

Template

Environmental Protection Act 1994

PRCP schedule template (Word)

This template can be used for completing a PRCP schedule for the submission of a progressive rehabilitation and closure plan (PRC plan).

1 General Instructions

- This form or ERS/2019/5103 must be used for completing a proposed PRCP schedule for the submission of a progressive rehabilitation and closure plan (PRC plan).
- See the PRCP schedule section of the PRC plan guideline (ESR/2019/4964) for further information requirements.

Rehabilitation area (RA) and improvement area (IA) table

- Each RA and IA table contains two parts (yellow and blue) for recording the time-based rehabilitation milestones.
- A default value of one (1) RA is represented by one RA table below (RA1).
 - To record additional RAs for your project, make a copy of the RA table below and update it to the relevant RA number (.e.g., RA2).
- A default value of one (1) IA is represented by one IA table below (IA1).
 - To record additional IAs for your project make a copy of the IA table below and update it to the relevant IA number (e.g., IA2).
 - Delete the IA table below if there is no IA for your project.
- Add a new column or row to each table as required for your information requirements.

RA milestones and IA milestones

- Two (2) separate tables below exist for recording the "Rehabilitation area milestones" and "Improvement area milestones".
 - Delete the Improvement area milestones table if it does not apply to your project.
 - Delete additional rows in either table 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.

2 Further Instructions when inputting Post-Mining Land Uses (PMLUs)

Headings under RA table

- Rehabilitation area - The rehabilitation area must align with the reference maps included in the rehabilitation planning part of the PRC plan and the spatial data submitted with the application. 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.
- First milestone reference to commence - The milestone number for the first milestone to commence must be specified. This will often be RM1 but may be a later milestone if RM1 (or later milestones) does not apply to the RA.
- Commencement of first milestone - The applicant must nominate a date for when the first milestone for the rehabilitation area will commence.
- PMLU - The PMLU must align with those identified in the rehabilitation planning part of the PRC plan including the proposed final site design and the spatial data submitted with the application.
- 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 become 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. All completion dates must be 10 December of the relevant year, as required in section 4.1 step 7 of the PRCP Guideline.
- 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 table with the detailed milestone criteria. The milestones must be achieved consecutively.

Headings under Rehabilitation Area Milestones table

- Rehabilitation milestone & Milestone criteria - The "rehabilitation milestone" is a short description of the rehabilitation activities. The "milestone criteria" must be written in a manner that delivers on SMART principles and demonstrate achievement of the milestone.

3 Further Instructions when inputting Non-Use Management Areas (NUMAs)

Headings under Improvement Area (IA) tables

- Improvement area - The improvement area must align with the reference maps included in the rehabilitation planning part of the PRC plan and the spatial data submitted with the application. This 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.
- First milestone reference to commence - The milestone number for the first milestone to commence must be specified. This will often be MM1 but may be a later milestone if MM1 (or later milestones) does not apply to the IA, or if earlier milestones were achieved prior to the commencement of the PRCP schedule.
- Commencement of first milestone - The applicant must nominate a date for when the first milestone for the improvement area will commence.
- NUMA - The NUMA must align with those identified in the rehabilitation planning part of the PRC plan including the proposed final site design and the spatial data submitted with the application.
- Date area is available - The PRCP schedule must identify when land within the improvement area becomes available for improvement. If the whole improvement area becomes available at once there should be only one date. If the improvement areas become 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 table with the detailed milestone criteria. The milestones must be achieved consecutively.

Headings under Improvement Area Milestones table

- Management milestone & Milestone criteria - The "management milestone" is a short description of the management activities. The "milestone criteria" must be able to demonstrate achievement of the milestone.

