Progressive Rehabilitation and Closure Plan Schedule template

Instructions

General Instructions:

- **This form can be used for completing a PRCP schedule for the submission of a progressive rehabilitation and closure plan (PRCplan).**
- **See the PRCP schedule section of the PRC plan guideline (ESR/2019/4964) for further information requirements.**

- A default value of one (1) Rehabilitation Area (RA) is represented by one RA sheets below (RA1).
- A default value of one (1) Improvement Area (IA) is represented by one IA sheet below (IA1).

- To record additional RAs for your project make a copy of the RA sheet below and update it to the relevant RA number (i.e. RA2).
- To record additional IAs for your project make a copy of the IA sheet below and update it to the relevant IA number (i.e. IA2).
- To remove the IA sheet if there is no IA for your project, delete the IA sheet below.

- Each RA and IA sheet contains **two separate excel tables** (yellow and blue) for recording the time-based rehabilitation milestones.
- Add a new column or row to each table as required for your information requirements.

- Two (2) separate sheets below exist for recording the "Rehabilitation Area Milestones" and "Improvement Area Milestones".
- Delete the Improvement Area Milestone sheet if it does not apply to your project.
- Delete additional rows in either sheet if they do not apply to your project.
- See the PRC plan guideline for a list of reference milestones and further information for developing additional site-specific milestones where appropriate.

Further Instructions when inputting PMLUs

Headings under Rehabilitation Area (RA) sheets

Rehabilitation area - The rehabilitation area must align with the spatial information included in the rehabilitation planning part of the PRC plan.This area must have the same PMLU and same milestones applied to the whole area.

Relevant activities - The relevant activities must align with the activities identified in the rehabilitation planning part of the PRC plan. The relevant activities are those undertaken within the rehabilitation area prior to land becoming available for rehabilitation.

Total size of rehabilitation area (ha) - Total size of rehabilitation area in hectares.

Commencement of first milestone - The applicant must nominate a date for when the first milestone for the rehabilitation area will commence. The milestone reference for the first milestone must be included in the heading.

PMLU - The PMLU must align with those identified in the rehabilitation planning part of the PRC plan and in the proposed final site design.

Date area is available - The PRCP schedule must identify when land within the rehabilitation area becomes available for rehabilitation. If the whole rehabilitation area becomes available at once there should be only one date. If the rehabilitation areas becomes available progressively there should be multiple dates. These dates should reflect the information provided in the rehabilitation planning part of the PRC plan.

Cumulative area available (ha) - The PRCP schedule must identify the area of land within the rehabilitation area that will become available at a given time.

Milestone completed by - The PRCP schedule must identify completion dates for milestones to be completed.

Cumulative area achieved (ha) - The PRCP schedule must show how progressive rehabilitation is being achieved over the life of the mine. This section must reflect the proposed rehabilitation work required for the rehabilitation area to achieve stable condition. The milestone reference to be included refers back to the Rehabilitation Area Milestones sheet with the detailed milestone criteria. The milestones must be achieved consecutively.

Headings under Rehabilitation Area Milestones sheet

Rehabilitation milestone & Milestone criteria - The “rehabilitation milestone” is a short description of the rehabilitation activities. The "milestone criteria" must be able to demonstrate achievement of the milestone.

Further Instructions when inputting NUMAs

Headings under Improvement Area (IA) sheets

Improvement area - The improvement area must align with the spatial information included in the rehabilitation planning part of the PRC plan. Th is area must have the same NUMA and same milestones applied to the whole area.

Relevant activities - The relevant activities must align with the activities identified in the rehabilitation planning part of the PRC plan. The relevant activities are those undertaken within the improvement area prior to land becoming available for improvement.

Total size (ha) - Total size of improvement area in hectares.

Commencement of first milestone - The applicant must nominate a date for when the first milestone for the improvement area will commence. The milestone reference for the first milestone must be included in the heading.

NUMA - The NUMA must align with those identified in the rehabilitation planning part of the PRC plan and in the proposed final site design.

Date area is available - The PRCP schedule must identify when land within the improvement area becomes available for improvement. If the whole improve ment area becomes available at once there should be only one date. If the improvement areas becomes available progressively there should be multiple dates. These dates should reflect the information provided in the rehabilitation planning part of the PRC plan.

