

Baralaba South Project Environmental Impact Statement

ATTACHMENT 2 Terms of Reference Reconciliation



Baralaba South Project Terms of Reference Reconciliation Table

	BSP Terms of Reference ¹	Section
Part B Content of the EIS		
1.0	General approach	
1.1	For the purposes of the EIS process, 'environment' is defined in section 8 of the EP Act.	Noted – defined in the Glossary
1.2	The EIS should give priority to the critical matters associated with the project (specified in section 7 of the TOR).	Noted – addressed in Chapters 4 to 12 and Appendices A to O
1.3	The detail in which the EIS deals with matters relevant to the project should be proportional to the scale of the impacts on environmental values. When determining the scale of an impact, consider its intensity, duration, cumulative effect, irreversibility, the risk of environmental harm, management strategies and offsets provisions.	Noted – addressed in Chapters 4 to 12 and Appendices A to O
2.0	Mandatory requirements of an EIS	
2.1	Describe the project including all aspects subject to this assessment. Provide details of the proponent of the project, including details of any joint venture partners. The project description should include all on and off lease activities relevant to the project including construction, operation and decommissioning activities. If the delivery of the project is to be staged, the nature and timing of the stages should be fully described.	Sections 1.1, 2.1, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 3.4, 3.5, 3.7, 3.8 and Appendix AA.
2.2	For all the relevant matters, the EIS must identify and describe the environmental values that must be protected. Environmental values are specified in the EP Act, the Environmental Protection Regulation 2008 (EP Regulation), environmental protection policies (EPPs) and relevant guidelines.	Sections 4.2, 5.2, 6.2, 7.4, 7.5, 7.6, 7.7, 9.8.2, 9.10.1, 9.11.2, 9.12.1, 9.15.1, 9.16.2, 10.3, 10.6, 11.2, 12.1.2, 13.3.1, 13.4.1, 13.5.1, 13.6.1, 14.1, 15.2, 16.2.2, 17.3 and Appendices A to AA.
2.3	The assessment should cover both the short and long-term scenarios and state whether any relevant impacts are likely to be irreversible.	Noted – addressed in Chapters 3 to 18 and Appendices A to AB
2.4	Provide all available baseline information relevant to the environmental risks of the project. Provide details about the quality of the information provided, in particular: the source of the information; how recent the information is; how the reliability of the information was tested; and any uncertainties in the information.	Chapters 3 to 17 and Appendices A to AB
2.5	Demonstrate how the construction, operation and decommissioning (to the extent known) of the project would be consistent with best practice environmental management. In general, the preferred hierarchy for managing likely impacts is: (a) to avoid; (b) to minimise or mitigate; and (c) if necessary, and possible, to offset. Where relevant, mitigation strategies should be described in the context of EHP model conditions.	Sections 3.4 to 3.8, 4.5, 5.5, 6.6, 7.9, 7.11, 8.4, 9.8 to 9.19, 10.5, 11.5, 12.4, 13.3 to 13.6, 14.4 to 14.6, 15.4, 16.2.4, 16.3.3, 17.6, Chapter 18 and Appendices A to AB
2.6	Provide detailed strategies in regard to all critical matters for the protection, or enhancement as desirable, of all relevant environmental values in terms of outcomes and possible conditions that can be measured and audited.	Chapters 3 to 13, Chapter 18 and Appendices A to H, J, K, N to Q, AA and AB.