4 PART 1: Post mining land uses

4.1 (RA1) Rehabilitation area 1

Post-mining land uses (PMLU)										
Rehabilitation area				RA1						
Relevant activities				Infrastructure, Stockpile Areas, Village and Exploration Areas, access tracks & roads						
Total rehabilitation area size (ha)				121.4						
Commencement of first milestone: RM1				10-12-2037						
PMLU				Low Intensity Grazing						
Date area is available	10-12-2037	10-12-2043								
Cumulative area available (ha)	62.5	121.4								
Milestone Reference	Cumulative area achieved (ha)									
Milestone completed by	10-12-2038	10-12-2040	10-12-2041	10-12-2042	10-12-2044	10-12-2046	10-12-2047	10-12-2048	10-12-2052	10-12-2058
RM1	62.5				121.4					
RM2		62.5				121.4				
RM5			62.5				121.4			
RM6				62.5				121.4		
RM8									62.5	121.4

4.2 (RA2) Rehabilitation area 2

Post-mining land uses (PMLU)										
Rehabilitation area				RA2						
Relevant activities				Processing Plant and ROM Pad						
Total rehabilitation area size (ha)				3.3						
Commencement of first milestone: RM1				10-12-2037						
PMLU				Low Intensity Grazing						
Date area is available	10-12-2037									
Cumulative area available (ha)	3.3									
Milestone completed by	10-12-2038	10-12-2040	10-12-2041	10-12-2042	10-12-2052					
Milestone Reference	Cumulative area achieved (ha)									
RM1	3.3									
RM2		3.3								
RM5			3.3							
RM6				3.3						
RM8					3.3					

4.3 (RA3) Rehabilitation area 3

Post-mining land uses (PMLU)										
Rehabilitation area				RA3						
Relevant activities				Waste Rock Dumps						
Total rehabilitation area size (ha)				24.1						
Commencement of first milestone: RM3				10-12-2037						
PMLU				Grassland						
Date area is available	10-12-2037									
Cumulative area available (ha)	24.1									
Milestone completed by	10-12-2039	10-12-2041	10-12-2042	10-12-2043	10-12-2053					
Milestone Reference	Cumulative area achieved (ha)									
RM3	24.1									
RM4		24.1								
RM5			24.1							
RM6				24.1						
RM8					24.1					

4.4 (RA4) Rehabilitation area 4

Post-mining land uses (PMLU)										
Rehabilitation area				RA4						
Relevant activities				TSF and Heap Leach						
Total rehabilitation area size (ha)				73.6						
Commencement of first milestone: RM1				10-12-2037						
PMLU				Grassland						
Date area is available	10-12-2037									
Cumulative area available (ha)	73.6									
Milestone completed by	10-12-2038	10-12-2040	10-12-2042	10-12-2043	10-12-2044	10-12-2054				
Milestone Reference	Cumulative area achieved (ha)									
RM1	73.6									
RM3		73.6								
RM4			73.6							
RM5				73.6						
RM6					73.6					
RM8						73.6				

4.5 (RA5) Rehabilitation area 5

Post-mining land uses (PMLU)										
Rehabilitation area				RA5						
Relevant activities				Runoff Dam						
Total rehabilitation area size (ha)				5.4						
Commencement of first milestone: RM1				10-12-2037						
PMLU				Water Storage						
Date area is available	10-12-2037									
Cumulative area available (ha)	5.4									
Milestone completed by	10-12-2038	10-12-2040	10-12-2042	10-12-2052						
Milestone Reference	Cumulative area achieved (ha)									
RM1	5.4									
RM2		5.4								
RM7			5.4							
RM8				5.4						

4.6 Rehabilitation area milestones

See PRCP Table 74.

Milestone Reference	Rehabilitation Milestone	Approximate Timeframe for Completion	Milestone Criteria	Criteria Justification
RM1	Infrastructure Decommissioning and Removal	1 year	1.1 With the exception of any infrastructure to remain as part of the post-mining land use (PMLU) or to be retained under landholder agreement, the following are complete: (a) All services disconnected 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 and associated foundations removed. (e) All pipelines drained and removed. (f) All waste not authorised to be disposed of on-site under EA EPML00297613 removed. (g) All drillholes, bores, sediment ponds and sumps decommissioned. (h) All machinery and equipment, not required for rehabilitation works removed from site. (i) For dams: i. Where present, liners are removed; ii. All contaminated sediment has been removed; and iii. Earthworks are completed to decommission dam walls. 1.2 Below-ground infrastructure and services deeper than 0.5m in relation to the final landform surface may be retained provided: (a) All pipelines have been drained and capped or filled with inert material; and (b) All below-ground infrastructure to be retained is mapped; and (c) The intended PMLU is not compromised; and (d) There is no ongoing risk of environmental harm.	The criteria proposed for this milestone is consistent with the steps undertaken as part of the infrastructure decommissioning process.

