

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 PRCP schedule.

To: BHP Billiton Mitsui Coal Pty Ltd
Level 14, 480 Queen Street
BRISBANE CITY QLD 4000

ATTN: Trudy Mazucco <trudy.mazucco@bhp.com>

Our reference: EPPR00668513

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

1. Application details

The application for a PRCP schedule was received by the administering authority on 25 February 2021.

Environmental authority: EPPR00668513

Land description: ML4752, ML1790, ML70443, ML70495

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 **15 November 2021** (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.

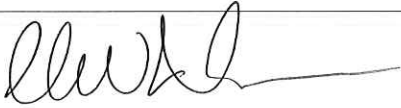
The response to this information request or a request to extend the information response period can be submitted to the administering authority by email to CRMining@des.qld.gov.au.

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. Review and appeal rights

You may apply to the administering authority for a review of this decision within 10 business days after receiving this notice. Information about your review rights is attached to this notice or search 'DES Internal review and appeals' at business.qld.gov.au. This information is guidance only and you may have other legal rights and obligations.

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



Signature

12/05/2021

Date

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

Enquiries:
Business Centre (Coal)
PO Box 3028, Emerald QLD 4720
Phone: (07) 4987 9320
Email: CRMining@des.qld.gov.au

Privacy statement

Pursuant to section 540 of the EP Act, the Department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the public who are able take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the Department to withhold documents or information required to be kept on the public register. For more information on the Department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

Attachments

Attachment 1: Information requested

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Item	Section (proposed PRCP)	Matter	Information Request
Rehabilitation Planning Part			
1	Available for rehabilitation Section 1.4 and the PRCP schedule	Section 1.4 notes the following with regards to the availability for progressive rehabilitation for the Box-cut pit: <i>'Available for rehabilitation once all box-cut and underground exploration mining activities are complete, future plans for the site determined and approvals sort [sic].'</i> This statement, and subsequently the proposed timeframes for the achievement of the relevant milestones, is inconsistent with the definition of 'available for rehabilitation' in the <i>Environmental Protection Act 1994</i> and does not meet the requirements of section 126D(5) of the Act.	To support the proposed timeframes for the commencement of rehabilitation as detailed in the PRCP schedule and section 1.4 of the PRC plan, the requirements outlined in section 4.1, Step 3 of the PRCP Guideline (p. 40) must be addressed and detailed in the PRC plan.
2	Existing Rehabilitation Section 1.4.3 of the PRC plan	A total of 618 exploration drilling boreholes are proposed to have been rehabilitated at Wards Well to date. Details of any future rehabilitation monitoring or required remediation/maintenance is not evident.	Provide further information regarding the existing rehabilitation at Wards Well, including: i) Any monitoring results obtained to date; and ii) Details of any additional monitoring or maintenance required to achieve the rehabilitation milestones and final land outcome.
3	Nominated PMLUs Section 3.1 of the PRC plan	Section 3.1 refers to 'the LSA Framework for Open-Cut Coal Mine Rehabilitation 2018 (A rule-set for land suitability assessment of sustainable beef cattle grazing on land rehabilitated after open-cut coal mining in the Bowen Basin Queensland)'. This document has not been provided with the PRCP.	Provide the complete LSA Framework for Open-Cut Coal Mine Rehabilitation 2018 document as an appendix to the PRC plan, and reference appropriately. Where this is not possible, provide sub-sections as context to support any exclusions or category selections in order for the administering authority to have a clear