2.7	Impact minimisation measures should include ongoing monitoring and proposals for an adaptive management approach, as relevant, based on monitoring. The proposed	Sections 3.4 to 3.8, 4.5, 5.5, 6.6, 7.9, 7.11, 8.4,



	BSP Terms of Reference ¹	Section
	measures should give confidence that, based on current technologies, the impacts can be effectively minimised over the long-term.	9.8 to 9.19, 10.5, 11.5, 12.4, 13.3 to 13.6, 14.4 to 14.6, 15.4, 16.2.4, 16.3.3, 17.6, Chapter 18 and Appendices A to AB
2.8	Present feasible alternatives of the project's configuration (including individual elements) that may improve environmental outcomes. Discuss the consequences of not proceeding with the project.	Section 2.1 and 2.9
2.9	For unproven elements of a resource extraction or processing process, technology or activity, identify and describe any global leading practice environmental management, where available.	N/A – no unproven elements are proposed
3.0	Further requirements of an EIS	
3.1	The assessment and supporting information should be sufficient for the administering authority to decide whether an approval should be granted. Where applicable, sufficient information should be included to enable approval conditions, such as the existing model EA conditions, to be utilised.	Noted - proposed conditions outlined in Chapter 19, with reference to the 'Model Mining Conditions'
3.2	To the extent of the information available, the assessment should endeavour to predict the cumulative impact of the project on environmental values over time and in combination with impacts created by the activities of other adjacent and upstream and downstream developments and landholders—as detected by baseline monitoring. The EIS should also outline ways in which the cumulative impact assessment and management could subsequently be progressed further on a collective basis.	Sections 4.4, 5.4, 6.5, 7.8, 9.8 to 9.17, 10.4, 11.3, 12.3, 13.3 16.2, Appendices A to H, K to P, and S to Y
3.3	Include a consolidated description of all the proponent's commitments to implement management measures (including monitoring programs). Should the project proceed, these should be able to be carried over into the approval conditions as relevant.	Chapter 18
3.4	Provide all geographical coordinates throughout the EIS in latitude and longitude against the Geocentric Datum of Australia 1994 (GDA94).	Noted
3.5	Maps provided in the EIS should be accompanied with the relevant geospatial data.	Noted
3.6	An appropriate public consultation program is essential to the impact assessment process. The proponent should consult with local, Queensland and Australian government authorities, and potentially affected local communities.	Section 16.2, Attachment 3 and Appendix S
3.7	The EIS should describe the consultation that has taken place and how the responses from the community and agencies have been considered, and where possible, incorporated into the design and outcomes of the project. Requirements for the public consultation plan are listed in the document 'Preparing an environmental impact statement: Guideline for proponents'.	Section 16.2, Attachment 3 and Appendix S
3.8	Include, as an appendix, a public consultation report. The report should detail how the public consultation plan was implemented including the results.	Attachment 3
4.0	Executive summary	
	The executive summary should describe the project and convey the most important and preferred aspects and environmental management options relating to the project in a concise and readable form. It should use plain English, avoid jargon, be written as a stand-alone document and be structured to follow the EIS. It should be easy to reproduce and distribute on request to those who may not wish to read or purchase the whole EIS.	Chapter 0, Executive Summary



5.0	Introduction	
	Clearly explain the function of the EIS, why it has been prepared and what it sets out to achieve. Include an overview of the structure of the document.	Section 1.0
	Project proponent Describe the proponent's experience, including:	
5.1	 the designated proponent's full name, postal address and Australian Business Number, if relevant (including details of any joint venture partners); 	Section 1.1
5.1	the nature and extent of business activities;	
	• environmental record, including a list of any breach of relevant environmental laws during the previous 10 years; and	_
	the proponent's environmental, health, safety and community policies.	
5.2	The environmental impact assessment process	
5.2.1	The EIS should provide an outline of the environmental impact assessment process, including the role of the administering authority in the decision-making process for the EIS. The information in this section is required to ensure readers are informed of the process to be followed and are aware of any opportunities for input and participation.	Section 1.2
5.2.2	Inform the reader how and when properly made public submissions on the EIS will be addressed and taken into account in the decision-making process.	Section 1.2
5.3	Project approvals process	
5.3.1	Provide an outline of the approvals required to enable the project to be constructed and operated. Explain how the environmental impact assessment process (and the EIS itself) informs the issue of the leases/licences/permits/ consents required by the proponent before construction can commence. Provide a flow chart indicating the key approvals and opportunities for public comment. Guidance on typical associated approvals can be accessed from the Coordinator-General's website.	Section 1.2 and 1.4
6.0	Project description	
	Proposed development	
	The EIS must describe and illustrate at least the following specific information about the	e proposed project:
	the project's title;	Section 2.1
	 the project, its objectives, mine life (up to final landform design) and expected capital expenditure; 	Sections 2.1.1
	rationale for the project;	Section 2.1.5
6.1	• a description of the coal/mineral resource base, including the key geological attributes of the coal seams and the extent of identified resources of coal estimated for the seams;	Sections 2.1.4 and 2.2.6
	 the location and extent of any identified coal/mineral resources potentially sterilised by the planned activities; 	N/A (Sections 2.9.3)
	 the nature and scale of activities to be undertaken and whether it is a greenfield or brownfield site; 	Section 2.1.1
 the regional and local context of the project's footprint (with maps at suitable scales); 	Section 2.1.6	
	 relationship to other coordinated projects and other major projects (of which the proponent should reasonably be aware); 	Section 2.2.3



	 the workforce numbers to be employed by the project during its various phases, where personnel would be accommodated and, where relevant, the likely recruitment and rostering arrangements to be adopted; and 	Section 2.1.8
	• the proposed construction staging and likely schedule of operational works for the recovery of the identified coal/mineral resources, including the annual tonnage(s) of coal/mineral to be mined.	Sections 2.4 and 2.5
6.2	Site description	
6.2.1	Provide real property descriptions of the project land and adjacent properties; any easements; any land tenure under the <i>Land Act 1994, Stock Route Management Act 2002</i> and the <i>Land Title Act 1994</i> ; state lands including roads, unallocated state land, state leases, reserves and state forests; any underlying resource tenures; and identification number of any resource activity lease for the project land that is subject to application. Key transport, state-controlled roads, rail, air, port/sea and other infrastructure in the region relevant to the project and to the site should be described and mapped.	Sections 2.2, 10.3, 13.3, 13.4, 13.5, and Appendices K and P
6.2.2	Describe and illustrate the topography of the project site and surrounding area, and highlight any significant features shown on the maps. Maps should have contours at suitable increments relevant to the scale, location, potential impacts and type of project, shown with respect to Australian Height Datum (AHD) and drafted to GDA94.	Sections 2.2.5 and 10.3.2.
