areas.

³ **Suitably qualified 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

		c) Detailed site investigation report, as required under the <i>Environmental Protection Act</i> 1994 (Qld) is completed. d) Contaminated and hazardous material is either remediated by on-site treatment or removed/transported to an approved landfill for disposal and waste tracking information recorded and submitted. e) Validation testing confirms that contaminated and hazardous materials have been removed or remediated.
RM3	Installation of Cover System/Capping	Common criteria: a) AQP¹ to determine appropriate particle size for the TSF and Coarse reject cover layers to ensure a capillary break is created. b) Cover system design has a performance target for infiltration rate of less than 5% of annual average rainfall as approved by an AQP¹. c) All ameliorants or fertiliser recommended by an AQP¹ applied and incorporated into the cover material prior to topsoiling. d) A 0.15m thick layer of topsoil is applied and amended with ameliorants and/or fertiliser as recommended by an AQP¹ to support the proposed vegetation cover. e) The landform surface is water shedding as per final landform design. Tailing Storage Facility (TSF): f) Tailings are consolidated and are geotechnically stable as assessed by an AQP¹. g) Low clay content, non-Acid Forming (NAF) spoil is placed in a 2m thick layer over consolidated tailings. h) NAF spoil meets the following specifications: i. Total sulfur <1 %; ii. NAPP <-5 kg H₂SO₄/t; and iii. Acid neutralising capacity: maximum potential acidity ratio < 2. i) Compacted clay layer ≥ 1m thickness of material (weathered Permian and/or Tertiary spoil) and surface shaped to shed any deep infiltration out of the landform. j) Approximately 2m of gravelly fresh Permian spoil placed over the low permeability layer.

		Coarse Reject Emplacement (CRE): k) Compacted clay layer $\geq 1\text{m}$ thickness of material (weathered Permian and/or Tertiary spoil) and surface shaped to shed any deep infiltration out of the landform. l) Approximately 2m of gravelly fresh Permian spoil placed over the low permeability layer.
RM4	Landform development and reshaping	Common criteria: a) All major earthworks (including reshaping, pushing/trimming) are completed in accordance with the design specification provided by an AQP¹ (e.g. mining engineers). b) Erosion and sediment control systems are designed by an AQP², installed, and fit for purpose. c) Drainage system installed to allow natural non-erosive drainage on the site and is stable as confirmed by AQP². d) The reshaped landform has been assessed as geotechnically stable by an AQP¹, achieving the factor of safety (FOS) ≥ 1.5. e) Slopes meet following design specification: i. RA1 (Spoil Dump Flats), RA3 (Mine infrastructure), RA4 (TSF and CRE), RA9 (Mine affected water dam) $\leq 10\%$ grade. ii. RA2 (Watercourse diversion), RA5 (Native ecosystem corridor), RA6 (Spoil Dump Slopes) $\leq 14\%$ grade. iii. RA7 (Existing rehabilitation - Historical Spoil Dumps), RA8 (Flood protection landform) $\leq 17\%$ grade. Spoil Emplacement Areas (RA1, RA6, RA7) f) Spoil Dump slopes have engineered Erosion and Sediment Control (ESC) and drainage structures installed to achieve a maximum continuous slope to manage erosion and maintain long term stability: i. RA6 (Proposed Spoil Dump Slopes) $\leq 70\text{m}$. ii. RA7 (Historical Spoil Dumps) $\leq 100\text{m}$. g) Proposed Erosion and Sediment Control (ESC) and drainage structures on site has been reviewed and endorsed by a third party AQP² as appropriate to the landform, materials and PMLU, with consideration given to long term performance and stability in a post-closure

		context. h) For RA6 and RA7, rock mulch (>200mm) applied at a depth $\geq 0.5\text{m}$ in areas of flow concentration such as drains, landform depressions/valleys, or where modelled peak flood velocities are greater than 2m/s, as assessed and certified by an AQP¹. Infrastructure areas RA3 (Mine infrastructure) and RA9 (Mine affected water dams) i) Natural drainage lines are reinstated when infrastructure is removed. Coarse Rejects and TSF (RA4) j) CRE are $\leq 20\text{m}$ above pre-mining ground levels. k) CRE and TSF reshaped landform meets design specification: - aligns with the adjoining topography. - integrated with the natural surface drainage. - finished with a mounded top surface. Creek Diversions (RA2) l) A detailed construction creek diversion design plan and design report has been certified by a third party AQP¹ as being safe, erosionally and structurally stable and appropriate for the PMLU, with regard to material properties and local conditions. m) Landform design report must demonstrate that the landform will support the achievement of a stable condition. n) AQP¹ has certified that the as-constructed landform achieves geotechnical stability with a Factor of Safety (FOS) ≥ 1.5, which includes consideration of flood stress. o) Diversions constructed in accordance with the engineering designs developed by an AQP¹. Flood Protection Landform (RA8) p) All flood protection landforms are designed by an AQP¹ to provide flood immunity to NUMAs from a 0.1% AEP flood event. q) The risk associated with a probable maximum flood (PMF) event must also be considered in the
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		design process as per RM4.p). r) Selective placement of non-erosive materials and/or rock mulch protection to ensure landform stability as per AQP's¹ advice. s) If the landform is to act as an abandonment bund, a bench at 10m, is established between the inward toe embankment and modified pit crest. t) Landform exceeds the mAHD for 0.1%AEP or PMF water surface level +0.5m freeboard as determined by AQP¹. u) A permanent flood protection landform is in place, with an appropriate minimum width at base and height as determined by an AQP¹ to achieve a gradient of <5% between maximum water level and the toe of the downstream batter. v) Must be fenced to exclude stock and permanent fencing in place post construction and maintained. Native Ecosystem Corridor (RA5) w) A minimum 200m wide native ecosystem corridor established as designed by the AQP¹. x) Batter slopes meet design specification of <14% gradient.
RM5	Surface preparation (Topsoil)	a) An assessment of soil material and the underlying spoil (down to 0.6m from surface) has been completed by an AQP¹ to assess soil material and underlying spoil's suitability to meet suitability parameters (as defined in RM7.a) for the relevant PMLU. b) Application of ameliorants such as fertiliser, gypsum/or organic matter determined by an AQP¹ based on the soil material assessment required by RM5.a). c) Where soil material and underlying spoil characteristics are outside the criteria in RM7.a), those materials may be used, provided a third party AQP¹ has reviewed and endorsed the soil material and underlying spoil assessment and confirms that the materials are suitable for the target vegetation establishment, the PMLU, and the stability of the landform. d) Records of ameliorants applied and incorporated into surface, as recommended by an AQP¹. e) Records that topsoil placement has achieved a minimum target depth of 150 mm. f) Ripping depth on contour to a minimum of 500mm at 1m spacing as per AQP¹ advice. g) The surface and groundwater quality monitoring network (PRCP Schedule Appendix 6 and 9) is installed and monitoring underway (a minimum of one year of sampling undertaken) by 2030.

