

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 Coal Pty Ltd
C/-Whitehaven Blackwater Pty Ltd
Level 28, 259 George Street,
Sydney NSW 2000

Via email transmission only

ATTN: Brendan Dillon

Email: BDillon@whitehavencoal.com.au

Our reference: EPML00717813, A-PRCP-NEW-100758431

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 11 November 2024.

The application reference number is: **A-PRCP-NEW-100758431**

Land description: Mining Lease (ML) 1759, ML1760, ML1761, ML1762, ML1767, ML1771, ML1772, ML1773, ML1792, ML1800, ML1812, ML1829, ML1860, ML1862, ML1907, ML70091, ML70103, ML70104, ML70139, ML70167, ML70329.

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: Additional information requested for proposed PRC plan** 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.

Should the information request require an 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 **19 December 2025** (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.

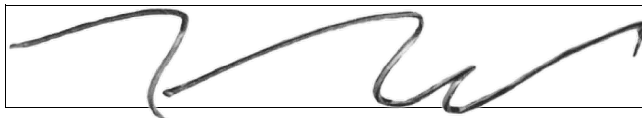
The response to this information request or a request to extend the information response period can be submitted to the administering authority by email to CRMining@detsi.qld.gov.au.

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/action and it was determined that no human rights are engaged by the decision/action.

If you require more information, please contact Business Centre Coal via the details listed below.



Signature

13/06/2025

Date

Ben Byrd
Department of the Environment, Tourism, Science
and Innovation
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@detsi.qld.gov.au

Attachments

[Information sheet: Internal review and appeals](#) (ESR/2015/1742)

Attachment 1: Additional information requested for proposed PRC plan

References to the PRCP Guideline are to the administering authority's guideline *Progressive rehabilitation and closure plans (PRC plans)* (ESR/2019/4964)

Where updates to the Rehabilitation Planning Part, the draft PRCP schedule or the spatial files is required as a result of this information request, provide such in response to this notice (with spatial files to also be submitted to the administering authority's Spatial Submissions Inbox <SpatialSubmit@des.qld.gov.au>).

Item	Relevant Section (proposed PRC plan)	Matter	Information Request
Rehabilitation Planning Part			
1.	Section 3.4 of the Planning Part - Non-use management areas EA EPML00717813 Residual Void Investigation - Land Outcome Document Appendix 4.13 – Void Closure Plan	The EA EPML00717813 has been identified as the primary Land Outcome Document (LOD). The BMA Residual Void Investigation report has been identified as a secondary LOD. As neither of these LODs identify the location or area of the NUMAs, the requirements of section 754(4) apply. The PRC Planning Part does not include sufficient information that demonstrates the options available for minimising final void areas and volume has been considered for voids proposed to be Non-use management areas (NUMAs). This is particularly relevant for the most southern NUMAs within ML70157 and ML70139 as well as the Togara and Marshmead voids/NUMAs that have not yet been constructed, or are not yet at their final location, and have a much wider NUMA extent to that of the other NUMAs at Blackwater mine.	Provide an updated Planning Part that includes sufficient information to demonstrate the requirements of section 754(4) of the EP Act, particularly with regard to NUMAs stated in the Matters column. Provide details as to why these voids are much greater in extent than other NUMAs proposed for Blackwater and how these areas can be minimised.
2.	Appendix 4.13 – Void Closure Plan Section 3.5.1.1 of the Planning Part – Hydrogeology Section 3.5.1.7 of the Planning Part - Water management	The PRC Plan and supporting documents present inconsistent conclusions regarding sink vs. source dynamics of the site's residual voids. In some sections, it is stated that ' <i>once the void lakes and groundwater levels have stabilised, the model results indicate the residual voids will continue to act as groundwater sinks</i> '. While most residual voids are modelled to behave as groundwater sinks under post-closure equilibrium conditions, the Kennedy West void is predicted to represent a groundwater source, potentially in perpetuity, with an outflow rate of 107 m ³ /day at equilibrium. Section 3.5.3.3.2 of the Planning Part notes this outward water flux from Kennedy West is reportedly driven by, and would eventually be captured by, the adjacent Comet Downs void. There appears to	Provide a clear and comprehensive summary of the modelling, conclusions, and supporting evidence to ensure alignment with closure objectives and regulatory requirements particularly with regards to whether the voids will act as groundwater sinks to ensure the minimisation of risks to the environment. Provide a comprehensive consideration the likely impacts and

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		be commitments in the PRCP to minimise the potential for environmental harm beyond the Mining Lease (ML) boundary. Further voids are discussed in the next request item that indicate other voids that may not act as sinks to groundwater. To address these inconsistencies and gaps, the PRCP must provide a clear and comprehensive summary of the modelling, conclusions, and supporting evidence to ensure alignment with closure objectives and regulatory requirements. As per section 3.3 of the PRCP guideline, a NUMA is defined in the EP Act as an area of land the subject of a PRC plan that cannot be rehabilitated to a stable condition after all relevant activities for the PRC plan carried out on the land have ended. It has not been demonstrated the areas surrounding the proposed NUMAs, in particular the groundwater, can achieve a stable condition as a result of the potential for the voids to act as sources or to allow for contaminant releases beyond the walls of the NUMA extent.	water quality of any void water proposed to be sources from the mining voids at any modelled stage. As per section 176A(3) of the EP Act, the administering authority must be satisfied that the schedule provides for all land the subject of the schedule to be rehabilitated to a stable condition, or managed as a NUMA in a way that achieves best practice management of the area and minimises risks to the environment. Provide sufficient information to demonstrate areas surrounding the NUMAS can achieve a stable condition.
3.	Section 3.4 of the Planning Part - Non-use Management Area Section 3.5.1.1 of the Planning Part - Hydrogeology	Releases of void pit water to surrounding hydrogeological formations are modelled to occur during certain periods post-closure, however, the spatial extent of these impacts has not been clearly defined. Figure 31 of the Planning Part, predicted movement of particles, suggests the potential for contaminant releases outwards, which are later reversed with all contaminated water returning to the voids. However, further information is required to clearly define the spatial zone and duration of potential groundwater impacts from void pit water releases to groundwater. Specific areas of concern are as follows <u>Section 8.2.4 Residual Void Inflow – Deep Creek Void</u>	(a) Provide an updated Planning Part that clearly defines the spatial zone of potential groundwater impacts from void pit water releases to groundwater and the extent that void pit water will extend from the pit shell. (b) Provide additional information to clarify the predictions of void outflow to groundwater from Deep Creek void in the first 100

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		Section 8.2.4 of the Hydrogeology Assessment states that for the Deep Creek Void: <i>The first 100 years post-closure is predicted to temporarily lose void water to surrounding natural geology before the flow gradient is reversed and the void reaches equilibrium as a net sink. The fate of this temporary post-closure outwards flux of void water is explored in Section 8.2.6.</i> Section 8.2.6 provides a particle tracking map, although the scale of that maps makes it difficult to track any movement of void water to groundwater in that first 100 years from Deep Creek void. Section 8.2.6 provides no discussion of the issue of the first 100 years post closure in Deep Creek void. Appendix 4.13 (Void Closure report) Section 4 provides some discussion supporting the concept of net groundwater inflow after 100 years. <u>Stewarton/Ballamoo residual void</u> Section 8.2.5.2 of the Hydrogeology Assessment states: <i>Lake levels are predicted to recover to within approximately 2 to 16 m below predicted Aries and Castor Seam groundwater elevations just outside the voids northern end at Stewarton_1 and southern at Stewarton_4 respectively. Lake levels are predicted to recover to approximately 2 m to 12 m below the predicted Pollux Seam groundwater elevation just outside the void at the northern end at Stewarton_1 and southern at Stewarton_4 respectively.</i> This indicates that the predicted void water levels at the northern end of the Stewarton/Ballamoo residual void are only 2 m above the predicted groundwater levels in the coal seams and 12 to 16 m above the predicted groundwater levels in the coal seams at the southern end. This description generally agrees with the predictive hydrographs presented in Appendix C. However, in Figure 8-36 (particle tracking figure), particles that start towards the lower or southern end of the void (not the northern end as you might expect from the information above) appear to move east out of the lease area and then return to the lease, although the map scale makes it difficult to determine.	years post mining and the predicted extent and characteristics of the impacts of that outflow. (c) Confirm if particle tracking indicates that void water at the southern end of Stewarton/ Ballamoo residual void is predicted to move into groundwater and east off the Blackwater Coal Mine mining lease before potentially returning. Ensure that modelling and discussion of the modelling is consistent in the Planning Part. (d) Provide a detailed assessment of the likely impacts this predicted movement of void water from the Stewarton/Ballamoo residual void will have on groundwater in the area immediately east of the lease.