6.2.3	Where appropriate, describe and map in plan and cross-sections the surficial and solid geology and landforms, including catchments, of the project area. Show geological structures, such as aquifers, faults and economic resources that could have an influence on, or be influenced by, the project's activities.	Sections 2.2.6, 5.2.2 and 10.3.3 and Appendices B, K, AA and AB
6.2.4	Where appropriate, describe, map and illustrate soil types and profiles of the project area at a scale relevant to the proposed project. Describe the method(s) used for soil characterisation. Identify soils that would require particular management due to wetness, erosivity, depth, acidity, salinity or other feature.	Sections 10.3.5 and 10.3.6 and Appendix K
6.3	Climate Describe the site's climate patterns that are relevant to the environmental assessment, with particular regard to discharges to water and air and the propagation of noise. Climate information should be presented in a statistical form including long-term averages and extreme values, as necessary.	Section 2.3
	Proposed construction and operations	
	 Describe the following information about the proposal: existing infrastructure and easements on the potentially affected land, including overlapping tenure(s); 	Sections 2.2.3 and 2.2.4
	 existing exploration works or disturbance within the underlying pre-requisite exploration tenure(s); 	Section 2.2.8
	 proposed extractive and processing methods, associated equipment and techniques; 	Sections 2.5.2, 2.5.4 and 2.5.5
6.4	 sequencing and staging of activities, including rehabilitation activities; 	Sections 2.5.1 and 3.4.10 and Appendix AA
	 capacity of high-impact plant and equipment, their chemical and physical processes, and chemicals or hazardous materials to be used; 	Sections 2.5.4 and 2.5.5
	 known locations of new or altered works and structures and infrastructure (including upgrades or relocation) necessary for the project at all stages of its development, whether on or off the project lease(s) or rights of way; 	Section 2.4
	 all environmentally relevant activities proposed to be undertaken, as described in schedule 2 and schedule 2A of the EP Regulation; and 	Section 2.7



	• the off-site location and volume of any quarry materials and screening operations required to service the construction and operation of the project.	Sections 2.4.1 and 10.4.9
7.0	Identification of critical matters	
	This section sets out the scope of critical matters that should be given detailed treatment in the EIS. A matter is an aspect of the proposal that has one or more of the following characteristics:	
		Noted
	 a high or medium probability of causing serious or material environmental harm or a high probability of causing an environmental nuisance; 	Addressed in Chapters 3 to 7, 9 to 13 and Appendices A to K, N to Q and AA-AB
7.1	 considered important by the administering authority and (or there is a public 	Noted
	 considered important by the administering authority and/or there is a public perception that an activity has the potential to cause serious or material environmental harm or an environmental nuisance, or, the activity has been the subject of extensive media coverage; and 	Addressed in Chapters 3 to 7, 9 to 13 and Appendices A to K, N to Q and AA-AB
	• identified (in a referral decision) as a specific controlling provision under the EPBC Act.	Section 1.2, Chapters 7 and 9, and Appendices, A, B, F, G, H, I and J
	The following critical matters have been identified for the proposed Baralaba South Coal Project:	
	Flora and fauna (Section 8.1);	
	Water quality (Section 8.2);	Chapters 3 to 7, 9 to 13
	Water resources (Section 8.3);	and Appendices A to Q
	Flooding and regulated dams (Section 8.4);	and AA-AB
7 2	Air quality (Section 8.5);	Attachments 2 to 4
7.2	Noise and vibration (Section 8.6);	provide a reconciliation
	Transport (Section 8.7);	table for each
	Land (Section 8.8); and	requirement of the
	Matters of National Environmental Significance (MNES) (Appendix 2).	Project TOR
	In the course of preparing and assessing the EIS, information may become available that warrants a change of scope of critical matters, or identifies additional critical matters.	
