

PRCP schedule

Environmental Protection Act 1994

PRCP schedule P-PRCP-100896397 Dysart East 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-100896397_V1

PRCP schedule holder(s)

Name(s)	Registered address
Bengal Coal Pty Ltd ACN: 140 425 529	Level 10, 12 Creek Street, BRISBANE CITY, QLD 4000

Location details

Location(s)
ML70507

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

30 June 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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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 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** Prior to any significant disturbance occurring within mining lease (ML) 70507, the holder must nominate in writing to the administering authority a commencement date for the mining activities in the format of a calendar year.
- PRCP2** All mining disturbance authorised under environmental authority (EA) EPML01978714 must have an associated rehabilitation outcome provided in this PRCP Schedule.
- PRCP3** The holder must for each rehabilitation area, achieve the corresponding rehabilitation milestone criteria (milestone reference):
- (a) for the cumulative area available specified in this schedule; and
 - (b) by the milestone completion date specified in this schedule.
- PRCP4** 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 thirty (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 ninety (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 milestone criteria.
- Note: reference to "earlier than the nominated date in the schedule" means a date that is greater than one (1) year prior to the date nominated in the schedule.*
- PRCP5** Where an area achieves a rehabilitation milestone, the holder must continue to achieve the milestone criteria until a surrender for the area is approved.
- PRCP6** The holder must maintain a risk register that identifies the risks to not achieving:
- (a) a stable condition for post-mining land uses, and
 - (b) how the risks are being managed or minimised.
- PRCP7** The risk register required by **PRCP6** must be reviewed annually and include consideration of the outcomes of PRCP monitoring data.
- PRCP8** 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, and

- (b) any requirement under this schedule; and
- (c) as necessary to demonstrate achievement of each rehabilitation milestone or management milestone criteria.

Where there is any inconsistency between this schedule and the rehabilitation planning part, the schedule criteria prevail to the extent of the inconsistency.

PRCP9

The holder must make and keep up to date records on:

- (a) Achievement and maintenance of achievement 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 (AQP) 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.

PRCP10

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

PRCP11

Records made under **PRCP9** must be provided to the administering authority in the specified format within ten (10) business days of a written request.

PRCP12

All AQP designs, specifications, certifications, assessments and any similar documents must:

- (a) include documented consideration of any relevant guideline or publication material, including material published by the administering authority;
- (b) detail the boundary conditions (of any model);
- (c) detail any assumptions made, limitations and areas of uncertainty; and
- (d) must contain sufficient detail to allow for independent peer review and substantiation.

PRCP13

Baseline Condition and Subsidence register

The holder must keep a register of all bord and pillar panels detailing:

- (a) the surface area (ha) and depth of any subsidence within each mining panel;
- (b) The locations of pre-existing drainage lines and drainage lines to be established to prevent/manage ponding;
- (c) The locations of proposed and existing infrastructure;

- (d) The baseline condition of the vegetation and land condition prior to the commencement of mining; and
- (e) Spatial data of the extent of the bord and pillars as well as the extent of any temporary or permanent ponding.

The register must be provided to the administering authority upon request.

PRCP14

The baseline condition of the extent of surface areas overlying area of bord and pillar mining must be assessed prior to the commencement of mining activities. The baseline condition must include, but is not limited to:

- (a) Site hydrology and fluvial networks;
- (b) Soil types, properties and productivity;
- (c) Flora species composition and structure;
- (d) Land stability (pre-existing degradation/erosion and predisposition to ongoing stability issues);
- (e) Regional ecosystem details, if remnant, and BioCondition assessed. Methodology may include digital surface model or terrain model generated;
- (f) Land Suitability Class, if is not a remnant regional ecosystem, as defined in the latest version of the Guidelines for Agricultural Land Evaluation in Queensland; and
- (g) Any potential subsidence analysis and modelling, with subsequent document of the likely impacts on vegetation, potential for ponding, mitigation and stabilisation measures required and subsequent rehabilitation actions required.

PRCP15

Landform design

A pre-construction landform design plan and report for the waste rock dumps (**RA1**) and the mine portal and drift (**RA2**) must be developed and certified by an AQP and provided to the administering authority prior to the commencement of mining activities.

PRCP16

The landform design plan and report required by **PRCP15** must:

- (a) include detailed engineering designs and a durability assessment;
- (b) demonstrate that the landform is safe, will achieve geotechnical and erosional stability, and be appropriate for the PMLU, with regard to the material properties and local conditions, during any flood event up to and including probable maximum flood;
- (c) For RA1, ensure that the maximum heights for dumps is not exceeded, with Dump 1 to have a maximum height of 27.5m and Dump 2 a maximum height of 35m.
- (d) For RA2, ensure sealing of any opening to the underground including the drift and any portals, in accordance with industry best practice. This, at minimum, must include:
 - (i) Type D rated seals to 345 Kpa (50 psi) rating;
 - (ii) infilling of the drift and any portals in line with the surrounding landform with benign or non-acid forming material;
 - (iii) demonstration of the achievement of geotechnical stability of bulkhead materials, and the competency and stability of the ground containing the bulkhead; and
 - (iv) a plan for the management and remediation of any residual potential for unplanned surface subsidence and ground collapse such as sinkholes and pot holing.
- (e) include parameters to mitigate higher-energy flow ($\geq 2\text{m/s}$) to reduce flow energy and ensure the stability of the landform, as determined by the AQP;
- (f) not result in increased erosion of the bank or bed of the adjacent waterways; and
- (g) not impact upon existing remnant vegetation (other than that authorised under EA EPML01978714).

