

PRCP schedule

Environmental Protection Act 1994

PRCP schedule P-PRCP-100908098_V1 Baralaba Coal Mine

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-100908098

PRCP schedule holder(s)

Name(s)	Registered address
Baralaba Coal Pty Ltd (ACN 009 805 029); and, Wonbindi Coal Pty Ltd (ACN 114 668 941).	Level 20, 10 Eagle Street, BRISBANE CITY QLD 4000

Location details

Location(s)
ML5605, ML5580, ML5581, ML5590, ML80157, ML80169, ML80170, ML80200, ML80201, and ML700004

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.



Signature

21 October 2025

Date

Ben Byrd

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

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Queensland
Government

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 – Definitions
- Section C - Final site design and reference maps
- Section D - Post mining land uses
- Section E - Non-use management areas.
- Section F - Appendices

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 EPML00223213 must have an associated rehabilitation outcome provided in this PRCP Schedule.
- PRCP2** The holder must for each rehabilitation area and improvement area, achieve the corresponding rehabilitation or management 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 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'; and
 - (b) describe in the notification why or why not it considers that it would be reasonable and appropriate to apply to the administering authority to amend this schedule; and
 - (c) unless otherwise agreed to by the administering authority in writing, apply to the administering authority within sixty (60) days of the notification to amend this schedule in a way that maximises the progressive rehabilitation to a stable condition.

Note:

- (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) Assessment of land becoming available is undertaken on a nominally annual basis.
- (3) Rehabilitation of land size must be practicable and economical.
- (4) The dates by which milestones are to be completed is brought forward, to the extent it is reasonably practicable to do so, by the same amount of time as the commencement was brought forward.

- PRCP4** Where an area achieves a rehabilitation or management milestone, the holder must continue to achieve the milestone criteria for that rehabilitation milestone until:
- (a) A progressive certification area has satisfied the provisions of section 318ZB(4) of the EP Act; or
 - (b) Until a surrender is approved.

- PRCP5** The holder must maintain a risk register that identifies the risks to not achieving:
- (a) a stable condition for post-mining land uses.
 - (b) sufficient improvement for non use management areas.
 - (c) how the risks are being managed or minimised.
- PRCP6** The risk register (**PRCP5**) must be reviewed every three (3) years and include consideration of the outcomes of PRCP monitoring data.
- 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 titled *Baralaba Coal Mine: Transitional Progressive Rehabilitation and Closure Plan*;
 - (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.
- PRCP8** The holder must make and 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 those activities (including but not limited to, actions taken, date, location, methods, data collected, Quality Assurance/Quality Control, 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;
 - (i) Details of community consultation in the community consultation register relating to rehabilitation and closure activities.
- 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, or a timeframe agreed to by the administering authority.
- PRCP11** All AQP designs, specifications, certifications, assessments and any similar documents developed in accordance with good professional practice must include documented consideration of any relevant guideline or publication material.
- PRCP12** Disturbance due to exploration and minor ancillary activities 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**.
- PRCP13** The groundwater model and long-term water balance model must be recalibrated and predictions rerun as required under Environmental Authority EPML00223213.
- PRCP14** Where the modelling conducted under **PRCP13** indicates a risk to achieving stable condition, an amendment application to this PRCP Schedule must be submitted to the administering authority to address the risk within three (3) months of the risk being identified.
- PRCP15** An up-to-date groundwater model and long-term water balance model must be maintained with predictions rerun at least as required under Environmental Authority EPML00223213 and within a year of any surrender application.
- PRCP16** A pre-construction detailed landform design plan and report must have been developed and certified by an AQP as being safe, erosionally and structurally stable, and appropriate for the PMLU, with regard to the material properties and local conditions as it applies to a geotechnical and erosional stability risk. The detailed landform design plan and report must demonstrate that the landform will support the achievement of a stable condition.
- PRCP17** The requirements of **PRCP16** must confirm, through an analysis of future landform stability, that the final landform configuration is able to achieve the criteria of this PRCP schedule across all areas of the landform. The modelling must:
- (a) be calibrated against existing performance to support the methodology and parameters adopted in the models; and
 - (b) demonstrate stability of the final landform.
 - (c) be undertaken in accordance with the latest version of the Queensland Government's '*Applying erosion and Landscape Evolution Models to assess post-mining landform stability: Technical Paper*'.
- PRCP18** The requirements of **PRCP16** must confirm, through an assessment of long-term geotechnical safety and stability, that the final landform configuration is able to achieve stable condition across all areas of the landform. The assessment must:
- (a) Develop of a geotechnical model for the entire site;
 - (b) Consider all credible potential instability mechanisms:

- (c) Include a stability analysis using quantitative methods such as Factor of Safety (FOS), Probability of Failure (POF), or Strength Reduction Factor (SRF) including consideration of the implication of achieving a FOS of 1.5 on all constructed landforms;
- (d) A consequence assessment to evaluate the potential impacts of slope failure; and
- (e) Consider the requirements and limitations, including evaluation of model uncertainty and development of stability acceptance criteria, discussed in of ACARP Project C34028 – *Guidelines for Assessment of Geotechnically Safe and Stable Post-Mining Landforms*.

- PRCP19** The detailed landform design plan and report that has met the requirements of **PRCP16** to **PRCP18** inclusive, and any modelling and modelling results relevant to **PRCP17** and **PRCP18**, must be provided to the administering authority no later than **10 December 2026**.
- PRCP20** Prior to the commencement of tailings or rejects disposal, a rehabilitation strategy and supporting report must be developed and certified by an AQP. The strategy must provide a plan for the rehabilitation of tailings and rejects that is safe, erosionally and structurally stable, and appropriate for the intended PMLU, having regard to the material properties and local site conditions.
- PRCP21** The rehabilitation strategy and report required under **PRCP20** must include an assessment of the long-term geotechnical and geochemical safety and stability of the final landform configuration, including seepage and leachate considerations. The assessment must demonstrate that the proposed rehabilitation strategy will not compromise the landform's ability to achieve a stable condition and meet all relevant criteria specified in this PRCP Schedule.
- PRCP22** The rehabilitation strategy and supporting report, including all relevant modelling and sampling data prepared in accordance with **PRCP20** and **PRCP21**, must be submitted to the administering authority prior to the commencement of tailings and rejects disposal.
- PRCP23** Three months prior to the commencement of tailings or rejects disposal, an amendment application to this PRCP Schedule must be submitted to the administering authority inclusive of the rehabilitation strategy and report described **PRCP20** and **PRCP21**.

END OF CONDITIONS

Section B – 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.
Ancillary activities	see section 19A of the <i>Environmental Protection Act 1994</i> .
BioCondition	refers to the <i>BioCondition Assessment Manual</i> (Eyre, T.J., Kelly, A.L, Neldner, V.J., Wilson, B.A., Ferguson, D.J., Laidlaw, M.J. and Franks, A.J. (2015)) and <i>BioCondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland. Assessment Manual. Version 2.2</i> (Queensland Herbarium, Department of Science, Information Technology, Innovation and Arts, Brisbane) or version thereof that is current on the first date area is available for RA6 .
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.
Environmentally problematic material	means material that will negatively impact water quality and stability or vegetation growth.
Flood stress	is the pressure on structures from rapid water rise, erosion, and saturation during extreme floods, risking instability.
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.
Potentially acid forming (PAF)	means material with either a Net Acid Producing Potential of greater than 5 kg of H ₂ SO ₄ /tonne or a Net Acid Generation oxidation pH of less than 4.5 (pH unit).
Rehabilitation activity	means any activity that the holder is required to carry out in relation to this PRCP schedule.
Relevant material	includes: (a) Final landform design report, (b) Durability assessment/ report, (c) “As Constructed” report; (d) All monitoring data (e) Assessment of monitoring data,

	(f) All maintenance records; and (g) Modelling and technical assessments.
Relevant structure	To be defined during the assessment and listed here. Typically includes TSF and higher risk structures, including WRDs.
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 Third Edition).
Stable condition	see section 111A of the <i>Environmental Protection Act 1994</i> .
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.
Vegetative groundcover	Means plants, plant litter, tree leaf litter, twigs and woody debris capable of protecting the soil surface from erosion

Section C - Final site design and reference maps

List of figures:

Figure 1 – Final Site Design

Figure 2 – Reference Map

Figure 1: Final Site Design

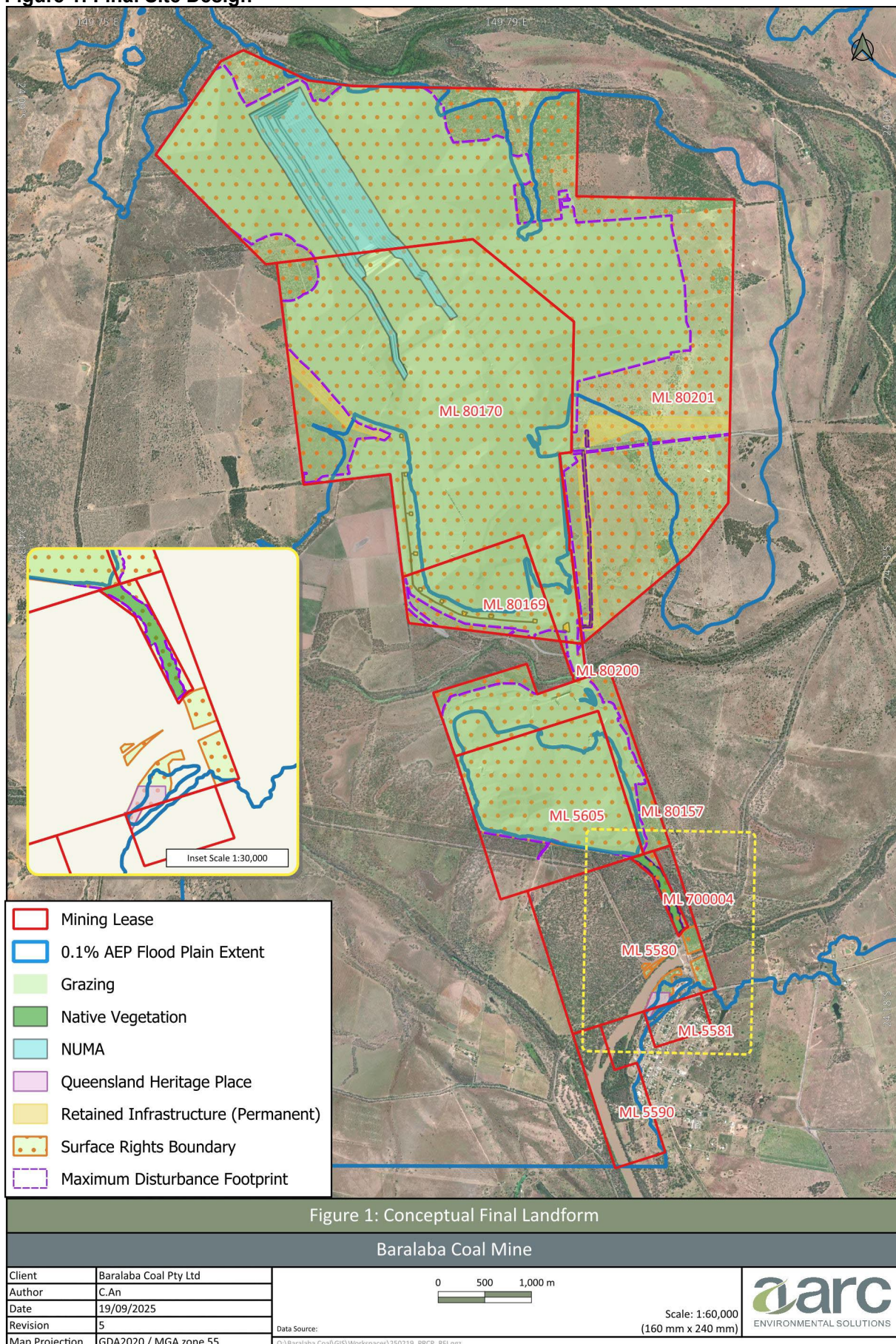
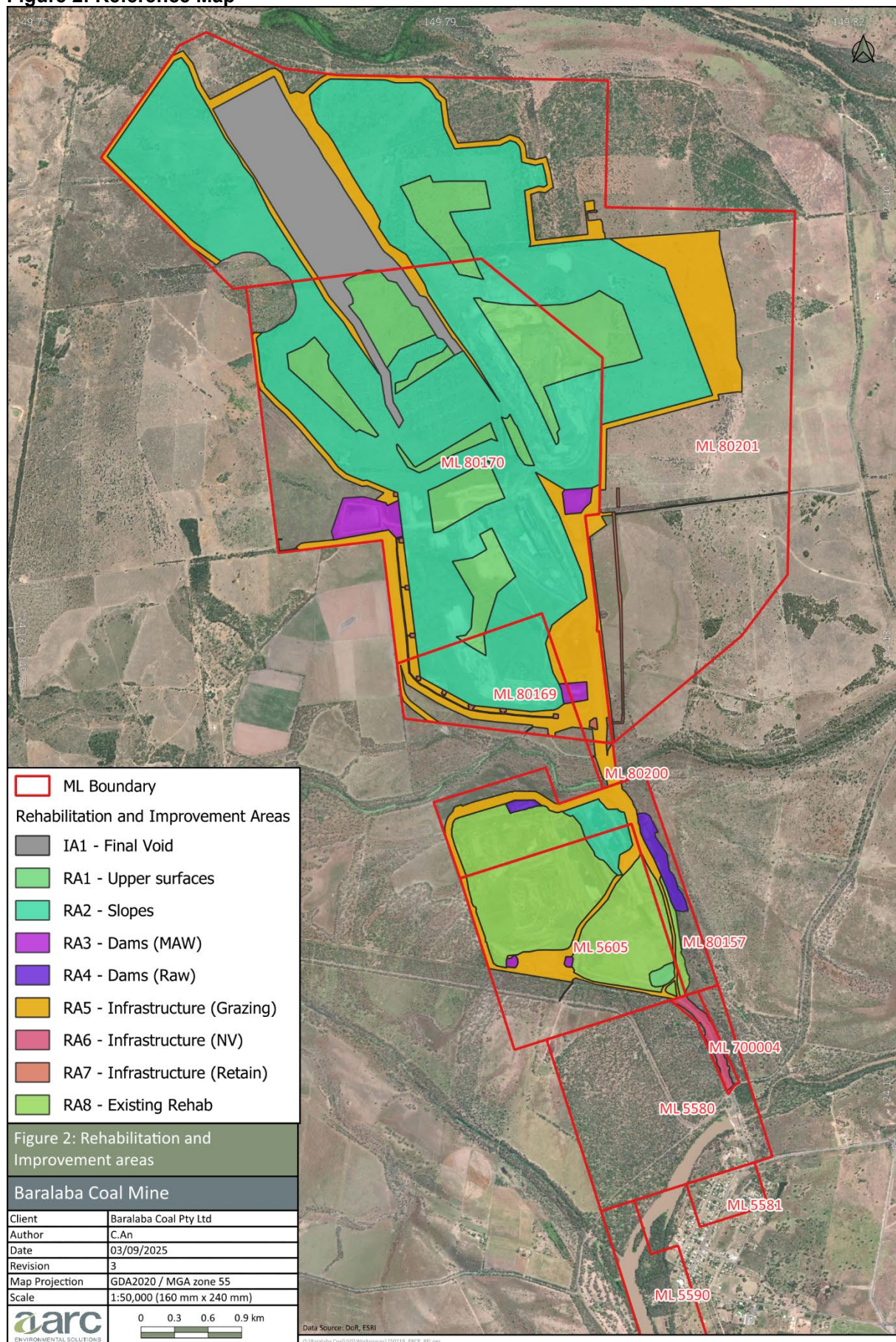


Figure 2: Reference Map

Section D – Post mining land uses

(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)							
Rehabilitation area	RA1						
Relevant activities	Upper Surfaces - Baralaba North, Central Waste Dumps, and backfilled void						
Total rehabilitation area size (ha)	249						
Commencement of first milestone: RM1	10/12/2026						
PMLU	Low intensity grazing						
Date area is available	10/12/2026	10/12/2030	10/12/2032	10/12/2036			
Cumulative area available (ha)	10	45	77	249			
Milestone completed by	10/12/2027	10/12/2032	10/12/2037	10/12/2042	10/12/2047	10/12/2052	10/12/2057
Milestone Reference	Cumulative area achieved (ha)						
RM1	10	45	77	249			
RM2		45	77	249			
RM3		22	77		249		
RM4		10	77		249		
RM5		10	77		249		
RM7			10	77		249	
RM9				10	77		249

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)							
Rehabilitation area	RA2						
Relevant activities	Slopes - Baralaba North and Central Spoil Waste Dumps, backfilled void						
Total rehabilitation area size (ha)	1023						
Commencement of first milestone: RM1	10/12/2026						
PMLU	Low intensity grazing						
Date area is available	10/12/2026	10/12/2029	10/12/2031	10/12/2036			
Cumulative area available (ha)	50	244	578	1023			
Milestone completed by	10/12/2027	10/12/2032	10/12/2037	10/12/2042	10/12/2047	10/12/2052	10/12/2057
Milestone Reference	Cumulative area achieved (ha)						
RM1	50	244	578	1023			
RM2		244	578	1023			
RM3		143	504	978	1023		
RM4		93	404	878	1023		
RM5		50	304	778	1023		
RM7			50	304	778	1023	
RM9				50	304	778	1023

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)				
Rehabilitation area	RA3			
Relevant activities	MAW Dams (Mine Dam 1, Mine Dam 4a, Sediment Dam D, ROM Sediment Dam, Central ROM Dam)			
Total rehabilitation area size (ha)	28.6			
Commencement of first milestone: RM1	10/12/2042			
PMLU	Low intensity grazing			
Date area is available	10/12/2042			
Cumulative area available (ha)	28.6			
Milestone completed by	10/12/2043	10/12/2047	10/12/2052	10/12/2057
Milestone Reference	Cumulative area achieved (ha)			
RM1	28.6			
RM2		28.6		
RM3		28.6		
RM4		28.6		
RM5		28.6		
RM7			28.6	
RM9				28.6

(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)				
Rehabilitation area	RA4			
Relevant activities	Dams (Farm Dam, Lagoon)			
Total rehabilitation area size (ha)	12.9			
Commencement of first milestone: RM1	10/12/2042			
PMLU	Low intensity grazing			
Date area is available	10/12/2042			
Cumulative area available (ha)	12.9			
Milestone completed by	10/12/2043	10/12/2048	10/12/2053	10/12/2058
Milestone Reference	Cumulative area achieved (ha)			
RM1	12.9			
RM2		12.9		
RM3		12.9		
RM4		12.9		
RM5		12.9		
RM7			12.9	
RM9				12.9

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)					
Rehabilitation area	RA5				
Relevant activities	Infrastructure (Roads, Hard Dams, MIA, Workshop Areas, Haul Roads) and backfilled void				
Total rehabilitation area size (ha)	350				
Commencement of first milestone: RM1	10/12/2042				
PMLU	Low intensity grazing				
Date area is available	10/12/2042				
Cumulative area available (ha)	350				
Milestone completed by	10/12/2043	10/12/2048	10/12/2053	10/12/2058	10/12/2063
Milestone Reference	Cumulative area achieved (ha)				
RM1	350				
RM2		350			
RM3		350			
RM4		250	350		
RM5		150	350		
RM7			150	350	
RM9				150	350

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)				
Rehabilitation area	RA6			
Relevant activities	Infrastructure (ML700004 Haul Road)			
Total rehabilitation area size (ha)	8.4			
Commencement of first milestone: RM1	10/12/2042			
PMLU	Native Vegetation			
Date area is available	10/12/2042			
Cumulative area available (ha)	8.4			
Milestone completed by	10/12/2043	10/12/2048	10/12/2053	10/12/2068
Milestone Reference	Cumulative area achieved (ha)			
RM1	8.4			
RM2		8.4		
RM3		8.4		
RM4		8.4		
RM6		8.4		
RM8			8.4	
RM10				8.4

(RA7) Rehabilitation area 7

Post-mining land uses (PMLU)	
Rehabilitation area	RA7
Relevant activities	Infrastructure (Powerline Permanent Infrastructure)
Total rehabilitation area size (ha)	8.1
Commencement of first milestone: RM1	10/12/2034
PMLU	Permanent Infrastructure
Date area is available	10/12/2034
Cumulative area available (ha)	8.1
Milestone completed by	10/12/2035
Milestone Reference	Cumulative area achieved (ha)
RM11	8.1

(RA8) Rehabilitation area 8

Post-mining land uses (PMLU)		
Rehabilitation area	RA8	
Relevant activities	MAW Dams, Infrastructure (Roads, Hard stands), Waste Dump, Backfilled Void	
Total rehabilitation area size (ha)	216	
Commencement of first milestone: RM1	10/12/2023	
PMLU	Low intensity grazing	
Date area is available	10/12/2022	
Cumulative area available (ha)	216	
Milestone completed by	10/12/29	10/12/34
Milestone Reference	Cumulative area achieved (ha)	
RM7	216	
RM9		216