8.0	Assessment of critical and routine matters	
	The following subsections list the critical and routine matters for resource projects, with (where applicable) reference to the objectives defined in the EP Regulation. In some cases, not all the matters may be relevant while in others the list may not be exhaustive. Where applicable, refer to the objective of the EP Regulation (section 3) to ensure ecologically sustainable development is achieved.	
	For each matter identified below, the level of detail should be proportional to the scale minimum, the proponent should supply sufficient information that confirms the risks/ii	
8.1	Flora and fauna (critical matter)	
	Information Requirements – Rehabilitation	
8.1.1	The EIS should provide information based on relevant guidelines, current best practice approaches and legislative requirements about the strategies and methods for progressive and final rehabilitation of the environment disturbed by the project and decommissioning.	Section 3.1 and Appendix AA
8.1.2	Develop a preferred rehabilitation strategy (supported by examples of successfully implemented rehabilitation methods at existing operations) that would minimise the residual loss of land and water bodies with ecological or productive value. For key	Sections 3.3 and 3.4 and Appendix AA



	intervals throughout the planned mine life (at minimum, every 5 years), and for mine closure, show the expected topography of the site with any excavations, waste areas and dam sites on suitably scaled maps. Illustrate the proposed final land uses.	
8.1.3	Describe the topsoil resource on site and the quantity and quality of topsoil that would be available for rehabilitation. Describe how topsoil will be managed to minimise topsoil loss. The EIS must describe how topsoil will be stripped, salvaged and stockpiled and used for progressive and final rehabilitation.	Sections 3.2.3 and 3.5.2 and Appendices K and AA
8.1.4	Describe and illustrate where mined areas and uncompacted overburden and workings at the end of operations would lie in relation to flood levels up to and including the 'probable maximum flood level' based on the Bureau of Meteorology's 'probable maximum precipitation' forecast for the locality. Demonstrate that any proposed final voids would be located outside areas affected by flood levels up to and including the 'probable maximum flood level'.	Sections 3.4.4, 6.3.1 and 6.3.6 and Appendices C and AA
8.1.5	Describe rehabilitation success criteria that would be used to measure progress and completion. Link the success criteria to the preferred rehabilitation strategy.	Section 3.6, 3.7 and Appendix AA
8.1.6	Notwithstanding that management techniques may improve over the life of the project, and legislative requirements may change, the EIS needs to give confidence that all potential high-impact elements of the project (e.g. spoil dumps, voids, tailings and water management dams, creek diversions/crossings, subsidence areas, etc.) are capable of being managed and rehabilitated to achieve acceptable land use capabilities/suitability, to be stable and self-sustaining and to prevent upstream and downstream surface and groundwater contamination.	Sections 3.4 to 3.7 and Appendix AA
	Information requirements – Flora and Fauna	
	Describe the likely impacts on the biodiversity and natural environmental values of affected areas arising from the construction, operation and eventual decommissioning of the project (where known). Take into account any proposed avoidance and/or mitigation measures. The assessment should include, but not be limited to, the following key elements:	
	Matters of State Environmental Significance (MSES) and MNES;	Sections 7.8, 7.10 and Chapter 9 and Appendices F to J
	 terrestrial and aquatic ecosystems (including groundwater-dependent ecosystems) and their interaction; 	Sections 9.11.3 to 9.11.6, 9.12.3, 9.13.5 and 9.14.3, Chapter 7 and Appendices F to J
	• biological diversity including listed flora and fauna species and regional ecosystems;	Sections 9.11, 9.12, 9.13 and 9.14, Chapter 7 and Appendices F to J
8.1.7	 the integrity of ecological processes, including habitats of threatened, near- threatened or special least-concern species; 	Sections 7.8, 7.10, 9.11, 9.12, 9.13 and 9.14 and Appendices A, C and F to J
	 connectivity of habitats and ecosystems, including impact of waterway barriers (e.g. diversions) on fish passage in all relevant waterways mapped on the Queensland Waterways for Waterway Barrier Works spatial data layer; 	Sections 7.8, 9.11.6, 9.11.8 to 9.11.9, 9.12.5 and Appendices A, F and G
	 the integrity of landscapes and places, including wilderness and similar natural places; 	Sections 9.11, 9.12, 9.13 and 9.14, Chapter 7 and Appendices F to I
	 chronic, low-level exposure to contaminants or the bio-accumulation of contaminants; 	Sections 7.8.2, 9.10.6, 9.11.4 and 9.12.3 and Appendices F to I.