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		The land suitability ruleset, provided in Table 18, is not a complete description of the limitations included in the rule-set. Key parameters such as topography/slope/microrelief have not been included in Table 18. It is expected that all limitations from the LSA framework are considered. Where limitations are excluded and sub-categories selected for use this must be justified, and be consistent with the proposed milestone criteria of the PRCP schedule. The appropriate class boundaries for the specified limitation in the LSA framework for Open-Cut Mine Rehabilitation 2018 must be included within the milestone criteria of the PRC plan, to ensure achievement of PMLU of cattle grazing as per the requirements of the completion criteria of the Wards Well EA (Table 10 – Rehabilitation Criteria).	understanding of the site's characteristics, and how this ruleset sub-section was determined and is justified. Provide a detailed justification for the limitations and subsets selected for use, and their appropriateness for the site.
4	Soil and Capping Material Section 6.1.3 of the PRC plan and Appendix 7: Soil Survey	As shown in Figure 3 of the Appendix 7, no sampling locations or soil classification for the bulk sample area has been conducted. Subsequently, it is unclear of the source of the proposed Vertosol soil type shown for the bulk sampling area in Figure 11 (pg. 24) of the PRC plan.	Provide a rational for extending the soil classification of Vertosol to the bulk sample area as shown in Figure 11 of the PRC plan.
5	Waste Characterisation Section 6.1.4 of the PRC plan Appendix 9: Geochemical Characterisation	a) Milestone Criteria A series of mineral waste management strategies are provided in Table 22 (pg. 67) of the PRC plan. These management strategies are not represented within the milestone criteria for RM 2 and RM 3. The achievement of the management strategies underpins the environmental risk posed by the mineral waste. As noted in Appendix 9, coaly and carbonaceous material has a low potential to generate AMD in an uncontrolled and unmitigated environment and	a) Update the milestone criteria to specifically require the key management strategies for each waste category presented in Table 22 of the PRC plan. Expected inclusions are: Following RM3(a) 'Box-cut void backfill completed' include management strategies from Table 22 to give

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	<i>and Risk Assessment of Mineral Waste</i>	that management measures proposed in the Appendix hinge on the placement of coaly and carbonaceous materials such that they will not report to the final landform surfaces. <i>References</i> b) The Document: RGS-Terrenus (2012) is referenced in Appendix 9 of the PRCP. A copy of this reference is requested in order to understand how limitations, QA/QC and outliers have been considered. It is expected that the document will demonstrate that the sampling regime meets best practice standards, is spatially representative of all material being mined (i.e. the ore body, exposed pit walls and overburden etc.) and is representative of all lithologies (PRCP Guideline requirements section 3.6.1).	specification of the strategic placement of backfilled material. For example: - Prioritised placement of less erosive Permian material on the outside of the backfill - Prioritised placement of dispersive tertiary, weathered Permian and coaly carbonaceous material in the void to minimise the risk of this material reporting to the landform surface and that the material is mingled to address the AMD potential. b) Provide the document referenced as RGS-Terrenus (2012) Geochemical Assessment of Potential Coal Reject, Coal and Spoil Materials. Wards Well Project. Draft Report 101118-R001_A, 28 May 2012
6	Landform Section 6.1.5 'Landform' of the PRC plan.	<i>3D design plans of the final landform</i> a) A '3D post-mining landform design' figure has been provided in the PRC plan (Figure 21, pg. 70). Further details are required to support this figure to demonstrate that the expectation of a low-risk final landform currently approved at Wards Well will be achieved. Providing a supporting figure showing the pre-mine contours would be beneficial and will assist with understanding the post-mining landform within the broader landscape. <i>Information sufficiency</i> b) Further information regarding the landform design is required: • assumed swell factors – the provided swell factor has not been referenced nor is it clear what the assumption considers other than the general overburden type/classification;	a) To support the demonstration of the final landform: i) Provide a scale and key locating points for the '3D post-mining landform design' figure 21. ii) Provide a comparison of the 3D post-mining landform design to the pre-mining contours. iii) Provide additional cross section/s of the final landform profile or another view of Figure 21 that is not just a plan view. b) Provide clarification of: i) the choice of swell factor, providing a clear explanation of the assumptions made other than the general overburden type/classification.

