

PRCP schedule

Environmental Protection Act 1994

PRCP schedule PRCP_EPML00334613_V1

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: PRCP_EPML00334613_V1

PRCP schedule holder(s)

Name(s)	Registered address
Bowen River Coal Pty Ltd ACN: 133 356 779	Level 15 40 Creek Street BRISBANE QLD 4000

Location details

Location(s)
ML10345

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

14/01/2022

Date

Louisa Nicolson
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

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Obligations under the *Environmental Protection Act 1994*

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

Pursuant to section 285 of the EP Act:

- the holder of a PRCP schedule must commission an audit of the schedule by a rehabilitation auditor for the following periods (each an audit period) —
 - (a) the 3-year period starting on the day the schedule takes effect
 - (b) each 3-year period starting on the day after the previous audit period ended.
- the holder must, within 4 months after the end of each audit period, give the administering authority -
 - (a) the rehabilitation auditor's report (an audit report) about the audit that complies with section 286 of the EP Act, and
 - (b) a declaration for the audit report that complies with section 285 of the EP Act.

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

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

PRCP schedule

The PRCP schedule incorporates the following sections:

- Section A - Conditions of PRCP schedule
- Section B - Final site design and reference maps
- Section C - Post mining land uses

Section 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** The holder must comply with each milestone criterion stated in the schedule.
- PRCP2** Where a milestone criterion requires any of the following, the holder must keep records of the actions taken to comply with the criterion as well as the results and provide a copy of this information to the Administering Authority on request -
- (i) certifications or assessments to be undertaken;
 - (ii) monitoring or maintenance to be carried out;
 - (iii) final design plans and/or specifications to be developed; and
 - (iv) reports such as contaminated land investigations, rehabilitation reports (including monitoring records), validation reports, Quality Assurance/Quality Control reports.
- PRCP3** Where land becomes available for rehabilitation earlier than the nominated 'Date area is available', progressive rehabilitation for that land must commence as soon as practicable. Progressive rehabilitation commenced early under this condition must be carried out in accordance with the milestones and criteria in this schedule, except that each of the dates by which milestones are to be completed is brought forward by the same amount of time as the commencement was brought forward.
- PRCP4** Land subject to exploration activities previously approved under EPC586 that subsequently became ML10345, must be rehabilitated in accordance with the Code of Environmental Compliance for Exploration and Mineral Development Projects*, with the exception that land must be rehabilitated to a stable condition^ that achieves the PMLU of grazing pasture.
- PRCP5** Land subject to exploration activities carried out on ML10345 subsequent to the grant of the relevant mining lease, must be rehabilitated in accordance with the Code of Environmental Compliance for Exploration and Mineral Development Projects*, with the exception that land must be rehabilitated to a stable condition^ that achieves the relevant PMLU of grazing pasture.
- PRCP6** Before applying for surrender of EA EPML00334613, the holder must demonstrate that surface runoff from rehabilitated areas entering the receiving environment does not result in impacts to surface water values and meets the contaminant levels as detailed below:

Quality characteristic (unit)	Completion criteria
pH	6.5 – 9.0
EC (µS/cm)	1,000
Total Suspended solids (mg/L)	110
Sulfate (mg/L) 1	250
Sodium (mg/L) 1	250

* or ESR/2016/1985 Eligibility criteria and standard conditions for exploration and mineral development projects where this is the relevant standard at the time of rehabilitation.