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Milestone Reference	Rehabilitation Milestone	Approximate Timeframe for Completion	Milestone Criteria	Criteria Justification
			1.3 Confirm that for exploration bores, water monitoring bores, dewatering bores and bores with diameter up to 300 mm): (a) Boreholes grouted and/or plugged. (b) Boreholes capped 0.5 m below surface. 1.4 Decommission of exploration bores completed in accordance with 'Eligibility Criteria and Standard Conditions for Exploration and Mineral Development Projects'.	
RM2	Identification and remediation of contaminated land	2 year	2.1 Complete a preliminary site investigation (PSI), where required. 2.2 Where the PSI completed under criterion RM2.1 identifies contamination is present, or is likely to be present, and said contaminated material is likely to result in a risk to human health or cause environmental harm, a detailed site investigation (DSI) is required to be completed. 2.3 Where contaminated material is identified, all contaminated material is either: (a) Remediated. (b) Removed and disposed of at a licenced facility; or (c) Disposed of as per the Contaminated Land Investigation Document (CLID) and Site Management Plan (SMP). 2.4 The site suitability statement states the land is not contaminated land and is not unsuitable for the proposed PMLU. 2.5 Auditor certifies, as per Environmental Protection Act 1994 (EP Act) (Qld), that all contaminated materials have been remediated, or removed and disposed of and the land is suitable for the PMLU. 2.6 Land is removed from Environmental Management Register if applicable.	The criteria proposed for this milestone is consistent with the steps undertaken as part of the contamination investigation and remediation processes.
RM3	Landform Development and Reshaping/Reprofiling	2 year	All major earthworks (including reshaping, pushing/trimming) are completed in accordance with the design specification provided by an AQP. 4.1 No slope exceeds 15% gradient for WRDs (RA3). 4.2 Installation of erosion and sediment control systems to design and certified by an AQP.	This criterion is consistent with the methodology proposed in the PRCP.

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Milestone Reference	Rehabilitation Milestone	Approximate Timeframe for Completion	Milestone Criteria	Criteria Justification
RM4	Installation and certification of TSF cover System/ cap on WRD	2 year	4.1 Installation of cover system comprises: a) 1.0 m benign waste rock; and b) ≥ 0.15 m of growth media. 4.2 Cover system design and performance criteria based on level of environmental risk has been developed by an independent AQP. 4.3 The cover system has been installed as per design. 4.4 All PAF material is located at least 2.0 m below the final surface.	This criterion is consistent with the methodology proposed in the PRCP.
RM5	Surface Preparation	1 year	5.1 Assessment of growth media characteristics and the development of an amelioration and physical treatment plan is completed by an AQP. 5.2 Ameliorant and physical treatments such as fertiliser, lime, gypsum and/or organic matter are applied as identified in criteria RM5.1. 5.3 Topsoil or growth media placed at a depth ≥ 0.15 m. 5.4 Following amelioration as per RM5.1 and 5.2, representative soil testing of growth media confirms: (a) pH 5.6-8.5; (b) Colwell P >10 mg/kg; (c) Organic matter $\geq 1\%$; (d) EC (saturated extract) <1 dS/m; (e) ESP $<6\%$; and (f) Emerson Aggregate Test (EAT) ≥ 4. 5.5 If topsoil or growth media does not meet the requirements specified in RM5.4, an AQP must assess the results to determine whether the material is suitable for the PMLU or whether additional amelioration is required. If additional amelioration is required, it must be completed in accordance with the AQP's recommendations.	This criterion is consistent with the methodology proposed in the PRCP.
RM6	Revegetation	1 year	6.1 PMLU Light Grazing - seeding completed using with a selection of species and application rates described in Table 6-20 of the PRCP. 6.2 PMLU Grassland - seeding completed using with a selection of species and application rates described in Table 6-20 of the PRCP.	This criterion is consistent with the methodology proposed in the PRCP and the requirements of the LOD.