RM6	Revegetation (seeding and / or planting)	Common Criteria: a) Stock exclusion fencing has been established to prevent stock from grazing newly seeded areas. Low Intensity Grazing PMLU (RA1, RA3, RA4, RA6, RA7, RA9) b) Seeding is completed using following: i. selection of species listed in: PRCP schedule Appendix 1: Seed Mix Grazing PMLU; and ii. seed mix must include 3P (perennial, palatable and productive) species, with a minimum of 4 perennial grass species. Native Ecosystem Corridor PMLU (RA5) c) Direct seeding is completed using a selection of species as per PRCP schedule Appendix 2: Seed Mix Native Ecosystem (For Corridor). Creek Diversion (RA2) d) Seeding is completed using a selection of species as per PRCP schedule Appendix 3: Seed Mix Native Ecosystem (For Watercourse). e) If rehabilitation monitoring recommends planting of the area, planting completed at a rate of 6-10 plants per 1m² along water edge using selection of species as per PRCP schedule Appendix 3: Seed Mix Native Ecosystem (For Watercourse). Flood Protection Landform (RA8) f) Seeding is completed using a selection of native grass species as per PRCP schedule Appendix 2: Seed Mix Native Ecosystem (For Corridor) to provide a good grass cover to maximise stability.
RM7	Achievement of surface requirements	Common criteria: a) Following amelioration, an AQP¹ certifies that the Soil testing of topsoil and subsoil/underlying spoil (0-60 cm) (sampled 12 months and 5 years after the completion of RM6 and repeated where required) demonstrate that the topsoil and subsoil/underlying spoil meet the following suitability criteria (derived from Land Class 4 land suitability parameters, Short 2023):

		i. Plant Available Water Capacity (PAWC); 30 - <40 mm; ii. Bicarbonate P (at 0 -10cm depth); 4 - <8 mg/kg; iii. Electrical Conductivity (1:5 dilution); ≤ 1.25 dS/m; iv. Soil pH 5.5 - 9.0; and v. Exchangeable Sodium Percentage (ESP%) (at 0 – 10 cm depth); • Slope <10% achieves ESP of <14% • Slope >10% achieves ESP of <6%. b) No evidence of erosion classified as 'moderate' or 'severe' as defined by PRCP schedule Appendix 5: Erosion classification framework. c) A third party AQP² certified that any erosion present will not compromise the achievement of a PMLU to a stable condition. d) No evidence of erosion, scouring, destabilisation, overtopping, or sedimentation in or associated with ESC and drainage structures. e) All temporary ESC and drainage structures are removed. f) Any ESC and drainage structures to be retained as permanent features are certified by an AQP² to remain stable in perpetuity with no increased risk of gully erosion at surrender. g) The stability assessment required as per RM7.f must consider performance, maintenance requirements and residual risk post closure. h) Vegetation groundcover⁴ is $\geq 60\%$ for Grazing PMLU and Native Ecosystem PMLU (with <14% slope), with no bare areas greater than 100 m². i) The final landforms are geotechnically stable demonstrated by achievement of 1.5 FOS assessed and certified by an AQP¹. j) Surface water runoff has been collected from rehabilitation areas when surface flows occur, and it is safe to do so. k) Surface water runoff is non-polluting to receiving waters and complies with PRCP schedule Appendix 8: Surface water quality limits. l) Retained dams are drained and desilted and meet water quality criteria stipulated in PRCP schedule Appendix 8: Surface water quality limits.
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⁴ Vegetation groundcover: Means plants, plant litter, tree leaf litter, twigs and woody debris that protect the soil surface from erosion.

		Contaminated Land: m) For any lot/plan listed on the Environmental Management Register (EMR)/Contaminated Land Register (CLR) within the mining lease area, a Contaminated Land Investigation Document (CLID) completed in accordance with the <i>Environmental Protection Act 1994</i>, including: i. Site Suitability Statement confirming the suitability of the property for the PMLUs; ii. Contaminated Land Audit or Certification; iii. Site Investigation Report and, where required, a Validation Report and/or a draft Site Management Plan. iv. Removal of land from EMR. v. Removal of land from CLR where possible. vi. A contaminated land assessment completed by a SQP3 demonstrates that no contamination unsuitable for the post-mining land use remains or is occurring. vii. For any sites that cannot be removed from EMR/CLR – a site management plan is provided with relevant area identified via mapping. Low Intensity Grazing PMLU n) Rehabilitated landform has following slope gradients: i. RA1 (Spoil Dump Flats), RA3 (Mine infrastructure), RA4 (Coarse rejects and TSF) and RA9 (Mine affected water dams) <10% grade, ii. RA6 (Spoil Dump Slopes) <14% grade, and iii. RA7 (Historical Spoil Dumps) <17% grade. o) Pasture species identified are consistent with PRCP schedule Appendix 1: Seed Mix Grazing PMLU. p) At least 4 perennial species established. Native Ecosystem Corridor PMLU q) Species identified are consistent with PRCP schedule Appendix 2: Seed Mix Native Ecosystem (For Corridor). r) Target native trees, shrubs and grass species identified are consistent with species number and composition in PRCP schedule Appendix 4: PRCP benchmark for Regional Ecosystem. (<i>Reseeding or plantation of tube stock completed if required to meet criteria</i>).
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		s) The annual monitoring conducted by an AQP¹ shows absence of prohibited or restricted invasive plants (as defined in <i>Biosecurity Act 2014</i>) in groundcover. t) Weed presence is a maximum of 5% of total vegetative groundcover⁴ confirmed by an AQP¹ in an annual monitoring report. u) Native ecosystem corridor has minimum width $\geq 200\text{m}$. Creek Diversions (RA2) v) Species identified are consistent with PRCP schedule Appendix 3: Seed mix Native Ecosystem (For Watercourse). w) Target native trees, shrubs and grass species identified are consistent with species number and composition in PRCP schedule Appendix 4: PRCP benchmark for Regional Ecosystem. (<i>Reseeding or plantation of tube stock undertaken if required to meet criteria.</i>) x) The annual monitoring conducted by an AQP¹ shows absence of prohibited or restricted invasive plants (as defined in <i>Biosecurity Act 2014</i>) in groundcover. y) Weed presence as defined in the <i>Biosecurity Act 2014</i> (Qld), is a maximum of 5% of total vegetative groundcover⁴ confirmed by an AQP¹ in an annual monitoring report with weed management recommendations provided. z) An AQP¹ certifies that the creek diversions are geotechnically and erosionally stable. aa) Creek diversion monitoring is undertaken at the monitoring locations identified in Appendix 7: Creek diversion monitoring locations. Flood Protection Landform (RA8) bb) Species identified must include 4 native grass species.
RM8	Achievement of post-mining land use to a stable condition	Common criteria: a) Weed presence, as defined in the <i>Biosecurity Act 2014</i> (Qld), is a maximum of 5% of total vegetative groundcover⁴ confirmed by an AQP¹ in an annual monitoring report with weed management recommendations provided. b) AQP¹ certifies that all constructed and rehabilitated landforms achieve relevant landform design criteria for geotechnical stability with a Factor of Safety (FOS) ≥ 1.5.