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		Quality assurance/quality control (QA/QC) requirements, as per the requirements of section 3.6.1 of the PRCP guideline. The current statement is generic and provides no description of specific controls. <i>References</i> c) The BHP Risk Management document referenced in the quality QA/QC section has not been provided.	ii) provide further details of the quality QA/QC activities for the establishment of the final landform. c) Provide the BHP Risk Management document or further supporting information to demonstrate the QA/QC processes that will be put in place.
7	Underground Section 6.4 of the PRC plan Appendix 11: Adit Subsidence Evaluation	<i>Factor of Safety (FOS) assessment</i> A FOS calculator has been discussed but not clearly named. Appendix 11 infers that the software used is related to the UNSW Pillar Design Procedure.	a) Provide the name, assumptions and limitations of the factor of safety (FOS) software used in the assessment of the geotechnical stability of the underground exploration. b) Provide the UNSW Pillar Design Procedure discussed in Appendix 11.
8	Seismic disturbance	The EA authorises 385km of receiver lines and 600km of source lines (as detailed in the EM Plan) for seismic activities. The relevant activities for the RAs do not plan for the rehabilitation of seismic disturbance.	Disturbance associated with seismic activities must be included as a rehabilitation area (RA) or within the description and milestones of a relevant RA. The monitoring and maintenance section should demonstrate the natural revegetation and establishment of the expected final land outcome.
9	Monitoring and Maintenance program Section 8 of the PRC plan	Review this section of the PRCP to ensure that the PRC plan addresses deviances from the milestone criteria and considers the following matters: a) <i>Analogue sites:</i> Section 8 notes that the monitoring of analogue or reference sites will not be included in the rehabilitation monitoring program. Further information is required to support the sufficiency of the rehabilitation monitoring program for elements that would otherwise be demonstrated through an analogue or reference site. This includes, but is not limited to, influence of seasonal and regional factors, surface water monitoring with respect to expected surface water runoff characteristics, the degree of erosion	

	rates for the area and vegetation establishment. As it is unclear whether sites will be consistently used to demonstrate continued rehabilitation and milestone success, the need for reference sites is further highlighted. <i>For all phases of monitoring:</i> <i>b) Ongoing monitoring sites</i> There is inconsistent discussion through section 8 of the establishment of field sites that will be fixed monitoring points for monitoring phases, other than where issues are identified. Ongoing and consistent monitoring sites, in addition to monitoring of areas of rehabilitation issues, is expected to ensure that areas continue maintain the milestone criteria up to the point of the surrender of the EA. The section would benefit from a further diagram or a monitoring table showing how the monitoring schedule progresses over the PRCP period at the ongoing monitoring sites, and which phases these sites are to be monitored under. <i>c) Soil sampling depths</i> Table 31 Soil and Spoil Analysis states sub-surface sampling will be undertaken at a depth of >10cm. It is recommended that this is revised to ensure sub-surface sampling is collected for depths below the 20cm topsoil layer and will sample overburden. This also reflects statements made in 8.4.2 (samples collected at a variety of depths 30-60cm, 90-100cm). <i>d) Monitored attributes, methodology and data recorded</i> Where monitoring of an attribute or milestone criteria is to be recorded over different monitoring phases or over time, ensure that section 8 details a consist description of attributes to be recorded and the methodology to be followed to allow the demonstration of the progressive achievement of the milestone criteria. It is noted that some of the attributes and methodology proposed in the initial and minor monitoring phases are different from those of the major monitoring phase despite linkages proposed between these phases. <i>e) Quality assurance</i> The PRCP guideline requires monitoring using appropriate quality assurance and data management processes and systems. There is no clear part of section 8 discussing QA/QC of the monitoring methodology. <i>f) References</i> Provide references of the methodology of monitoring techniques proposed. For example, an explanation of how the severity of erosion is determined and the monitoring methodology for soil and spoil testing specified in Table 31.
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	g) Contingency Strategies Section 3.8 of the PRCP guideline requires contingency strategies if monitoring data indicates milestone criteria are not being met. Section Maintenance (section 8.7) does not provide specific contingency strategies. Provide more information of the remedial actions, link these into the monitoring program and provide general timeframes for these actions. Specify that remedial actions are to be assessed by an appropriately qualified person/s. Additionally, to demonstrate the inclusion of a remediation phase to the monitoring and maintenance program, in Figure 29 of the PRCP detail a response phase following the Data Analysis and Reporting phase. h) Initial monitoring method (Section 8.2) In Table 31 of the PRC plan, list the metal analytes that have been identified from Waste characterisation report (Appendix 9) that are expected to be elevated levels, as a minimum. i) Major monitoring methodology (section 8.4) Sub section 'Soil and spoil' of section 8.4.2 Field monitoring states that <i>results are deemed to be within an acceptable range if they meet accepted published benchmarks or standards</i>. Specify the benchmarks and standards to be compared against. j) Opportunistic monitoring (section 8.5) i. The PRC plan notes that opportunistic surface water monitoring will be undertaken for the analytes and locations listed within the EA conditions and at any other locations deemed necessary by BMC to demonstrate attainment of milestone criteria. The milestone criteria depend on comparisons between upstream and downstream. To ensure demonstration of the achievement of the RM 7 (e), define surface water monitoring locations within Section 8 of the PRC plan and specify the ongoing evaluation of the water quality at these locations. ii. In addition to the above point, this phase of monitoring talks about background sampling where exceedances of the local WQOs occurs. Specify the location of this background monitoring in this phase of the monitoring program if it is different from that above. iii. RM7 (completion criteria) specifies that Rainfall runoff from the area is not significantly different to the upstream values for pH, EC and turbidity. Provide details of the location where rainfall runoff is to be monitored for all rehabilitation areas.
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10	Milestone Criteria <i>SMART principles</i>	Milestone Criteria are required to be written in a manner that delivers on SMART principles, as per section 4.1 Step 4 of the PRCP guideline. RM 7 specify the following matters in the criteria: - 'rainfall runoff <u>not significantly</u> different from upstream' - 'deep drainage from the area is <u>not significantly</u> different to EC levels....' The term 'not significantly' does not meet the SMART principles.	Revise the criteria of RM 7 to ensure the achievement of SMART principles.
11	Milestone Criteria <i>Landform design</i>	As discussed during pre-lodgement discussions, the defined slope and other criteria specified in RM 3 of the PRC plan is consistent with the final landform proposed throughout the PRC plan. However, it is also noted final landform slope defined in RM 7 contradicts the slope defined in RM 3. This creates a lack of clarity of the overall intent of the final landform. Additionally, this criterion does not meet the SMART principles defined in the PRCP guideline, regarding reasonable/relevant as there is no clear connection between the milestone and the desired outcome. Generally, the PRC plan concludes that there is expected to be minimal to no impacts (or otherwise considered low risk) of the final landform impacting on environmental values or not achieving a final land outcome based on there being minimal variation of the post-mining landform to the pre-mining topography with the proposal for all slopes to be equal to or less than 5%.	Review the criteria set out in RM 7 against the SMART principles and ensure that the criteria are commensurate with the low risk landform proposed in the PRC plan.
12	Milestone Criteria <i>Revegetation</i>	a) For the following milestone criteria, ensure the SMART principles are achieved by including a reference that underpins the criteria: 'Pasture condition rating ≤ 3, including:	a) For RM 6, the pasture condition rating must be clearly defined to demonstrate what the standard is and that the necessary components of that standard have been