- PRCP17** **ESC and drainage structures**
By **10 December 2033**, an independent AQP, following peer review, certifies that designs for any proposed permanent Erosion and Sediment Control (ESC) structures, contour banks and drainage structures on site are appropriate to the landform, materials and the post-mining land use (PMLU), with consideration given to their performance, stability, maintenance requirements, and residual risk post-closure; and provides for the achievement of stable condition as per the *Environmental Protection Act 1994*.
- PRCP18** The certification by the AQP under **PRCP17** must make an assessment of whether the installation of such structures would result in greater environmental harm than not installing such structures.
- PRCP19** Where a structure would result in greater environmental harm, an amendment to EA EPML01978714 and the PRCP Schedule must be sought.
- PRCP20** The groundwater monitoring network must be reviewed at least **twelve (12) months** prior to the commencement of mining activities to meet the following objectives:
- (a) Review of the groundwater monitoring locations for their ability to:
 - (i) detect any impacts to groundwater quality due to the activities relevant to this PRCP schedule; and
 - (ii) detect any changes to groundwater level due to the activities relevant to this PRCP schedule – including across all identified hydrogeological units across and adjacent to the site; and
 - (iii) determine any potential interactions or impacts from groundwater on surface water and environmental values; and
 - (iv) demonstrate that the final landform achieves stable condition.
 - (b) Provision of at least three additional standpipe bores into the Moranbah Coal Measures P seam to appropriately monitor groundwater level and quality as a result of mining activities.
 - (c) Ensure all bores are installed and able to be monitored for quality and level in accordance with the latest version of the administering authority's *Monitoring and Sampling Manual 2018*.
- PRCP21** Prior to the commencement of mining activities, groundwater level thresholds must be determined and provided to the administering authority for all groundwater monitoring bores determined by **PRCP20**, unless otherwise agreed with the administering authority.
- PRCP22** The groundwater model provided with PRC Plan for P-PRCP-100896397_v1 must be recalibrated and predictions rerun following the review of the groundwater monitoring network required by **PRCP20** and following the collection of groundwater level monitoring to support the model, and at least every five years from the date of approval of the PRCP schedule.
- PRCP23** Where a groundwater model rerun, as per **PRCP22**, indicate 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.