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| | | <p>c) Surface water runoff has been collected from rehabilitation areas when surface flows occur, and it is safe to do so.</p> <p>d) Surface water runoff is non-polluting to receiving waters and complies with PRCP schedule</p> <p>Appendix 8: Surface water quality limits</p> <p>e) No evidence of erosion classified as 'moderate' or 'severe' as defined by PRCP schedule Appendix 5: Erosion classification framework.</p> <p>f) A third party AQP² certified that any erosion present will not compromise the achievement of a PMLU to a stable condition.</p> <p>g) No evidence of erosion, scouring, destabilisation, overtopping, or sedimentation in or associated with ESC and drainage structures.</p> <p>h) All permanent ESC and drainage structures will be stable in long term with no increased risk of gully erosion.</p> <p>i) AQP¹ certifies that soil testing of topsoil and subsoil/underlying spoil (0-60 cm) continue to achieve following suitability criteria (derived from Land Class 4 land suitability parameters, Short 2023):</p> <ul style="list-style-type: none"> i. Plant Available Water Capacity (PAWC); 30 - <40 mm. ii. Bicarbonate P (at 0 -10cm depth); 4 - <8 mg/kg. iii. Electrical Conductivity (1:5 dilution); ≤ 1.25 dS/m. iv. Soil pH 5.5 - 9.0 v. Exchangeable Sodium Percentage (ESP%) (at 0 – 10 cm depth); <ul style="list-style-type: none"> • Slope <10%, ESP <14% • Slope >10%, ESP <6% . <p>Low intensity cattle grazing PMLU (RA1, RA3, RA4, RA6, RA7, RA9)</p> <p>j) Final landform has following slope gradients:</p> <ul style="list-style-type: none"> i. RA1 (Spoil Dump Flats), RA3 (Mine infrastructure), RA4 (Coarse rejects and TSF) and RA9 (Mine affected water dams) <10% grade; ii. RA6 (Spoil Dump Slopes) <14% grade; and iii. RA7 (Historical Spoil Dumps) <17% grade. <p>k) Monitoring by an AQP¹ demonstrates the following:</p> <ul style="list-style-type: none"> i. Perennial pasture species (3P grasses) diversity ≥ 4; and |
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	ii. Vegetation groundcover⁴ is $\geq 60\%$, with no bare areas greater than 100 m². l) Achievement of land class of 4 or better as per Guidelines for Agricultural Land Evaluation in Queensland, certified by an AQP¹. m) Assessment of carrying capacity by an AQP¹ demonstrates a low intensity grazing outcome has been achieved. n) Stock fencing installation is complete. o) Certification from AQP¹ that rehabilitation is resilient to fire and grazing pressures. Native Ecosystem PMLU (Corridor) p) Vegetation groundcover⁴ is $\geq 60\%$, with no bare areas greater than 100 m². q) A BioCondition assessment is completed by an AQP¹ using the methodology outlined in the latest version of the Queensland Herbarium's 'BioCondition Assessment Manual' for Regional Ecosystems (RE). r) The BioCondition assessment required under RM8. q) demonstrates achievement of following criteria as per Appendix 4: PRCP Benchmark for Regional Ecosystem (Native Ecosystem corridor) s) The overall assessable weighting score of PRCP Benchmark, representative of Brigalow Belt Bioregion at 10-15 years and tree species richness of 2 or more. Creek diversions (RA2) t) Vegetation groundcover⁴ is $\geq 60\%$, with no bare areas greater than 100 m². u) The final landform achieves slope gradient of $<14\%$. v) A BioCondition assessment is completed by an AQP¹ using the methodology outlined in the latest version of the Queensland Herbarium's 'BioCondition Assessment Manual' for Regional Ecosystems (RE). w) The BioCondition assessment required under RM8. w) demonstrates achievement of following criteria as per PRCP schedule Appendix 4: PRCP Benchmark for Regional Ecosystem (Watercourse). x) The overall assessable weighting score of PRCP Benchmark representative of Riparian ecosystem in the Brigalow Belt Bioregion, at 10-15 years and tree species richness of 2 or more.
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		y) Assessment by an AQP¹ that the Diversion has an IDC score >10 as defined in Criteria for functioning river landscape units in mining and post-mining landscapes (ACARP Project number C20017). z) An AQP¹ has certified that diversions being retained in the landform continue to achieve the following: i. Incorporate natural features (including geomorphic and vegetation) present at the location of the diversion. ii. Maintain the pre-existing hydrologic characteristics of surface water for the area in which the watercourse diversion is located. iii. Maintain the hydraulic characteristics of the local watercourses without requiring on-going maintenance. iv. Maintain sediment transport and water quality regimes that allow the diversion to be self-sustaining, while minimising any impacts to upstream and downstream water quality, geomorphology, or vegetation. v. Maintain equilibrium and functionality in all substrate conditions at the location of the diversion. vi. the creek diversions are geotechnically and erosionally stable. Flood protection Landform (RA8) aa) Vegetation groundcover⁴ is $\geq 70\%$, with no bare areas greater than 100 m². bb) At least 4 native grass species established. cc) Permanent fencing in place and maintained post closure which excludes the stock. dd) A third-party AQP¹ certify that all permeant flood protection landforms are safe, stable including: i. Construction completed as per design specifications stipulated by criteria RM4.p) to RM4.v).
RM9	Achievement of post-mining land use to a stable condition (retained infrastructure PMLU)	Retained Infrastructure PMLU a) No infrastructure remaining other than those that form part of the landholder agreement. b) The RA is safe with safety hazards, as determined by an AQP¹, to be similar to surrounding unmined landscapes. c) There is no environmental harm being caused by anything on or in the RA.

		d) Water storage monitored quarterly must not exceed the limits in PRCP schedule Appendix 8: Surface water quality limits, for a minimum of 5 years. e) All retained water storages achieve geotechnical safety and stability as assessed and approved by an AQP¹. f) No evidence of erosion on the retained dam banks classified as 'moderate' or 'severe' as defined by PRCP schedule Appendix 5: Erosion classification framework. g) Dams to remain for landholder use are safe for stock access and have vegetated banks.
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Section D – Non-use management areas

(IA1) Improvement area 1

Non-use management area (NUMA)			
Improvement area	IA1 (Far South)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	54		
Commencement of first milestone: MM1	2024		
NUMA	NUMA		
Date area is available	1/12/2024	1/12/2029	1/12/2034
Cumulative area available (ha)	54	54	54
Milestone completed by	1/12/2029	1/12/2034	1/12/2044
Milestone Reference	Cumulative area achieved (ha)		
MM1	54		
MM2		54	
MM3			54

(IA2) Improvement area 2

Non-use management area (NUMA)			
Improvement area	IA2 (Carlo Creek)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	46		
Commencement of first milestone: MM1	2024		
NUMA	NUMA		
Date area is available	1/12/2024	1/12/2029	1/12/2034
Cumulative area available (ha)	46	46	46
Milestone completed by	1/12/2029	1/12/2034	1/12/2044
Milestone Reference	Cumulative area achieved (ha)		
MM1	46		
MM2		46	
MM3			46

(IA3) Improvement area 3

Non-use management area (NUMA)			
Improvement area	IA3 (One tree)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	94		
Commencement of first milestone: MM1	2034		
NUMA	NUMA		
Date area is available	1/12/2034	1/12/2039	1/12/2049
Cumulative area available (ha)	94	94	94
Milestone completed by	1/12/2039	1/12/2049	1/12/2059
Milestone Reference	Cumulative area achieved (ha)		
MM1	94		
MM2		94	
MM3			94

(IA4) Improvement area 4

Non-use management area (NUMA)			
Improvement area	IA4 (Pipeline)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	89		
Commencement of first milestone: MM1	2034		
NUMA	NUMA		
Date area is available	1/12/2034	1/12/2039	1/12/2049
Cumulative area available (ha)	89	89	89
Milestone completed by	1/12/2039	1/12/2049	1/12/2059
Milestone Reference	Cumulative area achieved (ha)		
MM1	89		
MM2		94	
MM3			94

(IA5) Improvement area 5

Non-use management area (NUMA)			
Improvement area	IA5 (Fox Plains)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	186		
Commencement of first milestone: MM1	2049		
NUMA	NUMA		
Date area is available	1/12/2049	1/12/2054	1/12/2064
Cumulative area available (ha)	186	186	186
Milestone completed by	1/12/2054	1/12/2064	1/12/2074
Milestone Reference	Cumulative area achieved (ha)		
MM1	186		
MM2		186	
MM3			186