^stable condition is defined by s111A of the *Environmental Protection Act 1994*

END OF CONDITIONS

Section B - Final site design and reference maps

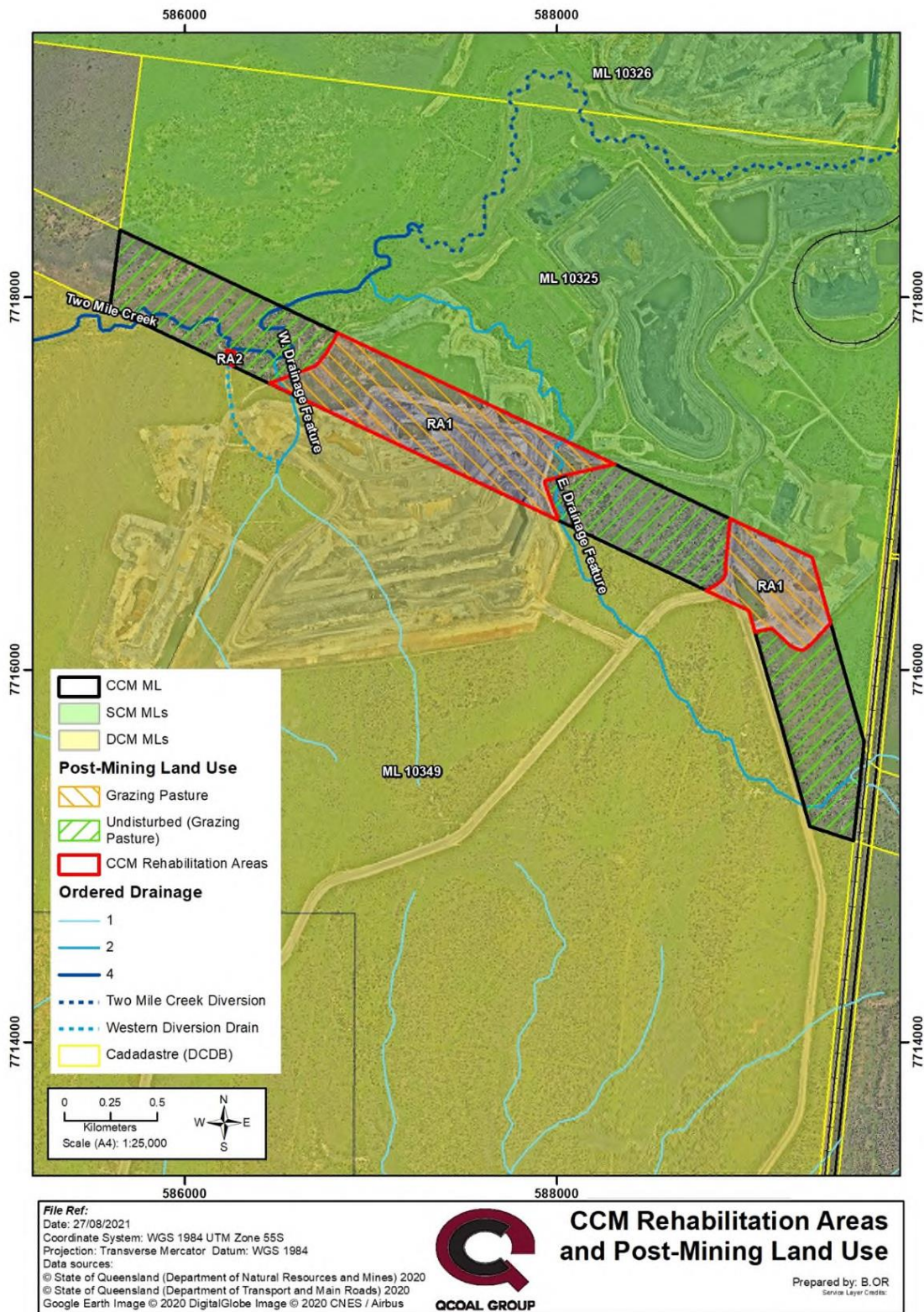


Figure 1 – Final Site Design and Reference Map

Section C – Post mining land uses

(RA1) Rehabilitation area 1

Post-mining land uses (PMLU)					
Rehabilitation area			RA1		
Relevant activities			B Pit and Q Pit back-filled voids, waste rock dumps and haul roads		
Total rehabilitation area size (ha)			86.84		
Commencement of first milestone: RM1			First rehabilitation milestone completed for part of RA prior to PRCP transition		
PMLU			Grazing Pasture		
Date area is available	10/12/21	10/12/24	10/12/26	10/12/37	
Cumulative area available (ha)	46	46	46	86.84	
Milestone completed by	10/12/24	10/12/26	10/12/27	10/12/43	
Milestone Reference	Cumulative area achieved (ha)				
RM1	46			86.84	
RM2	46			86.84	
RM3	19	46		86.84	
RM4			46	86.84	

(RA2) Rehabilitation area 2

Post-mining land uses (PMLU)		
Rehabilitation area		RA2
Relevant activities		Western Diversion Drain
Total rehabilitation area size (ha)		0.28
Commencement of first milestone: RM5		Rehabilitation of RA2 commenced prior to PRCP transition
PMLU		Grazing Pasture
Date area is available	10/12/21	
Cumulative area available (ha)	0.28	
Milestone completed by	10/12/26	
Milestone Reference	Cumulative area achieved (ha)	
RM5	0.28	