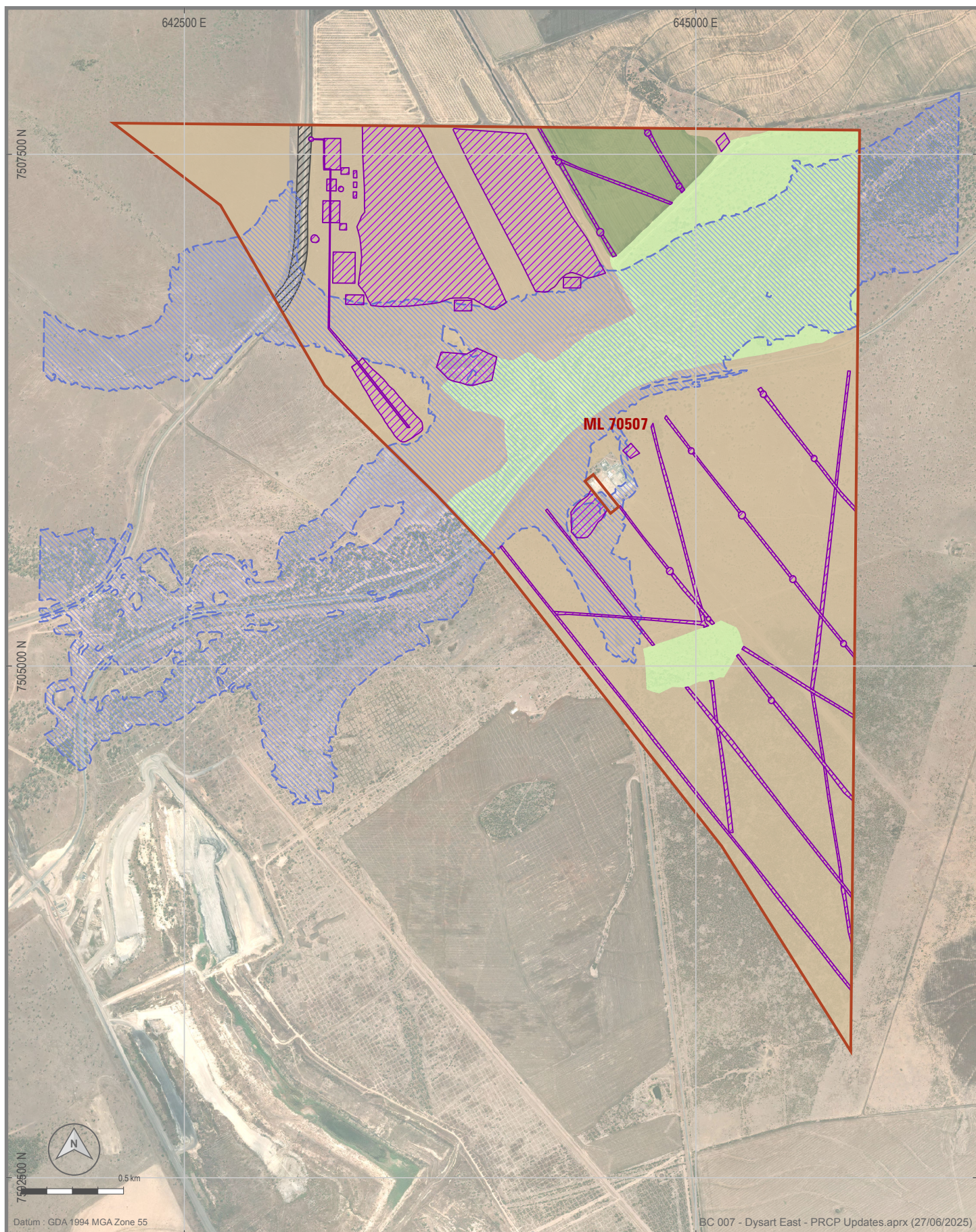
END OF CONDITIONS

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 later versions thereof.
Commencement of mining activities	the date <i>significant disturbance</i> is conducted for the purposes of mining or activities associated with the commencement of mining (i.e. construction), other than for exploration or monitoring purposes.
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.
Disturbed area	any area where activities authorised under Environmental Authority EPML01978714 has resulted in ground disturbance. Disturbance may include removal of vegetation, groundcover or soil material from an area. Such include activities related to gas drainage or access to the underground.
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.
Independent AQP	is an AQP who is a third party, being independent of the PRCP schedule holder, and has not previously provided advice on the matter the subject of the review.
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.
Significant disturbance	means mechanical disturbance of the land surface or clearing of vegetation but does not include access tracks for land management, fire breaks or disturbance associated with environmental monitoring or exploration.
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.
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



Legend

- Mining Lease Boundary
- Maximum Surface Disturbance Footprint
- Q1000 Floodplain Extent

Post Mining Land Use

- Cropping
- Grazing
- Native Ecosystem
- Retained Infrastructure

Figure 1 – Final Site Design



Dysart East PRCP

Drawn: carteform

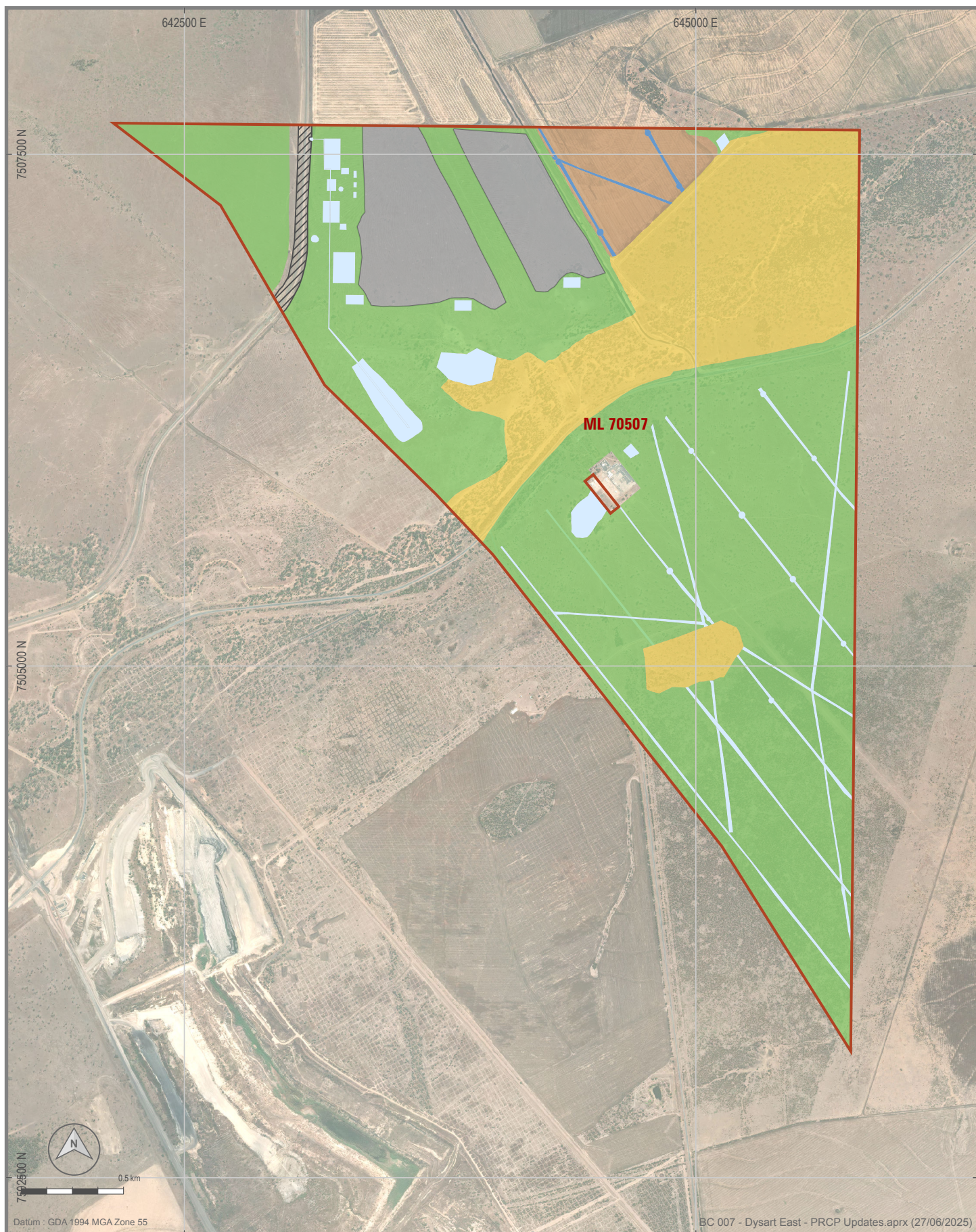
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Date: 27/06/2025

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Revision: A

Scale: 1:25,000



Legend

 Mining Lease Boundary

Rehabilitation Areas

 RA1 - WRD Area

 RA2 - Infrastructure to be removed

 RA3 - Infrastructure to be removed

 RA4 - Surface Area above Underground Workings

 RA5 - Surface Area above Underground Workings

 RA6 - Surface Area above Underground Workings

 Retained Infrastructure

Figure 2 – Rehabilitation Areas Reference Map



Dysart East PRCP

Drawn: carteform

Filename: BC 007 - Dysart East - PRCP Updates.aprx

Date: 27/06/2025

Checked:

