

Notice

Environmental Protection Act 1994

Information request

This information request is issued by the administering authority under section 140 of the Environmental Protection Act 1994 to request further information needed to assess an application for a proposed PRC plan.

To: MGT Minerals Pty Ltd
First Floor, Suite 6 119A John Street
Cabramatta NSW 2166

C/- Ardent Group Pty Ltd
PO Box 320
RED HILL QLD 4059
Email: Richard.davis@ardent-group.com.au

Attention: Richard Davis

Our reference: EPVL00864413; 101/0008747

Further information is required to assess an application for a PRCP schedule

1. Application details

The application for a proposed PRC plan was received by the administering authority on 2 March 2023.

The application reference number is: EPVL00864413

Land description: Mining lease (ML) 4349 and ML 20547

2. Information request

The administering authority has considered the abovementioned application and is writing to inform you that further information is required to assess the application (an information request).

The information requested is specified in the Attachment 1 to the notice.

3. Actions

The abovementioned application will lapse unless you respond by giving the administering authority -

- (a) all of the information requested; or
- (b) part of the information requested together with a written notice asking the authority to proceed with the assessment of the application; or
- (c) a written notice –

- i. stating that you do not intend to supply any of the information requested; and
- ii. asking the administering authority to proceed with the assessment of the application.

Should the information request require an EIS process or applicant to submit a progressive rehabilitation and closure (PRC) plan then it must be completed and submitted.

A response to the information requested must be provided by **16 October 2023** (the information response period). If you wish to extend the information response period, a request to extend the period must be made at least 10 business days before the last day of the information response period.

The response to this information request or a request to extend the information response period can be submitted to the administering authority by email to ESCairns@des.qld.gov.au.

If the information provided in response to this information request is still not adequate for the administering authority to make a decision, your application may be refused as a result of section 176 of the *Environmental Protection Act 1994*, where the administering authority must have regard to any response given for an information request.

4. Human rights

A human rights assessment was carried out in relation to this decision and it was determined that the decision is compatible with human rights.

If you require more information, please contact the department on the telephone number listed below.



Signature

13/04/2023

Date

Chris Wake
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Minerals Business Centre
PO Box 7230, Cairns QLD 4870
Phone: (07) 4222 5352
Email: ESCairns@des.qld.gov.au

Attachments

Attachment 1: Additional information requested for proposed PRC plan.

Appendix 1: Additional information required for proposed PRC Plan

Item	Relevant section (proposed PRC plan and/or PRCP Guideline)	Matter	Information Request
Rehabilitation Planning Part			
1	Flooding (section 3.1.5, 8.2 and figure 12 of the PRC Plan)	The Rehabilitation Planning Part and appendices do not provide information regarding erosion protection measures to ensure the TSF is not affected by flood flow either at the toe of the embankment or at the spillway. This information is required to demonstrate the remaining structures, particularly the embankment adjacent to the TSF and the reshaped old/existing TSF will remain stable during a range of flood events including probable maximum flood.	Provide a revised PRC Plan that includes information required under the heading <i>Flooding</i> in section 3.6.1 of the PRCP Guideline including maximum velocity and depth for a range of flood levels including PMF. Provide information regarding how landforms will be rehabilitated to achieve a stable condition including during PMF flood events.
2	Hydrogeology (section 3.1.6 and 8.1 of the PRC Plan)	The water quality data provided in the Rehabilitation Planning Part relates to dissolved data. However, stock water limits which are based off total fraction have been used to demonstrate the onsite water quality is compatible with a PMLU of grazing. Table 15 does not provide the Hydrostratigraphic Unit for bores SB1-SB5. The rehabilitation planning part states that ongoing water quality monitoring will occur in accordance with the conditions of the EA. Additional information is required to justify if the current EA monitoring	Update the PRC Plan to include the hydrographic units for all bores and if applicable, include measurable criteria in the PRCP Schedule relating to ongoing surface and groundwater monitoring including: - Water quality - location of monitoring points - monitoring frequency.

		requirements which are based on an operational mine are suitable for ongoing monitoring to determine rehabilitation success, including water quality limits, location and monitoring frequency. Particularly, in the area downstream of the old TSF.	Include total and dissolved water quality data.
3	Landform Design (section 8.6, figure 30 and appendix 4 of the PRC Plan)	The Rehabilitation Planning Part provides conflicting information regarding the design of the toe of the tailings storage facility (TSF). Figure 30 and Appendix 4 show the external embankment and the lower embankment forming a single pond. However, Figure 10 and the Environmental Authority (EA) EPVL00864413 show a different design for this area that includes a new embankment and two ponds. The Rehabilitation Planning Part does not describe how the final landform in Figure 30 and Appendix 4 relates to the approved landform in the EA. Figure 5 of Appendix 4 Shows the proposed final landform for the Summerhill pit that includes batters of 48 – 57 degrees with small benches to achieve geotechnical stability. It is not clear that this landform will be able to sustain the nominated PMLU of grazing. Similarly, the external embankment slope of the TSF is proposed 1V to 2.5H and will be rock mulched. It is unclear how this part of the landform will be suitable for the proposed PMLU of grazing.	Provide an updated PRC Plan that reflects the TSF landform authorised by the EA. Alternatively, provide an updated PRC Plan that describes how the final landform is the same or substantially similar to the landform authorised by the EA. Provide an updated PRC Plan that includes further information demonstrating how the proposed landforms will achieve a stable condition including supporting the PMLU of grazing or justifies how the landform remains suitable for the broader grazing land use.
4	Water Management (section 8.8 and appendix 6, section 13.7.2 of the PRC Plan)	Section 13.7.2 of Appendix 6 indicates that the TSF will cause seepage to the groundwater both during operation and once tailings have been consolidated. Condition E7 of the EA states contaminants must not be released to groundwater. Further, condition G28 of the EA requires a liner to prevent seepage. The TSF design shown in Appendix 4 may result in water ponding between the toe of the tailings embankment and the outer embankment. Should water pond in this location it appears there is the potential to	Provide an updated Rehabilitation Planning Part that includes detailed information regarding the TSF demonstrating the structure will be/is lined in accordance with the requirements of the EA and the landform will achieve a stable condition including being non-polluting.