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	(1.1) With the exception of any infrastructure to remain as part of the post-mining land use (PMLU), where agreed to be retained by the landholder as evidenced by a signed landholder agreement, or required for rehabilitation activities, the following are complete: (a) All services disconnected, terminated and removed. (b) All buildings and associated infrastructure dismantled and removed offsite. (c) All hardstand, concrete areas and roads (bitumen, blue metal, aggregate etc) removed. (d) All fencing that is not part of PMLU requirements removed. (e) All pipelines drained and removed. (f) All waste not authorised to be disposed of on-site under Environmental Authority EPML00223213 removed. (g) All surface water drainage infrastructure not required for the PMLU is removed. (h) All drillholes, bores, sediment ponds and sumps decommissioned. (i) All machinery and equipment removed from site. (j) All clean water dams dewatered and backfilled.
RM2	Identification, remediation and removal of contaminated land	(2.1) Contaminated or hazardous material either remediated in-situ or removed/transported to a facility lawfully able to accept the material. (2.2) Contaminated Land Investigation Document completed in accordance with the EP Act, including a site investigation report, and, where required, a Validation Report and/or a draft Site Management Plan. (2.3) SQP certifies that: (a) contaminated materials other than approved waste materials have been removed or rehabilitated and that no contamination unsuitable for the PMLU remains or is occurring; and,

Milestone reference	Rehabilitation milestone	Milestone criteria
		(b) approved waste materials are appropriately encapsulated such that there is no release of general waste materials, leachate, landfill gas or other contaminants that will cause environmental harm from the landfill activities.
RM3	Landform development and reshaping	(3.1) All earthworks completed to final detailed landform design with an 'As constructed' survey plan showing surveyed area and finished slopes conform to the designed landform and drainage for each sub-area. (3.2) Landform surface drainage has been designed and installed as follows: (a) Landforms sheet flow to either existing drainage gullies or constructed drains integrated into the final landform. (b) Existing drainage gullies will not receive excess catchment runoff that may impact the stability of the existing waterway. (c) Where required, drains are constructed at a suitable longitudinal grade and cross-sectional area to convey the upstream catchment without causing erosion or instability. (d) Where locations of high velocity are expected (steep concentrated flow locations or drainage tie in locations with existing drainage features) rock protection is installed to prevent erosion. (e) Surface has been shaped to prevent ponding and concentration of surface water flow. (3.3) Diversions/drainage and erosion and sediment control systems are installed as per the engineering and construction design and verified by an appropriately qualified person (AQP). (3.4) AQP certifies that as constructed landform achieves design criteria for geotechnical stability as determined under PRCP18. (3.5) All slopes achieve the following: (a) RA1, RA2, RA3 and RA4, disturbed slopes not steeper than 9 degrees (15%). (b) RA5 and RA6, disturbed slopes not steeper than 3 degrees (5%). Additional criteria for spoil dumps within RA1, RA2 and RA5: (3.6) Spoil dumps have erosion management systems in place as per AQP design to minimise erosion from runoff and to reduce the total catchment area reporting to the final void.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(3.7) Surfaces on top of spoil dumps reshaped to be free draining to prevent rainfall infiltration to the landform. Additional criteria applicable to in-pit spoil and voids within RA1, RA2 and RA5: (3.8) Spoil settlement analysis of in-pit spoil completed by an AQP certifies that the long-term landform is stable and functioning as per design intent. (3.9) Assessment from an AQP that void areas (excluding IA1) are backfilled above the modelled groundwater equilibrium levels. (3.10) Exposed coal seams at the floor of voids have been treated, removed, or covered with ≥ 2 m of Non-Acid Forming (NAF) material in the backfilling process. (3.11) To the maximum extent reasonable, drainage outward away from voids towards original topographic drainage paths, other than for internal void slopes. Additional criteria applicable to the waste disposal area cover: (3.12) A final capping system to the landfill area must be designed by an AQP and installed to: (a) minimise infiltration of water into the landfill area and water ponding on the surface; (b) minimise the likelihood of any erosion occurring to either the final capping system or the landfilled materials; and (c) ensure the contaminant concentrations are appropriate for the final land use and in accordance with the 'National Environmental Protection (Assessment of Soil Contamination) Measure 1999'.
RM4	Surface preparation	(4.1) Assessment of growth media characteristics and the development of an amelioration and physical treatment plan is completed by an AQP. (4.2) Ameliorants and physical treatments, such as fertiliser, lime, gypsum and/or organic matter, are added to improve soil quality characteristics, at rates recommended by an AQP in alignment with criterion in RM 4.1. (4.3) Ripping of compacted surfaces into the soil/subsoil profile along contour of slopes. (4.4) Topsoil placement of a minimum of 200 mm.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(4.5) Following amelioration as per RM 4.1 and RM 4.2, representative soil testing of growth media confirms, for RA1, RA2, RA3, RA4, RA5 and RA6 that the relevant depths within the effective root zone (0–200mm) meet the following suitability targets: (a) Emerson aggregate class: 3; (b) pH in the range of >5.6 and <8.4; (c) Available Phosphorous (P): ≥4 mg/kg (d) ECe (Electrical conductivity from a saturated extracted) ≤1.5 dS/cm; and (e) Exchangeable sodium percentage (ESP%) < 6 %. (4.6) For the relevant depths within the effective root zone (200mm – 300mm), for RA1, RA2, RA3, RA4, RA5 and RA6 representative soil testing of the growth media demonstrates the materials are stable, and have been assessed and documented by an AQP as being suitable for the PMLU and target vegetation establishment. (4.7) Where soil assessment results identify that the characteristics specified in RM 4.5 and RM 4.6 have not been met, soil is treated with ameliorants and / or fertilisers, as per recommendations made by an AQP. (4.8) The surface and groundwater monitoring, as required by RM 9 and RM 10, is underway (at least one year of sampling undertaken).
RM5	Revegetation (Low-intensity grazing)	(5.1) With the exception of a non-permanent cover crop species, the seed mix must be spread at the minimum seeding rates of 14 kg/ha of seed unless adjusted by an AQP, and contain only those species listed in, Table 1 – Low-intensity grazing PMLU Seed Mix of Appendix 1 –Seed Mix Species List Tables. (5.2) Stock exclusion fencing has been established to prevent stock from grazing newly seeded areas. (5.3) No evidence of erosion classified as ‘moderate’ or ‘severe’ as defined by Appendix 2 - Erosion classification framework.
RM6	Revegetation (Native Vegetation)	(6.1) With the exception of a non-permanent cover crop species, the seed mix contains only those species listed in Table 2 – Native Vegetation PMLU Seed Mix of Appendix 1 – Seed Mix Species List Tables. (6.2) Seed spread at a minimum seeding rate of 6kg/ha for tree species, 4 kg/ha for woody understory species and 7 kg/ha for grasses, unless adjusted by an AQP.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(6.3) Stock exclusion fencing has been established to prevent stock from grazing newly seeded areas. (6.4) No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix 2 - Erosion classification framework.
RM7	Achievement of surface requirements (Low-intensity grazing)	(7.1) Total percentage of vegetative groundcover over a 3-year average is $\geq 70\%$. (7.2) Presence of weeds classified as a prohibited or restricted matter (as defined under the <i>Biosecurity Act 2014</i>) or classified as Weeds of National Significance are $\leq 10\%$ of total vegetative cover, confirmed by an AQP. - (7.3) At least five of the species used in revegetation as listed in RM5.1, or as planted for RA8, remain present from monitoring data (7.4) Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur and it is safe to do so. (7.5) Surface water runoff collected under RM 7.4 is assessed for interpretation only against Appendix 4 – Surface water quality limits. Surface water runoff is non-polluting to the receiving waters and complies with the criteria presented below: (a) pH- 6.5 - 8.5 (b) EC- 340 $\mu\text{S}/\text{cm}$ (c) Sulfate - 25 mg/L. (7.6) With respect to erosion: (a) No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix 2 - Erosion classification framework. (b) Average erosion rate of $< 5 \text{ t/ha/yr}$ with the maximum erosion rate at any point on the landform of $< 10 \text{ t/ha/yr}$. (c) Any erosion present will not compromise the achievement of a PMLU to a stable condition. (7.7) All contour banks and other temporary erosion and sediment control structures have been removed.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(7.8) Any erosion and sediment control or drainage structures to be retained as permanent features are certified by an AQP to remain stable with no increased risk of erosion. (7.9) The assessment required as per RM 7.8 must consider performance, maintenance requirements and residual risk post closure.
RM8	Achievement of surface requirements (Native Vegetation)	(8.1) Presence of weeds classified as a prohibited or restricted matter (as defined under the <i>Biosecurity Act 2014</i>) or classified as Weeds of National Significance are ≤10% of total vegetative cover, confirmed by an AQP in annual wet season monitoring. (8.2) A BioCondition assessment is completed by an AQP using the methodology outlined in the Queensland Herbarium's 'BioCondition Assessment Manual' that is current on the first date area is available for RA6. (8.3) Modified BioCondition score assessed under RM 8.2 achieves the >20/60 PRCP Benchmark average of RE 11.3.2 and 11.3.3 as described in Appendix 3 - BioCondition Benchmark Criteria (8.4) Species used in revegetation remain present and showing evidence of natural recruitment from rehabilitation monitoring data. (8.5) Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur, and it is safe to do so. (8.6) Surface water runoff collected under RM 8.5 is assessed for interpretation only against Appendix 4 – Surface water quality limits. Surface water runoff is non-polluting to the receiving waters and complies with the criteria presented below: (a) pH- 6.5 - 8.5 (b) EC- 340 µS/cm (c) Sulfate - 25 mg/L. (8.7) With respect to erosion: (a) No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix 2 - Erosion classification framework.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(b) Average erosion rate of <5 t/ha/yr with the maximum erosion rate at any point on the landform of <10 t/ha/yr. (c) Any erosion present will not compromise the achievement of a PMLU to a stable condition. (d) Erosion requiring intervention has been remediated.
RM9	Achievement of post mining land use to stable condition (Low-intensity grazing)	(9.1) Land suitability assessment by an AQP confirms that the rehabilitated land meets land suitability Class 4 or better for grazing according to the <i>Guidelines for agricultural land evaluation in Queensland</i> (DSITI & DNRM, 2015)¹. (9.2) Any remaining infrastructure rehabilitated or removed in accordance with RM1.1. (9.3) The landform is free draining and there is no evidence of any of the following: (a) Vegetation die-back localised in low points on the landform surface; or (b) Salt rise as evidenced by salt deposition at the landform surface. (9.4) With the exception of RA8, minimum composition of the following, present per hectare (averaged): (a) Four species of 3P pasture species. (b) Two native legumes. (c) Native shade tree species with a density of 2 stems per hectare (density). (d) At least 6% vegetative groundcover from native pasture species. (9.5) For RA8 only, minimum composition of four species of 3P pasture species present per hectare (averaged). (9.6) Hazard assessment by an AQP confirms the hazards in the grazing areas has no significant difference to hazards in local grazing lands in surrounding unmined landscapes, as identified through reference site monitoring. (9.7) Surface water quality is monitored, within 24 hrs of a rainfall event which produced runoff from the corresponding rehabilitated landform into a flowing receiving environment at, but not limited to, downstream

¹ DSITI & DNRM (Department of Science, Information Technology and Innovation and Department of Natural Resources and Mines) (2015). *Guidelines for agricultural land evaluation in Queensland* (2nd edn.). Queensland Government: Brisbane, Queensland.

