

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: Graymont (NSW) Pty Ltd
Level 16, 111 Pacific Highway
NORTH SYDNEY NSW 2060

ATTN: Donald Cheong

Our reference: EPML00352613

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 18 March 2022.

The application reference number is: EPML00352613

Land description: ML50111

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 Attachment 1 to this 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.

A response to the information requested must be provided by 7 November 2022 (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 Giles Bezzina on the telephone number listed below.



Signature

03/05/2022

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 – Graymont (NSW) Pty Ltd – Murgon Limestone Mine

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Item	Relevant section (Proposed PRC plan and/or PRCP Guideline)	Matter	Information Request
Rehabilitation Planning Part			
1.	Proposed PRC Plan Section 3.5.2 Flooding	Preliminary flood modelling has identified that some mining domains will be inundated under 1% AEP and PMF events. However, information detailing how flood flow may interact with the final landform has not been included. The department requires an understanding of flood depth and velocity across the final landform and how this may influence the achievement and maintenance of a safe, stable and sustainable PMLU.	Please demonstrate how the final landform will achieve and maintain a stable condition under 1% AEP, PMF and dam failure flooding events. This includes (but may not be limited to) further flood modelling to investigate the effect that flood depth and velocity may have on the final landform.
2.	Proposed PRC Plan Section 3.5.2 Residual Void – Abandonment Bund	Section 3.5.2 discusses the installation of an abandonment bund around the residual void which will provide some flood protection. The abandonment bund is further discussed in Appendix H, Rocktest Consulting Report, and a consideration of potential risks are presented. Potential mitigation strategies and monitoring and maintenance objectives are not provided. It is noted that Appendix H does not list	Please provide information to demonstrate the abandonment bund will achieve a safe and stable condition. For example, engineering design by an appropriately qualified person, consideration of risks, and

		flood protection as one of the intended design considerations. Point 1 above references potential effects of flood flows to final landforms – the planning part and associated appendices do not consider how flooding may impact the long-term stability of the bund. Appendix H details that if the abandonment bund strategy is adopted, the characteristics and specifications of the bunds will be considered before end of mine life. This approach does not appropriately demonstrate that the bund will achieve a stable condition, nor does it demonstrate how the bund will contribute to the void achieving and maintaining a safe, stable and sustainable PMLU. The department also notes that the crest on the southwestern wall of the void is near the mining lease boundary, which is bordered by Barker Creek – this may impact the ability to construct a bund with appropriate setback distances without encroaching on the adjacent watercourse.	associated risk mitigation, monitoring and maintenance strategies. Furthermore, consider the limitations imposed by the mining lease boundary and include mining lease boundaries in landform design cross sections.
3.	Proposed PRC Plan Section 3.2 Community Consultation	While a community consultation register table has been provided, any details of community consultation has not been included in the register.	Please carry out community consultation as per section 3.5 of the PRCP Guideline (ESR/2019/4964) and update the Rehabilitation planning part to reflect the outcomes of the consultation process.
4.	Proposed PRC Plan Sections 3.1.7 and 3.2.2 Land stability	The majority of the mining lease is described as having a moderate to severe water erosion risk. The revegetation coverage of 50% and biomass of 1000 kg/ha is identified as the minimum ground cover in the nominated milestone criteria with justification from reference material.	Please provide further information (e.g. landform evolution modelling - LEM) to demonstrate that the land will achieve a stable condition with the

		However, the milestone completion criteria have been selected based on references that are general in nature rather than for the prevailing soil type in the PMLU areas. As such, the values used to support the selection of the criteria do not allow a determination to be made as to whether the desired erosion rate of the PMLU will be achieved.	proposed minimum level of groundcover. Should LEM determine that annual erosion rates that reflect a stable condition cannot be achieved, provide revised landform and vegetation criteria that reflect a stable condition.
5.	Proposed PRC Plan Section 3.5.4 Waste characterisation	As previously mentioned, current flood modelling identifies that the void will be inundated under various flooding scenarios. The waste characterisation analysis provided in section 3.5.4 of the rehabilitation planning part does not provide a description of the potential for contaminant transport in the event that the void is impacted by flooding. Further, it is noted that the void has a PMLU of stock use and insufficient characterisation information is provided	Please provide further analytical results to demonstrate the potential for contaminant release to the environment in the event of void inundation due to flooding and demonstrate the suitability of water in the void for stock use (the intended PMLU).
6.	Proposed PRC Plan Section 3.6 Risk assessment - groundwater	The risk assessment indicates that the groundwater monitoring program will be restored to detect potential contamination capable of causing environmental harm. However, the risk assessment does not detail what actions will be undertaken to mitigate that impact, should it be detected.	Please update the risk assessment to include strategies to mitigate the impacts of groundwater contamination should it be detected.
7.	Proposed PRC Plan Section 3.6 Risk assessment - flooding	The risk assessment has identified that further flood modelling is necessary to determine whether additional measures will be required to ensure landform stability long term. As detailed in Point 1, additional modelling is required to demonstrate how flooding will impact the final landform. If modelling indicates flooding may cause the landform to not achieve a stable condition, mitigation, monitoring and maintenance	Please provide a detailed consideration of updated risks and appropriate risk mitigation strategies following the completion of further flood modelling detailed in Point 1.