(IA6) Improvement area 6

Non-use management area (NUMA)			
Improvement area	IA5 (Eagles Nest)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	187		
Commencement of first milestone: MM1	2059		
NUMA	NUMA		
Date area is available	1/12/2059	1/12/2064	1/12/2074
Cumulative area available (ha)	187	187	187
Milestone completed by	1/12/2064	1/12/2074	1/12/2084
Milestone Reference	Cumulative area achieved (ha)		
MM1	187		
MM2		187	
MM3			187

(IA7) Improvement area 7

Non-use management area (NUMA)			
Improvement area	IA5 (WC Pit)		
Relevant activities	Open cut mining / void		
Total improvement area size (ha)	75		
Commencement of first milestone: MM1	2059		
NUMA	NUMA		
Date area is available	1/12/2059	1/12/2064	1/12/2074
Cumulative area available (ha)	75	75	75
Milestone completed by	1/12/2064	1/12/2074	1/12/2084
Milestone Reference	Cumulative area achieved (ha)		
MM1	75		
MM2		75	
MM3			75

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Achievement of structural stability	a) AQP¹ confirms that each NUMA area do not exceed the parameters listed in PRCP schedule Appendix 11: Approved residual voids. b) Stable in situ pit walls left standing at the slope created by the final blast and a diversion bank provided at the top for safety and drainage. c) Drainage structures along in-situ pit walls and in-pit spoil dump have been revegetated with native shrub and grass species, with water drainage that flows naturally without pooling or flooding. d) Geotechnical stability and risk assessments conducted to determine the appropriate treatments prior closure. e) Void walls/slopes assessed as stable by an AQP¹ (geotechnical engineer) and meets following design criteria: i. in-situ pit walls, floor and backfilled spoil within the NUMA assessed by a AQP¹ meeting an FOS>1.5; ii. overall, in-situ pit wall and floor slopes <275% (<70°) and verified by an AQP¹; and iii. overall backfilled spoil walls and floor within the NUMA footprint 70% (<35°). f) Predictive modelling undertaken by a AQP¹ confirming that the voids will remain as a groundwater sink and that there is no risk of contaminant release to surface or groundwaters post-mining.
MM2	Achievement of landform design and surface requirements	a) An AQP¹ certifies that NUMA as identified in PRCP schedule Appendix 11: Approved Residual voids are not subject to inundation from floodwaters up to a minimum 0.1% AEP event. b) Safety infrastructure (such as a safety bund) in place around NUMA and confirmed to be geotechnically stable by an AQP¹. c) Safety infrastructure established around NUMA includes a cattle exclusion zone to prevent cattle accessing the void. d) Perimeter fencing and signage erected around NUMA to prevent access to fauna and humans. e) Appropriate signage placed every 100 m of the perimeter of NUMA to clearly identify and convey the purpose (e.g. EP Act 1994 Non- Use Management Area No Entry). f) Bunding constructed to the following design criteria (unless it forms part of a R8 – Flood Protection Landform): i. a minimum batters 1V:3H;

		ii. a minimum height of 2 m; and iii. located beyond the area, as determined by an AQP¹ through geotechnical assessment, potentially affected by any instability of the pit edge. g) Evidence that ground cover between the void crests and bunds is >60% where ground cover is defined as any cover that assists in controlling erosion and may include live cover. h) Appropriate drainage management infrastructure in place to avoid pooling of surface water between the void crest and safety bund and concentrated flow over the void crest. i) Between the void crest and bund, no evidence of erosion classified as 'moderate' or 'severe' as defined by PRCP schedule Appendix 5: Erosion classification framework and that any initial erosion has been stabilised by vegetation cover. j) Residual voids are monitored for water levels and quality quarterly.
MM3	Achievement of sufficient improvement	a) The water level and quality in the void do not and will not cause environmental harm to the surrounding environment, as demonstrated by groundwater level, quality and modelling. b) Certification from an AQP¹ that the residual void is safe to humans and livestock. c) Certification from an AQP² that erosion occurring within NUMA will not impact the stability of any adjacent structures or RAs. d) Final void walls confirmed to drain internally to the final void. e) Residual void water levels measured; shows void water levels are below the pit crest level. f) Water level data and modelling demonstrates that regional groundwater levels are more than the residual void water levels, confirming void acting as sink.

END OF PRCP SCHEDULE

Appendices

Appendix 1: Seed Mix Grazing PMLU

The seed mix for grazing PMLU will be as per the following table, or updated using suitable species that meet the following criteria:

- The seed mix for non-remnant grazed improved pasture should include species appropriate to the [Guidelines for Agricultural Land Evaluation in Queensland](#) and based on the land capability and agricultural land class (C1-C2).
- The species must all be 3P grasses as recommended by Grazing Land Management information provided by NQ Dry Tropics (<https://nrm.nqdrytropics.com.au/land/3p-grasses/>) or the Fitzroy Basin Association (<https://fba.org.au/services/graziers/>).
- The species mix must not include Indian Couch *Bothriochloa pertusa* or Seca *Stylosanthes* spp both of which have significant impacts on surrounding native remnant vegetation.
- The volume of seed mix (i.e. kg/ha) must be sufficient to ensure the land condition meets its recommended native ecosystem targets.

Scientific Name	Common Name	Kg/ha
Grass species – Total seed weight coated (kg/ha), If not coated, use half prescribed rate		
<i>Chloris gayana</i> Kunth	Callide Rhodes	2
<i>Chloris gayana</i>	Katambora Rhodes	2
<i>Bothriochloa insculpta</i>	Bisset Bluegrass	2
<i>Chamaecrista rotundifolia</i>	Wynn Cassia	1
<i>Cenchrus ciliaris</i>	Gayndah Buffel	2
<i>Urochloa mosambicensis</i>	Sabi Grass	2
<i>Bothriochloa bladhii</i>	Swann Bluegrass	1
Legume species – Total seed weight uncoated (kg/ha)		
<i>Macroptilium bracteatum</i>	Burgundy Bean	1
<i>Clitoria ternatea</i>	Butterfly Pea	1
<i>Echinochloa esculenta</i>	Shirohie Millet	10
Selection of additional species from conditions		6
	Total	30

Appendix 2: Seed Mix Native Ecosystem (For Corridor)

The seed mix for Native Ecosystem PMLU will be as per the following table, or updated using suitable species that meet the following criteria:

- The final proportion of seeds (kg/ha) should reflect the relative cover and frequency of Brigalow Belt Bioregion Descriptions.
- Additional potential species for the seed mix can be found in the Regional Ecosystem Technical Descriptions (<https://publications.qld.gov.au/dataset/re-technical-descriptions>).
- It should be noted, though introduced species do occur in the Regional Ecosystem Technical Description as the data is collected from field sites and some of these sites are disturbed or in poor condition, introduced species should not be used in the seed mix. Introduced species will invariably invade the regional ecosystem corridor due to edge effects and natural dispersal.
- The species mix must not include Wynn Cassia, Progardes, or Seca Stylosanthes spp both of which have significant impacts on surrounding native remnant vegetation.
- The volume of seed mix (i.e., kg/ha) must be sufficient to ensure the land condition meets its recommended native ecosystem targets.