Milestone reference	Rehabilitation milestone	Milestone criteria
		locations specified in Appendix 5 - Surface water monitoring locations. Results must not exceed the limits in Appendix 4 - Surface water quality limits, for a minimum of five (5) consecutive years. (9.8) Following achievement of RM9.7, continued surface water quality monitoring frequency may be reduced to at least once per year within 24 hrs of a rainfall event which produces runoff from the corresponding rehabilitated landform into a flowing receiving environment. (9.9) With respect to surface water as monitored according to RM 9.7 and RM9.8 the following must be demonstrated: (a) Surface water quality must not exceed the limits specified in Appendix 4 – Surface Water Quality Limits within the five-year period immediately prior to the milestone completed by date for the rehabilitation area; (b) If the surface water quality exceeds criteria 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 site². (9.10) Where the surface water quality at the downstream site exceeds the upstream site result RM 9.9 (b), an AQP must complete an assessment of the cause and risk of rehabilitation not achieving a stable condition within the schedule timeframe and: (a) Where there is a low risk to achieving a stable condition from, then no further action is to be taken; or, (b) Where there is a risk greater than low 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. RM 9.10 (a) can only be triggered 3 times over 5 consecutive years for all data collected after 10 December 2030.

² For pH, quality measured at the downstream location must be within the prescribed range limits. However, where pH quality measured at the downstream location is greater-than (>) the highest limit in the range, pH measured at the applicable upstream location must be greater-than or equal-to ($\geq$) the downstream location. Conversely, where pH measured at the downstream location is less than (<) the lowest limit in the range, the upstream pH measured at the applicable upstream location must be less-than or equal-to ($\leq$) the downstream location.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(9.11) The assessment/s under RM 9.10 must be completed and provided to the administering authority within 3 months of receiving the relevant sampling results. (9.12) If RM 9.10 (b) is triggered, the 5-year timeframe is reset. (9.13) For a minimum of five (5) consecutive years groundwater quality must be monitored quarterly at the locations identified Appendix 6 - Groundwater monitoring bores, for all quality characteristics listed in Appendix 7 – Groundwater quality limits. (9.14) Groundwater quality results must not exceed the limits in Appendix 7 – Groundwater quality limits, for three (3) consecutive quarterly results. (9.15) Groundwater level is monitored quarterly at the location specified in Appendix 8 - Groundwater level threshold, and all results must not exceed the Level Trigger Thresholds outlined in Appendix 8 - Groundwater level threshold for a minimum of 10 consecutive years. (9.16) Water within any retained water storages / dams must be of a suitable quality for native wildlife and/or livestock ingestion and must not exceed the stock water guidelines (ANZECC 2000), for a minimum of five (5) consecutive years. (9.17) For infrastructure that is to be retained subject to a landholder agreement: (a) Infrastructure to be transitioned to a future landholder is deemed fit for purpose, as verified by an AQP. (b) Transfer of ownership agreements in place for all infrastructure to be retained. (c) An AQP certifies that all retained infrastructure is in a condition that is safe, stable, non-polluting and will not cause environmental harm. (d) All fencing removed, other than those that form part of a landholder agreement.
RM10	Achievement of post mining land use to stable condition (Native Vegetation)	(10.1) A BioCondition assessment is completed by an AQP using the methodology outlined in the Queensland Herbarium's 'BioCondition Assessment Manual' that is current on the first date area is available for RA6. (10.2) Modified BioCondition score assessed under RM 10.1 achieves the >40/60 PRCP Benchmark average of RE 11.3.2 and 11.3.3 as described in Appendix 3 - BioCondition Benchmark Criteria

Milestone reference	Rehabilitation milestone	Milestone criteria
		(10.3) Hazard assessment by an AQP confirms that the hazard has no significant difference to hazards in local regional ecosystems in surrounding unmined landscapes, as identified through appropriate and representative reference site monitoring. (10.4) Any remaining infrastructure rehabilitated or removed in accordance with RM1.1. (10.5) Surface water quality is monitored, within 24 hrs of a rainfall event which produced runoff from the corresponding rehabilitated landform into a flowing receiving environment at, but not limited to, downstream locations specified in Appendix 3 - Surface water monitoring locations. Results must not exceed the limits in Appendix 4 - Surface water quality limits, for a minimum of five (5) consecutive years. (10.6) Following achievement of RM 10.5, continued surface water quality monitoring frequency may be reduced to at least once per year within 24 hrs of a rainfall event which produces runoff from the corresponding rehabilitated landform into a flowing receiving environment. (10.7) With respect to surface water as monitored according to RM 10.5 and RM 10.6 the following must be demonstrated prior to surrender: (a) Surface water quality must not exceed the limits specified in Appendix 4 – Surface Water Quality Limits within the five-year period immediately prior to the milestone completed by date for the rehabilitation area; (b) If the surface water quality exceeds criteria 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 site³. (10.8) Where the surface water quality at the downstream site exceeds the upstream site result RM 10.7 (b), an AQP must complete an assessment of the cause and risk of rehabilitation not achieving a stable condition within the schedule timeframe and: (a) Where there is a low risk to achieving a stable condition from, then no further action is to be taken; or,

³ For pH, quality measured at the downstream location must be within the prescribed range limits. However, where pH quality measured at the downstream location is greater-than (>) the highest limit in the range, pH measured at the applicable upstream location must be greater-than or equal-to (≥) the downstream location. Conversely, where pH measured at the downstream location is less than (<) the lowest limit in the range, the upstream pH measured at the applicable upstream location must be less-than or equal-to (≤) the downstream location.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(b) Where there is a risk greater than low 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. RM 10.8 (a) can only be triggered 3 times over 5 consecutive years for all data collected after December 2030. (10.9) The assessment/s under RM 10.8 must be completed and provided to the administering authority within 3 months of receiving the relevant sampling results. (10.10) If RM 10.8 (b) is triggered, the 5-year timeframe is reset. (10.11) For a minimum of five (5) consecutive years groundwater quality must be monitored quarterly at the locations identified Appendix 6 - Groundwater monitoring bores, for all quality characteristics listed in Appendix 7 – Groundwater quality limits. (10.12) Groundwater quality results must not exceed the limits in Appendix 7 – Groundwater quality limits, for three (3) consecutive quarterly results. (10.13) Groundwater level is monitored quarterly at the locations specified in Appendix 8 - Groundwater level threshold, and all results must not exceed the Level Trigger Thresholds outlined in Appendix 8 - Groundwater level threshold for a minimum of ten (10) consecutive years. (10.14) For infrastructure that is to be retained subject to a landholder agreement: (a) Infrastructure to be transitioned to a future landholder is deemed fit for purpose, as verified by an AQP. (b) Transfer of ownership agreements in place for all infrastructure to be retained. (c) An AQP certifies that all retained infrastructure is in a condition that is safe, stable, non-polluting and will not cause environmental harm. (d) All fencing removed, other than those that form part of a landholder agreement or the final PMLU.
RM11	Achievement of post-mining land use (Permanent Infrastructure)	(11.1) No infrastructure remaining other than those that form part of the landholder agreement. (11.2) Transfer of ownership agreements in place for all infrastructure to be retained. (11.3) Final landform survey confirms no built structures remain other than those that form part of a landholder agreement.

Milestone reference	Rehabilitation milestone	Milestone criteria
		(11.4) Disturbed slopes not steeper than 3 degrees (5%). (11.5) No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix 2 – Erosion classification framework .

Section E – Non-use management areas**(IA1) Improvement area 1**

Non-use management area (NUMA)	
Improvement area	IA1
Relevant activities	Final Void
Total size (ha)	144
Commencement of first milestone: MM1	10/12/2036
NUMA	Final Void
Date area is available	10/12/2036
Cumulative area available (ha)	144
Milestone completed by	10/12/2041
Milestone Reference	Cumulative area achieved (ha)
MM1	144
MM2	144
MM3	144

Improvement area milestones

Milestone reference	Management milestone	Milestone criteria
MM1	Achievement of final landform design	(1.1) Detailed design plan and report for final landform completed by an AQP based on the latest flood modelling and materials data prior to achieving final position. (1.2) All final pit walls battered to achieve the nominated stable slope range of: (a) maximum of 9 degrees (15%) to the base of tertiary. (b) maximum of 70 degrees (274%) below the base of tertiary. (1.3) Predictive modelling is undertaken by an AQP, confirming that: the voids will remain as a groundwater sink in perpetuity and that there is no risk of contamination to the receiving environment or post mining land use surrounding the NUMA post mining, or outside of the tenure boundaries. (1.4) Final detailed landform design has a minimum overtopping level of 96 m AHD at the southern end of the final void and 89m AHD at the northern end of the final void to provide 2 m and 1.5 m freeboard above the Probable Maximum Flood (PMF) at the southern and northern ends of the void respectively. (1.5) NUMA contains 100% of runoff generated from the catchment of the NUMA. (1.6) Drainage measures and structures have been implemented and are directing overland flow away from the highwall and low wall edges. (1.7) Voids (including highwalls, end walls and low walls) assessed to be erosionally and geotechnically stable by an AQP, modelled to achieve a factor of safety of ≥ 1.2. (1.8) The location of and erosion of the NUMA and associated safety bunds does not cause instability or degradation to the land outside the NUMA extent.
MM2	Achievement of surface requirements	(2.1) Safety bund constructed from non-weathered and non-dispersive material and to a geometry that prevents traversing by vehicles. (2.2) Safety bund constructed accordance with engineering requirements and calculated geotechnical factor of safety including the following specifications: (a) A minimum height of 2 m. (b) A minimum base width of 5 m.