Revision: A

Scale: 1:25,000

Section D – Post mining land uses**(RA1) Rehabilitation area 1**

Post-mining land uses (PMLU)						
Rehabilitation area	RA1					
Relevant activities	Waste Rock Dumps					
Total rehabilitation area size (ha)	69.71					
Commencement of first milestone: RM1	01/01/2035					
PMLU	Grazing					
Date area is available	01/01/2035		01/01/2053			
Cumulative area available (ha)	26.88		69.71			
Milestone completed by	10/12/2036	10/12/2039	10/12/2054	10/12/2057	10/12/2062	10/12/2066
Milestone Reference	Cumulative area achieved (ha)					
RM1	26.88		69.71			
RM2	26.88		69.71			
RM3	26.88		69.71			
RM4		26.88		69.71		
RM5		26.88		69.71		
RM6			26.88		69.71	
RM7				26.88		69.71

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)					
Rehabilitation area		RA2			
Relevant activities		Infrastructure (processing, water management, tracks, de-gassing of wells, ancillary surface disturbance)			
Total rehabilitation area size (ha)		37.02			
Commencement of first milestone: RM1		01/01/2054			
PMLU		Grazing			
Date area is available	01/01/2054				
Cumulative area available (ha)	37.02				
Milestone completed by	10/12/2055	10/12/2057	10/12/2058	10/12/2064	10/12/2070
Milestone Reference	Cumulative area achieved (ha)				
RM1	37.02				
RM2		37.02			
RM3		37.02			
RM4			37.02		
RM5			37.02		
RM6				37.02	
RM7					37.02

(RA3) Rehabilitation area 3

Post-mining land uses (PMLU)		
Rehabilitation area	RA3	
Relevant activities	Infrastructure (processing, water management, tracks, de-gassing of wells)	
Total rehabilitation area size (ha)	2.47	
Commencement of first milestone: RM1	01/01/2058	
PMLU	Cropping	
Date area is available	01/01/2054	
Cumulative area available (ha)	2.47	
Milestone completed by	10/12/2055	10/12/2058
Milestone Reference	Cumulative area achieved (ha)	
RM1	2.47	
RM2	2.47	
RM4	2.47	
RM5	2.47	
RM8		2.47

(RA4) Rehabilitation area 4

Post-mining land uses (PMLU)	
Rehabilitation area	RA4
Relevant activities	Surface areas that overlie underground bord and pillar workings
Total rehabilitation area size (ha)	454.51
Commencement of first milestone: RM1	01/01/2058
PMLU	Grazing
Date area is available	01/01/2058
Cumulative area available (ha)	454.51
Milestone completed by	10/12/2063
Milestone Reference	Cumulative area achieved (ha)
RM1	454.51
RM2	454.51
RM5	454.51
RM8	454.51

(RA5) Rehabilitation area 5

Post-mining land uses (PMLU)	
Rehabilitation area	RA5
Relevant activities	Surface areas that overlie underground bord and pillar workings
Total rehabilitation area size (ha)	29.52
Commencement of first milestone: RM1	01/01/2058
PMLU	Cropping
Date area is available	01/01/2058
Cumulative area available (ha)	29.52
Milestone completed by	10/12/2063
Milestone Reference	Cumulative area achieved (ha)
RM1	29.52
RM2	29.52
RM5	29.52
RM8	29.52

(RA6) Rehabilitation area 6

Post-mining land uses (PMLU)	
Rehabilitation area	RA6
Relevant activities	Surface areas that overlie underground bord and pillar workings
Total rehabilitation area size (ha)	160.33
Commencement of first milestone:	01/01/2058
PMLU	Native Vegetation
Date area is available	01/01/2058
Cumulative area available (ha)	160.33
Milestone completed by	10/12/2063
Milestone Reference	Cumulative area achieved (ha)
RM1	160.33
RM2	160.33
RM5	160.33
RM8	160.33

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone criteria
RM1	Infrastructure decommissioning and removal	1.1 With the exception of existing rail or roads (prior to mining), any infrastructure to remain as part of the PMLU, or for the purposes of rehabilitation, the following are complete: (a) All services disconnected. (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 and associated foundations removed. (e) All pipelines drained and removed. (f) All waste not authorised to be disposed of on-site under EA EPML01978714 removed. (g) All constructed surface water drainage infrastructure is removed. (h) All drillholes and bores decommissioned. (i) All plant, equipment (including conveyors and rail load out systems) and any other infrastructure, not required for rehabilitation works, demolished and removed from site. (j) All dams, sumps and sediment ponds dewatered, desilted and backfilled. (k) Watercourse crossings and culverts removed. 1.2 For gas drainage infrastructure: (a) Gas wells plugged in accordance with the latest version of the <i>Code of Practice: For the construction and abandonment of petroleum wells and associated bores in Queensland</i>¹. (b) AQP verifies isolation of aquifers and proper sealing to prevent gas or water migration. (c) Pipelines and associated infrastructure, gas compressors, turbines and auxiliary systems and other gas drainage infrastructure removed and disposed of appropriately off-site. 1.3 Risk assessment completed by an AQP and provided in a report to ensure that the site is safe, and all infrastructure has been decommissioned appropriately. 1.4 An independent AQP has certified the achievement of RM1.1 to RM1.3 (inclusive).