	• impacts on terrestrial and aquatic ecosystems and associated native fauna due to wastes at the site, particularly those related to any form of toxicants in supernatant water of any tailings storage facility; and	Sections 7.8.2, 9.10.6, 9.11.4 and 9.12.3 and Appendices F to I.
	 impacts of dust from coal and overburden stockpiles and any additional coal haulage above already approved volumes on the growth and productivity of threatened species habitat, crops, grazing pastures and cattle. 	Sections 7.8.2 and 9.11.4 and Appendices F, G and L
8.1.8	Describe any actions of the project that require an authority under the <i>Nature</i> <i>Conservation Act 1992</i> , and/or would be assessable development for the purposes of the <i>Vegetation Management Act 1999</i> , the <i>Fisheries Act 1994</i> and the <i>Planning Act</i> <i>2016</i> .	Section 1.4
8.1.9	Propose practical measures for protecting or enhancing natural values and assess how the nominated quantitative indicators and standards may be achieved for nature conservation management. In particular, address measures to protect or preserve any listed threatened, near-threatened or special least concern species.	Sections 7.9, 7.10, 7.11, 9.11.7, 9.12.4, 9.13.6, 9.14.4, 9.19 and Appendices F to J.
8.1.10	Specifically address any obligations imposed by State or Commonwealth legislation or policy or international treaty obligations, such as the China–Australia Migratory Bird Agreement, Japan–Australia Migratory Bird Agreement, or Republic of Korea– Australia Migratory Bird Agreement.	Sections 1.4, Chapter 7 and Chapter 9
8.1.11	Assess the need for buffer zones and the retention, rehabilitation or planting of movement corridors, and propose measures that would avoid the need for waterway barriers, or propose measures to mitigate the impacts of their construction and operation. The measures proposed for the progressive rehabilitation of disturbed areas should include rehabilitation success criteria in relation to natural values that would be used to measure the progress.	Sections 7.9.1, 9.11.7, 9.12.4, 9.13.6, 9.14.4, 9.19, and Appendices F, G and AA
8.1.12	Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed. Proposals for the rehabilitation of disturbed areas should incorporate, where appropriate, provision of nest hollows and ground litter.	Sections 3.7, 7.9, 9.11.7, 9.12.4, 9.13.6, 9.14.4, 9.19, and Appendices F to J and AA
8.1.13	Assess the role of buffer zones in maintaining and enhancing riparian vegetation to enhance water quality and habitat connectivity.	Section 7.9.1
	Information requirements – Offsets	
	Propose offsets that are consistent with the requirements set out in any applicable Stat legislation or policy, for example:	e and Commonwealth
8.1.14	Where a significant residual impact will occur on a prescribed environmental matter, as outlined in the Environmental Offsets Regulation 2014, the offset proposal(s) must be consistent with the requirements of Queensland's <i>Environmental Offsets Act 2014</i> and the latest version of the Queensland Environmental Offsets Policy.	Chapters 7 and 9 and Appendix J
8.1.15	Where the Commonwealth offset policy requires an offset for residual significant impacts on a MNES, the offset proposal(s) must be consistent with the requirements of the EPBC Act Environmental Offsets Policy (October 2012), the Offsets Assessment Guide and relevant guidelines (also refer to Appendix 2 of the TOR).	Chapters 7 and 9 and Appendix J
8.2	Water quality (critical matter)	
8.2.1	Identify the environmental values of surface waters within the project area and immediately downstream that may be affected by the project with reference to the Environmental Protection (Water) Policy 2009 and section 9 of the EP Act, including any human uses (e.g. domestic, agricultural, horticultural, industrial and recreational) of the water and any cultural values.	Sections 4.2, 7.5.4, 9.8.1, 9.8.2 and 9.8.3 and Appendices A and G
8.2.2	Define the relevant water quality objectives applicable to the environmental values and demonstrate how these will be met by the project during construction, operation and following completion.	Sections 4.4 and 9.8.1



8.2.3	Detail the chemical, physical and biological characteristics of surface waters and groundwater within the area that may be affected by the project during construction, operation and following completion. The information should be based on statistically robust baseline surface water and groundwater quality data.	Sections 4.2.4 to 4.2.7, 4.4, 5.2.2 to 5.2.4, 7.5 to 7.8, 9.8.1 to 9.8.3, 9.10.1 to 9.10.3 and Appendices A, B, G, H and I
8.2.4	Identify the quantity, quality, location and timing of all potential and/or proposed releases of contaminants (such as controlled water releases to surface water streams) from water and wastewater from the project, whether as point sources (including controlled or uncontrolled discharges, stormwater run-off from regulated structures or other dams and sediment basins) or diffuse sources (such as seepage from waste rock dumps or irrigation to land of treated sewage effluent).	Sections 4.2 and 9.8.5 and Appendix A