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4.	Section 3.5.1.1 of the Planning Part - Hydrogeology Section 3.1.2.6 of the Planning Part - Hydrogeology Section 3.5.3 of the Planning Part - Voids Appendix 4.2 Hydrogeology Assessment Bottom Dam Tailings Storage Facility and Sirius Creek: Preliminary Hydrogeological Review and Investigation	The following matters are noted from the 'Preliminary Hydrogeological Review and Investigation: Bottom Dam Tailings Storage Facility & Sirius Creek prepared by SLR 7 April 2025 (Hydrogeological Review) <i>MB21</i> MB21 is identified in Table 58 of the Planning Part as a Tertiary bore. In Table 4-1 of the hydrogeological assessment (Appendix 4.2), it is identified as being screened between 25 and 31 m. In the Hydrogeological Review, Table 2-1 identified that there was no log for MB21, and they were unable to identify a screened unit for this bore. Furthermore, the Hydrogeological Review stated that more recent co-located drilling indicates that the unit of Tertiary may be mis-attributed to this aquifer. In the same report, monitoring bore BWM_MB135_02 is identified as being located adjacent to MB21. BWM_MB135_02 is screened between 17 and 23 m in coal and siltstone in what appears to be the Rangal Coal Measures based on the drilling log. It appears clear that MB21 is not monitoring the Tertiary. Additionally given the lack of knowledge of the construction details for MB21, it is recommended that it be replaced by BWM_MB135_02.	To allow continuity of data, MB21 is to be retained in Table 58 of the Planning Part, with an amended hydrogeological unit (e.g. Rangal Coal Measures). BWM_MB135_02 is to be included in Table 58.
5.	Table 58 of the Planning Part Appendix 4.2 Hydrogeology Assessment; Section 4.1, Table 4-1 Groundwater Monitoring Network	Table 58 of the Planning Part and Table 4-1 of the Hydrogeology Assessment does not identify any monitoring bore that is within spoil or proposed as part of a future monitoring network. Table 8-10 in the hydrogeological assessment indicates that in seven of the eleven residual voids predicted groundwater inflow is between 40 and 60% of total predicted inflows to the voids. Additionally, Section 8.2.4 indicates that the spoil contributes between 26 and 100% of all predicted groundwater inflow to the voids. Predicted groundwater inflow from the spoil is a significant part of the total groundwater inflow and subsequently an important part of the water balance, determining the relationship between the void water levels and adjacent groundwater levels at equilibrium.	Provide advice as to where and when monitoring bores will be established in the spoil including GPS locations.

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		It is therefore considered important that monitoring bores be established at a future date in the spoil to provide calibration targets in the spoil to enable confidence in the parameters used to represent groundwater recharge, storage and movement in the spoil. This will provide additional confidence in relation to future modelled residual void conditions.	
6.	Table 58 of the Planning Part Appendix 4.2 Hydrogeology Assessment, Section 4.1, Table 4-1 Groundwater Monitoring Network	Issues with some of the monitoring bores identified in Table 58 of the Planning Part are as follows: <i>BWM_MB15_01</i> This bore is identified in Table 58 as a Tertiary bore. It is not included in Table 4-1 of Appendix 4.2 Hydrogeology Assessment. The drilling log for this bore identified as 'Hydro Drilling scope of work', indicates that the bore is screened adjacent a coal seam. This conflicts with the description in Table 58. <i>BWM_MB01_01</i> The hydrogeology assessment report advises that the only alluvial bore on site that has provided water samples is BWM_MB01_01. This bore should be included in Table 58.	Address the identified issues of some of the bores of Table 58 and provide evidence to support any assumptions and variations made.
7.	Appendix 4.2 Hydrogeology Assessment Section 4.1, Table 4-1 Groundwater Monitoring Network	Table 4-1 provides details of the monitoring bores used in the assessment. The Rangal Coal Measures bores appear to have their monitored unit identified as either RCM coal or RCM O/I (presumably overburden or interburden). The numerical groundwater model as described in Table 8-1 assigns seven layers to represent the various coal seams, overburden and interburden within the Rangal Coal Measures. Those Rangal Coal Measures monitoring bores used in the model calibration would have been assigned to a model layer based on an understanding of which unit within the Rangal Coal Measures they were monitoring. These units, where known, should be identified in Table 4-1 to provide confidence in the data being used to calibrate the numerical groundwater model. In addition, it is noted that Table 4-1 appears to not provide details of a number of bores which are in the PRCP Table 58 Groundwater monitoring	(a) Provide an updated Table 4-1 which identifies the geologic unit/s that each of the Rangal Coal Measures is monitoring. (b) Provide explanation of the reason why the following bores identified above as being in the PRCP Table 58 are not in the Table 4-1 in the hydrogeological assessment. BWM_MB02_01 BWM_MB02_02 BWM_MB03_02 BWM_MB12_01 BWM_MB12_02

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		bore locations. The following bores are in Table 58 but not in the hydrogeological assessment Table 4-1: BWM_MB02_01 BWM_MB02_02 BWM_MB03_02 BWM_MB12_01 BWM_MB12_02 BWM_MB15_01 BWM_MB17_01 BWM_MB17_02 Explanation of the reason why these bores were not considered part of the monitoring network in the Hydrogeological Assessment is required. Where these bores would enhance the capability and outputs of the model (e.g. bores that are not dry, or bores that may provide benefit at the end of model calibration), the model must be rerun with consideration of these bores and their data available. It is noted that the model was not recalibrated for the PRCP rather, is the 2023 model.	BWM_MB15_01 BWM_MB17_01 BWM_MB17_02 (c) Rerun and provide the updated numerical groundwater model where the above listed bores will provide an enhanced model result or where the outcome of matters noted in this information request notice would benefit from a rerun of the model.
8.	Hydrogeology Assessment Section 4.3.5.4, Figure 4-15, Groundwater level contours Aries seam (observed data)	Contours are provided based on observed water level data in bores considered to be monitoring the Aries coal seam and void water levels. This provides useful information for the Aries seam based on actual data. However, the bores used to provide the groundwater levels for these contours are not identified. These bore numbers should be provided on the map adjacent the elevation of groundwater level at each site to demonstrate which bores are used to provide this interpretation.	Provide an updated Figure 4-15 to the Hydrogeology Assessment identifying which bores were used to provide groundwater elevation data for the Aries seam.
9.	Hydrogeology Assessment	The Column headings in Table 8-2 'Model Calibration Targets' don't appear to represent the data in this table. There are a greater number of calibration target locations than there are target head measurements.	Review and update the column headings in Table 8-2 'Model Calibration Targets' including the data in the fourth and fifth columns.

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	Section 8.1.3, Table 8-2 Model Calibration Targets	It is possible the columns have been reversed with an accurate number of target heads are not currently represented in this table.	
10.	Hydrogeology Assessment Section 8.1.3 Model Calibration	Model simulated groundwater elevation contours should be presented for the end of the transient calibration period for the major geologic units. In particular, they should be provided for the Aries seam to compare with the interpreted contours provided in Figure 4-15, based on observed data. This comparison must be made available to provide confidence that the groundwater flow direction being simulated by the numerical groundwater model is similar to that interpreted from observed groundwater data.	Provide simulated groundwater elevation contours for the major geologic units at the end of the transient calibration period.
11.	Hydrogeology Assessment Table 8-3 Groundwater Model and Data Limitations	Under a heading of 'measurement error' in Table 8-3 'Groundwater Model and Data Limitations' states: <i>Bore logs and construction details available for many site bores, and long-term site water level data available for various units. Improvement in availability of specific details for some bores may improve confidence in observation data.</i> Table 4-1 of the Hydrogeology Assessment must clearly identify which bores have bore logs and construction details available. Additionally, it should be identified which calibration bores had this data available to provide confidence in the numerical groundwater model.	(a) Update Table 4-1 of the Hydrogeology Assessment to identify those bores where bore logs and construction details are available. (b) Provide details of which bores used in the model calibration were supported by bore logs and construction details.
12.	Hydrogeology Assessment Section 8.2.1 'Model set Up, Spoil parameters'	Section 8.2.1 'Model set Up, Spoil parameters' identifies the hydraulic properties used for the in-pit tailings in the recovery model but does not identify what hydraulic properties were used to represent the spoil. Additionally, it is noted that this section states: recharge and evapotranspiration [ET]) in the recovery model were set constant for the duration of the recovery model, at their values consistent with the previous predictive mining model (SLR, 2023b). A review of SLR, 2023b 'Blackwater Mine – North Extension Project Groundwater Modelling Technical Report' indicates that a recharge rate of 7.4% of the average annual rainfall was applied to the spoil. There appears to	(a) Provide advice as to what hydraulic conductivity and specific yield were used to represent the spoil in the recovery model. (b) Provide information to support the use of a recharge rate of 7.4% applied to the spoil in the recovery model.