Scientific Name	Common Name	Kg/ha
Upper story native species		
<i>Corymbia tessellaris</i>	Moreton Bay Ash	Minimum (6) species for growth form group at a total (3) kg/ha
<i>Eucalyptus melanophloia</i>	Silver-leaved Ironbark	
<i>Eucalyptus largiflorens</i>	Black Box	
<i>Eucalyptus woollsiana</i>		
<i>Corymbia clarksoniana</i>	Clarkson's Bloodwood	
<i>Eucalyptus populnea</i>	Poplar Box	
<i>Eucalyptus crebra</i>	Narrow Leaved Ironbark	
<i>Eucalyptus orgadophila</i>	Mountain Coolibah	
Mid-stratum native species		
<i>Alphitonia Excelsa</i>	Soap Wattle	Minimum (5) species for growth form group at a total (3) kg/ha
<i>Lysiphyllum caronii</i>	Red flowered Bauhinia	
<i>Melaleuca viminalis</i>	Weeping Bottlebrush	
<i>Acacia leiocalyx</i>	Black Wattle	

<i>Cassia brewsteri</i>	Brewsters cassia	
<i>Geijera parviflora</i>	Wilga	
<i>Eremophila mitchellii</i>	False Sandalwood	
Lower story shrub & grass species		
<i>Carissa ovata</i>	Current Bush	Minimum (5) species for growth form group at a total (8) kg/ha.
<i>Duma florulenta</i>	Tangled lignum	
<i>Dicanthium sericeum</i>	Qld blue grass	
<i>Themeda triandra</i>	Kangaroo Grass	
<i>Heteropogon contortus</i>	Black Speargrass	
<i>Heteropogon triticeus</i>	Giant Speargrass	
<i>Bothriochloa erianthoides</i>	Forest Mitchell Grass	
<i>Chloris ventricosa</i>	Tall Windmill Grass	
<i>Cymbopogon refractus</i>	Barb wire grass	
Legumes		
<i>Desmanthus progardes</i>	Progardes	a total (1) kg/ha.

Appendix 3: Seed Mix Native Ecosystem (For Watercourse).

The seed mix for Native Ecosystem (Watercourse) PMLU will be as per the following table, or updated using suitable species that meet the following criteria:

- The final proportion of seeds (kg/ha) should reflect the relative cover and frequency of Riparian ecosystem in the Brigalow Belt Bioregion technical descriptions.
- Additional potential species for the seed mix can be found in the Regional Ecosystem Technical Descriptions (<https://publications.qld.gov.au/dataset/re-technical-descriptions>).
- It should be noted, though introduced species do occur in the Regional Ecosystem Technical Description as the data is collected from field sites and some of these sites are disturbed or in poor condition, introduced species should not be used in the seed mix. Introduced species will invariably invade the regional ecosystem corridor due to edge effects and natural dispersal.
- The species mix must not include Wynn Cassia, Progardenes, or Seca Stylosanthes spp both of which have significant impacts on surrounding native remnant vegetation.
- The volume of seed mix (i.e., kg/ha) must be sufficient to ensure the land condition meets its recommended native ecosystem targets.

Scientific Name	Common Name	Kg/ha
Upper story native species		
<i>Corymbia tessellaris</i>	Moreton Bay Ash	Minimum (6) species for growth form group at a total (3) kg/ha
<i>Eucalyptus camaldulensis</i>	River Red Gum	
<i>Eucalyptus tereticornis</i>	Forest Red Gum	
<i>Corymbia clarksoniana</i>	Clarkson's Bloodwood	
<i>Eucalyptus populnea</i>	Poplar Box	
<i>Eucalyptus crebra</i>	Narrow Leaved Ironbark	
<i>Eucalyptus orgadophila</i>	Mountain Coolibah	
<i>Eucalyptus cambageana</i>	Dawson river Blackbutt	
<i>Corymbia citriodora</i>	Lemon Scented Gum	
<i>Casuarina cunninghamiana</i>	River She-oak	
<i>Melaleuca Leucandendra</i>	Weeping Paperbark	
<i>Casuarina cristata</i>	Belah	
Mid-stratum native species		
<i>Alphitonia Excelsa</i>	Soap Wattle	Minimum (5) species for growth form group at a total (3) kg/ha
<i>Lysiphyllum caronii</i>	Red flowered Bauhinia	

<i>Melaleuca viminalis</i>	Weeping Bottlebrush	
<i>Acacia leiocalyx</i>	Black Wattle	
<i>Acacia salicina</i>	Sally Wattle	
<i>Acacia macradenia</i>	Zig-zag Wattle	
<i>Alectryon oleifolius</i>	Inland rosewood	
<i>Geijera parviflora</i>	Wilga	
<i>Eremophila mitchellii</i>	False Sandalwood	
Lower story shrub & grass species		
<i>Carissa ovata</i>	Current Bush	Minimum (5) species for growth form group at a total (8) kg/ha.
<i>Dicanthium sericeum</i>	Qld blue grass	
<i>Themeda triandra</i>	Kangaroo Grass	
<i>Heteropogon contortus</i>	Black Speargrass	
<i>Heteropogon triticeus</i>	Giant Speargrass	
<i>Bothriochloa bladhii</i>	Forest Bluegrass	
<i>Bothriochloa erianthoides</i>	Forest Mitchell Grass	
<i>Chloris ventricosa</i>	Tall Windmill Grass	
<i>Cymbopogon refractus</i>	Barb wire grass	
Cover crop (sterile)		
<i>Echinochloa esculenta</i>	Japanese Millet	Minimum (1) species for growth form group at a total (15) kg/ha.
<i>Panicum milliaceum</i>	White French Millet	
<i>Lolium rigidum</i>	Annual Rye	

Appendix 4: PRCP Benchmark for Regional Ecosystem

BioCondition Assessable Attributes	BioCondition Assessable Attribute Weighting	Native Ecosystem Corridor (Representative of Brigalow Belt Bioregion)			Native Ecosystem Watercourse (Representative of Riparian ecosystem in the Brigalow Belt Bioregion)		
		BioCondition benchmark	PRCP benchmark		BioCondition benchmark	PRCP benchmark	
			c. 5yrs	c.10-15 yrs		c. 5yrs	c.10 -15 yrs
Recruitment	5	100%	0	20% (=3 out of 5 weighting)	100%	0	20% (=3 out of 5 weighting)
Non-native plant cover	10	0%	<25% (=5 out of 5 weighting)	<25% (=5 out of 5 weighting)	0%	<25% (=5 out of 5 weighting)	<25% (=5 out of 5 weighting)
Tree species richness	5	2	≥1 (=3 out of 5 weighting)	≥1 (=3 out of 5 weighting)	4	≥1 (=3 out of 5 weighting)	≥1 (=3 out of 5 weighting)
Native shrub species richness	5	2	≥1 (=3 out of 5 weighting)	≥1 (=3 out of 5 weighting)	4	≥1 (=3 out of 5 weighting)	≥1 (=3 out of 5 weighting)
Native grass species richness	5	9	≥2 (=3 out of 5 weighting)	≥2 (=3 out of 5 weighting)	8	≥2 (=3 out of 5 weighting)	≥2 (=3 out of 5 weighting)
Native forb other species richness	5	15	≥4 (=3 out of 5 weighting)	≥4 (=3 out of 5 weighting)	13	≥3 (=3 out of 5 weighting)	≥3 (=3 out of 5 weighting)
Tree canopy height	5	18m	0	≥4.5 (=3 out of 5 weighting)	23m	0	≥5.75 (=3 out of 5 weighting)
Tree canopy cover	5	37%	≥3.7 (=2 out of 5 weighting)	≥18.5 – 74 (=5 out of 5 weighting)	34%	≥3.4 (=2 out of 5 weighting)	≥17 – 68 (=5 out of 5 weighting)
Shrub canopy cover	5	4%	≥0.4 (=3 out of 5 weighting)	≥0.4 (=3 out of 5 weighting)	7%	≥0.7 (=3 out of 5 weighting)	≥0.7 (=3 out of 5 weighting)
Native perennial grass	5	26%	≥13 – 23.4 (=3 out of 5 weighting)	≥13 – 23.4 (=3 out of 5 weighting)	35%	≥17.5 – 31.5 (=3 out of 5 weighting)	≥17.5 – 31.5 (=3 out of 5 weighting)
Litter ground cover	5	35%	0	≥3.5 (=3 out of 5 weighting)	21%	0	≥2.1 (=3 out of 5 weighting)
Total BioCondition Assessable weighting score	60		Overall assessable weighting score >20	Overall assessable weighting score >35		Overall assessable weighting score >20	Overall assessable weighting score >35