¹ State of Queensland (2019). *Code of Practice: For the construction and abandonment of petroleum wells and associated bores in Queensland*. Accessed via https://www.resources.qld.gov.au/_data/assets/pdf_file/0006/1461093/code-of-practice-petroleum-wells-bores.pdf

Milestone reference	Rehabilitation milestone	Milestone criteria
RM2	Identification and remediation of contaminated land	2.1 Contaminated land Investigation Document completed in accordance with the <i>Environmental Protection Act 1994</i>, including a site investigation report and, where required, a Validation Report and/or a draft Site Management Plan. 2.2 Contaminated and hazardous material either remediated in-situ or removed/transported to facility lawfully able to accept the material. 2.3 A SQP certifies that that no contamination unsuitable for the PMLU remains or is occurring.
RM3	Final landform development	3.1 All major earthworks (including reshaping, pushing/trimming) are completed in accordance with the design specification provided by an AQP and in accordance with the design plan and considerations made under conditions PRCP15 to PRCP19 (inclusive). 3.2 An “As-Constructed Report” prepared which details and justifies all variations to the design, including a certification that such variations will not affect the design performance. 3.3 Constructed landform achieves geotechnical stability with a Factor of Safety (FOS) ≥ 1.5, which includes consideration of flood stress. 3.4 Dispersive and PAF spoil and reject materials buried by <2m of weathered/known Non-Acid Forming material. 3.5 For RA1, the final landform achieves the following: (a) Average slopes <10% (b) At least 1% longitudinal grade (c) free-draining surfaces. 3.6 For RA2, the gradient of the final landform must not exceed that which existed prior to mining. 3.7 For RA1, rock armouring completed for all locations where the Probable Maximum Flood is expected to result in velocities more than 2 m/s as detailed by the ATC Williams, 2025, Dysart East Coal Project Hydraulic Assessment Probable Maximum Flood 240129_R01_Rev1 MARCH 2025 of PRC plan. Rock armouring is additional to the 2m of material required by RM3.4. Additional criteria for underground workings and opening 3.8 Sealing of drifts and other access to the underground mine completed in accordance with the Coal Mining Health and Safety Regulation 2017 and in accordance with the design determined by PRCP15. 3.9 Construction and backfilling of underground openings met the design intent as per condition PRCP15. 3.10 Underground openings are safe. 3.11 An independent AQP has certified the achievement of RM3.1 to RM3.10 (inclusive).

Milestone reference	Rehabilitation milestone	Milestone criteria
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 Ameliorant and physical treatments such as fertiliser, lime, gypsum and/or organic matter have been applied as per the treatment plan identified in RM4.1. 4.3 All areas will be shallow ripped/scarified to at least 300mm (or refusal) along the contour prior to spreading topsoil. 4.4 Soil suitability assessment completed and documented by an AQP to confirm that the quantity and quality of the growth media is suitable for the target vegetation and the PMLU. 4.5 Topsoil/growth media placement of a minimum of 300mm for RA1 and 200mm for all other RAs where topsoil has previously been removed. 4.6 Following amelioration as per criteria RM4.1 and RM4.2, representative soil testing of growth media confirms: (a) Emerson aggregate class: ≥ 4; (b) pH in the range of 6 - 8.5; (c) Electrical Conductivity (saturated extract) (dS/m) ≤ 2 (2,000 $\mu\text{S/cm}$); and (d) Exchangeable sodium percentage (ESP) (%) < 6. 4.7 The surface and groundwater monitoring network are installed, and monitoring is underway (one year of sampling undertaken). 4.8 Independent AQP has certified the plan in RM4.1 and achievement of RM4.2 to RM4.7 (inclusive).

Milestone reference	Rehabilitation milestone	Milestone criteria
RM5	Revegetation activities	5.1 For the Grazing PMLU (RA1, RA2 and disturbed areas of RA4): (a) Seeding completed using the seed mix at the recommended sowing rates described in Appendix 1: Seed mix. (b) Seed sown at a seeding rate of a minimum of 15kg/ha. (c) The seeded mix must contain at least four (4) species of 3P pasture grasses, two forb species and two shade tree species, with two of the species being native species. (d) An AQP has confirmed that the seeding mix comprises of species suited to the soil, slope, aspect, climate and other factors relevant to the site. (e) Tubestock planted where determined to be required by the AQP. 5.2 For disturbed areas of RA3 or RA5, seeding with a sterile cover crop (e.g. Japanese Millet) at 10kg/ha completed, or a crop otherwise identified by written agreement with the landholder provided to the administering authority. 5.3 For disturbed areas of RA6, seeding of disturbed areas using a seed mix (or with tubestock) that aligns with the species composition identified in the baseline condition assessment as described by PRCP14. 5.4 Independent AQP has certified the achievement of RM5.1 to RM5.3 (inclusive).

Milestone reference	Rehabilitation milestone	Milestone criteria
RM6	Achievement of surface requirements	6.1 Species used in revegetation remain present and show evidence of natural recruitment. Evidence of flora recruitment from rehabilitation monitoring data. 6.2 $\geq 70\%$ established and persistent vegetative groundcover for all slopes. 6.3 Total groundcover (combination of vegetative groundcover, other organic material (i.e. sticks, leaf litter) and inorganic material (i.e. rocks)) $\geq 70\%$. 6.4 No bare surfaces $> 20 \text{ m}^2$ or $> 10 \text{ m}$ in length down slope. 6.5 At least 4 species of 3P pasture grasses, 2 forb species and two shade tree species established, of which at least 2 are native species. 6.6 Weed presence is a maximum of 5% of total vegetative groundcover confirmed by an AQP in annual monitoring. 6.7 Restricted invasive plants (as defined in the <i>Biosecurity Act 2014</i>) comprise less than 5% of vegetation cover 6.8 With respect to erosion: (a) No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix 2 – Erosion classification framework. (b) Any erosion present will not compromise the achievement of a PMLU to a stable condition. (c) All other erosion requiring intervention has been remediated and does not impact achieving the PMLU. (d) Average erosion rate of $< 5 \text{ t/ha/y}$ within a maximum erosion rate of $< 10 \text{ t/ha/y}$. (e) No evidence of scouring, overtopping, sedimentation or destabilisation in or associated with any erosion and sediment control structures. 6.9 Surface water runoff has been collected across representative areas of rehabilitation when surface flows occur. 6.10 Surface water runoff collected under RM6.9 complies with the limits in Appendix 3 – Receiving surface water quality limits. 6.11 An independent AQP has certified the achievement of RM6.1 to RM6.10 (inclusive).
RM7	Achievement of a stable condition (Grazing PMLU)	7.1 The rehabilitation area is safe, with safety hazards in the rehabilitation area are not significantly different to surrounding unmined landscapes subject to the same land use. 7.2 There is no environmental harm being caused by anything on or in the Rehabilitation Area. 7.3 All remaining infrastructure, equipment and plant has been removed in accordance with RM1. 7.4 The final landform can sustain the grazing PMLU.