Cumulative area available (ha) - The PRCP schedule must identify the area of land within the improvement area that will become available at a given time.

Milestone completed by - The PRCP schedule must identify completion dates for milestones to be completed.

Cumulative area achieved (ha) - The PRCP schedule must show how progressive improvement is being achieved over the life of the mine. This section must reflect the proposed management work required for the improvement area to achieve sufficient improvement. The milestone reference refers back to the Improvement Area Milestones sheet with the detailed milestone criteria. The milestones must be achieved consecutively.

Headings under Improvement Area Milestones sheet

Post-mining land uses (PMLU)										
Rehabilitation area	RA1									
Relevant activities	Infrastructure									
Total rehabilitation area size (ha)	0.93									
Commencement of first milestone: <insert milestone reference>	End of mine life									
PMLU	Low-intensity cattle grazing									
Date area is available	1/07/31	30/12/33	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	0.93	0.93								
Milestone completed by	30/12/33	30/12/42	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
RM1	0.93									
RM6	0.93									
RM7	0.93									
RM8		0.93								
RM9		0.93								

1) Insert new columns to the yellow table to include further rehabilitation milestone dates.
2) Insert new columns to the blue table to match rehabilitation milestone dates.
3) Insert new rows to the blue table to include additional rehabilitation milestone references.
4) Insert the relevant number in the "Milestone reference" column (i.e. RM1).

Post-mining land uses (PMLU)										
Rehabilitation area	RA2									
Relevant activities	Pit									
Total rehabilitation area size (ha)	4.84									
Commencement of first milestone: <insert milestone reference>	End of mine life									
PMLU	Native ecosystem									
Date area is available	1/07/31	30/12/33	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	4.84	4.84								
Milestone completed by	30/12/33	30/12/42	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
RM2	4.84									
RM6	4.84									
RM7	4.84									
RM8		4.84								
RM										

1) Insert new columns to the yellow table to include further rehabilitation milestone dates.
2) Insert new columns to the blue table to match rehabilitation milestone dates.
3) Insert new rows to the blue table to include additional rehabilitation milestone references.
4) Insert the relevant number in the "Milestone reference" column (i.e. RM1).

Post-mining land uses (PMLU)										
Rehabilitation area	RA3									
Relevant activities	Overburden Stockpile									
Total rehabilitation area size (ha)	4.74									
Commencement of first milestone: <insert milestone reference>	End of mine life									
PMLU	Native ecosystem									
Date area is available	1/07/31	30/12/33	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	4.74	4.74								
Milestone completed by	30/12/33	30/12/42	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
RM3	4.74									
RM6	4.74									
RM7	4.74									
RM8		4.74								
RM										

1) Insert new columns to the yellow table to include further rehabilitation milestone dates.
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4) Insert the relevant number in the "Milestone reference" column (i.e. RM1).

Post-mining land uses (PMLU)										
Rehabilitation area	RA4									
Relevant activities	Mine Water Management Dams									
Total rehabilitation area size (ha)	7.77									
Commencement of first milestone: <insert milestone reference>	End of mine life									
PMLU	Low-intensity cattle grazing									
Date area is available	1/07/31	30/12/33	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	7.77	7.77								
Milestone completed by	30/12/33	30/12/42	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
RM5	7.77									
RM6	7.77									
RM7	7.77									
RM8		7.77								
RM9		7.77								

1) Insert new columns to the yellow table to include further rehabilitation milestone dates.
2) Insert new columns to the blue table to match rehabilitation milestone dates.
3) Insert new rows to the blue table to include additional rehabilitation milestone references.
4) Insert the relevant number in the "Milestone reference" column (i.e. RM1).

Post-mining land uses (PMLU)										
Rehabilitation area	RA5									
Relevant activities	Processing Area									
Total rehabilitation area size (ha)	6.97									
Commencement of first milestone: <insert milestone reference>	End of mine life									
PMLU	Native ecosystem									
Date area is available	1/07/31	30/12/33	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	6.97	6.97								
Milestone completed by	30/12/33	30/12/42	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
RM4	6.97									
RM6	6.97									
RM7	6.97									
RM8		6.97								
RM										

1) Insert new columns to the yellow table to include further rehabilitation milestone dates.
2) Insert new columns to the blue table to match rehabilitation milestone dates.
3) Insert new rows to the blue table to include additional rehabilitation milestone references.
4) Insert the relevant number in the "Milestone reference" column (i.e. RM1).