Appendix 5: Erosion classification framework

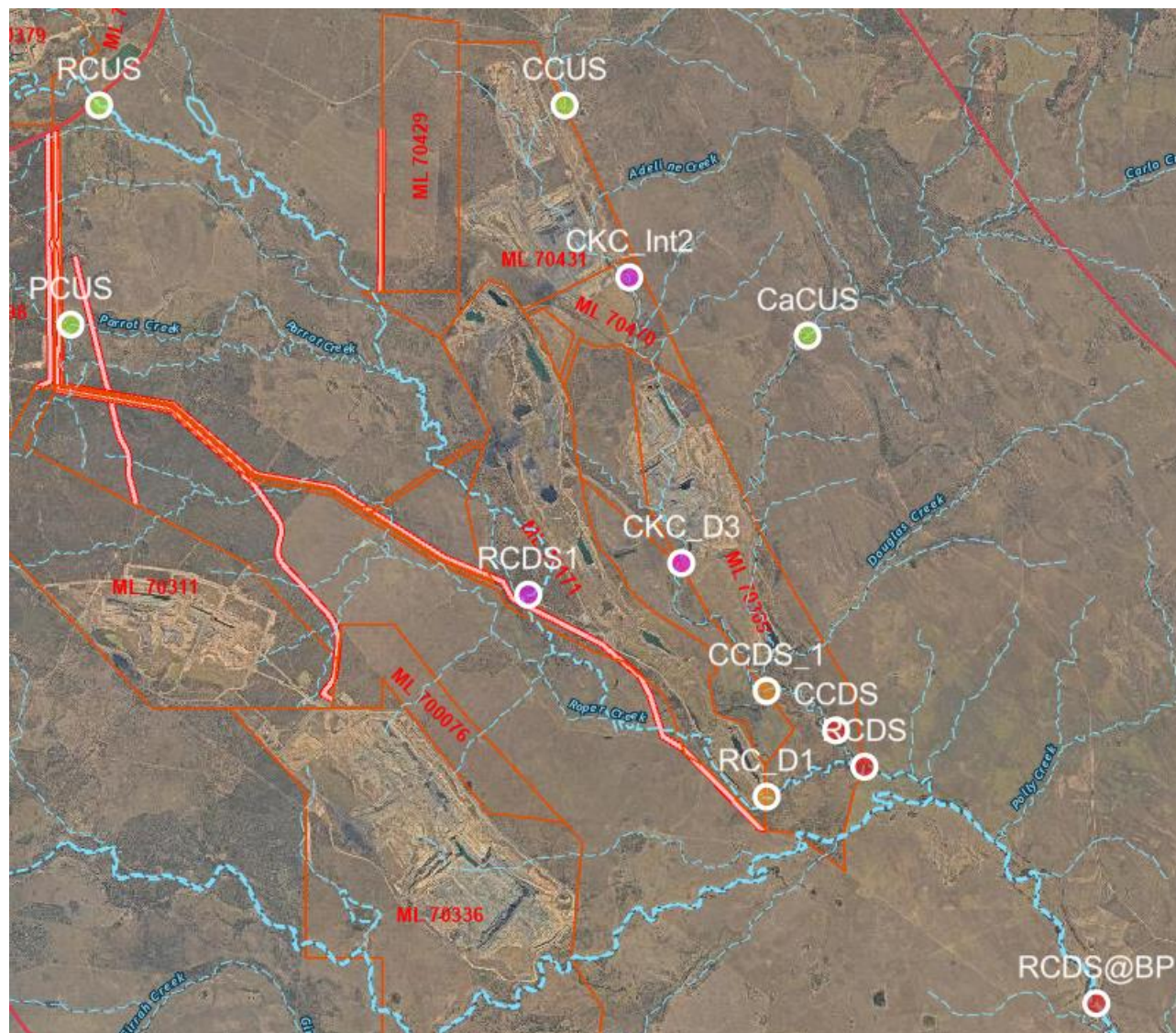
<u>Erosion classification</u>	<u>Minor</u>	<u>Moderate</u>	<u>Severe</u>
Sheet erosion	Shallow soil deposits downslope	Partial exposure of roots; moderate soil deposits downslope.	Loss of surface horizon; subsoil exposure; root exposure; substantial soil deposits downslope.
Rill erosion (<0.3m deep)	<15 rills per transect*	15-30 rills per transect*	>30 rills per transect*
Gully erosion (>0.3m deep)	Absent	Absent	Present
Tunnel erosion	Absent	Absent	Present
Mass movement	Absent	Absent	Present

Source: NCST (2009) *Australian Soil and Land Survey Field Handbook, 3rd edition*. The National Committee on Soil and Terrain. CSIRO Publishing, Collingwood, Australia.

*Transect 100 m across the contour (Source: Tongway, D. J. and Hindley, N. L. 2005. *Landscape Function Analysis: Procedures for Monitoring and Assessing Landscapes*. CSIRO Publishing, Canberra, Australia.)

Appendix 6: Surface water monitoring locations

Monitoring Locations	Receiving waters location description	Latitude (decimal degree, GDA94)	Longitude (decimal degree, GDA94)
Upstream monitoring locations			
CCUS	Cockatoo Creek Upstream	-22.8778	148.77421
RCUS	Roper Creek Upstream	-22.87783	148.67294
PCUS	Parrot Creek Upstream	-22.9218	148.6665
CaCUS	Carlo Creek Upstream	-22.9238	148.82695
Downstream monitoring locations			
RCDS	Roper Creek Downstream	-23.01014	148.83919
CCDS	Cockatoo Creek Downstream	-23.00294	148.83319
RCDS@BP	Roper Creek Downstream at Barwon Park	-23.05775	148.88973
CKC_Int2	Cockatoo Creek – Intermediate reach (diversion monitoring location)	-22.91213	148.78825
CKC_D3	Cockatoo Creek – downstream reach (diversion monitoring location)	-22.96925	148.79918
CCDS_1	Cockatoo Creek	-22.99493	148.81814
RC_D1	Roper Creek - downstream reach (diversion monitoring location)	-23.01619	148.81799
RCDS1	Roper Creek Downstream	-22.97575	148.76625