8.2.5	Assess the impact of any releases on all relevant environmental values of the receiving environment and the quality and quantity of receiving waters, and the assimilative capacity of the receiving environment.	Sections 4.4.2 to 4.4.10, 7.8, 9.8.5 and 9.12.3 Appendices A and G
8.2.6	Describe how the achievement of the objectives would be monitored and audited, and how corrective actions (if required) would be managed. For example, provide measurable criteria, standards and/or indicators that will be used to assess the condition of the ecological values and health of surface water environments. Propose corrective actions if objectives cannot be met.	Sections 4.5, 5.4, 9.8.5 and 9.10.5, Chapter 18 and Appendices A, B and G
8.3	Water resources (critical matter)	
8.3.1	Provide details of any proposed impoundment, extraction, discharge, injection, use or loss of surface water or groundwater. Address the information requirements outlined in section 126A of the EP Act. Identify any approval, allocation or other requirement that would be needed under the <i>Water Act 2000</i> .	2.6.5, 4.2, 4.3, 4.4, 5.3, 9.8.2, 9.8.3, 9.8.4, 9.10.4 and Appendices A and B
8.3.2	Detail any significant temporary or permanent diversion or interception of overland flow, including any staging of works. Include maps of suitable scale showing the location of diversions and other water-related infrastructure in relation to mining infrastructure.	Sections 2.6.5, 4.3, 7.8, 9.8.5 and 9.9.6 and Appendices A and G
8.3.3	Describe the options for supplying water to the project and assess any potential consequential impacts in relation to the objectives of any water plans, resource operations plan and wild river declaration that may apply.	Sections 2.6.5, 4.2, 4.3, 4.4, 9.8.1, 9.8.4 and 9.8.6 and Appendices A and B
8.3.4	Describe present and potential users and uses of water in areas potentially affected by the project, including municipal, agricultural, industrial, recreational and environmental uses of water.	Sections 4.2.7, 5.2.5, 9.8.3 and 9.10.2 and Appendices A and B
8.3.5	Undertake a landholder bore survey to identify the location and source aquifer(s) of groundwater extraction in the area potentially affected by the project.	Sections 5.2 and 9.10 and Appendix B
8.3.6	Develop a monitoring bore network to inform the development of a groundwater model and form the basis of an ongoing network to monitor the full impacts of the project.	Sections 5.2, 5.4 and 9.10, and Appendix B
8.3.7	Provide statistically robust baseline seasonal surface water quality and flow volumes in watercourses, and groundwater quality and levels in aquifers in the area potentially affected by the project.	Sections 4.2, 5.2, 9.8 and 9.10, and Appendices A and B
8.3.8	Develop hydrological and hydraulic models as necessary to describe the inputs, movem outputs of all significant quantities and resources of surface water and groundwater tha project. The models should address the range of climatic conditions that may be experie adequately assess the potential impacts of the project (during key stages of mining and of the rehabilitated landform) on water resources. The models should include a site war reviewed. This should enable a description of the project's impacts at the local scale and including proposed:	at may be affected by the enced at the site, and after the implementation ter balance and be peer



	 changes in flow regimes from diversions, water take and discharges; 	Sections 4.4 and 9.8 and Appendices A and B and attachments 6, 7 and 8
	• alterations to riparian vegetation and bank and channel morphology; and	Sections 4.4, 5.2, 5.3, 6.3, 9.8.4, 9.8.6, 9.10.4 and 9.14.2, Appendix A and D, and Attachments 6, 7 and 8
	 direct and indirect impacts arising from the development. 	Sections 4.4, 5.3, 6.3, 7.8, 9.8, 9.9 and 9.10, Appendices A, B, C, D and H and Attachments 6, 7 and 8
	The Independent Expert Scientific Committee (IESC)	
8.3.6	The EIS must include a specific section responding to the information requirements contained in the IESC's information guidelines for proposals relating to the development of a large coal mine where there is a significant impact on water resources (Commonwealth of Australia, 2015).	Chapters 4, 5, 6 and 9 Appendices A-D and H-I An IESC reconciliation table is provided as Attachment 4
8.4	Flooding and regulated dams (critical matter)	
	Information requirements – Flooding	