Milestone reference	Management milestone	Milestone criteria
		(c) minimum of 20m offset from the pit perimeter. (d) 1 (V) in 3 (H) batters. (2.3) Perimeter fencing erected at a distance from slope crest to “zone of void influence” has been established around all NUMA walls to prevent access to humans, cattle and wildlife. (2.4) Warning signage to deter public access and warn of void related risks are designed in accordance with Australian Standard AS1319-1994 and are erected at 100 m intervals around the perimeter fence.
MM3	Achievement of sufficient improvement	(3.1) The landform has been constructed in accordance with the final detailed landform design plan and report. (3.2) The residual void has in place effective management measures to ensure it is safe to humans, wildlife and livestock. (3.3) Voids retain flood immunity up to a PMF event, supported by flood modelling re-run at end of life and calibrated against the final landform. (3.4) Hazard assessment by an AQP confirms the NUMA will have no impacts extents of land within ML5605, ML5580, ML5581, ML5590, ML80157, ML80169, ML80170, ML80200, ML80201, and ML700004.

Section F – Appendices

Appendix 1 – Seed Mix Species List Tables

This Appendix articulates the list of species which are permitted to be included in the seed mix for Rehabilitation Areas (RAs). For Rehabilitation Areas (RAs), the list of species is further specific to the PMLU to be achieved.

Table 1 - Low-intensity grazing PMLU Seed Mix

Species	Common Name
<i>Bothriochloa bladhii</i>	Forest Bluegrass
<i>Bothriochloa decipiens</i>	Pitted Bluegrass
<i>Bothriochloa ewartiana</i>	Desert Bluegrass
<i>Capillipedium parviflorum</i>	Scented-top Grass
<i>Chrysopogon fallax</i>	Golden Beard Grass
<i>Desmanthus spp</i>	Desmanthus
<i>Dichanthium sericeum</i>	Silky/Queensland Bluegrass
<i>Digitaria spp.</i>	Digitaria
<i>Eucalyptus coolabah</i>	Coolabah
<i>Eucalyptus populnea</i>	Bimble Box
<i>Eucalyptus tereticornis</i>	Forest Red Gum
<i>Heteropogon contortus</i>	Black Speargrass
<i>Macroptilium bracteatum</i>	Burgundy Bean
<i>Megathyrsus maximus</i>	Guinea Grass
<i>Panicum ssp. (Native)</i>	Panics
<i>Stylosanthes spp (Native)</i>	-
<i>Themeda triandra</i>	Kangaroo Grass
<i>Chloris gayana</i>	Rhodes Grass
<i>Megathyrsus maximus</i>	Gatton Panic

Species	Common Name
<i>Digitaria</i> spp. (Native)	Digitaria
<i>Bothriochloa insculpta</i>	Bisset Creeping Bluegrass
<i>Stylosanthes scabra</i>	Seca Stylo
<i>Echinochloa esculenta</i>	Japanese Millet
<i>Themeda triandra</i>	Kangaroo Grass
<i>Cynodon dactylon</i>	Couch Grass
<i>Lomandra multiflora</i>	Many-flowered Mat-rush
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush
<i>Lomandra confertifolia</i>	Lomandra Mist
<i>Chrysopogon fallax</i>	Golden Beard Grass
<i>Neptunia gracilis</i>	Native Sensitive Plant

Table 2 - Native Vegetation PMLU Seed Mix

For the Native Vegetation PMLU, the seed mix must be selected and apportioned with appreciation for the BioCondition benchmarks at later milestones (refer **Appendix 3 - BioCondition Benchmark Criteria**). Hence, the proportion of each species (kg/ha) within the seed mix must reflect the relative cover and frequency of the relevant Regional Ecosystems (REs) Technical Description (<https://publications.qld.gov.au/dataset/re-technical-descriptions>).

Despite introduced species occurring in the RE Technical Descriptions, introduced species must not be included in the seed mix. Finally, the seed mix must not include Indian Couch *Bothriochloa pertusa* or *Seca Stylosanthes* spp, both of which have significant impacts on surrounding native remnant vegetation.

PMLU	Regional Ecosystem	Trees	Shrubs	Grasses	Forbs
Native Vegetation	11.3.2	<i>Acacia conferta</i> <i>Acacia excelsa</i> <i>Acacia fasciculifera</i> <i>Acacia harpophylla</i> <i>Acacia salicina</i> <i>Amyema indet.</i> <i>Amyema pendula</i> subsp. <i>longifolia</i> <i>Brachychiton</i> <i>populneus</i> <i>Atalaya hemiglauca</i> <i>Callitris glaucophylla</i> <i>Cassia brewsteri</i> <i>Casuarina cristata</i> <i>Citrus glauca</i> <i>Corymbia clarksoniana</i> <i>Cymbidium canaliculatum</i> <i>Eremophila mitchellii</i> <i>Eucalyptus camaldulensis</i> <i>Eucalyptus crebra</i> <i>Eucalyptus melanophloia</i> <i>Eucalyptus populnea</i> <i>Eucalyptus tereticornis</i> <i>Geijera parviflora</i> <i>Grevillea striata</i> <i>Lysiphyllum carronii</i> <i>Psyrax oleifolia</i> <i>Ventilago viminalis</i>	<i>Acacia conferta</i> <i>Acacia crassa</i> <i>Acacia decora</i> <i>Acacia excelsa</i> <i>Acacia harpophylla</i> <i>Acacia oswaldii</i> <i>Acacia salicina</i> <i>Alectryon diversifolius</i> <i>Alectryon oleifolius</i> <i>Atalaya hemiglauca</i> <i>Capparis lasiantha</i> <i>Corymbia clarksoniana</i> <i>Dodonaea viscosa</i> <i>Eremophila deserti</i> <i>Eremophila glabra</i> subsp. <i>glabra</i> <i>Eremophila mitchellii</i> <i>Erythroxylum australe</i> <i>Eucalyptus populnea</i> <i>Ficus opposita</i> <i>Geijera parviflora</i> <i>Grevillea striata</i> <i>Grewia retusifolia</i> <i>Hakea chordophylla</i> <i>Indigofera indet.</i> <i>Lysiphyllum carronii</i> <i>Owenia acidula</i> <i>Owenia venosa</i> <i>Pimelea neoanglica</i> <i>Psyrax oleifolia</i> <i>Salsola australis</i> <i>Sida hackettiana</i> <i>Tephrosia indet.</i> <i>Terminalia oblongata</i> subsp. <i>oblongata</i> <i>Ventilago viminalis</i>	<i>Aristida calycina</i> <i>Aristida indet.</i> <i>Aristida personata</i> <i>Aristida ramosa</i> <i>Austrostipa verticillata</i> <i>Bothriochloa bladhii</i> <i>Bothriochloa decipiens</i> var. <i>decipiens</i> <i>Chloris divaricata</i> <i>Chloris truncata</i> <i>Chloris ventricosa</i> <i>Chrysopogon fallax</i> <i>Cymbopogon refractus</i> <i>Cyperus fulvus</i> <i>Cyperus gracilis</i> <i>Dichanthium sericeum</i> subsp. <i>sericeum</i> <i>Digitaria brownii</i> <i>Digitaria hystrioides</i> <i>Dinebra decipiens</i> <i>Enneapogon gracilis</i> <i>Enneapogon indet.</i> <i>Enneapogon intermedius</i> <i>Enneapogon lindleyanus</i> <i>Enneapogon polyphyllus</i> <i>Enneapogon virens</i> <i>Enteropogon acicularis</i> <i>Enteropogon ramosus</i> <i>Eragrostis brownii</i> <i>Eragrostis elongata</i> <i>Eragrostis lacunaria</i> <i>Eragrostis leptostachya</i> <i>Eragrostis sororia</i> <i>Eremochloa bimaculata</i> <i>Eriochloa crebra</i>	<i>Abutilon oxycarpum</i> <i>Achyranthes aspera</i> <i>Alternanthera nana</i> <i>Boerhavia dominii</i> <i>Breynia oblongifolia</i> <i>Brunoniella australis</i> <i>Calotis cuneata</i> <i>Calotis lappulacea</i> <i>Capparis lasiantha</i> <i>Carissa ovata</i> <i>Chrysocephalum apiculatum</i> <i>Clematicissus opaca</i> <i>Cyanthillium cinereum</i> <i>Desmodium rhytidophyllum</i> <i>Desmodium varians</i> <i>Einadia hastata</i> <i>Einadia nutans</i> subsp. <i>linifolia</i> <i>Enchylaena tomentosa</i> <i>Eremophila debilis</i> <i>Euphorbia dallachyana</i> <i>Euphorbia drummondii</i> <i>Evolvulus alsinoides</i> <i>Galactia tenuiflora</i> <i>Glossocardia bidens</i> <i>Glycine tabacina</i> <i>Grewia latifolia</i> <i>Hibiscus sturtii</i> <i>Indigofera indet.</i> <i>Jasminum didymum</i> <i>Maireana microphylla</i> <i>Marsdenia viridiflora</i> <i>Melhantha oblongifolia</i> <i>Murdannia graminea</i> <i>Neptunia gracilis</i> <i>Nyssanthus diffusa</i>