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		be no supporting information for the use of that rate of recharge. This rate appears to be above some literature values available (Mackie, 2009).	
13.	Hydrogeology Assessment Section 8.2.1 'Model set Up, Spoil parameters'	Section 8.21 'Model Setup, in pit tailings' states: <i>The PRC Plan's proposed final landform 2.4 was replicated in the recovery model, including areas of spoil emplacement within mined out pits, the 11 proposed residual voids, and the two in-pit tailings emplacements at Bonnie Doon and Laleham. The distribution of modelled spoil emplacement is shown on Figure 8-1.</i> It is noted that there are other tailings emplacements adjacent residual voids. These include Deep Creek and Kenmare residual voids.	(a) Provide supporting information on how other tailings emplacements including those adjacent the Deep Creek and Kenmare residual voids have been represented in the numerical groundwater model. (b) Where these emplacements have not been represented in the model, what impact is this likely to have on predicted modelling adjacent the residual voids. OR provide an updated model that addresses these emplacements.
14.	Figure 65 of the Planning Part	This figure must clearly identify which units are being monitored. This could be achieved by colour coded the bores to identify the monitored geologic units.	Provide an updated figure 65 that clearly identifies the units being monitored e.g. colour coding.
15.	Appendix 4.3 – Material Characterisation 3.1.2.7 Soil types, properties and productivity 3.5.1.4 Soil and capping material.	The current volume of soil suitable for rehabilitation has been provided on the basis of a total available soil. Further expansion of Section 3.5.1.4.2 of Planning Part is required to demonstrate there are adequate volumes of each specific soil type (based on Table 25 of the Planning Part) available for the specific use (i.e. clay topsoils on plateau and gravelly clay topsoils on batters) is required. This additional information must state: the volumes of each stockpiled soil class that can be used as primary or secondary growth media.	Provide an updated Planning Part which includes further information of the soil suitability for rehabilitation including: (a) the volumes of each stockpiled soil class that can be used as primary or secondary growth media. (b) the volumes of materials to be used on the plateau (low slope)

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		- the volumes of materials to be used on the plateau (low slope) and external embankments (higher slopes) as per Landloch's recommendations of Appendix 4.3. - a comparison between volumes of soil suitable for intended use against the actual volume of soil required per rehabilitation area. Landloch emphasises that more soil-specific screening is required for any material used in rehabilitation activities (e.g. growth media and cover system). This requirement needs to be integrated into the PRCP schedule.	and external embankments (higher slopes) as per Landloch's recommendations. (c) a comparison between volumes of soil suitable for intended use against the actual volume of soil required per rehabilitation area.
16.	Section 3.5.1.6 Cover design Section 3.5.2.3.5 QA/QC of cover construction Appendix 4.3 Material Characterisation Appendix 4.12 - Concept Cover Designs for Waste Storage Facilities at Blackwater Mine (Henderson Geotech Pty Ltd 2024) Section 3.6.1 of the PRCP Guideline.	The proposed cover design does not meet the requirements of the PRCP Guideline. Section 3.5.1.6 Cover design of the Planning Part, notes that: <i>'As detailed in Section 3.5.1.3, the main types of waste materials at BWM include spoil, rejects and tailings. Tailings and rejects are disposed of in dedicated TSFs and/or rejects landforms and are addressed in Section 3.5.2. Considering the waste materials within the spoil landforms, the large quantities of inert spoil and the methods of disposal, the geochemical assessment concluded that no specific AMD management measures are required for the spoil dumps'.</i> Appendix 4.12 of the Planning Part contains some of the information requirements of 'cover design', Section 3.6.1 of the PRCP Guideline. Section 3.5.2.3.5 states " <i>The concept cover designs detailed in this PRC Plan will be refined to detailed designs by the end of mining, for application of the required covers.</i>" Appendix 4.12 notes, <i>'The conceptual cover designs described in this report do not have the level of analysis required for detailed design and are applicable only to the scenarios and inputs also described'.</i> Appendix 4.12 provides the following various conceptual designs:	As per the PRCP Guideline, the cover system design must be appropriate for the type(s) of waste the project will generate and reflect a risk-based approach. Where waste has the potential for AMD, neutral mine drainage or saline mine drainage, an appropriate cover system must be designed taking into consideration: - availability of suitable cover materials (both quality and quantity) - criteria for discharge (i.e. to protect environmental values) - suitable vegetation. The cover design should include, to an appropriate level of detail for the risk,:

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		- NCPP TSF - the preferred cover for this TSF is the multi-layer system (Section 5.3.2) - Laleham TSF (Section 6.3.2) - the preferred cover type is a thick layer of general spoil, including the material that is already in place. Final surface gradients, topsoil thickness and vegetation will be consistent with other spoil landforms rehabilitated to the same post-mining land use - R72 WSF (Section 7.3.2) - a thick cover of general spoil material - R74 WSF (Section 8.3.2) - combined spoil and water covers - Bottom Dam TSF and ROM3 Area WSF (Section 9.3.2) - the preferred cover type is a thick layer of general spoil - Bonnie Doon TSF (Section 10.3.1) - estimates are not included in the conceptual cover design; instead, settlement will be assessed and allowed for as part of detailed design and especially by adaptive design revision during the construction phase. - Ramp 36 Rejects dump (11.3.2) - a thick layer of general spoil is proposed for rehabilitation, with spoil sourced from future mining of the Deep Creek Pits. Insufficient information has been provided to demonstrate these areas will achieve a stable condition. The alternative cover systems proposed are not supported by any field data. Proposed cover designs must provide supporting evidence as to which cover is most appropriate to meet the environmental risk posed by the final landforms. More detailed design information on both the landform design and PAF placement and agreed risk is required to support the use of a low-risk cover design.	- identification and specification of the objectives of the cover system - a detailed description of the design including the thickness (m) of each layer - a detailed description of construction methodology including any proposed staging of the cover system - a quantitative assessment that identifies the location and quantity of proposed capping material available on site - proposed QA/QC for the construction of the cover system including the timely implementation of corrective actions where deviations from the design are identified.

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17.	Section 3.5.1.2 of the Planning Part - Flooding Section 3.4 of the Planning Part - Non-use Management Areas	The PRCP concludes that the Togara / North Marshmead residual void is only “marginally” impacted by a 0.1% AEP event and does not propose mitigation measures on the basis that the intersecting reach of Sirius Creek has a stream order of less than 4. However, stream order alone is not a valid exemption from rehabilitation or flood impact assessment obligations under PRCP Guideline. Where a residual void intersects the 0.1% AEP floodplain, the PRCP must demonstrate landform performance, structural integrity, and environmental risk management under extreme flood events. In accordance with Section 3.6.3 of the PRCP Guideline, if floodwaters are likely to move over backfilled material, an assessment of the hydraulic properties must be conducted to assess whether instability may occur. If instability is possible, modification to the landform design of the backfilled void may be required. If floodwaters are allowed to enter the void this may compromise the stability of the wall, which can increase the volume of floodwater entering the void. Where relevant, consideration must be given to the impacts of floodwater interaction on erosion.	Provide further detail in the Planning Part of the landform performance, structural integrity, and environmental risk management under extreme flood events (including up to Probable Maximum Flood) for the Togara / North Marshmead residual void that achieves the requirements of Section 3.6.3 of the PRCP Guideline. Detail must be provided as to the possible re-design options of the final landform and the use of other structures to prevent structural instability, flood egress and erosion susceptibility to ensure achievement of the objections of section 176A(3) of the EP Act described earlier.
18.	Section 3.5.1.2 of the Planning Part - Flooding Section 3.4 of the Planning Part - Non-use Management Areas Appendix 4.6 – Rehabilitation Flood Assessments	Modelling presented in Figure “Appendix C6-2-4” of Appendix 4.6 – Rehabilitation Flood Assessments confirms that the Laleham Void is inundated under PMF. Given the magnitude of flow and its location adjacent to the Sirius Creek Diversion, the interaction may result in instability or failure of the diversion and lead to connectivity between the void and the downstream environment. Figure “Appendix C6-3-4” shows velocities in Sirius Creek and portions of the Laleham Void exceeding 3.5 m/s (though the exact upper bound is not reported) which indicates high erosive and hydraulic force. This raises significant concern regarding the structural integrity of both the diversion and the void wall during extreme flood events and consequence on surrounding and downstream.	Revise final landform designs to mitigate risk from flood inundation from 0.1% AEP or PMF events (depending on consequence of inundation). Propose protective measures to mitigate stability risks from high velocity flows and shear stresses. Provide modelling to demonstrate that voids, diversions and creek boundaries will be erosionally and

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			structurally stable and not adversely impacted during rare and extreme events.
19.	Section 3.5.1.2 of the Planning Part - Flooding Appendix 4.6 Rehabilitation Flood Assessments Section 3.4 of the Planning Part - Non-use Management Areas	Flood modelling indicates that partial backfilling of the Laleham Void removes it from the 0.1% AEP flood extent of Sirius Creek. While this suggests the backfilled landform avoids direct inundation, other hydraulic parameters raise serious concerns. Figure 6 of the Flood Assessment Report shows shear stresses exceeding 80 N/m² under the 2% AEP event in the Sirius Creek Diversion adjacent to the Laleham Void. It is reasonable to expect significantly higher stresses under rarer and extreme events such as the 0.1% AEP and PMF. This, combined with velocities exceeding 3.5 m/s (Appendix C6-8-3), suggests the Sirius Creek Diversion is prone to erosional and structural instability which can influence Laleham Void. Unless the Sirius Creek diversion is demonstrated to be stable under 0.1% AEP (and PMF events if consequence on surrounding and downstream is high), the Laleham Void must be assessed as potentially unstable and at risk of being influenced by diversion failure. This is inconsistent with the requirement under the PRCP Guideline to demonstrate landform stability under flood scenarios within in a risk-based framework. Voids located adjacent to the Emu Creek, Deep Creek, and Rockland Creek diversions exhibit the same potential risk profile as the Laleham Void. While direct inundation may not occur under the 0.1% AEP event, their proximity to diversions subject to high velocity and shear stress raises concerns about erosion-induced instability or diversion failure. Appendix 4.6 – Rehabilitation Flood Assessments, modelling confirms that eight residual voids: Mimosa, Besgrove, Deep Creek, Stewarton, Ballamoo,	See above.