Milestone reference	Rehabilitation milestone	Milestone criteria
		7.5 Assessment from an AQP that a land suitability class of 3 has been achieved, or better as defined in the latest version of the Guidelines for Agricultural Land Evaluation in Queensland. 7.6 Where a land assessment demonstrates that limiting factors prevent the achievement of a post-mine land suitability class of 3 or better and that limiting factor existed prior to mining for the relevant land, the land must be rehabilitated to achieve at least a class 3 for all soil properties with the exception of those identified as limiting factors preventing achievement of class 3. 7.7 The land is structurally and erosionally stable. 7.8 The final landform is geotechnically stable and achieved a factor of safety ≥ 1.5. 7.9 Absence of ecosystem altering weeds. 7.10 Soil testing of the growth media confirms the topsoil and subsoil physical, chemical and biological properties are not limiting vegetation cover performance (e.g. nutrient availability, drought stress). 7.11 Surface water runoff complies with Appendix 3 – Receiving surface water quality limits. 7.12 Surface water quality results monitored monthly during flow at, but not limited to, downstream locations specified in Appendix 4 - Surface water monitoring locations, must not exceed the limits in Appendix 3 – Receiving surface water quality limits, for a minimum of five (5) consecutive years. 7.13 If the surface water quality exceeds criteria RM 7.12, the applicable upstream location must be compared to the downstream location result; and quality result measured at a downstream location must be equal to or less than the quality result measured at the applicable upstream location². 7.14 For a minimum of five (5) consecutive years, groundwater quality must be monitored quarterly at, but not limited to, bores specified in Appendix 5 - Groundwater monitoring bores, for all quality characteristics listed in Appendix 6 - Groundwater quality limits. 7.15 Groundwater quality results for compliance bores must not exceed the limits in Appendix 6 - Groundwater quality limits, for three (3) consecutive results. 7.16 Groundwater level, monitored quarterly at locations specified in Appendix 5 - Groundwater monitoring bores, must not exceed the Level Thresholds determined by PRCP21, for a minimum of 10 consecutive years. 7.17 Any subsidence that has occurred has ceased, with <1 metre (m) difference from pre-mining ground level as per the baseline assessment of condition PRCP14. 7.18 Long-term stability of the underground mine layout with a minimum factor of safety of 1.6. 7.19 An independent AQP has certified the achievement of RM7.1 to RM7.18 (inclusive).

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

Milestone reference	Rehabilitation milestone	Milestone criteria
RM8	Achievement of a stable condition (Surface Areas above Underground Workings and for Cropping PMLU)	8.1 The rehabilitation is safe, with safety hazards in rehabilitation area are not significantly different to surrounding unmined landscapes subject to the same land use. 8.2 There is no environmental harm being caused by anything on or in the rehabilitation area. 8.3 All remaining infrastructure, equipment and plant has been removed in accordance with RM1, except existing rail or roads (prior to mining). 8.4 The rehabilitation area demonstrates achievement of stable condition. 8.5 For the Grazing PMLU (RA4), assessment from an AQP that the relevant surface areas have not declined from pre-mining condition, in terms of the latest version of the Land Suitability Class as defined in the Guidelines for Agricultural Land Evaluation in Queensland. 8.6 For the Native Vegetation PMLU (RA6), assessment from an AQP that, for the relevant surface areas, there is no substantial decline from the baseline species composition and structure to the latest baseline condition that has been assessed under condition PRCP14. 8.7 For the Cropping PMLU (RA5 and RA3), assessment from an AQP that, for the relevant surface areas, there has not been a decline in the condition of the cropping land from the latest baseline condition determined under condition PRCP14, in terms of Land Suitability Class as defined in the latest version of the Guidelines for Agricultural Land Evaluation in Queensland. 8.8 Any subsidence that has occurred has ceased, with <1m difference from pre-mining ground level as per the baseline assessment of condition PRCP14. No subsidence in the riparian zone of Downs Creek (RA6). 8.9 There is no cracking present in the rehabilitation area that is greater than 20 mm wide and 1m long. 8.10 An AQP confirms: (a) Long-term stability of the underground mine layout with a minimum FoS of: (i) 2.11 for areas below Downs Creek and rail lines; and (ii) 1.6 for all other areas. (b) All life of mine seals meet the requirements dictated in the <i>Coal Mining Health and Safety Regulation 2017</i>, or a more current version. 8.11 No evidence of erosion classified as 'moderate' or 'severe' as defined by Appendix 2 – Erosion classification framework. 8.12 Any erosion present does not compromise the achievement of a PMLU to a stable condition. 8.13 All other erosion requiring intervention has been remediated and does not impact achieving the PMLU. 8.14 Average erosion rate of <5t/ha/y within a maximum erosion rate of <10t/ha/y.