		measures must be incorporated throughout the rehabilitation planning part.	
8.	Proposed PRC Plan Section 3.6 Risk Assessment General	Various potential risk factors have not been considered in the risk assessment. The following examples do not constitute an exhaustive list, but have been provided for reference: • A range of potential risks regarding weather events (storms, droughts, fire), • Animal damage to revegetation (insects, wallabies, cattle etc), • A consideration of how various events may impact the completion time of rehabilitation stages (including potential compliance action as a consequence) • A consideration of risks associated with potential issues arising yet remaining unidentified between monitoring events, with specific links to the monitoring program to justify the selection of specific monitoring frequencies.	Please update the risk assessment to include a broader consideration of potential risk factors and their associated mitigation measures to ensure the safe, stable and sustainable PMLU is achieved. Please refer to section 3.7 of the PRCP guideline for further information.
9.	Proposed PRC Plan Section 3.7 Monitoring and maintenance – Reference sites	Reference sites are mentioned throughout the rehabilitation planning part and PRCP schedule, however, they are not explicitly identified in the rehabilitation planning part. Reference sites must be selected and justified for their suitability as an analogue to PMLU outcomes.	Please provide further information regarding the locations and justifications for using specific reference sites. Include details on the information that is currently held and the relevant characteristics being measured at each reference site.
10.	Proposed PRC Plan Section 3.7	Analytical suites (Suite A and Suite B) identified for monitoring against stock drinking water limits (ANZECC 2000) do not include an assessment of fluoride concentration. Additionally, the upper limit for electrical conductivity (EC) of 5900 uS/cm is outside a sustainable	Please update water quality targets to reflect all parameters established for sustainable stock water use as per ANZECC 2000.

	Monitoring and maintenance – Water Quality	long-term EC according to table 9.3.3 of the ANZECC (2000) recommended stock water use limits.	
11.	Proposed PRC Plan Section 3.7 Monitoring and maintenance – Contingency Measures	Table 34 identifies that monitoring activities will be conducted annually in some circumstances. Maintenance and contingency measures do not meet SMART principles – particularly they are not specific, nor do they provide a timeline within which intervention strategies will be implemented. As such, the monitoring and maintenance program does not appear to appropriately support the achievement of a safe, stable and sustainable PMLU.	Please review section 3.8 of the PRCP guideline and provide a monitoring and maintenance program that identifies and describes the monitoring systems that will be carried out to demonstrate a milestone and milestone criteria have been achieved. The program should intrinsically link to the risk assessment and mitigation strategies and ultimately inform the schedule and milestone criteria.
PRCP Schedule			
12.	PRCP Schedule General	Throughout the schedule, rehabilitation milestones have been listed as not applicable where they do not apply to a rehabilitation area. For example, RA1 relies on RM6 and RM7 to achieve a stable outcome according to the PRCP schedule submitted with the application, with the remaining RM's listed as NA.	Please update rehabilitation milestone (RM) references such that only those that are applicable to the rehabilitation area in question are referenced. For example, RA1 should only list rows for RM6 and RM7, with all other rows removed.
13.	PRCP Schedule General	Milestone criteria are listed as bullet points in the PRCP schedule. While not a requirement of the guideline, criteria referencing is streamlined when listed in an easily referenced format.	Please number milestone criteria in the following manner:

			RM1 Criteria: 1. a) example criteria 1. b) example criteria 1. c) example criteria i) example sub-criteria RM2 Criteria: 2. a) example criteria
14.	PRCP Schedule General	Grammatical errors throughout milestone criteria. For example: • RM2, point 2 - a minor typographical error in “complete” rather than “completed”. • Point 2, subpoint 5 and point 3 of the milestone criteria for RM3 appear to be duplicates. • RM4, point 4 – minor grammatical error <i>“Available, scalps have been applied to 150 mm as a subsoil for RA3”</i> • RM5, point 3 – minor typographical error <i>“the seedbed will be prepared will using harrows or equivalent”</i> Note that these examples are provided for exemplification purposes and do not constitute an exhaustive list.	Please review milestone criteria throughout the PRCP schedule to ensure grammatical accuracy.
15.	PRCP Schedule General	Milestone criteria should refer to an outcome, with timelines demonstrated in the rehabilitation scheduling. As such, individual milestones should not carry a timeframe themselves. For example, milestone criteria should not contain wording to the effect of “within 24 months”.	Please update milestone criteria to reflect the rehabilitation outcome and allow the scheduling itself to demonstrate timelines.