Item	Relevant Section (proposed PRC plan)	Matter	Information Request
		South Marshmead, Kennedy West, and Comet Downs East are subject to inundation under PMF flood	
20.	Section 3.5.1.7.5 of the Planning Part - Surface water diversions Appendix 4.9 - PRCP Concept Design Report - Sirius Creek Appendix 4.10 PRCP Concept Design Report - Taurus Creek Appendix 4.11 - PRCP Concept Design Report - Rockland Creek	Section 3.5.1.7.5 of the Planning Part proposes that Creek diversions are to be re-aligned where required and rehabilitated to form a stable landform that allows relinquishment of the water licences. Three diversions (Sirius, Taurus and Rocklands) require realignment and/or rehabilitation. - PRCP Concept Design Report - Sirius Creek (Engeny, 2024a) (Appendix 4.9) - PRCP Concept Design Report - Taurus Creek (Engeny, 2024b) (Appendix 4.10) - PRCP Concept Design Report - Rockland Creek (Engeny, 2024c) (Appendix 4.11) Sirius Creek is a stream order ≥ 4 watercourse (Appendix 4.9), Taurus Creek and Rockland Creek are identified as stream order 4 watercourses (Appendix 4.10 and 4.11 respectively). These diversions qualify as permanent diversions under the Guideline: Works that interfere with water in a watercourse for a resource activity (OSW/2019/4599) (Watercourse Diversions Guideline) and sections 19–20 of the <i>Water Act 2000</i>. The concept design is required to demonstrate functional feasibility, per Section 2.1 and Table 6 of the Watercourse Diversions Guideline. This includes identifying key design risks and assumptions to show that each diversion outcome is achievable. However, the current concept design (Appendix 4.9) does not meet these expectations: - Outcome 2: No hydrologic assessment to confirm flow regime continuity e.g. peak flows, baseflow, duration.	Refer to the requirements of the Guideline: Works that interfere with water in a watercourse for a resource activity— watercourse diversions authorised under the Water Act 2000 (OSW/2019/4599). To meet concept-stage expectations, the PRCP must be revised to include: - hydraulic modelling (including 0.1% AEP + climate change and PMF), - sediment transport and continuity assessment, - Justification for armouring design and erosion control based on site conditions, - A staged rehabilitation and monitoring plan aligned with Table 8 of the Guideline.

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		- Outcome 3: No hydraulic parameters e.g. velocity, shear stress are provided for design events such as 0.1% AEP with climate change adjustment. - Outcome 4: No sediment transport or continuity modelling is presented to support long-term geomorphic function. - Outcome 5: Rock protection is not justified against design thresholds. There is no assessment of geomorphic or substrate stability. - No indication is given that the channel will become self-sustaining. A monitoring or rehabilitation plan is absent, contrary to Section 2.3 and Table 7. In its current form, the design does not demonstrate sufficient feasibility to meet the permanent diversion criteria for high-order streams under the Watercourse Diversions Guideline or the <i>Water Act 2000</i>. Refer to the <i>PRCP schedule</i> section below for further concerns proposed to be addressed through milestone criteria for creek diversions.	
21.	Appendix 4.6 – Rehabilitation Flood Assessments	The Planning Part identifies that several rehabilitated waste rock dumps (WRDs) are at risk of contact with floodwaters under design and extreme flood events, including some adjacent to flood-affected voids or downstream of diversion structures The flood interactions have not been assessed for erosion or structural failure under 1% AEP, 0.1% AEP, and PMF events. Where WRDs are intersected by floodwaters, it must be demonstrated, as per the PRCP Guideline and Outcome 3 of the Watercourse Diversions Guideline that: - Dumps remain stable and resist flood-induced erosion - Sediment, salinity, or contaminants will not mobilise downstream; and	The PRCP must meet the relevant requirements of the Watercourse Diversions Guideline and the PRCP guideline. This must include but is not limited to, demonstration that: - Dumps remain stable and resist flood-induced erosion - Sediment, salinity, or contaminants will not mobilise downstream; and

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		Structural integrity is maintained under future climate-adjusted flood conditions.	Structural integrity is maintained under future climate-adjusted flood conditions. Where the above is unable to be demonstrated, alternative designs, objectives and/or criteria must be proposed in response to this information request with sufficient detail to demonstrate the achievement of the guideline requirements and stable condition.
22.	Appendix 4.5 – Voids in Floodplain Modelling	The reports outline the hydrology and TUFLOW model setup, including grid resolution, LiDAR-derived terrain, and boundary conditions. Manning's n values are listed. Hydrologic inputs follow the guideline 'Australian Rainfall and Runoff' (2019) with a 20% climate change allowance. The modelling lacks both calibration and validation, which are essential for demonstrating reliability of flood extents and velocities used in assessing landform stability and NUMA viability. This is inconsistent with ARR 2019 Book 8 (Model Calibration and Validation) which requires confidence in modelling for decision-making regarding flood-prone landforms. The 'calibration and sensitivity analysis' of the model is required by Section 3.4 of the PRCP Guideline has not been detailed in Appendix 4.5.	Provide information of the 'calibration and sensitivity analysis' applied to the Floodplain Modelling detailed in Appendix 4.5 as required by Section 3.4 of the PRCP Guideline.
23.	Section 3.3.3.1 of the Planning Part Cattle grazing (future and existing)	The administering authority's position is that grazing PMLUs should achieve a land suitability class 3 or better to align with the agricultural outcome of 'suitable land with moderate limitations' or better (as per the latest version of the Queensland Government's Guidelines for Agricultural Land Evaluation in Queensland) with class 4 being 'marginal or unsuitable land with severe	Provide for Rehabilitation Areas proposed to be a grazing PMLU that achieves a land suitability class 3 or better.

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		limitations'. Where class 4 is proposed, further justification of what limitations will result on this class and the extent to which these limitations can be overcome with corrective actions or designs in the PRCP.	Where class 4 is proposed, provide detail on the limitations that would result in the poorer class of grazing PMLU, and the extent to which these limitations can be overcome with corrective actions or designs in the PRCP.
24.	Section 3.1.2.8 of the Planning Part - Land stability	Land stability described in the PRCP is limited to a high-level description of erosion potential, for example '<i>The pre-mining topography at BWM was generally flat to undulating and is consistent with the regional landscape. Land adjacent to the mine and within the Bowen Basin indicates surface erosion is common upon disturbance of soils and vegetation from cattle grazing</i>' (Whitehaven 2024, p. 59). This appears to largely duplicate the information at 'Section 3.1.2.11 Pre-mining land use'. Section 3.1 of the PRCP Guideline requires land stability to include information on the '<i>pre-existing land degradation/erosion and predisposition to ongoing stability issues</i>'.	Provide a revised Planning Part which addresses the requirements of Section 3.1 of the PRCP Guideline for land stability including information on the pre-existing land degradation/erosion and predisposition to ongoing stability issues.
25.	Section 3.1.4.2 of the Planning Part - Existing rehabilitation	Further detail is required as to the rehabilitation of the 1,929 ha of existing rehabilitation. Limited information is provided as to the when the rehabilitation commenced and was completed a requirement of section 3.1 of the PRCP guideline. This is required to support the timeframes proposed for the completion of rehabilitation milestones. The response to the NPM notice provided additional information regarding the monitoring of rehabilitation. The response noted some reports in relation to the monitoring of these areas. These reports are sought to support the provided report on existing rehabilitation. With consideration of other matters raised in	(a) Provide a revised Planning Part which details when all rehabilitation works commenced and were completed in each area of existing rehabilitation described in 'Section 3.1.4.2 Existing rehabilitation' of the PRCP guideline (or indicative

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		this information request, further information is required to demonstrate the existing rehabilitation has achieve the milestones that such area is excluded from in the draft PRCP schedule. The PRCP guideline is noted to not require this information, however, the PRCP schedule must demonstrate the achievement of stable condition for all areas that will form part of the PRCP schedule at decision. Where a milestone is not considered to be applicable or otherwise met, justification of such is required. This information is sought to ensure that the milestones proposed in the schedule for existing rehabilitation areas are able to be achieved and are appropriate for demonstrating stable condition. For areas of grazing PMLU The Planning Part states that areas of existing rehabilitation for cattle grazing in place before the development of this PRCP (RA7) will be assessed against the indicators associated with land condition as described in the Queensland Reef Protection Regulations Farming in Reef Catchments Grazing Guide (DES, 2022a). However, this guide is not considered an appropriate measure with reference to the following : • The purpose of the guide is to 'support graziers to meet requirements in accordance with the Agricultural Environmentally Relevant Activity (ERA) standard for beef cattle grazing – version 2'. It is not intended to inform assessment of potential land use against relevant limitations as is the purpose of the Guidelines for agricultural land evaluation in Queensland (DSITI & DNRM 2015). • The Office of the Queensland Mine Rehabilitation Commissioner (OQMRC) recognises the Land Suitability Assessment (LSA) approach as leading practice to support assessment of the suitability of rehabilitated mined land for beef cattle grazing (OQMRC 2024).	timeframes of the age of the rehabilitation). (b) Provide detail of the capacity of the existing rehabilitation to achieve milestones of the draft PRCP schedule, the Biocondition benchmarks (for Woodland Habitat PMLUs) and a land suitability class of 3 or better.