PMLU	Regional Ecosystem	Trees	Shrubs	Grasses	Forbs
			<i>Zieria smithii</i>	<i>Eriochloa pseudoacrotricha</i> <i>Eulalia aurea</i> <i>Fimbristylis dichotoma</i> <i>Heteropogon contortus</i> <i>Leptochloa digitata</i> <i>Panicum decompositum</i> <i>Panicum effusum</i> <i>Panicum simile</i> <i>Paspalidium caespitosum</i> <i>Paspalidium gracile</i> <i>Sporobolus caroli</i> <i>Sporobolus creber</i> <i>Sporobolus elongatus</i> <i>Themeda triandra</i> <i>Tragus australianus</i> <i>Urochloa foliosa</i>	<i>Nyssanthes erecta</i> <i>Parsonsia lanceolata</i> <i>Peripleura hispidula</i> <i>Phyllanthus virgatus</i> <i>Pseuderanthemum variabile</i> <i>Psydrax oleifolia</i> <i>Pterocaulon redolens</i> <i>Rhagodia spinescens</i> <i>Rhynchosia minima</i> <i>Rostellularia adscendens</i> <i>Salsola australis</i> <i>Sclerolaena birchii</i> <i>Sclerolaena muricata</i> <i>Sida hackettiana</i> <i>Sida indet.</i> <i>Sida pleiantha</i> <i>Sida rohlenae</i> <i>Sida sp. (Musselbrook M.B.Thomas+ MRS437)</i> <i>Sida trichopoda</i> <i>Stackhousia muricata</i> <i>Tribulus terrestris</i> <i>Tricoryne elatior</i> <i>Verbena indet.</i> <i>Vittadinia pustulata</i> <i>Vittadinia sulcata</i> <i>Wahlenbergia gracilis</i>
Native Vegetation	11.3.3	<i>Acacia cambagei</i> <i>Acacia harpophylla</i> <i>Acacia pendula</i> <i>Acacia salicina</i> <i>Alectryon oleifolius</i> subsp. <i>elongatus</i> <i>Amyema congener</i> <i>Amyema quandang</i> <i>Apophyllum anomalum</i> <i>Casuarina cristata</i> <i>Casuarina cunninghamiana</i> <i>Corymbia tessellaris</i> <i>Cymbidium canaliculatum</i> <i>Dodonaea viscosa</i> <i>Eremophila mitchellii</i> <i>Eucalyptus camaldulensis</i>	<i>Acacia excelsa</i> <i>Acacia harpophylla</i> <i>Acacia oswaldii</i> <i>Acacia pendula</i> <i>Acacia salicina</i> <i>Acacia stenophylla</i> <i>Alectryon diversifolius</i> <i>Alectryon oleifolius</i> subsp. <i>elongatus</i> <i>Atalaya hemiglauca</i> <i>Avicennia marina</i> <i>Bursaria spinosa</i> subsp. <i>spinosa</i> <i>Capparis lasiantha</i> <i>Carissa ovata</i> <i>Cassia brewsteri</i>	<i>Aristida leptopoda</i> <i>Bothriochloa bladhii</i> subsp. <i>bladhii</i> <i>Bothriochloa decipiens</i> <i>Bothriochloa ewartiana</i> <i>Cenchrus ciliaris</i> <i>Chloris divaricata</i> <i>Chloris ventricosa</i> <i>Chrysopogon fallax</i> <i>Cymbopogon refractus</i> <i>Cyperus exaltatus</i> <i>Cyperus gracilis</i> <i>Cyperus indet.</i> <i>Cyperus javanicus</i> <i>Dichanthium sericeum</i> subsp. <i>sericeum</i>	<i>Abutilon fraseri</i> <i>Abutilon oxycarpum</i> <i>Achyranthes aspera</i> <i>Alectryon diversifolius</i> <i>Alternanthera denticulata</i> <i>Alternanthera nodiflora</i> <i>Atriplex muelleri</i> <i>Basilicum polystachyon</i> <i>Boerhavia dominii</i> <i>Boerhavia indet.</i> <i>Brunoniella australis</i> <i>Calotis cuneata</i> <i>Camptacra barbata</i> <i>Capparis lasiantha</i> <i>Citrus glauca</i> <i>Crotalaria indet.</i>

PMLU	Regional Ecosystem	Trees	Shrubs	Grasses	Forbs
		<i>Eucalyptus coolabah</i> <i>Eucalyptus melanophloia</i> <i>Eucalyptus populnea</i> <i>Eucalyptus tereticornis</i> <i>Exocarpos aphyllus</i> <i>Geijera parviflora</i> <i>Lysiphyllum hookeri</i> <i>Melaleuca bracteata</i> <i>Myoporum acuminatum</i> <i>Owenia acidula</i> <i>Psydrax oleifolia</i> <i>Terminalia oblongata</i> subsp. <i>oblongata</i> <i>Ventilago viminalis</i>	<i>Casuarina cristata</i> <i>Citrus glauca</i> <i>Clematicissus opaca</i> <i>Denhamia</i> indet. <i>Diospyros humilis</i> <i>Dodonaea lanceolata</i> <i>Duma florulenta</i> <i>Ehretia membranifolia</i> <i>Eremophila bignoniiflora</i> <i>Eremophila deserti</i> <i>Eremophila mitchellii</i> <i>Eucalyptus coolabah</i> <i>Eucalyptus tereticornis</i> <i>Enchylaena tomentosa</i> <i>Excoecaria agallocha</i> <i>Ficus opposita</i> <i>Geijera parviflora</i> <i>Grewia latifolia</i> <i>Lysiphyllum carronii</i> <i>Lysiphyllum hookeri</i> <i>Melaleuca bracteata</i> <i>Myoporum acuminatum</i> <i>Notelaea microcarpa</i> <i>Pittosporum angustifolium</i> <i>Psydrax forsteri</i> <i>Psydrax johnsonii</i> <i>Psydrax oleifolia</i> <i>Santalum lanceolatum</i> <i>Senna barclayana</i> <i>Sesbania cannabina</i> var. <i>cannabina</i> <i>Terminalia oblongata</i> subsp. <i>oblongata</i> <i>Ventilago viminalis</i>	<i>Digitaria brownii</i> <i>Dinebra decipiens</i> <i>Eleocharis acuta</i> <i>Eleocharis pallens</i> <i>Enteropogon acicularis</i> <i>Enteropogon ramosus</i> <i>Eragrostis lacunaria</i> <i>Eriochloa crebra</i> <i>Eriochloa procera</i> <i>Eriochloa pseudoacrotricha</i> <i>Eulalia aurea</i> <i>Heteropogon contortus</i> <i>Leptochloa digitata</i> <i>Panicum decompositum</i> <i>Panicum laevinode</i> <i>Paspalidium caespitosum</i> <i>Paspalidium distans</i> <i>Paspalidium gracile</i> <i>Paspalidium indet.</i> <i>Paspalidium jubiflorum</i> <i>Sporobolus caroli</i> <i>Sporobolus creber</i> <i>Sporobolus mitchellii</i> <i>Thellungia advena</i> <i>Themeda avenacea</i>	<i>Cyanthillium cinereum</i> <i>Cymbidium canaliculatum</i> <i>Eclipta prostrata</i> * <i>Duma florulenta</i> <i>Einadia nutans</i> subsp. <i>linifolia</i> <i>Enchylaena tomentosa</i> <i>Eremophila debilis</i> <i>Euphorbia dallachyana</i> <i>Euphorbia drummondii</i> <i>Euphorbia</i> indet. <i>Euphorbia psammogeton</i> <i>Eustrephus latifolius</i> <i>Glycine tabacina</i> <i>Haloragis aspera</i> <i>Jasminum didymum</i> subsp. <i>racemosum</i> <i>Jasminum didymum</i> <i>subsp. didymum</i> <i>Lomandra longifolia</i> <i>Maireana microphylla</i> <i>Marsilea drummondii</i> <i>Marsilea hirsuta</i> <i>Melhania oblongifolia</i> <i>Neptunia gracilis</i> <i>Oxalis perennans</i> <i>Phyllanthus maderaspatensis</i> <i>Rhagodia spinescens</i> <i>Rhynchosia minima</i> <i>Rostellularia adscendens</i> <i>Salsola australis</i> <i>Sclerolaena muricata</i> <i>Sclerolaena tetracuspis</i> <i>Senna barclayana</i> <i>Sida hackettiana</i> <i>Sida</i> indet. <i>Sida trichopoda</i> <i>Tetragonia tetragonoides</i> <i>Verbena</i> indet. <i>Wahlenbergia gracilis</i> <i>Zaleya galericulata</i> subsp. <i>Galericulata</i>

Appendix 2 - Erosion classification framework

Erosion classification	Minor	Moderate	Severe
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	<15 rills per transect*	15–30 rills per transect*	>30 rills per transect*
Gully erosion	Absent	Absent	Present
Tunnel erosion	Absent	Absent	Present
Mass movement	Absent	Absent	Present

Source: NCST (2024) *Australian Soil and Land Survey Field Handbook, 4th 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 3 – BioCondition Benchmark Criteria

This Appendix articulates the benchmark criteria to be achieved for each assessable attribute. The benchmark criteria for each RA are determined by the corresponding PMLU. Benchmark criteria and assessable attributes are derived from the Queensland Government's BioCondition benchmark database⁴. Some attributes (i.e. large trees) of the full BioCondition assessment are not likely to be attainable in the timeframe between seeding and achievement of the PMLU, hence only a subset is included here. The reference Regional Ecosystems (REs) are also included for interpretation purposes only.

BioCondition Assessable Attributes	BioCondition Assessable Attribute Weighting	Hybrid Regional Ecosystem RE 11.3.2 / 11.3.3 Rehabilitated <i>Eucalyptus populnea</i> / <i>Eucalyptus conica</i> woodland on alluvial plains		
		Average benchmark	Indicative benchmark	
			RM8	RM10
Recruitment	5	100%	0	20% (=3 out of 5 weighting)
Non-native plant cover	10	0%	<25% (=5 out of 10 weighting)	<25% (=5 out of 10 weighting)
Native tree species richness	5	3	≥1 (=2.5 out of 5 weighting)	≥3 (=5 out of 5 weighting)
Native shrub species richness	5	4	≥1 (=2.5 out of 5 weighting)	≥4 (=5 out of 5 weighting)
Native grass species richness	5	11	≥3 (=2.5 out of 5 weighting)	≥3 (=2.5 out of 5 weighting)
Native forb / other native species richness	5	15	≥4 (=2.5 out of 5 weighting)	≥4 (=2.5 out of 5 weighting)
Tree canopy height	5	18m	0	≥4.5m (=3 out of 5 weighting)
Tree canopy cover	5	32.5%	≥3.25% (=2 out of 5 weighting)	≥16.25% (=5 out of 5 weighting)
Shrub canopy cover	5	4%	≥0.4% (=3 out of 5 weighting)	≥0.4% (=3 out of 5 weighting)
Native perennial grass	5	35.5%	≥17.75% (=3 out of 5 weighting)	≥17.75% (=3 out of 5 weighting)
Organic litter ground cover	5	32.5%	0	≥3.25% (=3 out of 5 weighting)
Total BioCondition Assessable attribute weighting score	60		Overall BioCondition score required >20	Overall BioCondition score required >40