Post-mining land uses (PMLU)										
Rehabilitation area	RA6									
Relevant activities	Other Disturbance Areas									
Total rehabilitation area size (ha)	24.77									
Commencement of first milestone: <insert milestone reference>	End of mine life									
PMLU	Low-intensity cattle grazing									
Date area is available	1/07/31	30/12/33	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)	24.77	24.77								
Milestone completed by	30/12/33	30/12/42	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
RM1	24.77									
RM6	24.77									
RM7	24.77									
RM8		24.77								
RM										

1) Insert new columns to the yellow table to include further rehabilitation milestone dates.
2) Insert new columns to the blue table to match rehabilitation milestone dates.
3) Insert new rows to the blue table to include additional rehabilitation milestone references.
4) Insert the relevant number in the "Milestone reference" column (i.e. RM1).

Non-use management area (NUMA)										
Improvement area	IA1									
Relevant activities										
Total size (ha)										
Commencement of first milestone: <insert milestone reference>										
NUMA										
Date area is available	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx	10/12/xxxx
Cumulative area available (ha)										
Milestone completed by	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx	xx/xx/xxxx
Milestone Reference	**Cumulative area achieved (ha)**									
MM										
MM										
MM										
MM										
MM										

1) Insert new columns to the yellow table to include further management milestone dates.
2) Insert new columns to the blue table to match management milestone dates.
3) Insert new rows to the blue table to include additional management milestone references.
4) Insert the relevant number in the "Milestone reference" column (i.e. MM1).

Milestone reference	Rehabilitation milestone	Milestone criteria
RM 1	Decommissioning of infrastructure and other minor disturbance areas	• All services disconnected in coordination with service providers and all associated service infrastructure removed from site to an appropriate waste management facility. • All remaining buildings and infrastructure, concrete pads and laydown areas demolished, and materials removed from site to an appropriate waste management facility. • All pipelines and mine water management infrastructure, other than those to remain post mining, decommissioned and removed from site to an appropriate waste management facility. • All equipment and machinery are removed from site. • All other rubbish removed from site to an appropriate waste management facility. • Area is ripped. • A minimum of 0.2 m of growth medium (topsoil, subsoil, or ameliorated material) is placed over the area. An AQP will assess the suitability of topsoil and/or subsoil and outline any required ameliorants prior to use in rehabilitation. • The landform is stable and water-shedding.
RM 2	Backfill of pit (void)	• Backfill the pit (void), which includes the previously closed off portal. • The final pit landform is geotechnically stable. • The final landform surface is water-shedding with no visible evidence of surface subsidence such as ponding water.
RM 3	Rehabilitation of overburden stockpile	• Final landform will have a Factor of Safety of 1.5 or greater. • Cover system (store and release with vegetation) is installed per detailed design by an appropriately qualified person. • Area is ripped. • A minimum of 0.2 m of growth medium (topsoil, subsoil, or ameliorated material) is placed over the area. • The landform is stable and water-shedding.
RM 4	Rehabilitation of processing areas	• Final landform will have a Factor of Safety of 1.5 of greater. • Cover system (store and release with vegetation) is installed per detailed design by an appropriately qualified person. • Area is ripped. • A minimum of 0.2 m of growth medium (topsoil, subsoil, or ameliorated material) is placed over the area. • The landform is stable and water-shedding.
RM 5	Rehabilitation of mine water management structures (including Process Water Dam and Overflow Dams)	• All remaining water transferred out of structures to an appropriate place. • Any contaminated material within the base of the water management structures are removed and buried within the pit to a minimum depth of 10 m or removed to an appropriate facility. • Dam walls are decommissioned and removed, with the landform to then be shaped to match surrounding landform. • Area is ripped. • A minimum of 0.2 m of growth medium (topsoil, subsoil, or ameliorated material) is placed over the area. • The landform is stable and water-shedding.
RM 6	Remediation of contaminated land	• All contaminated material removed from the site unless onsite remediation is being undertaken. • Contaminated land investigation for all areas that are identified as containing a source of contamination undertaken by an appropriately qualified person. • A contaminated land investigation document has been prepared by an appropriately qualified person, containing a site suitability statement confirming that land is not contaminated and is suitable for the proposed PMLU.