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		The Rehabilitation Monitoring NPM notice response indicates that few of the rehabilitation sites are achieving a class 3, with most being a class 4 or 5, noting that not all the areas would have a PMLU of cattle grazing.	
26.	Section 3.4.5 of the Planning Part - Regional planning integration	'Section 3.4.5 Regional planning integration' of the Planning Part discusses how the NUMAs are consistent with the Central Queensland Regional Plan 2013 and the Rural Zone mapping prescribed by Council. No discussion is provided in Section 3.4.5 on whether the NUMAs are consistent with the <i>Water Plan (Fitzroy Basin) 2011</i> .	In accordance with s126C(1)(d) of the EP Act and Section 3.3 of the PRCP Guideline, provide a revised Planning Part which considers whether the NUMAs will be consistent with the <i>Water Plan (Fitzroy Basin) 2011</i> .
27.	Section 3.5.1.8 of the Planning Part - Revegetation	Details on site preparation strategies have not explicitly been included in 'Section 3.5.1.8 Revegetation' of the Planning Part. As per subheading 'Revegetation' in Section 3.6.1 of the PRCP Guideline, the Planning Part must include details of the site preparation required for rehabilitation activities.	Provide a revised revegetation plan which includes all details of the site preparation for rehabilitation activities as required by Section 3.6.1 of the PRCP Guideline.
28.	Section 3.5.2 of the Planning Part - Tailings storage facilities	The PRCP lacks the following being requirements of Section 3.6.2 of the PRCP Guideline: • The Planning Part states that, 'by the time a TSF reaches closure, the tailings will have settled and hence settling is not an important property in the context of rehabilitation and closure planning'. This is not a sufficient justification for the lack of consideration of settling in section 3.5.2.2.3 Geotechnical characteristics. • Soil water characteristic curve appears limited to three of the six TSFs as illustrated in 'Figure 40 Tailings SWCC results'. • Column testing does not appear to have been discussed.	Provide a revised Planning Part which addresses Section 3.6.2 of the PRCP Guideline including: • evidence-based responses including modelling which confirms why settling testing is not a relevant consideration for the TSFs. • soil water characteristic curve for all TSFs. • column testing.

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29.	Section 3.5.3.5 of the Planning Part Appendix 4.8 Landform Design	Section 3.5.3.5 of the Planning Part indicates that lowwall slopes will be left at angle of repose. No information has been provided that this will result in acceptable levels of stability. Appendix 4.8 provides erosion modelling predictions and recommendations for lowwall slopes up to 30% gradient, and indicates that a degree of vegetation cover will be required to ensure stability. This information does not appear to have been used to inform or support the proposed final landform design for lowwalls. The OQMRC has published guidance material on best practice for management of non-use management areas, including advice on treatments for ensuring erosional stability. It is expected that erosion occurring within the NUMA will not impact on adjacent RA's or structures. Insufficient information has been provided to demonstrate that this will be achievable.	Provide revised PRC Plan that includes appropriate landform design and treatments for void lowwalls that are supported by the findings of Appendix 4.8, as well as appropriate milestone criteria, with consideration given to the advice published by the OQMRC on best practice for management of NUMAs . It must be demonstrated that the slopes of the lowwalls will not impact on the achievement of the adjacent rehabilitation area and achieves a geotechnically stability appropriate for the environmental and longterm risk.
30.	Section 3.5.3 of the Planning Part Appendix 4.8 Landform design	Section 3.5.3 of the Planning Part does not include any discussion or consideration of erosional stability of void highwall and endwall crests and ramp batters proposed to remain as constructed. The upper strata exposed at these crests are extremely erodible, and erosional instability has the potential to impact on adjacent critical structures (e.g. safety bunds and fences) or rehabilitation areas and can increase geotechnical instability. More information is required to demonstrate that these risks have been adequately understood and managed.	Provide revised PRCP that includes sufficient technical investigation of erosion risk on void wall crests and batter slopes of ramps proposed to be retained, with consideration given to advice published by the OQMRC. Appropriate milestone criteria required to ensure necessary treatments are implemented and stability can reasonably be expected.

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31.	Section 3.5.3 of the Planning Part Appendix 4.8 Landform design	It is unclear whether ramp batters will be pushed down and treated to achieve an erosionally stable condition (as per Appendix 4.8) and assigned a PMLU or left at the angle of repose and included in NUMAs. If ramp batters are intended to be left at angle of repose and included in the NUMA, more information is required to demonstrate how this is consistent with the intention of minimising NUMA extent.	Provide a revised PRC Plan inclusive of : (a) Further information to clarify whether ramp batters are included in NUMA's or assigned a PMLU, (b) A detailed description and justification of the final landform characteristics and treatments proposed for ramp batters; and Figures to clearly illustrate the proposed final landform and PMLU arrangement.
32.	Appendix 4.16 – Underground Geotechnical Considerations	Underground workings The <i>Transitional PRC Plan Hydrogeology Assessment</i> (SLR 2024a) provided as Appendix 4.2 of the Planning Part identifies an additional underground area referred to as 'Augering Underground workings'. The Augering workings do not appear to have been identified or discussed in the Appendix 4.16.	Clarify why the Augering workings have not been considered in the Planning Part or supporting Appendix 4.16. Include additional geotechnical studies to align with the outcomes of the appendix.
33.	Section 3.5.4.3 of the Planning Part - Surface deformations Appendix 4.16 – Underground Geotechnical Considerations.	Vegetation/habitat impact assessment for the underground workings is limited to a qualitative statement that ' <i>it was observed during the inspection that the cracking does not appear to have adversely impacted vegetation growth</i> ' (Byrnes Geotechnical 2024, p. 23). These qualitative findings are reiterated at 'Section 3.5.4.3 Surface deformations. For the purpose of Section 3.6.4 of the PRCP Guideline, the assessment of vegetation/habitat impacts should include: damage to vegetation in the vicinity of surface cracks.	Provide an assessment of vegetation/habitat impacts in accordance with Section 3.6.4 of the PRCP Guideline which should include assessment of: damage to vegetation in the vicinity of surface cracks.

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		impacts associated with changed hydrogeological characteristics. Surface ponding in the context of underground workings has not been discussed in the Planning Part or Appendix 4.16.	- impacts associated with changed hydrogeological characteristics. - Surface ponding in the context of underground workings or the Geotechnical considerations for closure of the underground panels at Blackwater.
34.	Section 3.5.1.8.5 of the Planning Part - Woodland habitat vegetation	The following issues were noted in the selection of species and seeding rates chosen for the Cattle Grazing, Woodland habitat and Watercourse PMLUs: - Couch (<i>Cynodon dactylon</i>) should not be included due its potential to outcompete native species in PMLU Woodlands - Shrubby Stylo (<i>Stylosanthes hamata</i>) should not be included in a Cattle Grazing PMLU due its potential to outcompete native species in adjacent PMLU Woodlands	Provide a revised Planning Part with species and seeding selected in consideration for competition with native species.
35.	Section 3.3.3.2 Woodland Habitat (future and existing) Section 3.7.1 Rehabilitation monitoring program	Woodland habitat PMLU is planned for elevated landforms associated with the spoil dumps (RA1), and general disturbance areas near existing vegetation communities (RA5). The total proposed woodland habitat PMLU area is approximately 22,590 ha. Section 3.3.3.2 of the Planning Part proposes that the PMLU woodland habitat revegetation to achieve characteristics of RE 11.7.2. Where woodland habitat is aligned to RE11.7.2 is not possible due to seed availability, soils or spoils variability, the remaining areas of woodland habitat have been planned based on a 'hybrid' woodland habitat ecosystem. Section 3.7.1.3.2 of the Planning Part, Landform and erosion, includes methods for monitoring RE 11.7.2., using QBEIS Tertiary level assessment	Provide a revised Planning Part which includes BioCondition assessments for the relevant regional ecosystems which are the target PMLU outcome. Refer to the attached modified BioCondition benchmark framework and draft PRCP schedule to develop BioCondition benchmarks and include a robust monitoring program in