8.4.1	Describe current flood risk for a range of annual exceedance probabilities up to the probable maximum flood, for the project site. Assess (through flood modelling) how the project may potentially change flooding (including flood flow velocities, afflux, rate of rise, time to peak, extent and duration) and run-off characteristics (upstream and downstream of the site, where applicable). Consultation with local landholders and business owners regarding the scale and magnitude of historical flood events is recommended, prior to conducting flood modelling. The assessment should consider levee banks already constructed for the existing Baralaba mining operation, as well as all infrastructure associated with all stages (including decommissioning) of the Baralaba South Coal Project including levees, waste rock dumps, roads and linear infrastructure. Propose mitigation measures to avoid or minimise impacts, including upstream impacts on adjoining and adjacent landholders and associated infrastructure. The flood modelling should be used to develop flood mapping which identifies areas of planned disturbance that would be affected by flooding at key time intervals (at minimum, every 5 years) throughout the planned mine life. This should include identification of mining pits and mine affected water storages that would be inundated.	Sections 6.2, 6.3 and 9.9, and Appendix C
8.4.2	Evidence should be provided that the securing of storage containers of hazardous contaminants during flood events meets the requirements of schedule 5, table 2 of the EP Regulation.	Sections 4.5, 6.3.11, 6.4, 6.5, 9.9.5, 9.9.6 and 9.9.7 and Appendix C
8.4.3	Assess the project's vulnerabilities to climate change (e.g. changing patterns of rainfall, hydrology, temperature and extreme weather events). Include assessment of key risk areas, such as effects of hydrologic changes on risk of flooding of mining voids. Describe possible adaptation strategies (preferred and alternative) based on climate change projections for the project.	Sections 4.4.16, 6.3.13 and 9.9.5, and Appendices A and C
	Information requirements – Dams	
8.4.4	Conduct impact assessments on regulated structures in accordance with the EHP's EIS information guideline – Regulated structures, EHP's Guideline on structures which are dams of levees constructed as part of environmentally relevant activities, and EHP's Manual for assessing hazard categories and hydraulic performance of structures.	Sections 6.5 and 9.8.5 and Appendix C



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8.4.5	Where project infrastructure comprises dams or other structures for storing potentially hazardous materials, describe how risks associated with dam or storage failure, seepage through the floor, embankments of the dams, and/or with overtopping of the structures will be avoided, minimised or mitigated to protect people, property and the environment.	Sections 2.6.5, 4.3, 4.4, 6.4, 6.5 and 9.8, 9.9 and Appendix C	
8.4.6	Describe the purpose of all dams, levees, clean water diversions, water transfer and piping systems proposed on the project site. Show their locations on appropriately scaled plans, maximum embankment heights, and for dams, their maximum volumes. Describe how storage structures and other infrastructure would be sited to avoid or minimise risks from flooding.	Sections 2.6.5, 4.3, 6.5, 9.8 and 9.9, and Appendices A and C	
8.4.7	Regulated structures must comply with the Manual for assessing consequence categories and hydraulic performance of structures in accordance with schedule 5, table 2 of the EP Regulation. Undertake a consequence category assessment for each dam or levee, according to the criteria outlined in this manual. The assessments must be undertaken for the three different failure event scenarios described in EHP's manual, i.e. for seepage, overtopping and dam break.	Sections 4.3, .6.5 and 9.8.1, 9.8.6, and Appendix A and C	
8.4.8	Following the consequence category assessment, determine the consequence category ('low, significant, or high') according to table 1 of EHP's Manual for assessing hazard categories and hydraulic performance of structures and provide certified copies of these the consequence category determination for each of the proposed dams or levees.	Sections 4.3, 9.8.1 and 9.8.6, and Appendix A	
8.4.9	List hazards and safety risks associated with flooding, including safety risks to persons, and impacts of flooding on dams, levees and/or associated infrastructure located within or outside the project area.	Sections 6.3, 6.4 and 6.5 and 9.9.5 and Appendices A and C	
8.5	Air quality (critical matter)	- -	
8.5.1	Fully describe the characteristics (through an emissions inventory) of the contaminants or materials released when carrying out the activity (point source and fugitive emissions). Provide an estimate of the greenhouse gas (direct) scope 1 and (indirect) scopes 2 and 3 emission factors during construction, commissioning, upset conditions, operation and closure in accordance with the Australian Government National Greenhouse Accounts Factors.	Section 11.4, and Appendix L	
	Predict the impacts of the releases from the activity on environmental values of the rec recognised quality assured methods. The description of impacts should take into consid capacity of the receiving environment and the practices and procedures that would be impacts. The impact prediction must:	deration the assimilative	