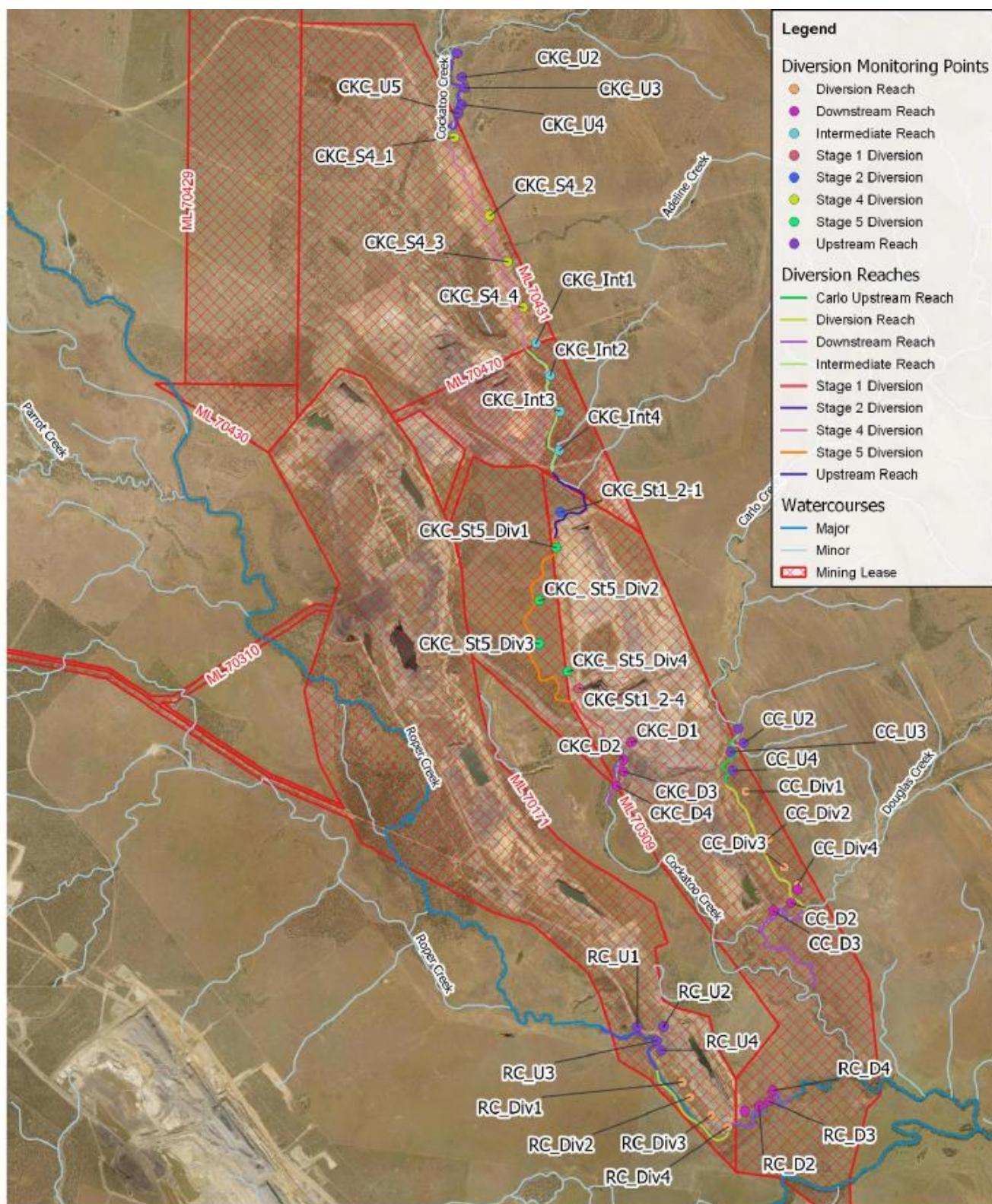
Appendix 6.1: Figure 1 Surface water monitoring locations

Appendix 7: Creek diversion monitoring locations

Monitoring Reach	Monitoring Point	Easting	Northing
Carlo Creek Diversion			
Upstream	CC_U1	686208	7459376
	CC_U2	686294	7459161
	CC_U3	686095	7459025
	CC_U4	686126	7458741
Diversion	CC_Div1	686327	7458418
	CC_Div2	686675	7457695
	CC_Div3	686913	7457262
	CC_Div4	687126	7456995
Downstream	CC_D1	687118	7456923
	C C_D2	687019	7456716
	CC_D3	686756	7456593
	CC_D4	686636	7456516
Roper Creek Diversion			
Upstream	RC_U1	684667	7454825
	RC_U2	685074	7454825
	RC_U3	684967	7454607
	RC_U4	685035	7454460
Diversion	RC_Div1	685361	7453974
	RC_Div2	685474	7453747
	RC_Div3	685799	7453475
	RC_Div4	686051	7453292
Downstream	RC_D1	686310	7453532
	RC_D2	686527	7453608
	RC_D3	686680	7453682
	RC_D4	686744	7453850

Monitoring Reach	Monitoring Point	Easting	Northing
Cockatoo Creek Diversion			
Upstream	CKC_U1	681916	7469706
	CKC_U2	681986	7469340
	CKC_U3	682025	7469176
	CKC_U4	681991	7468922
	CKC_U5	681927	7468788
Diversion - Stage 4	CKC_S4_1	681872	7468422
	CKC_S4_2	682414	7467229
	CKC_S4_3	682689	7466517
	CKC_S4_4	682925	7465822
Diversion - Stage 4	CKC_Int1	683121	7465273
	CKC_Int2	683336	7464779
	CKC_Int3	683487	7464234
	CKC_Int4	683475	7463636
Stage 2 Diversion	CKC_St1_2-1	683495	7462690
Diversion - Stage 5	CKC_St5_Div1	683425	7462149
	CKC_St5_Div2	683172	7461342
	CKC_St5_Div3	683169	7460681
	CKC_St5_Div4	683607	7460250
Stage 1 Diversion	CKC_St1_2-4	683776	7459998
Downstream	CKC_D1	684578	7459177
	CKC_D2	684460	7458905
	CKC_D3	684464	7458728
	CKC_D4	684355	7458505

Appendix 7.1: Figure 2 Creek Diversion Monitoring Location



Appendix 8: Surface water quality limits

Quality characteristic (units)	Limit	Comment on limit
pH	6.5-8.0	
Electrical Conductivity (µS/cm)	310	Mackenzie River baseflow WQO
Turbidity (NTU)	270	Site-specific – 80 th percentile of CCUS, RCUS and CaCUS (WQO <50NTU)
Sulphate (mg/L)	30	Site-specific - 95 th percentile of CCUS, RCUS and CaCUS (WQO <10 mg/L)
Aluminium – dissolved (µg/L)	55	ANZG 2018
Arsenic – dissolved (µg/L)	13	ANZG 2018
Iron – dissolved (µg/L)	700	Draft ANZG 2018
Manganese – dissolved (µg/L)	1,900	ANZG 2018
Molybdenum – dissolved (µg/L)	34	ANZG 2018
Nickel – dissolved (µg/L)	11	ANZG 2018
Selenium – dissolved (µg/L)	5	ANZG 2018
Zinc – dissolved (µg/L)	8	ANZG 2018
Nitrate (µg/L)	1100	
Total recoverable hydrocarbons (C6-C9) (µg/L)	20	
Total recoverable hydrocarbons (C10-C36) (µg/L)	100	
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes only	
Hardness (mg/L)	For interpretation purposes only	