Item	Relevant Section (proposed PRC plan)	Matter	Information Request
		and modified BioCondition. However, the intention to monitor the hybrid RE 11.5.3/11.5.9 using existing minimal criteria is unsatisfactory. It is unclear what proportion of the Woodland PMLU will be allocated to RE 11.7.2 versus the hybrid (11.5.3/ RE 11.5.9). Further information is required to determine whether this PMLU will achieve a stable condition. The administering authority does not consider the approach to satisfactorily assurance the achievement of an appropriate PMLU due to the lack of clear ecosystem outcome resulting from a hybrid ecosystem. Defined regional ecosystems which assessment against BioCondition benchmarks is the recommended approach. Consideration should also be given to the EA conditions in conjunction with the BioCondition benchmarks while ensuring that the PMLU achieves stable condition.	alignment with BioCondition assessments.
36.	Section 3.3.3.2 Woodland Habitat (future and existing) Section 3.7.1 Rehabilitation monitoring program	Given the importance of riparian systems for landscape connectivity and fauna habitat (e.g. high value feed trees for koala), the vegetation component of the Watercourse PMLU monitoring method of the Planning Part isn't sufficient as the vegetation community composition is not specifically monitored. BioCondition assessment against RE 11.3.25 benchmark values should be conducted in addition to the IDC methods.	Propose BioCondition assessments for the vegetation communities of the Watercourse PMLU against an appropriate RE. RE 11.3.25 is recommended. Refer to the attached modified BioCondition benchmark framework and draft PRCP schedule to develop BioCondition benchmarks and include a robust monitoring program in alignment with BioCondition assessments.
37.	Section 3.7.1.3.6 of Planning Part - Woodland habitat	Note that while the PRCP plan states that BioCondition methods are to be used for monitoring Woodland PMLU rehabilitated with RE 11.7.2 (p 211), there are no criteria that identify the BioCondition score that must be achieved.	Provide an updated Planning Part and schedule that includes:

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	specific rehabilitation parameters Section 3.5.1.8.5 of the Planning Part - Woodland habitat revegetation Section 3.5.1.8.4 of the Planning Part - Cattle grazing revegetation Section 3.7.1.3.1 of the Planning Part - Reference sites	Ensure that monitoring and conditions are explicit about identifying native v non-native grasses. For monitoring to effectively inform adaptive management of mine site rehabilitation, and appropriately report progress, native and non-native grasses must be reported separately. Ensure that monitoring and conditions are explicit about “invasive plants” v “non-native cover”. BioCondition requires non-native cover to be assessed and that includes all non-native species, not only declared weeds. Section 3.7.1.3.1 states that reference sites for PMLUs won’t be selected until Yr 1 of monitoring. They should be designated in the PRC plan. The map on p215 shows only two reference sites for grazing and two for woodland (though Table 56 shows four woodland reference sites). Two reference sites are not enough. There needs to be at least three for each target RE. Should Blackwater adopt an approach to vegetation criteria that fulfills the department’s expectations regarding BioConditioning, reference sites will have reduced importance, and the proposed sites may be sufficient. However, if Blackwater prefers to focus on reference-sites based criteria, local reference sites will be very important for understanding local environmental conditions and interpreting monitoring results	(a) Condition BioCondition-based monitoring and criteria for Woodland PMLU (RE 11.7.2; RE 11.5.3/11.5.9 hybrid) and Watercourse PMLU (RE 11.3.25). (b) Condition width of the Watercourse PMLU (RE 11.3.25) e.g. at least 50m out from the high bank. (c) Consider a wider selection of species in the seed mixes for each RE. Consider the habitat requirements of the conservation-significant species identified on site and incorporate these into the rehabilitation plans e.g. ensure high seeding rate of koala food species occurring in each RE. (d) Condition reuse of logs and tree stumps as shelter for fauna in rehabilitated areas. There are no plans or references to this in the PRCP. (e) Incorporate shade/habitat trees in the grazing PMLU.

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38.	Section 3.5.1.7.2 of the Planning Part - Water Management	Section 3.5.1.7.2 lacks sufficient detail regarding water management and does not meet the requirements of Section 3.6.1 of the PRCP Guideline. The PRC Plan must provide a comprehensive description of the contaminants that pose a risk to environmental values of the receiving environment. The Planning Part has not identified the specific Contaminant of Concern (CoC) associated with the activity. CoC identification should be based on site-specific information, including mining processes (e.g., dams and seepage data), industrial chemical inventories and waste characterisation. This information must be clearly presented in the PRC Plan to demonstrate that the proposed rehabilitation methodologies will ensure the land achieves a non-polluting condition. This is critical for refining the list of CoC that may require surface water and groundwater monitoring and limits as part of the PRCP Schedule. It is acknowledged that the WaTERS database contains some data for mine affected water releases at Blackwater. A more comprehensive dataset, along with supporting interpretations, is required as part of the Planning Part. While some information is included in the Waste Characterisation section and appendices, additional data and interpretations are necessary. The PRC Plan must clearly present comprehensive data from dams, seepage monitoring programs and void water quality conducted to date for the site. Statistically robust data sets for the waste characterisation and site dams, seepage and void water should then be compared against the relevant water quality objective (WQOs) and water quality guidelines (WQGs) of all the identified environmental values, and where possible, to local surface water and groundwater baseline conditions.	Provide an updated Planning Part that includes: (a) A description of potential CoCs associated with the activity (including the industrial chemicals listed in section 3.5.1.7.2). (b) Present comprehensive raw and interpreted data collected from dams, seepage, mine-affected water programs. Clearly outline the methodology used to identify, evaluate and refine the potential CoC, in accordance with the PRCP guideline requirements. Consider as a minimum, Electrical Conductivity, TDS, pH, sulphate, dissolved: aluminium, antimony, arsenic, barium, cobalt, copper, chromium, molybdenum, manganese, nickel, selenium, iron, zinc; fluoride, nitrate, total petroleum hydrocarbons, PFAS etc. (c) Present a statistically robust comparison of site-specific water quality data from dams, mine-affected water, seepage, void

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			water quality against the relevant WQO, WQGs, baseline groundwater quality for the environmental values identified in Table 7 and Table 11 of the PRC Plan. Include a broad suite of contaminants in the appraisal. (d) Include a list of water quality indicators (based on CoC) and, where relevant, limits to be monitored in the residual voids. Provide an updated monitoring program that specifies frequency of water quality monitoring at sufficient intervals to be able to gather data to monitor/demonstrate the condition of the void pit water and to assist in future refinements of the PRC Plan and void water quality modelling.
39.	Section 3.1.2 of the Planning Part - Baseline information Section 3.5.1.7 of the Planning Part - Water management	Section 3.1.2 of the Planning Part lacks sufficient detail and does not meet the requirements of Section 3.1 and 3.6.1 of the PRCP Guideline. Very limited data on the receiving environment's water quality has been provided or summarised in the Planning Part. The response to DETSI NPM Item #2, which refers to water quality data available via WaTERS or in separate REMP documents, does not meet the requirements of the PRCP Guideline. The guideline requires this data/information to be provided in the PRCP Plan and	Provide an updated Planning Part that includes: (a) Background receiving environment water quality monitoring data (surface water, ground water). This must include

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	Section 3.7.1.3.10 of the Planning Part - Groundwater monitoring	to be supported by adequate scientific analysis and rationale relevant to the rehabilitation and post-closure conditions. Regarding groundwater, in accordance with section 3.8 of the PRCP Guideline and section 126C(1)(j) of the EP Act, the Planning Part must include a monitoring and maintenance program that identifies and describes the monitoring systems required to demonstrate that milestones and milestone criteria have been achieved. However, section 3.7.1.3.10 of the PRC Plan proposes a single deep drainage Acceptance Criterion for rehabilitation based solely on Electrical Conductivity (EC). The plan indicates that the EC limit will be determined at a later stage. This approach does not adequately meet the requirements of the PRCP guideline, as it does not account for aquifer-specific and/or bore specific limits or provide assessments for all identified CoC. This is inadequate given the milestone and milestone criteria for the proposed NUMAs include the requirement to minimise environmental harm to receiving environments during post-closure and for the rehabilitated status of the site. The PRCP states that it is expected that the void lakes will contain elevated concentrations of salts and metals because of the quality of groundwater inflows and evapo-concentration effects over time. Additionally, water quality within the voids is projected to continue deteriorating beyond the modelled scenarios (>500 years) and stratification-based density driven seepage is listed as a potential impact. Without a fit-for-purpose monitoring program clearly documented, it is unclear how the successful achievement of milestone criteria can be demonstrated. Comprehensive water quality data is important and must be provided in both detailed and summarised formats. The rehabilitation and management methodology section of the Planning Part should include the detail of the proposed water quality monitoring program. For	all monitoring locations and indicators monitored. Use the attached departmental templates. (b) As a minimum, a statistically appropriate comparison of background data against the relevant water quality objective and water quality guidelines relevant to all the environmental values. (c) Proposed water quality limits for all identified CoC at surface water and groundwater monitoring locations. This is needed as part of the PRCP Schedule conditions (as per Section 4.2 of the PRCP Guideline). (d) Aquifer or bore specific information in terms of baseline water quality or proposed limits.