Appendix 4 - Surface water quality limits

Quality characteristic (units) ⁽¹⁾⁽²⁾⁽³⁾	Limit ⁽²⁾⁽³⁾	Comment on limit
pH	6.5–8.5	Lower Dawson River Sub-basin fresh waters WQO
Electrical Conductivity (µS/cm)	340	Lower Dawson River Sub-basin fresh waters WQO. Baseflow
Suspended Solids (mg/L)	10	Lower Dawson River Sub-basin fresh waters WQO
Sulfate (mg/L)	25	Lower Dawson River Sub-basin fresh waters WQO
Aluminium - dissolved (µg/L)	55	ANZG 2018
Antimony – dissolved (µg/L)	9	ANZG 2018
Arsenic - dissolved (µg/L)	13	ANZG 2018
Manganese - dissolved (µg/L)	1,900	ANZG 2018
Molybdenum - dissolved (µg/L)	34	ANZG 2018
Selenium - dissolved (µg/L)	5	ANZG 2018
Uranium - dissolved (µg/L)	0.5	ANZG 2018
Zinc - dissolved (µg/L)	8	ANZG 2018
Ammonia (µg/L)	900	ANZG 2018
Nitrate (µg/L)	1,100	For aquatic ecosystem protection, based on ambient Qld WQ Guidelines (2006) for Total Nitrate
Total recoverable hydrocarbons (C6-C9) (µg/L) ⁽⁶⁾	20	For aquatic ecosystem protection, based on LOR for GCMS ⁽⁴⁾⁽⁵⁾
Total recoverable hydrocarbons (C10-C36) (µg/L) ⁽⁶⁾	100	For aquatic ecosystem protection, based on LOR for GCMS ⁽⁴⁾⁽⁵⁾
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes	-

Notes:

- (1) All metals and metalloids must be measured as 'dissolved' (from analysis of a field filtered sample) and total (unfiltered).
- (2) Limits for metals and metalloids apply to dissolved results.
- (3) ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection)
- (4) LOR (limit of reporting) – typical reporting for method stated.
- (5) GCMS – analytical method required to achieve LOR
- (6) Silica Gel Cleanup, SW-846 Method 3630C, December 1996, US EPA

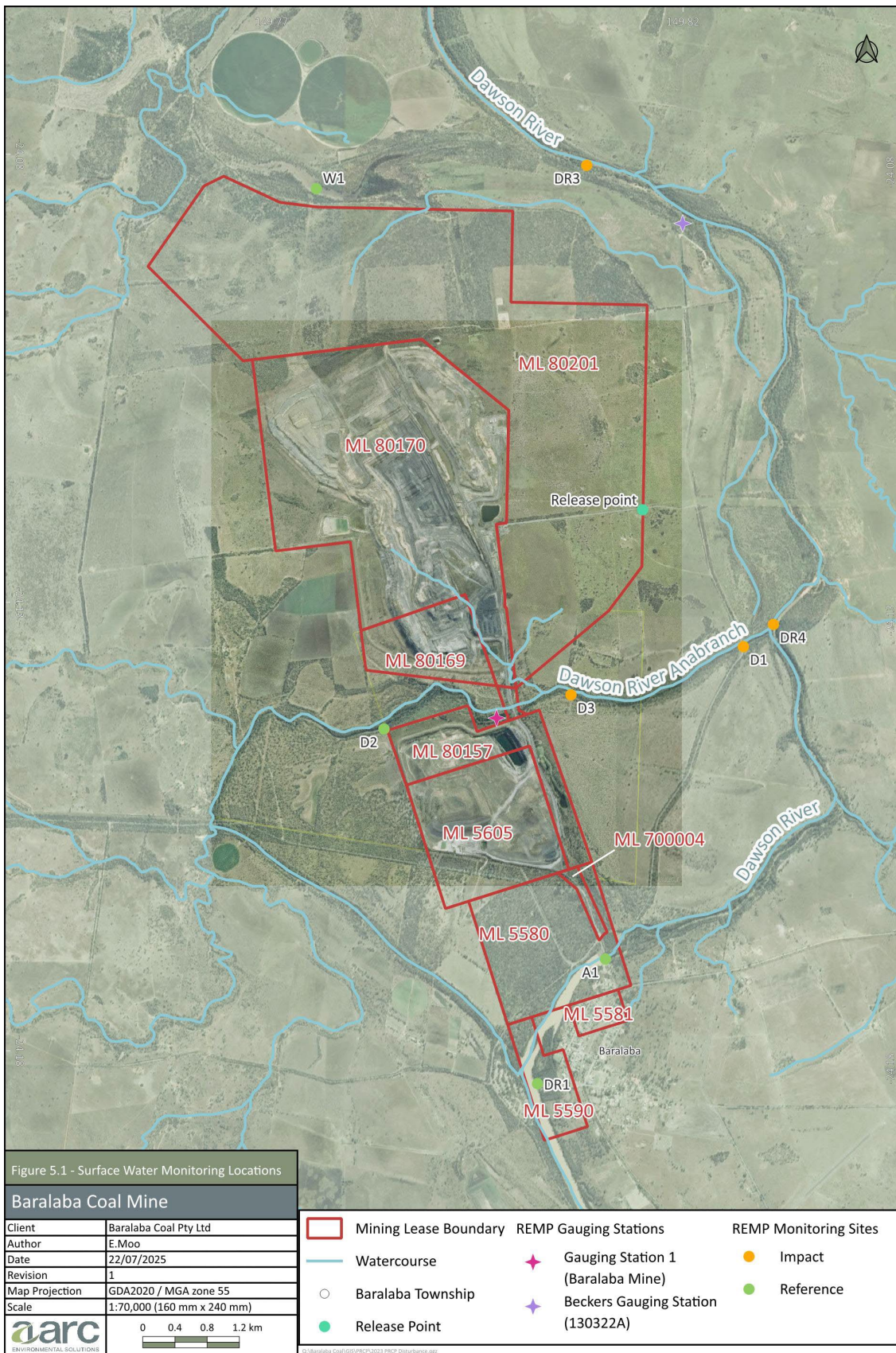
Appendix 5 - Surface water monitoring locations

Monitoring Locations	Receiving waters location description	Latitude (decimal degree, GDA2020)	Longitude (decimal degree, GDA2020)
<i>Upstream monitoring locations</i>			
A1	Dawson River, between the two confluences with the Dawson River Anabranh and downstream of the Neville Hewitt Weir	-24.170934	149.814274
D2	Dawson River Anabranh located near the boundary of the mining lease on the Anabranh, upstream of the mine	-24.145636	149.786631
DR1	Dawson River upstream	-24.185062	149.806264
<i>Downstream monitoring locations</i>			
D1	Downstream of the mine along Dawson River Anabranh.	-24.135547	149.830368
DR3	Dawson River downstream of Beckers gauging station	-24.081964	149.810034
DR4	Dawson River within 8 km downstream of the confluence with the Dawson River Anabranh.	-24.133027	149.833979
D3	Downstream of the mine along Dawson River Anabranh.	-24.141387	149.809407
W1	Located at the palustrine wetland in between the Dawson River and Saline Creek, downstream of the mine	-24.085191	149.777049

Notes:

(1) Monitoring locations illustrated in **Figure 4.1 – Surface Water Monitoring Locations**

Figure 5.1 – Surface Water Monitoring Locations



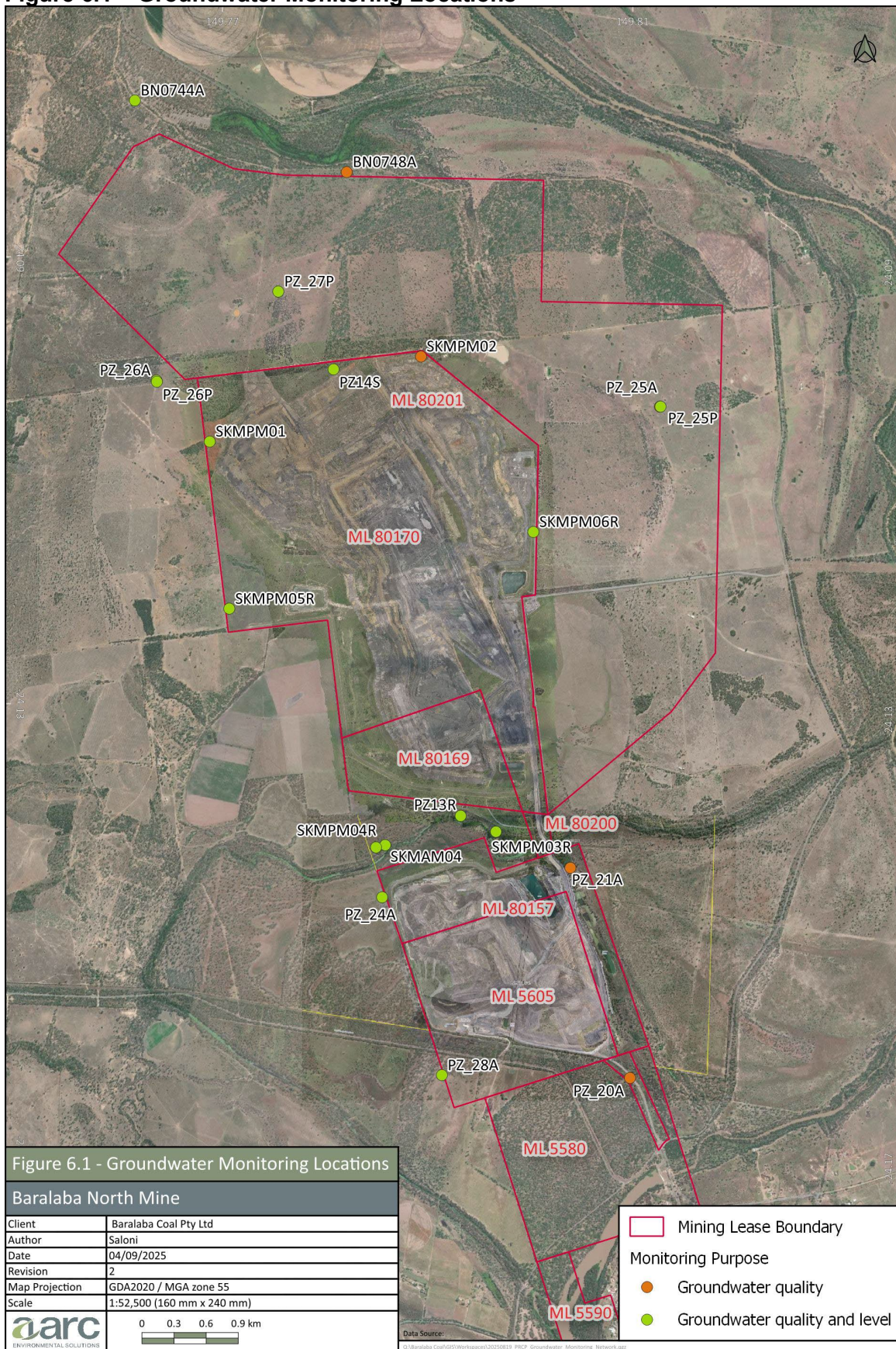
Appendix 6 - Groundwater monitoring bores