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		measured and achieved. The milestone criteria must be revised to meet SMART principles. b) For RM 5, as a minimum, include a reference to the relevant table of the PRC plan (Table 26) to specify the expected seeding mix.	
13	Milestone timeframes and EA conditions	- Annual grass DM yield % - <70% - Undesirable grasses and other weeds %DM yield - <80% - Preferred pasture species diversity >2 species' b) For the following milestone criteria, ensure the SMART principles are achieved by including details of the recommended pasture mix. 'Completed seeding in accordance with recommended pasture mix (grasses, cover crop and legumes), and seeding rates (up to 25kg/ha).' The Wards Well EA (condition F25) requires that 'areas disturbed (exploration activities of drilling, LOX lines and 3D seismic surveys) in Category B Environmentally Sensitive Area (ESA) or within 500m of a Category B ESA must commence as soon as practicable to the extent that erosion impacts are minimised and be completed as soon as practicable but <u>no longer than three (3) months after completion of the disturbance activity.</u>' It isn't clear from the PRCP Schedule that this requirement has been considered in the scheduling of rehabilitation areas related to drilling or seismic activities. The requirement has not been included as a milestone criterion.	Provide an explanation regarding how the milestone criteria addresses the requirement of Condition F25. Update milestone timeframe if amendments are required.
14	Inconsistencies with EA <i>Figure 30 of the PRC plan and</i>	Disturbance footprint maps and figures in the PRCP currently appear to be inconsistent with that approved under the Wards Well EA.	Review the proposed final site design and ensure consistency with the currently approved disturbance. Additional disturbance beyond that approved by the EA is not able to be included in the PRCP until such time that

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	provided spatial files		approval for the disturbance is acquired and the PRCP is subsequently amended.
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