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Milestone Reference	Rehabilitation Milestone	Approximate Timeframe for Completion	Milestone Criteria	Criteria Justification
			6.3 Livestock are excluded from newly seeded areas via physical or virtual fencing.	
RM7	Water management in the final landform	2 years	7.1 All dams, which are to remain as part of the PMLU, comply with the following: (a) Safely accessible by humans and livestock; (b) All contaminated sediment has been removed.	Proposed criteria with the objective to demonstrate the landform has achieved a stable condition.
RM8	Achievement of PMLU to a stable condition	10 years	8.1 Species used in revegetation remain present and show evidence of natural recruitment. Evidence of flora recruitment from rehabilitation monitoring data. 8.2 Weed presence is <10% of total vegetative groundcover. 8.3 No evidence of erosion classified as 'moderate' or 'severe' as defined by PRCP Table 8-2 Erosion classification framework. 8.4 Certification by an AQP that the land has achieved stable condition. 8.5 Total groundcover ≥ 50%. 8.6 Surface and groundwater quality is comparable with pre-mining water quality and EA and ANZECC water quality guideline for livestock drinking water. Grazing PMLU (RA1 & RA2) 8.7 Species diversity of at least 5 (per hectare (averaged)): a) At least 3 palatable, perennial, and productive (3P) species. Grassland PMLU (RA3 & RA4) 8.8 Species diversity of at least 5 (per hectare (averaged)): a) 3 native groundcover species. Water Storage (RA5) 8.9 Must meet ANZECC 2000 livestock drinking water no adverse effects guidelines for beef cattle (electrical conductivity is ≤5,970µS/cm) during the wet season (November to April). 8.10 Safely accessible by humans and livestock.	Proposed criteria with the objective to demonstrate the landform has achieved a stable condition.

5 PART 2: Non-use management areas

5.1 (IA1) Improvement area 1

Non-use management area (NUMA)										
Improvement area			IA1							
Relevant activities			Open-cut pits							
Total size (ha)			22.2							
Commencement of first milestone: MM1			10-12-2037							
NUMA			NUMA							
Date area is available	10-12-2037									
Cumulative area available (ha)	22.2									
Milestone completed by	10-12-2042	10-12-2047								
Milestone Reference	Cumulative area achieved (ha)									
MM1	22.2									
MM2		22.2								

5.2 Improvement area milestones

Table 2 Improvement Area Milestones and Milestone Criteria

Milestone Reference	Rehabilitation Milestone	Approximate Timeframe for Completion	Milestone Criteria	Criteria Justification
MM1	Achievement of safety requirements	5 years	1.1 Safety bund setback distance located where determined by an AQP. 1.2 Bunding constructed in accordance with the Department of Industry and Resources (1997) Guideline safety bund walls around abandoned open pit mines or as recommended by AQP and confirmed to be geotechnically stable by an AQP. 1.3 Fencing erected, where required, to prevent access to the residual void, around the perimeter of the safety bund. 1.4 Safety signs erected at 100 m intervals along the fence clearly warning of a safety risk and prohibiting public access. Signs are to comply with Australian Standard AS 1319:1994 – Safety Signs for the Occupational Environment. 1.5 Geotechnical investigations of the high walls demonstrates geotechnical stability has been achieved. 1.6 All highwalls achieve a FoS >1.5 and certified by an AQP.	Proposed criteria with the objective to demonstrate the NUMA has achieved safety requirements.
MM2	Achievement of sufficient improvement	5 years	2.1 Residual voids must not overtop. 2.2 Voids retain flood immunity for a 0.1% AEP event. 2.3 Groundwater and void lake monitoring / modelling confirms that the voids act as a sink. 2.4 No NUMA will cause environmental harm outside of the tenure boundaries.	Proposed criteria with the objective to demonstrate the NUMA has achieved sufficient improvement.

6 PART 3: Maps

The following two maps must be included in the application and will form part of the approved PRCP Schedule (see PRCP Guideline (ESR/2019/4964) for examples). Attach the maps to the application as high-resolution jpeg files.

7 Final site design

A final site design has the purpose of showing the community what the site will look like post surrender, and must depict:

- All Post Mining Land Uses (PMLU) and Non-Use Management Areas (NUMA) for all land within the relevant resource tenures, including undisturbed land
- Maximum disturbance footprint
- Resource tenure boundaries
- Floodplain extent (if relevant).

8 Reference map(s)

Reference map(s) have the purpose of showing the boundary of each rehabilitation area (for PMLUs) and improvement area (for NUMAs). Reference maps may contain more than one rehabilitation area/improvement area and must be to a scale that allows for easy interpretation. Only areas of disturbance need to be included on these reference maps.