Site*	Latitude(GDA94)	Longitude(GDA94)	Geologic Unit
BN0744A	-24.08124	149.76338	Alluvium
BN0748A	-24.08693	149.78298	Alluvium
PZ_20A	-24.162861	149.810683	Alluvium
PZ_21A	-24.145238	149.804817	Alluvium
PZ_25A	-24.106175	149.812200	Alluvium
PZ_26A	-24.10480422	149.76588386	Alluvium
PZ_28A	-24.1629163	149.7933958	Alluvium
PZ14S ^A	-24.10359	149.78213	Alluvium
SKMAM04	-24.14363	149.78775	Alluvium
PZ_24A	-24.14804	149.787564	Alluvium
PZ13R	-24.1409891	149.7946627	Baralaba Coal Measures – Coal Seam Interburden – Sandstone Fault Zone
PZ_25P	-24.106182	149.81225	Permian (Gyranda Formation)
PZ_26P	-24.104924	149.765911	Baralaba Coal Measures – Coal Seam Interburden
PZ_27P	-24.097118	149.776907	Baralaba Coal Measures – Coal seam (Sub Dirty Seam)
SKMPM01	-24.10989	149.77088	Baralaba Coal Measures – Interburden
SKMPM02 ^A	-24.10236	149.79014	Permian (Gyranda Formation)
SKMPM03R	-24.1423084	149.7979088	Baralaba Coal Measures – Interburden
SKMPM04R	-24.143826	149.7869114	Baralaba Coal Measures – Interburden
SKMPM05R	-24.123947	149.772979	Baralaba Coal Measures – Interburden
SKMPM06R	-24.116973	149.800797	Permian (Gyranda Formation)

Notes:

* Monitoring locations illustrated in **Figure 6.1 – Groundwater Monitoring Locations**

A To be monitored as per frequency listed until destroyed by mining

Figure 6.1 – Groundwater Monitoring Locations

Appendix 7 – Groundwater quality limits

Geologic Unit	Quality Characteristic	pH (field)	Electrical Conductivity (Lab)	Aluminium (dissolved)	Antimony (dissolved)	Arsenic (dissolve d)	Manganese (dissolved)	Molybdenum (dissolved)	Selenium (dissolve d)	Uranium (dissolved)	Zinc (dissolved)	Sulfate (dissolved)	TRH C10 - C16 Fraction ^κ	TRHC16 -C34 Fraction ^κ	TRHC34 -C40 Fraction ^κ	Bicarbonate, sodium, carbonate, calcium, chloride,
																Interpretation Only
	Monitoring Bore	pH units	µS/cm	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L
Alluvium	BN0744A	6.4 – 6.7 ^A	731 ^A	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	150 ^A	4.5 ^A	50 ^C	100 ^C	100 ^C	N/A
Alluvium	BN0748A	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ_20A	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ_21A	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ_24A	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	145 ^M	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ_25A	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ_26A	6.5-8.5	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	3.5 ^{AL}	154 ^A	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ_28A	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	5 ^A	25 ^A	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	PZ14S	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Alluvium	SKMAM04	6.9 - 8.4 ^B	953 ^B	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	62 ^B	50 ^C	100 ^C	100 ^C	N/A
Baralaba Coal Measures – Coal Seam Interburden – Sandstone Fault Zone	PZ13R ³	7.4 - 8.6 ^B	20,000 ^A	50 ^B	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^{DN}	72 ^A	6.0 ^A	50 ^C	100 ^C	100 ^C	N/A
Permian (Gyranda Formation)	PZ_25P	6.6 - 7.1 ^A	6,200 ^A	50 ^B	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	5.0 ^A	140 ^A	51 ^A	50 ^C	100 ^C	100 ^C	N/A
Baralaba Coal Measures – Coal Seam Interburden	PZ_26P	6.5-8.5	2,880 ^A	50 ^B	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	2 ^A	20 ^{AL}	113 ^A	50 ^C	100 ^C	100 ^C	N/A
Baralaba Coal Measures – Coal seam (Sub Dirty Seam)	PZ_27P	7.4 - 8.6 ^B	1,355 ^A	50 ^B	9 ^D	85 ^A	1,900 ^D	34 ^D	11 ^D	0.5 ^{DN}	13 ^{AL}	13 ^A	50 ^C	100 ^C	100 ^C	N/A
Baralaba Coal Measures – Interburden	SKMPM01	10-12	4,268 ^A	178 ^A	9 ^D	13 ^D	1,900 ^D	47 ^A	11 ^D	0.5 ^D	14 ^A	18 ^A	50 ^C	100 ^C	100 ^C	N/A
Permian (Gyranda Formation)	SKMPM02	7.3 - 8.5 ^B	3,542 ^I	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^D	8 ^D	6 ^O	50 ^C	100 ^C	100 ^C	N/A
Baralaba Coal Measures – Interburden	SKMPM03R	7.3 - 8.5 ^B	2,112 ^A	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^{DN}	27 ^A	132 ^A	50 ^C	100 ^C	100 ^C	N/A
Baralaba Coal Measures – Interburden	SKMPM04R	7.3 - 8.5 ^B	19,470 ^A	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	0.5 ^{DN}	130 ^A	63 ^A	50 ^C	100 ^C	100 ^C	N/A

PRCP schedule P-PRCP-100908098_V1 Baralaba Coal Mine

Geologic Unit	Quality Characteristic	pH (field)	Electrical Conductivity (Lab)	Aluminium(dissolved)	Antimony (dissolved)	Arsenic (dissolve d)	Manganese (dissolved)	Molybdenum (dissolved)	Selenium (dissolve d)	Uranium (dissolved)	Zinc (dissolved)	Sulfate (dissolved)	TRH C10 - C16 Fraction ^K	TRHC16 -C34 Fraction ^K	TRHC34 -C40 Fraction ^K	Bicarbonate, sodium, carbonate, calcium, chloride,
																Interpretation Only
	Monitoring Bore	pH units	µS/cm	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L
Baralaba Coal Measures – Interburden	SKMPM05R	7.3 - 8.5 ^B	3,542 ^I	55 ^D	9 ^D	18 ^A	1,900 ^D	62 ^A	11 ^D	0.5 ^D	85 ^{ALN}	6 ^A	50 ^C	100 ^C	100 ^C	N/A
Permian (Gyranda Formation)	SKMPM06R	6.6 – 7.1 ^A	20,750 ^H	55 ^D	9 ^D	13 ^D	1,900 ^D	34 ^D	11 ^D	5 ^A	76 ^A	179 ^A	50 ^C	100 ^C	100 ^C	N/A

Note:

A. 95th percentile of site specific value

B. 95th percentile of aquifer group specific value (Alluvium, Permian Coal Seam, Permian Interburden)

C. Limit of reporting available for TPH fractions for ALS laboratories

D. ANZG (2018) 95% Protection aquatic species (fresh water)

E. Fitzroy Plan WQ1310 groundwater water quality objectives (aquatic ecosystem) Zone 34 (shallow) 80th percentile - Dawson River Sub-basin Environmental Values and Water Quality Objectives

F. Fitzroy Plan WQ1310 groundwater water quality objectives (aquatic ecosystem) Zone 34 (deep) 80th percentile - Dawson River Sub-basin Environmental Values and Water Quality Objectives

G. 95th percentile of BN0744C and BN0744CR_2

H. 95th percentile of SKMPM04 and SKMPM06R

I. 95th percentile of SKMPM02 and SKMPM05R

J. 95th percentile of SKMPM01, SKMPM04, SKMPM05, SKMPM05R, SKMPM06R

K. Silica Gel Cleanup, SW-846 Method 3630C, December 1996, US EPA

L Site specific data trigger has been set on a small number of data points, outside the QWQG recommended minimum dataset. Once sufficient data is available this trigger should be reconsidered.

M 95th percentile of BN0744A and PZ_24A

N Due to insufficient data, this limit is interim until a sufficient data set has been collected and a site specific or grouped specific trigger can be applied.

O Due to insufficient data this interim trigger has been calculated based on data collected from SKMPM05R

Appendix 8 - Groundwater level threshold

Site	Geologic Unit	Starting Water Level for purpose of Trigger Level Assessment		Maximum Modelled Drawdown (m)	Maximum Permissible Impacted Water Level	
		(mTOC)	mAHD		(mTOC)	mAHD
BN0744A	Alluvium	12.5	68.96	1	13.5	67.96
PZ_23A	Alluvium	12.51	70.294	0	12.51	70.294
PZ_24A ^A	Alluvium	10.84	71.56	0	10.84	71.56
PZ_26A	Alluvium	22.91	74.34	0	22.91	74.34
PZ_28A ^A	Alluvium	Dry	Dry	0	n/a - dry	n/a - dry
SKMAM04	Alluvium	Dry	Dry	0	n/a - dry	n/a - dry
BN0744C	Baralaba Coal Measures – Coal Seam (Reid Seam)	14.65	*	7.13	21.78	*
BN0744CR_2	Baralaba Coal Measures – Coal Seam (Reid Seam)	17.41	64.09	7.13	24.54	56.96
PZ_25P	Permian (Gyranda Formation)	19.79	73.61	0	19.79	73.61
PZ_26P	Baralaba Coal Measures – Coal Seam Interburden	22.29	74.96	2.82	25.11	72.14
PZ_27P	Baralaba Coal Measures – Coal seam (Sub Dirty Seam)	24.12	70.88	53.35	77.47	17.53
PZ13R	Baralaba Coal Measures – Coal Seam Interburden – Sandstone Fault Zone	12.77	69	24.63	37.4	44.37
PZ14D	Baralaba Coal Measures - Coal Seam (Coolum Seam)	23.86	67.6	50.94	74.8	16.66
SKMPM01	Baralaba Coal Measures – Interburden	30.6	65.34	4.12	34.72	61.22
SKMPM03R	Baralaba Coal Measures – Interburden	13.35	66.27	20.28	33.63	45.99
SKMPM04R ^A	Baralaba Coal Measures – Interburden					
SKMPM05R	Baralaba Coal Measures – Interburden	28.38	64.82	5.15	33.53	59.67
SKMPM06R	Permian (Gyranda Formation)	25.1	63.5	0.09	25.19	63.41

^A Monitoring bores to be updated in accordance with the requirements of Conditions D11 to D16 of environmental authority EPML00223213, dated 6 June 2025* Relative water level (mAHD) must be reviewed, prior to November 2025, on collection of a validated collar height RL by an AQP surveyor.

END OF **PRCP** SCHEDULE