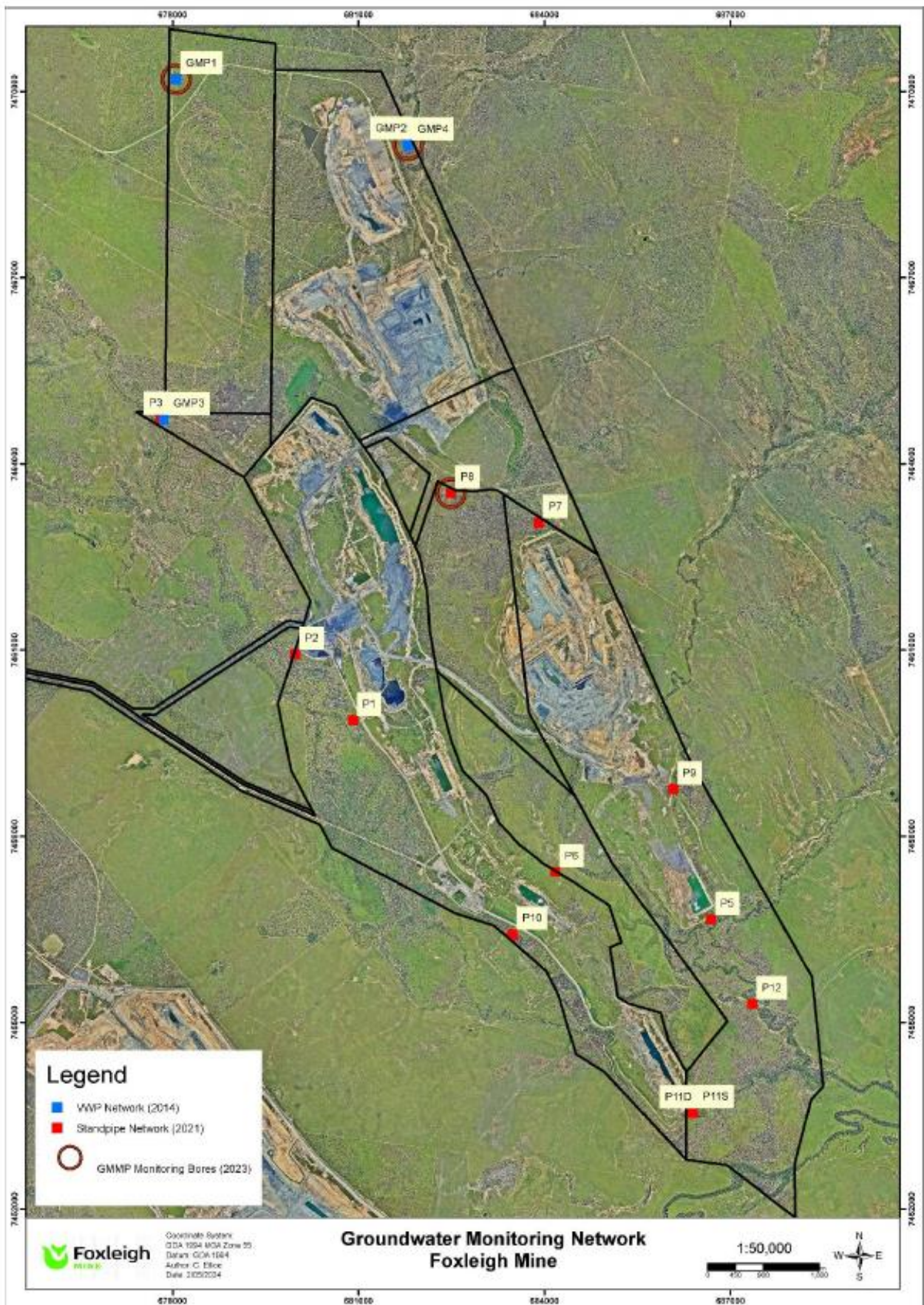
Notes:

- DEHP 2011. Environmental Protection (Water) Policy 2009 Mackenzie River Sub-basin Environmental Values and Water Quality Objectives (WQOs) Basin No. 130 (part), including all waters of the Mackenzie River Sub-basin. https://environment.des.qld.gov.au/__data/assets/pdf_file/0031/89068/fitzroy_mackenzie_river_wqo_290911.pdf
- All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- Limits for metals and metalloids apply to dissolved results.
- ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection)

Appendix 9: Groundwater monitoring bores

Monitoring Bore	Hydrogeological Unit	Latitude (decimal degree, GDA94)	Longitude (decimal degree, GDA94)
GMP4	Alluvium	-22.875772	148.772084
P1	Burngrove	-22.95954	148.764504
P1S	Alluvium		
P2	Burngrove	-22.95006	148.755292
P3	Alluvium	-22.916062	148.733601
P4	Middlemount Seam	-22.984853	148.824867
P5	Middlemount Seam	-22.987874	148.821211
P5S	Alluvium		
P6	Rewan	-22.981231	148.796622
P7	Middlemount Seam	-22.930474	148.793398
P7S	Alluvium		
P8	Rewan	-22.926327	148.779519
P9	Burngrove	-22.968979	148.81503
P10	Burngrove	-22.990366	148.790076
P11A	Alluvium		
P11S	Overburden	-23.015975	148.818787
P11D	Middlemount Seam	-23.016047	148.818538
P12	Alluvium/Tertiary	-23.000084	148.827892
P13	Alluvium	-22.94336	148.77780

Appendix 9.1: Figure 3: Groundwater monitoring locations



Appendix 10: Groundwater quality limits

Quality characteristic (units)	Monitoring Bore	Limit	Comment on limit
pH (pH units)	All bores /	6.5-8.0	
Electrical conductivity (µS/cm)	All bores, except GMP4, P1, P2, P4, P5, P6, P8, P9, P10, P11D, P11S, P12	16,000	WQO Groundwater zone 34 deep 80 th percentile
Electrical conductivity (µS/cm)	GMP4	55,440	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P1	24,220	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P2	47,160	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P4	32,911	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P5	39,403	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P6	38,602	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P8	33,400	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P9	8,657	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P10	56,088	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P11D	39,475	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P11S	43,325	Site-specific. 80 th percentile
Electrical conductivity (µS/cm)	P12	46,627	Site-specific. 80 th percentile
Sulfate (mg/L)	All bores	389	WQO Groundwater zone 34 deep 80 th percentile
Aluminium – dissolved (µg/L) ³	All bores	55	ANZG 2018
Arsenic – dissolved (µg/L) ³	All bores	13	ANZG 2018
Iron – dissolved (µg/L) ³	All bores	246	WQO Groundwater zone 34 deep 80 th percentile
Manganese – dissolved (µg/L) ³	All bores	1900	ANZG 2018
Molybdenum – dissolved (µg/L) ³	All bores	34	ANZG 2018
Nickel – dissolved (µg/L) ³	All bores	11	ANZG 2018
Selenium – dissolved (µg/L) ³	All bores	5	ANZG 2018
Zinc – dissolved (µg/L) ³	All bores	8	ANZG 2018
Major ions (mg/L)	All bores	For interpretation purposes only	

Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate			
Hardness (mg/L)	All bores	For interpretation purposes only	

Notes:

- All bores that require water quality compliance assessment (See Appendix 9)
- All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- Limits for metals and metalloids apply to dissolved results.
- ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection)
- DEHP 2011. Environmental Protection (Water) Policy 2009 Mackenzie River Sub-basin Environmental Values and Water Quality Objectives (WQOs) Basin No. 130 (part), including all waters of the Mackenzie River Sub-basin. Fitzroy Groundwater zone 34 deep - https://environment.des.qld.gov.au/__data/assets/pdf_file/0031/89068/fitzroy_mackenzie_river_wqo_290911.pdf

Appendix 11: Approved residual voids

Residual Void	Total NUMA Area (Ha) (Inclusive of safety bund)	Void waterbody surface area (Ha)
Eagle Nest	187.3	92
Fox Plains	185.5	101.9
One Tree West	93.8	48.9
Pipeline Pit	89.3	37.8
WC Pit	74.6	20.9
Far South	54.0	21.2
Carlo	45.8	23.1