Rehabilitation area milestones

Milestone reference	Rehabilitation milestone	Milestone Criteria
RM1	Landform development, shaping and profiling	a) Undertake contaminated land assessment if required and if necessary undertake remedial activities (supervised by a suitably qualified person). b) All major earthworks completed with an 'As constructed' survey plan showing surveyed area contours, finished slope and conformance to designed landform and drainage for each sub-area. c) No unblended Category 2 material (as defined in Table 27 of PRC Plan) reporting to surface. d) 20% (11.5°) maximum slope achieved on dump batters (unless an alternate slope is recommended by an RPEQ), determined by survey. e) Drainage works within rehabilitation areas completed, confirmed by survey. f) Where present, structures within drainage lines (e.g. culverts, bed level sheeted crossings) removed and bed and banks reinstated to tie into upstream/downstream reaches.
RM2	Surface preparation	a) Ripping of compacted surfaces as required. b) Placement of a minimum of 100 mm of topsoil.
RM3	Achievement of surface requirements (grazing pasture)	a) Germination monitoring completed within 12 months of completion of RM2 determines that adequate vegetation has been established (minimum 30% groundcover of preferred and intermediate species*). b) Assessment of the need for soil amelioration undertaken within 12 months of completion of RM2. c) Where required by the assessment undertaken in RM3 b), application of soil ameliorants such as fertiliser, gypsum and/or organic matter at rates determined by an appropriately qualified person. d) Mean groundcover $\geq 50\%$ or $>$ the grazed reference site mean minus one standard deviation (whichever is the highest). e) $\geq 70\%$ of the productivity (carrying capacity measured as pasture biomass) of grazed reference sites. f) Proportion of preferred and intermediate species* is $> 60\%$ of vegetative groundcover. g) A minimum of 3 preferred and intermediate* pasture grass species must be present. h) Proportion of Category 3 restricted invasive plant species** not $> 10\%$ of total vegetative groundcover. i) Rectification of active rill and gully erosion completed within 12 months of achieving RM3 d). j) Soil testing undertaken 5 yearly (or a lesser period if required) indicates the following parameters are met: - Plant Available Water Capacity (PAWC) > 50 mm; - Bicarbonate P ≥ 4 ppm (at 0 - 10 cm depth); - Electrical Conductivity (1:5 dilution) < 1.2 mS/cm or Chloride (1:5 dilution) $< 1,500$ ppm in the root zone (at 60 cm depth); - Soil pH < 10 and > 4 as measured at any part of the root zone; and - Exchangeable Sodium Percentage (ESP %) $< 30\%$ (at 0-10 cm depth). *Preferred and intermediate species are as defined in s5.2.9.1 of the PRC Plan. ** Defined by <i>Biosecurity Act 2014</i>

Milestone reference	Rehabilitation milestone	Milestone Criteria
RM4	Achievement of post-mining land use to stable condition (grazing pasture)	Each of the below listed criteria is certified as having been achieved by a person who is appropriately qualified to assess that criteria, with the combined certifications confirming that the rehabilitation achieves the PMLU and is stable (as defined in the EP Act): a) Soil testing undertaken 5 yearly (or a lesser period if required) indicates the following parameters are met: - Plant Available Water Capacity (PAWC) >50 mm; - Bicarbonate P ≥4ppm (at 0 - 10cm depth); - Electrical Conductivity (1:5 dilution) <1.2 mS/cm or Chloride (1:5 dilution) <1,500 ppm in the root zone (at 60 cm depth); - Soil pH <10 and >4 as measured at any part of the root zone; and - Exchangeable Sodium Percentage (ESP %) <30% (at 0-10 cm depth). b) ≥70% of the productivity (carrying capacity measured as pasture biomass) of grazed reference sites***. c) Mean groundcover ≥50% or > the grazed reference site mean minus one standard deviation (whichever is the highest). d) Proportion of preferred and intermediate species is >60% of vegetative groundcover. e) A minimum of 3 preferred and intermediate* pasture grass species must be present. f) Proportion of Category 3 restricted invasive plant species** is not >10% of total vegetative groundcover. g) Conformance of the final landforms to the design criteria as follows: - 20% (11.5°) maximum slope achieved on dump batters (unless an alternate slope is recommended by an RPEQ). h) No contamination causing the land to be unsuitable for the use is present. i) Groundwater monitoring undertaken through the operational life of the Cows Coal Mine (CCM) and through the full period of rehabilitation establishment (as required by the CCM environmental authority (EA)), has indicated no potential impacts to any groundwater values resulting from the rehabilitated landforms. j) Surface water and aquatic ecology monitoring undertaken through the operational life of the CCM and through the period of rehabilitation establishment (as required by the CCM EA), has indicated no potential impacts to any surface water values including aquatic ecology, resulting from the rehabilitated landforms. k) Results of grazing trials within rehabilitated areas at the QCoal Northern Hub confirm the carrying capacity***. * Preferred and intermediate species are as defined in s5.2.9.1 of the PRC Plan. ** Defined by <i>Biosecurity Act 2014</i> *** Grazing trials will not be undertaken within the CCM due to access and spatial limitations.
RM5	Drainage structure stabilised and fit for purpose (ephemeral drainage channel within grazing pasture)	Each of the below listed criteria is certified as having been achieved by a person who is appropriately qualified to assess that criteria, with the combined certifications confirming that the rehabilitation achieves the PMLU and is stable (as defined in the EP Act): a) Earthworks completed; b) Mean groundcover* ≥50%; and c) The diversion drain bed and banks is analogous with the geomorphology of the immediate upstream and downstream reaches of Two Mile Creek (from their confluence).

Milestone reference	Rehabilitation milestone	Milestone Criteria
		*Groundcover for RM5 is defined as preferred and intermediate species** and/or drainage rock contributing to the stabilisation of the channel **Preferred and intermediate species are as defined in s5.2.9.1 of the PRC Plan.

END OF PRCP SCHEDULE