Milestone reference	Rehabilitation milestone	Milestone criteria
		8.15 No evidence of scouring, overtopping, sedimentation or destabilisation in or associated with erosion and sediment control structures. 8.16 Surface water runoff complies with Appendix 3 – Receiving surface water quality limits. 8.17 Surface water quality results monitored monthly during flow, but not limited to, downstream locations specified in Appendix 4 – Surface water monitoring locations, must not exceed the limits in Appendix 3 – Receiving surface water quality limits, for a minimum of five (5) consecutive years. 8.18 If the surface water quality exceeds criteria RM8.17, the applicable upstream location must be compared to the downstream location result; and quality result measured at a downstream location must be equal to or less than the quality result measured at the applicable upstream location³. 8.19 For a minimum of five (5) consecutive years, groundwater quality must be monitored quarterly at, but not limited to, bores specified in Appendix 5 - Groundwater monitoring bores, for all quality characteristics listed in Appendix 6 - Groundwater quality limits. 8.20 Groundwater quality results for compliance bores must not exceed the limits in Appendix 6 - Groundwater quality limits, for three (3) consecutive results. 8.21 Groundwater level, monitored quarterly at locations specified in Appendix 5 - Groundwater monitoring bores, must not exceed the Level Thresholds determined by PRCP21, for a minimum of 10 consecutive years. 8.22 An independent AQP has certified the achievement of RM8.1 to RM8.21 (inclusive).

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

Appendices

Appendix 1: Seed mix

Common Name	Scientific name	Recommended seeding rate (kg/ha)
Pasture Grasses and Forbs		
Barbwire grass	<i>Cymbopogon refractus</i>	2.5
Berseem clover	<i>Trifolium alexandrinum</i>	2.5
Black speargrass	<i>Heteropogon contortus</i>	5
Brigalow grass	<i>Paspalidium</i> spp.	1
Burgundy bean	<i>Macroptilium bracteatum</i>	2.5
Cotton panic grass	<i>Digitaria brownii</i>	1
Couch grass	<i>Cynodon dactylon</i>	2.5
Forest bluegrass	<i>Bothriochloa bladhii</i>	5
Glycine	<i>Glycine</i> spp.	2.5
Golden beard grass	<i>Chrysopogon fallax</i>	2.5
Guinea grass	<i>Megathyrsus maximum</i>	2.5
Hunter riverlucerne	<i>Medicago sativa</i>	1
Kangaroo grass	<i>Themeda australis</i>	1
Mitchell grass	<i>Astrebla</i> spp.	1
Native millet	<i>Panicum decompositum</i>	2.5
Queensland bluegrass	<i>Dichanthium sericeum</i>	5
Rhodes grass	<i>Chloris gayana</i>	2.5
Rhynco	<i>Rhynchosia minima</i>	2.5
Sabi grass	<i>Urochloa mosambicensis</i>	5
Scented top	<i>Capillipedium parviflorum</i>	5
Stylo mix	<i>Stylosanthes</i> spp.	2.5
Tall cup grass	<i>Eriochloa crebra</i>	1
Windmill grasses	<i>Chloris</i> spp.	2.5
Windmill grasses	<i>Enteropogon</i> spp.	1
Wire grasses	<i>Aristida</i> spp.	1
Cover Crops		
Japanese Millet	<i>Echinochloa esculenta</i>	10

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 / gully erosion	<15 rills per transect* and < 0.3 m deep	15-30 rills per transect* and < 0.3 m deep	>30 rills per transect* and / or < 0.3 m deep
Tunnel erosion	Absent	Absent	Present
Mass movement	Absent	Absent	Present

Notes:

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 3 - Receiving Surface water quality limits

Quality characteristic (units)	Limit ^{(1), (2)}	Comment on limit ^{(3),(4),(5)}
pH	6.5-8.5	WQO
Electrical Conductivity (µS/cm)	250 – baseflow 720 - highflow	WQO
Turbidity (NTU)	50	WQO
Sulfate (mg/L)	25	WQO
Aluminium - dissolved (µg/L)	55	ANZG 2018
Antimony - dissolved (µg/L)	9	ANZG 2018
Arsenic - dissolved (µg/L)	13	ANZG 2018
Iron - dissolved (µg/L)	300	ANZG 2018
Mercury - dissolved (µg/L)	0.06	ANZG 2018
Molybdenum - dissolved (µg/L)	34	ANZG 2018
Selenium - dissolved (µg/L)	5	ANZG 2018
Silver - dissolved (µg/L)	0.05	ANZG 2018
Lead - dissolved (µg/L)	3.4	ANZG 2018 ⁽⁵⁾
Manganese - dissolved (µg/L)	1,900	ANZG 2018 ⁽⁵⁾
Zinc - dissolved (µg/L)	8	ANZG 2018 ⁽⁵⁾
Total recoverable hydrocarbons (C6-C9) (µg/L)	20	For aquatic ecosystem protection, based on LOR
Total recoverable hydrocarbons (C10-C36) (µg/L)	100	For aquatic ecosystem protection, based on LOR
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	For interpretation purposes	-
Hardness (mg/L)	For interpretation purposes	-