		cause inundation of the tailings above the liner. The inundation of tailings could result in the leaching of contaminants from the tailings into the water ponded between the embankments. Consequently, it is possible this water will not be suitable for stock consumption. Section 7.3 states that drainage diversions will be permanently established. The Rehabilitation Planning Part does not provide information regarding the location, function or design of the proposed drainage diversions. Diversions will be necessary to prevent surface water flow impacting rehabilitated areas (such as the TSF and Summerhill Pit) so a stable condition will be achieved. It is noted that a milestone criterion of "drainage meets design criteria" has been included the schedule but the design criteria and the basis for them has not been provided.	Provide an updated Rehabilitation Planning Part that clearly indicates whether the TSF landform will retain water and how the landform will be rehabilitated to achieve a stable condition. Provide an updated Rehabilitation Planning Part that includes information regarding surface water flow on the rehabilitated site including the location of diversions and drainage infrastructure that will remain in the final landform. Provide milestone criteria that reflect the drainage design criteria to be implemented to ensure the landforms achieve a stable condition.
5	Cover system (section 8.7 of the PRC Plan)	The Rehabilitation Planning Part indicates that some waste rock material will remain within the WRD footprint area and a cover system has been proposed. The cover system proposes a minimum of 0.15m of topsoil over compacted rock. Similarly, the proposed cover system for the TSF includes 0.15m of topsoil over 0.4m capillary break layer. In both cases, no subsoil is proposed to be applied between the rock and the topsoil. Consequently, limited vegetation cover is likely on both landforms without deeper growth media. This is likely to hinder the establishment, and sustaining, of the proposed grazing PMLU. It is noted that clay subsoil on site is sodic and is proposed to be used for the compacted clay layer of the TSF cover system. Criteria including the assessment of subsoil and the application of ameliorants according to	Provide an updated Rehabilitation Planning Part that includes: • Further information demonstrating the proposed minimum depth of topsoil is sufficient to achieve a stable condition and sustain the PMLU. • Further information regarding the management, treatment and specification for each type of cover material to ensure the landform will achieve a stable condition.

		AQP recommendations are likely to be required to ensure the material is suitable. A specific compaction rate is not provided in the Rehabilitation Planning Part or in the PRCP schedule. Further, a nominal minimum and maximum size fraction has not been provided for the capillary break layer. Without sufficient sized rock to ensure capillary break is achieved, it is possible contaminants and salts may rise through the cover system and impact vegetation sustainability.	
6	Revegetation (section 8.9 f the PRC Plan)	This section provides information regarding the proposed species for revegetation. However, it is unclear how the proposed species will be appropriate for the existing TSF and reflect the PMLU for the rehabilitation area. Further it is unclear how the criteria consider the potential for inundation and ponding in the existing TSF. Section 8.9.1 indicates that analogue sites are recommended for the assessment of <i>the success of rehabilitation activities</i>. However, there is no information describing the location and suitability of these analogue sites. If analogue sites are to be used as a measure for rehabilitation success in the milestone criteria of the PRCP Schedule detailed information is required in the rehabilitation planning part regarding the suitability of these locations.	Provide an updated PRC Plan that includes: • further information regarding how the existing TSF will be rehabilitated, • how the species proposed will sustain the PMLU regardless of the level of inundation, and • criteria for the existing TSF that consider the potential for inundation and include relevant species. If analogue sites are proposed to be used as a measure for rehabilitation success provide an update PRC Plan which identify the specific sites and include location data, description and justification of the suitability of the site.
7	Built infrastructure (Section 8.13 of the PRC plan)	Section 8.13 states that third party infrastructure exists on the site (powerline and communication tower). Section 3.2 of the PRCP Guideline states that it is not the intention of the definition of PMLU to include third-	Provide an updated PRC Plan that clarifies third party infrastructure at the Project and