		However, timelines leading to the achievement of an outcome should be addressed in the monitoring and maintenance section of the PRC planning part with appropriate links to mitigation strategies addressed in the risk assessment section.	
16.	PRCP Schedule RM2	Milestone criteria bullet point 2 for RM2 specifies that “if required, remediation of contaminated land is carried out and validated sampling has been complete”. This point infers that the requirement to carry out remediation and validated sampling would be identified in the Site Investigation Report, however it is not explicitly stated, resulting in ambiguity.	Please ensure that where a milestone criteria requirement is conditional upon the results of a preceding step, the milestone criteria explicitly states that requirement.
17.	PRCP Schedule RM3	The milestone criteria for RM3 require inclusion of at least the following additional criteria: • A milestone criterion for the confirmation that geotechnical stability has been achieved as assessed by an AQP has not been included. • Safety signage installation per unit distance of exclusion fencing has not been included.	Please include a criterion specific to landform development that will confirm the achievement of geotechnical stability. Please include the installation rate of safety signage per unit distance of exclusion fencing and justify the use of that rate in the PRC planning part.
18.	PRCP Schedule RM6	RM6 describes the milestone criteria typically identified as “Achievement of surface requirements” rather than rehabilitation monitoring and maintenance. As discussed above in points 9-13 monitoring and maintenance in conjunction with appropriately identified and justified risk mitigation protocols described in the PRC planning part should demonstrate how the achievement of milestone criteria will be ensured ultimately resulting in the safe, stable and sustainable achievement of the PMLU.	Please consider naming rehabilitation milestones to accurately reflect the intent of the milestone criteria.
19.	PRCP Schedule	Some criteria can be condensed and improved to follow SMART principles and more accurately reflect the PMLU. Furthermore, some	Review milestone criteria and provide

	Milestone criteria	criteria within RM6 may be more appropriate as separate rehabilitation milestones. Additionally, phrasing such as “as soon as practical” and “dominated by” are ambiguous. The following points, while not constituting an exhaustive list, have been noted to exemplify and inform: • RM5, Criteria: ○ The revegetation milestones do not include reference to a target biomass or percentage cover comparable to reference analogue sites. • RM6, Criteria Point 2: ○ No deliverables have been identified as part of the rehabilitation monitoring program ○ Monitoring programs must be carried out by a suitably qualified individual • RM6, Criteria Point 3: ○ The criterion uses non-specific wording rather than addressing a specific outcome with regards to declared pest species. The following example is more appropriate, “Annual rehabilitation monitoring carried out by an AQP identifies that X% cover of weeds and declared pest species does not exceed that measured at equivalent analogue site.” ○ As a note, this criterion appears to address the same objective as point 9.	a revised PRCP schedule that ensures criteria meet SMART principles.
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20.	PRCP Schedule RM7	SMART criteria must be identified to support the achievement of post-mining land use to a stable condition. Specifically, the following areas should be considered as part of RM7: • An appropriate landform safety factor • An appropriate erosion rate/s • Final groundcover achievement • Specific surface water parameters • Any groundwater requirements from the area • Certification by an AQP as to pests and weed species • A specific final cattle grazing rate for areas with a pasture grazing PMLU A final set of soil parameters addressing pH, conductivity, macro and micronutrients and heavy metals	Please include additional criteria for the achievement of the final post-mining land use with consideration of SMART principles. For example, • Maximum erosion rate of X t/ha/yr • Final groundcover >X% comparable to reference analogue sites • Cattle able to be grazed at a rate of 1 beast per X hectares Upon inclusion of additional milestone criteria, please make, and justify, appropriate adjustments to schedule timelines where necessary.
21.	PRCP Schedule – Rehabilitation Areas RA3, RA4, RA8, RA9, RA10	The dates by which milestones must be completed must allow for sufficient time to have elapsed. This is necessary to complete the activities associated with each milestone and also to ensure achievement of each milestone criterion can be demonstrated. For a number of RAs the time periods allocated to complete achievement of all milestones necessary for the progressive rehabilitation of an RA may be insufficient. Time periods should also take into account time required for interventions to made should the monitoring program detect that rehabilitation objectives are not on track	Please review and update rehabilitation timelines to ensure that sufficient time is allocated for each Rehabilitation Milestone to be achieved.

		to achieve the milestone. If a milestone completion timeframe is not met, the site will be in non-compliance with the PRCP schedule.	
22.	RA6	Section 3.5.2 of the PRC planning part refers to the construction of an abandonment bund that may reduce the risk of inundation, however, a rehabilitation milestone has not been included in the PRCP schedule.	Please update the PRCP schedule to include necessary rehabilitation milestone/s and associated milestone criteria for the construction of the abandonment bund that facilitate the safe, stable and sustainable achievement of the PMLU.
23.	RA10	Only 0.8 ha progresses through the rehabilitation milestones prior to the entire RA reaching the final PMLU. There is limited justification in the PRC planning part for the remaining 0.81 ha to proceed directly to the final rehabilitation milestone.	Please update the PRCP schedule to include all land within a rehabilitation area to progress through the appropriate milestones or provide adequate justification in the PRC planning part as to why some of the landform only requires the final milestone to achieve a stable condition.