Milestone reference	Rehabilitation milestone	Milestone criteria
RM 7	Landform Development and Reshaping/Reprofiling and Revegetation	• All rehabilitation is engineered and shaped to achieve a stable landform. • All onsite earthworks completed. • Landform is free draining. • All erosion and sediment control systems have been installed and are functioning correctly. • Topsoil will have the following suitability criteria: • pH range 5.5 to 9 • Salinity <1,000 us/cm EC • Organic matter >1.5% • Copper <270 mg/kg • An AQP will assess the suitability of topsoil and outline any required ameliorants prior to use in rehabilitation. • The volumes, source and placement of topsoil and subsoil used in landform reshaping and construction will be recorded for reporting requirements. • The cover surface will be ripped to a depth of at least 0.2 m on contour prior to seeding. • Seeding undertaken prior to forecasted rainfall during the wet season. • Seeding undertaken at a minimum rate of 8 kg/ha comprising a mix of pasture species and native species present in Regional Ecosystems (RE) RE 9.11.3a, 9.11.3b, 9.11.25 and 9.11.26a, and RE 9.3.14a in riparian areas including: o Eucalyptus and/or Corymbia open woodlands native tree, sub story and shrub species (including Melaleuca, Acacia and Petalostigma spp.) o Native grasses (including Heteropogan spp., mnesithea rottboellioides, themeda triandra, and Aristida spp.) o Pasture species (including ryegrass, Rhodes grass and bluegrass) • The seed mix specified will be revised for the overburden stockpile, heap leach pads, and pit to remove deep-rooting tree species.
RM 8	Establishment of target PMLU vegetation and stable landform PMLU achieved	• No erosion classed as 'Moderate' or 'Severe' is present (per Erosion Classification Framework in PRCP Table 6), and erosion rates do not exceed erosion rates observed in the reference sites. • There is no evidence of salt accumulation on the surface of the overburden stockpile, heap leach pads, or pit. • Trees are, on average, at least 2 m tall (other than areas where tall tree species are removed from the seed mix). • A BioCondition Assessment is completed per the BioCondition Assessment Manual (V2, February 2015, Queensland Herbarium), or latest version. • Surface water quality, sediment quality and groundwater quality complies with relevant quality objectives stated in the Environmental Authority EPML00881213. • Land is geotechnically stable and suitable for relevant PMLU. • Certification from an appropriately qualified person that the landform has achieved a factor of safety greater than 1.5. • Weed presence is no greater than reference sites. • Vegetative groundcover, floristic composition and bare areas are statistically ($P<0.05$) comparable to those at reference sites. • Vegetation comprises of a of mix of native and pasture grasses; and open woodland native trees, sub storey and shrub species consistent with REs 9.11.3a, 9.11.3b, 9.11.25 and 9.11.26a, and RE 9.3.14a in riparian areas. • Areas of PMLU native ecosystem show evidence that fauna species identified pre-mining are present or habitat of these species is present such that the ecosystem will be sustained. Fauna species include but are not limited to: o Gouldian finch; o Buff-breasted button-quail; o Australian painted snipe; o White-throated needletail; Mertens' water monitor; o Northern quoll; and o Large-eared horsehsoe bat.
RM 9	Retained infrastructure handover (Raw Water Dam 1 and roads)	• Water quality of retained dams meets ANZECC guidelines for cattle grazing. • Landowner sign off.

1) Insert new rows below the table to record more Rehabilitation Area Milestones for the project
2) Ensure all Rehabiitation Milestones recorded in this table align with those included in the RA sheets in this form.
3) See the PRCP guideline before developing site-specific Rehabilitation Area Milestones

Milestone reference	Management milestone	Milestone criteria
MM1		
MM2		
MM3		
MM4		
MM5		
MM6		
MM7		
MM8		
MM9		
MM10		

1) Insert new rows below the table to record more Improvement Area Milestones for the project
2) Ensure all Management Milestones recorded in this table align with those included in the IA sheets in this form.
3) See the PRCP guideline before developing site-specific Improvement Area Milestones