		party activities or assets that continue to exist once mining activities have ceased, such as third party pipeline easements, power easements or overlapping tenures for other EAs.	remove these from the rehabilitation area if applicable.
8	Risk Assessment (section 9 of the PRC plan)	The risk assessment discusses the consequence of the PMLU not being achieved but does not discuss the consequences of the rehabilitation milestones not being achieved particularly due to the short timeframes within the PRCP schedule. For example, what are the consequences of a weather event impacting the ability to undertake the milestone within the specified timeframe. The PRCP guideline states that the purpose of the risk assessment is analysis of the potential consequences, cascade and cumulative effects. The objective is to create a comprehensive list of risks based on events, which may impede, enhance, delay or accelerate the rehabilitation of land to a stable condition. The Schedule 8A part 3 of the <i>Environmental Protection Regulation 2019</i> states that the time frame mentioned in section 126D (4) of the EP Act for achieving each rehabilitation milestone has regard to the risks identified in the PRC plan.	Provide an updated risk assessment in the PRC Plan that includes an analysis of risks that may impact the ability to achieve the rehabilitation milestones within the specified timeframes.
PRCP Schedule			
9	Criteria generally	To provide ease of interpretation it is preferable to have unique identifiers for each criterion. Many criteria are not SMART, such as: Criteria that refer to analogue sites without providing the location and condition of the analogue sites	Provide an updated PRCP Schedule that includes: - individual identifier for each criterion in the milestone to allow ease of reference. - Updated criteria that are SMART.

		Erosion classification criteria in RM7 where there is no definition of severe or extreme. Where detail is provided in the rehabilitation planning part that is key to achieving a stable condition (e.g. seed mix and rate) include the detail either in the criteria or as an attachment to the milestone criteria. It is recommended the reference milestones identified in the PRCP guideline are used instead, particularly achieving surface requirements and the inclusion of a milestone relating to remediation of contaminated land.	- Information provided in the Rehabilitation Planning Part that is key to achieving a stable condition. - Criteria that reflect the land achieving a stable condition and supporting the PMLU without referring to analogue sites (e.g. 80% groundcover). - Rehabilitation Milestones that reflect the reference milestones included in the PRCP Guideline.
10	RM1	This milestone should include criteria relating to the removal of any pipelines associated with the mining activity.	Provide an updated PRCP Schedule that includes the removal of pipelines associated with the mining activity.
11	RM2	This milestone does not include criteria regarding the implementation of a cover system for the WRD footprint or the TSF. The implementation of a cover system that achieves the objectives stated in the Rehabilitation Planning Part is necessary to achieve a stable condition. Consider including the installation of monitoring in the cover system particularly on the TSF to demonstrate the cover system is achieving the objectives stated in the Rehabilitation Planning Part.	Provide an updated PRCP Schedule that includes: - Installation of a cover system and objectives of the cover - A minimum compaction rate for the reduced permeability layer for the TSF. - AQP certification that the cover system has been constructed according to design.
12	RM3	The criterion regarding the application of ameliorants is not specific or measurable. It is recommended criteria be added that reflect the testing of	Provide an updated PRCP Schedule that includes criteria that ensures the topsoil is

		topsoil and spoil as proposed in section 8.4.1 and that recommended ameliorant type and application rate required to improve vegetation establishment be applied.	suitable as a growth medium to support achieving a stable condition.
13	RM4	The Rehabilitation Planning Part provides a list of species and seeding rates proposed to be used in revegetation but the list and rates are not included in the criteria. Information regarding where stock exclusion fencing will be installed and when it will be removed must be detailed in the rehabilitation planning part and reflected in specific criteria.	Include criteria that: • reflect the species and seeding rates proposed in the Rehabilitation Planning Part. • detail the location and timing of the installation and removal of stock exclusion fencing to achieve a stable condition.
14	RM5 and RM6	The first criterion states 95% of landform achieves design outcomes without referring to specific designs or how 95% will be measured. The necessary information to support the criterion is not provided in the Rehabilitation Planning Part. It is recommended that these milestones be combined and reference milestones identified in the PRCP guideline are used instead.	Provide an updated PRC Plan that includes landform criteria that relate to specific designs, meet SMART principles and are supported by information in the Rehabilitation Planning Part.
15	RM7	Criteria proposed can be improved/expanded to address additional aspects required to demonstrate a stable condition has been achieved. For example: • specified pasture species that are palatable, perennial and productive to be established. • specified strike rates and establishment of vegetation. • indicators of natural recruitment occurring. • maintaining the specified species mix for the PMLU.	Provide an updated PRCP Schedule that includes revised criteria that meet SMART principles and demonstrate the land has achieved a stable condition.

		• concentration of weed species. • definition of erosion rates and maximum depths of rills and gullies. • slopes have been certified as being geotechnically stable with a minimum specified Factor of Safety. • absence of bare topsoil or subsoil. • parameters and values for surface and ground water quality that demonstrate the water is non-polluting (for water discharging to the environment) and suitable for the PMLU (for stock watering). • carrying capacity for grazing or land suitability criteria. • indicators used to demonstrate the post-mine land suitability classification has been achieved. • performance criteria demonstrating the cover system continues to achieve the design objectives. • the absence of ponding on the TSF surface. • the absence of seepage from the TSF. • diversion drains are performing design requirements and are stable.	
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