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		NUMAs the management milestones must be supported by milestone criteria that ensure the milestones are measurable. Management milestones are required for all improvement areas that have a NUMA to ensure that the NUMAs achieve best practice management of the area and minimise risks to the environment. Hence, quality characteristic must be based on CoC and CoC should be the same for surface water and groundwater. Proposed limits must be fit for purpose (based on closure rather than operational EA conditions), site-specific, and based on WQOs, guidelines and/or background data. Aquatic ecosystem protection, as a scheduled environmental value for the receiving environment, must also be considered where relevant. Background data may be utilised to establish site-specific water quality limits, specifically where natural mineralisation or processes are evident. For surface waters CoC, the 80th percentile of the data for upstream/reference site/s should be used for physico-chemical indicators and the 95th percentile for toxicants. For groundwater, the 95th percentile of the baseline (ideally pre-mining) data can be used to determine site-specific limits for all identified CoCs. Refer to the guidance presented in the Queensland Governments Guideline, 'Using monitoring data to assess groundwater quality and potential environmental impacts - Groundwater Quality Assessment. This guideline outlines the methodology required to accurately assess and process raw data for deriving proposed limits, under Queensland guidelines.	
40.	Section 3.5.1.7 of the Planning Part - Water Management	The Planning Part lacks sufficient detail and does not fulfil Section 3.6.1 of the PRCP Guideline. The PRCP must clearly present and justify the proposed monitoring locations for both surface water and groundwater. These locations should be	(a) Provide an updated Planning Part that includes the detailed rationale and methodology used to propose, refine and map all

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	Section 3.6.1 of the PRCP Guideline	determined based on a clear and defensible methodology that considers the sources and pathways of potential COCs specific to the rehabilitation areas and NUMAs on the site. For example, while groundwater monitoring locations are shown in Figure 65 and Table 58 of the Planning Part, the following critical issues have been identified: • No proposed monitoring points within ML70104 or ML70329 – despite the presence of a high risk TSF nearby. • No proposed monitoring points proposed in ML70167, ML1773 ML70139 or ML1771 – despite NUMAs being proposed nearby. Additionally, limited information has been provided regarding the aquifers that may be impacted by void pit water releases, TSF seepage, or other potential sources of contaminants. It remains unclear whether the groundwater monitoring program has been designed to effectively target the relevant aquifers relevant to rehabilitation and post closure and whether the selected locations are optimal for early detection of unintended emissions. No surface water monitoring is currently proposed in the draft PRCP Schedule. Present a surface water monitoring program. Ensure the monitoring program is comprehensive and aligned with the closure objectives, particularly the requirement to minimise environmental harm to receiving environments and for PMLUs to achieve stable condition. Provide detailed descriptions of the methodology used to determine all monitoring locations be it for surface water of groundwater. The number and positioning of these monitoring locations need to be fit for purpose and aligned with best practice rehabilitation management programs	water quality monitoring locations appropriate for rehabilitation and post-closure and appropriate to demonstrate the objectives of section 176A(3) of the EP Act. (b) Identify and assess aquifers that may be impacted by potential emissions, such as those associated with void pit water releases (or are sources to groundwater) or TSF seepage, and ensure the monitoring program is designed to capture data from these aquifers effectively. (c) Include monitoring locations appropriately place for all relevant mining leases, mining areas and NUMAs, and potential sources of contaminants to the receiving environment.
PRCP Schedule			

Item	Relevant Section (proposed PRC plan)	Matter	Information Request
41.	PRCP Schedule: General	The PRCP assessment process is an iterative process whereby ongoing awareness and understanding of the site's rehabilitation needs will lead to additions and variations to the draft PRCP schedule. Amendments proposed by the administering authority to the draft PRCP schedule is provided as an attachment to this information request notice to assist you in developing SMART criteria. Note, where the administering authority has not varied a criterion of the draft PRCP schedule, it is not intended to infer this criterion is accepted. Please review and amend the draft PRCP schedule in consideration of the additional information request items below. <i>Overall amendments proposed:</i> Completion criteria included for RM1 to RM3 does not achieve SMART principles. The administering authority proposed the inclusion of general criteria that apply to all PMLUs. Section 3.5.1.7 of the Planning Part (Water Management) indicates all mining-related dams are to be decommissioned and removed. Specific criteria for Cattle Grazing, Woodland Habitat, Watercourse and Tailings Storage Facilities and Reject dumps should be expanded to achieve SMART principles. Criteria for management milestones also don't achieve SMART principles. Additional criteria have been proposed by the administering authority, with more specific surface requirement and geotechnical criteria required to demonstrate that the landform is geotechnically stable. <i>Further specific requests are provided below.</i>	Review the proposed amendments to the draft schedule and advise of agreement or comment otherwise to the amendments. The draft schedule in response to this information request is able to be provided in the word document format rather than the excel spreadsheet. It is the administering authority's preferred approach that where proposed amendments are agreed, that track changes of these amendments is accepted. Any agreement to any comments on the schedule is to be provided as subsequent comments. Any additional amendments or concerns are to be provided in track changes and/or comments.
42.	PRCP Schedule - Timeframes	In accordance with section 4.1 of the PRCP Guideline, milestones must have a completion date of the 10 December of the calendar year. Milestone complication dates of the draft PRCP schedule has been proposed as 1 July.	Provide a revised Schedule which proposes dates which areas are available, and milestones completed by that align with 10 December of the

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			relevant year. Refer to the PRCP Guideline for examples.
43.	PRCP Schedule – Milestone complete dates for RAs	Several RAs have significant time lag between milestone competition dates between milestones. There is limited on no justifications for this lag, which can range up to 25, 30 or 90 years. RA2 has a 30-year gap where no additional areas are proposed to commence a milestone from 2075 to 2100. This is followed by another 25 years of no additional areas from 2100 to 2125. The RA tables propose a general timeframe for cattle grazing of 30 years between when the area is available to when RM7 is achieved or 25 years from the completion of the first milestone. RA6 has a 5-year gap where no additional areas are proposed to commence a milestone from 2040 to 2045. This is followed by another 90 years of no additional areas from 2060 to 2150. RA7 has a 95-year gap where no additional areas are proposed to commence a milestone from 2055 to 2150.	Justify why progressive rehabilitation is not occurring between these time periods or adjust the time periods to reflect progressive rehabilitation.
44.	PRCP schedule – New figure	The relevant activities for IA1 include the names of voids as per the NUMAs proposed (Ramp 8, Mimosa/Besgrove, Deep Creek, Stewarton/Ballamoo, Kenmare, Togara/North Marshmead, South Marshmead, Comet Downs East, Kennedy West). A figure is sought for inclusion in the schedule which includes an overlay of pits as per the NUMAs proposed and which specific pits are included in each of these areas. For example, Figure 3 of the Planning Part includes 'Tannyfoil	Provide a new figure to be included in the PRCP schedule which shows existing and proposed pits with current names and an overlay of pits with the proposed NUMA naming.

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		Pit', however, as this pit is part of the 'Stewarton/Ballamoo' void, this specification is needed to assist in identifying the relevant sections the Planning Part (and criteria) if required.	
45.	RM3	RM3.1 does not include an upper limit for slope gradient for the grazing PMLU. Landform criteria must be supported by appropriate technical studies and appropriate to the PMLU. Table 29 of the PRCP includes a commitment to place rock on steeper slopes, as per the recommendations of Appendix 4.8. This commitment is not reflected in the schedule. In general, the material placement recommendations in Appendix 4.8 have not been reflected in the schedule to a sufficient extent to ensure that the landforms will remain erosionally stable.	Provide a revised PRCP schedule with SMART criteria for landform geometry and material placement that can demonstrably be expected to achieve a stable condition and support the proposed PMLU.
46.	RM4 Surface preparation	Completion criteria included for RM4 does not achieve SMART principles. The administering authority does not accept criteria proposed for surface preparation. In general, the Planning Part provides evidence the soil types are problematic for a variety of reasons. Appropriate criteria are required to demonstrate the management of growth media and completion criteria to be verified and evaluated by an AQP. The administering authority does not accept vague criteria such as '<i>Assessment of growth media characteristics and the development of an amelioration plan is completed by an AQP prior to placement on the landform</i>'. Table 28 of the Planning Part, Growth media ameliorant options and surface treatments for the PMLUs, provides information which should be used utilised for the development of SMART criteria for Surface preparation.	Provide a revised Schedule which includes criteria for surface preparation consistent with the Planning Part and that achieves SMART principles.