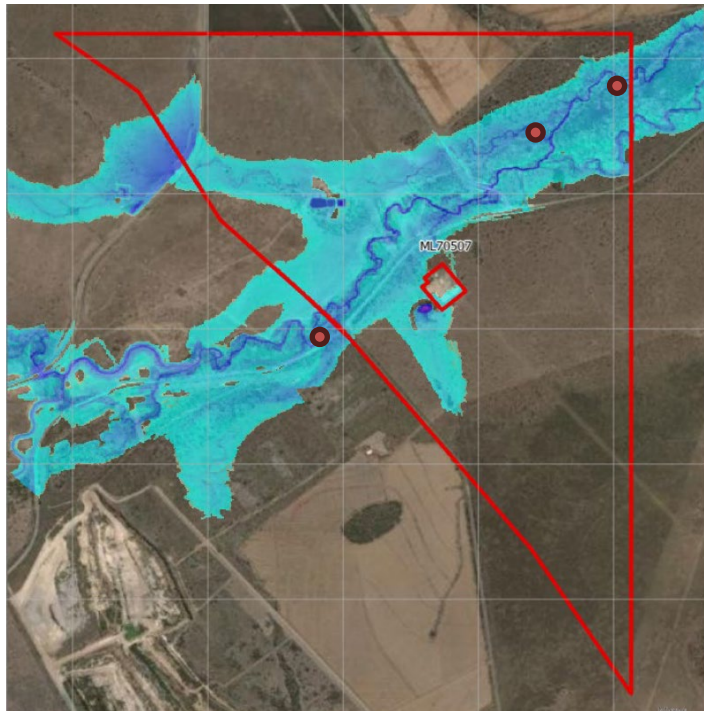
Notes:

- (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) LOR = limit of reporting. Typical reporting for method stated.
- (4) WQO: EHP (2011). *Environmental Protection (Water) Policy 2009 Isaac River Sub-basin Environmental Values and Water Quality Objectives Basin No. 130 (part)*, including all waters of the Isaac River Sub-basin (including Connors River). Isaac western upland tributaries – Upper Isaac River catchment waters.
- (5) ANZG (2018) Aquatic ecosystem protection for moderately disturbed system (95% protection)

Appendix 4 - Surface water monitoring locations

Monitoring Locations	Receiving waters location description	Latitude (decimal degree, GDA2020)	Longitude (decimal degree, GDA2020)
Upstream monitoring locations ¹			
MP1	Downs Creek downstream	-22.55074	148.39837
Downstream monitoring locations			
MP2	Downs Creek downstream	-22.53795	148.41212
MP3	Downs Creek tributary	-22.53478	148.41674

* monitoring points are approximate and require review against on ground conditions and appropriateness for monitoring.



Appendix 5 - Groundwater monitoring bores

Monitoring location*			Latitude (decimal degree, GDA2020)	Longitude (decimal degree, GDA2020)	Hydrogeological unit
Compliance Bores	Water quality	Water Level			
132731	Y	Y	-22.54019	148.39835	Blackwater Group
132732/132733	Y	Y	-22.53923	148.41140	Blackwater Group
DMB01	Y	Y	-22.54019	148.39834	Tertiary
DMB02	Y	Y	-22.55385	148.41075	Tertiary
DMB03	Y	Y	-22.53420	148.41486	Tertiary
DMB04a	Y	Y	-22.53923	148.41139	Tertiary
DMB04b	Y	Y	-22.53923	148.41148	Permian
DYE08	Y	Y	-22.54019	148.39834	Permian
DYE11	Y	Y	-22.53420	148.41486	Permian
DYE10	Y	Y	-22.55385	148.41075	Permian
DYE15	Y	Y	-22.53420	148.41486	Permian
MB1	Y	Y	TBD	TBD	Alluvium
MB2	Y	Y	TBD	TBD	Alluvium
165890		Y	-22.52908	148.37460	Back Creek Group
158686		Y	-22.52214	148.39528	Coal Measure
190444		Y	-22.55112	148.39444	Moranbah Coal Measures
190445		Y	-22.55111	148.39473	Moranbah Coal Measures
38754		Y	-22.55567	148.38694	
67130		Y	-22.55823	148.38526	Blenheim Formation
90015		Y	-22.57058	148.39972	
90013		Y	-22.58008	148.42306	
89470		Y	-22.56350	148.43241	
89469		Y	-22.55591	148.43657	Fair Hill Formation

* As proposed or discussed in URS (2015) Dysart East Coal Mine Project: Underground Environmental Assessment – Groundwater Technical Report, 42627233/GW/0



Appendix 6 - Groundwater quality limits

Quality characteristic (units)	Monitoring Bore	Limit	Comment on limit
pH (pH units)	All bores	6.5 – 9	Site data and WQO
Electrical conductivity (µS/cm)	All bores	7,450	WQO
Sulfate (mg/L)	All bores	520	WQO
Aluminium - dissolved (µg/L)	All bores	55	ANZG 2018
Antimony - dissolved (µg/L)	All bores	9	ANZG 2018
Arsenic - dissolved (µg/L)	All bores	13	ANZG 2018
Iron - dissolved (µg/L)	All bores	300	ANZG 2018
Mercury - dissolved (µg/L)	All bores	0.06	ANZG 2018
Molybdenum - dissolved (µg/L)	All bores	34	ANZG 2018
Selenium - dissolved (µg/L)	All bores	5	ANZG 2018
Silver - dissolved (µg/L)	All bores	0.05	ANZG 2018
Lead - dissolved (µg/L)	All bores	3.4	ANZG 2018 ⁽⁵⁾
Manganese - dissolved (µg/L)	All bores	1,900	ANZG 2018 ⁽⁵⁾
Zinc - dissolved (µg/L)	All bores	8	ANZG 2018 ⁽⁵⁾
Major ions (mg/L) Calcium, chloride, potassium, magnesium, sodium, bicarbonate, carbonate	All bores		For interpretation purposes
Hardness (mg/L)	All bores		For interpretation purposes
Water level (mAHD)	All bores		For interpretation purposes

Notes:

- 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)
- Isaac River Sub-basin WQOs – Zone 23

END OF PRCP SCHEDULE