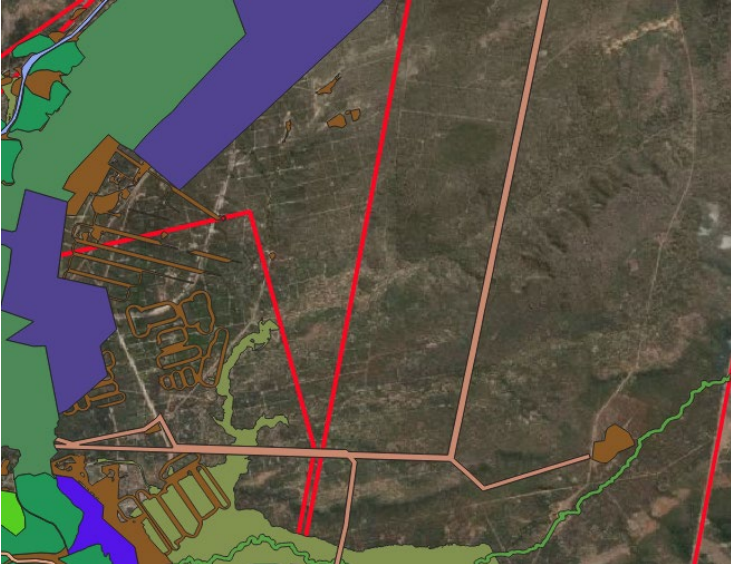
Item	Relevant Section (proposed PRC plan)	Matter	Information Request
47.	RMs Revegetation	The administering authority does not accept criteria proposed for Revegetation. An appendix which refers to BioCondition benchmarks is required. The criteria proposed must: (a) Provide a benchmark to measure areas requiring revegetation to demonstrate that the area is on a trajectory to achieving stable condition. (b) Provide a benchmark to measure the achievement of revegetation for each regional ecosystem. In addition, criteria should be included to ensure non-native seed has not been used for the revegetation (except for sterile cover crops). Example criteria you may consider for the achievement of surface requirements are: (a) A BioCondition assessment is completed by an AQP using the methodology outlined in the latest version of the Queensland Herbarium's 'BioCondition Assessment Manual'. (b) The BioCondition assessment completed under (X) complies with the >#60 PRCP Benchmark for the PMLU, as per Appendix # - Biocondition Benchmarks. For the achievement of stable condition (later milestones): (a) An assessment of BioCondition benchmarks for 'PMLU' complies with the >#60 PRCP Benchmark for the PMLU as per Appendix # - Biocondition Benchmarks	Provide a revised Schedule which includes BioCondition benchmarks for the relevant regional ecosystems which are the target PMLU outcome. Refer to the attached modified BioCondition benchmark framework and draft PRCP schedule to develop BioCondition benchmarks. Ensure criteria proposed for revegetation achieves SMART principles.
48.	RM6 Achievement of surface requirements	Criteria 6.1 and 7.1, for all PMLUs, proposes:	Provide justification for the proposed criterion 6.1 regarding Parthenium

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		(a) Restricted invasive plant species (Defined by the <i>Biosecurity Act 2014</i> (Qld)) comprise <5% of total vegetation groundcover, with the exception of <i>Parthenium hysterophorus</i> which must not exceed 10% of vegetation groundcover and be assessed by an AQP as appropriately managed. It is unclear why of the reason for the variation in the groundcover percentage for Parthenium and whether the criterion will impact on the achievement of stable condition for all PMLUs.	groundcover and justify how a 10% of total groundcover maximum will align with the PMLU and ensure stable condition.
49.	RM6, RM7	Criteria 6.2, 6.3, 7.2, 7.3, and 7.4 do not adequately reflect the findings and recommendations of Appendix 4.8. There is significant variation in the recommended groundcover targets between the different soils and different slope gradients tested, and the criteria proposed do not sufficiently provide for erosional stability across all scenarios. The definition for groundcover used in the PRCP schedule does not reflect the definition and assumptions discussed in Section 3.5.4 of the erosion assessment (Appendix 4.8). It is noted that rocky material can increase erosional stability, however, the groundcover targets recommended in appendix 4.8 are for vegetative groundcover, with rockiness inherent to the materials already accounted for in model input parameters. Any additional rock added over and above that considered in the modelling can augment groundcover, but the definition used in the PRCP schedule does not provide sufficient guarantee that the assumptions and recommendations of the erosion assessment will be implemented.	Provide revised PRCP schedule that includes groundcover criteria that reflect the findings and recommendations of the erosion assessment.
50.	RM 8 Surface water and groundwater demonstrates non-polluting landform	The administering authority does not accept criteria proposed related to surface and groundwater. Refer to information request items 38 to 40 and amend the PRCP schedule in consideration of the issues identified.	In consideration of the issues identified in the Planning Part, provide an updated PRCP Schedule which includes further surface water and groundwater monitoring details

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	Attachment 4 Groundwater Quality Limits	For the water quality criteria to be SMART the location, frequency, quality characteristics and limits are required. An appendix should be included in the PRCP schedule for each of the following: (a) Groundwater Monitoring locations (b) Groundwater quality limits (c) Surface Monitoring locations (d) Surface water quality limits Criteria should be included to ensure void water quality monitoring conducted at regular intervals at a minimum of 3 locations across the void water surfaces for the quality characteristics listed for proposed surface water quality limits.	and limits (including location, quality characteristics, limits and frequency of monitoring).
51.	RA03 (RM1 – RM8)	The administering authority does not accept criteria proposed for Watercourses. Refer to information request items 19 to 21 and amend the PRCP schedule in consideration of the issues identified. Minimal Criteria have been provided for the rehabilitation of Watercourse PMLU. Three diversions (Sirius, Taurus and Rocklands) require realignment and/or rehabilitation. Criteria have not been included to ensure the realignment of the creek diversions are achieved and that the creek diversions achieve stable condition.	In consideration of the issues identified in the Planning Part, provide an updated PRCP Schedule which includes SMART criteria for Watercourses, including: (a) Expanded criteria which meets SMART principles and ensures achievement of stable condition. (b) Criteria for the completion of the realignment of water course diversions

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52.	MM2 Installation of cover system	As per request item 16 in relation to cover systems, completion criteria included for MM2 does not achieve SMART principles. The criteria proposed of '<i>An AQP has certified that the cover system is built/ installed as designed and has completed an 'As Constructed' engineering report for each cover system</i>' is not achievable as there is no detailed design for the cover system at current nor a requirement in the schedule for one. At minimum, the PRCP is required to include SMART criteria that the covers must meet in terms of: (a) Target performance criteria (e.g. water flux density <5% average annual rainfall). (b) Validation by an AQP that the cover design will achieve the target criteria (for example: numerical modelling and column/field trials). (c) Validation by an AQP the growth medium is suitable for the proposed plant species mix (e.g. water holding capacity, fertility status, permeability, effective depth of rooting, etc). As noted in Appendix 4.12, a new concept design will be required for the particular waste storage facility if there are changes to: • Final landform geometry; • Post-mining land use, especially a change requiring different vegetation; • The approach to surface water management on the relevant final landforms (i.e. free draining or ponding); or • The understanding of end-of-mining and long-term groundwater levels in the vicinity of inpit TSFs.	Provide an updated PRCP Schedule that includes SMART cover system criteria which includes: (a) A requirement for a detailed design at an appropriate time before the commencement of the relevant milestones to ensure the achievement of stable condition for the structures. (b) The minimum criteria stated in the matters column (left). (c) Completion criteria that ensures a new concept design will be completed where there are changes to the following: i. Final landform geometry; ii. Post-mining land use, especially a change requiring different vegetation; iii. The approach to surface water management on the relevant final landforms (i.e. free draining or ponding); or iv. The understanding of end-of-mining and long-term

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			groundwater levels in the vicinity of inpit TSFs.
53.	MM4 Achievement of sufficient improvement	Completion criteria included for MM4 does not achieve SMART principles. More specific criteria are required to ensure sufficient improvement is achieved. No criteria have been included to demonstrate the water level and quality in the voids do not and will not cause environmental harm to the surrounding environment.	Provide an updated PRCP Schedule that includes SMART for sufficient improvement
54.	NUMA criteria: Flooding	Criteria is required for landform or bunding, bank protection and erosion design where inundation up to and under PMF scenarios are predicted or where high-velocity flows (>2.5 m/s) are predicted to impinge of the landform based on proposed designs.	Provide criteria for the protection of the landform where inundation up to and under PMF scenarios are predicted or where high-velocity flows (>2.5 m/s) are predicted to impinge of the landform to ensure matters and expectations detailed in section 3.6.3 of the PRCP Guideline.
Spatial Data/Figures			
55.	Reference Map, Final Site Design and Spatial Data	The NPM response submitted to the administering authority on 16 May 2025 satisfied NPM Notice matters #5 – 7 (Reference Map, Final Site Design and Spatial Data). However further clarification is required regarding these matters.	Provide further confirmation Figure 1 includes general disturbance (Figure 1) or whether the disturbance relates to exploration. If applicable, update the Planning part and spatial data to include all areas of general disturbance.

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		As previously noted, general disturbance is required to be mapped as Rehabilitation Areas (RAs) and exploration disturbance is not subject to RA mapping. It is unclear whether the figure below includes general disturbance (Figure 1) or whether the disturbance relates to exploration. Particularly the wider roads/tracks, general disturbance contiguous with the mining activities.  <i>Figure 1: Exploration and track extents not clearly defined by the PRCP</i>	