8.5.2	• address residual impacts on the environmental values (including appropriate indicators and air quality objectives) of the air receiving environment, with reference to sensitive receptors, using recognised quality assured methods. This should include all relevant values potentially impacted by the activity, under the EP Act, EP Regulation and Environmental Protection (Air) Policy 2008 (EPP (Air));	Section 11.3 and Appendix L	
	• address the cumulative impact of the release with other known releases of contaminants, materials or wastes associated with existing development (including the existing Baralaba mine and haul road) and possible future development (as described by approved plans and existing project approvals); and	Section 11.3.8 and Appendix L	
	• quantify the human health risk and amenity impacts associated with emissions from the project for all contaminants whether or not they are covered by the National Environmental Protection (Ambient Air Quality) Measure or the EPP (Air).	Sections 11.3 and Appendix L	
8.5.3	Describe the proposed mitigation measures and how the proposed activity will be consistent with best practice environmental management. Where a government plan is relevant to the activity or site where the activity is proposed, describe the activity's consistency with that plan.	Section 11.5, Chapter 18 and Appendices L, M and Z	



8.5.4	Describe how the achievement of the objectives would be monitored, audited and reported, and how corrective actions would be managed.	Section 11.5 and Appendix L and M
8.6	Noise and vibration (critical matter)	
8.6.1	Fully describe the characteristics of the noise and vibration sources that would be emitted when carrying out the activity (point source and general emissions). Noise and vibration emissions (including fugitive sources) that may occur during construction, commissioning, upset conditions, operation and closure should be described.	Section 12.3 and Appendices N and O
	Predict the impacts of the noise emissions from the activity on the environmental values of the receiving environment, with reference to sensitive receptors, using recognised quality assured methods. Taking into account the practices and procedures that would be used to avoid or minimise impacts, the impact prediction must address the:	
8.6.2	activity's consistency with the objectives;	Section 12.1.2, 12.3 and Appendices N and O
	• cumulative impact of the noise with other emissions of noise associated with existing development and possible future development (as described by approved plans); and	Section 12.3.5 and Appendices N and O
	 potential impacts of any low-frequency (<200 Hz) noise emissions. 	Section 12.3.1 and Appendix N
8.6.3	Describe how the proposed activity would be managed to be consistent with best practice environmental management for the activity. Where a government plan is relevant to the activity, or the site where the activity is proposed, describe the activity's consistency with that plan.	Section 12.4 and Appendix N
8.6.4	Describe how the achievement of the objectives would be monitored and audited, and how corrective actions would be managed.	Section 12.4, Chapter 18 and Appendices N and O
8.7	Transport (critical matter)	
8.7.1	The EIS should include a clear summary of the total transport task for the project, including workforce, inputs and outputs, during the construction and operational phases, noting any components of transport that are already approved (e.g. off-site coal haulage of up to 3.5 million tonnes per year of product coal along the Baralaba Mine Haul Route) and any proposed increase in approved volumes. The proponent should make appropriate modal choices to ensure transport efficiency and minimise impacts on land uses and the community.	Sections 13.2, 13.3.2, 13.4.2, 13.5.2 and 13.6.2, and Appendix P
8.7.2	Present the transport assessment in separate sections for each project affected mode (road, rail, air and sea) as appropriate for each phase of the project. Provide sufficient information to allow an independent assessment of how existing transport infrastructure will be affected by project transport at the local and regional level (e.g. local roads and state-controlled roads).	Sections 13.2, 13.3.2, 13.4.2, 13.5.2 and 13.6.2, and Appendix P
	Include details of the adopted assessment methodology for:	
8.7.3	• impacts on roads: the road impact assessment report in accordance with the Guide to Traffic Impact Assessment (Department of Main Roads, 2017), with traffic data provided in formats acceptable to DTMR; and	Section 13.3 and Appendix P
	• impacts on rail level crossings: the Australian Level Crossing Assessment Model.	Section 13.3.2 and Appendix P
8.7.4	Discuss and recommend how identified impacts will be mitigated so as to meet the above objectives for each transport mode. Mitigation strategies may include works, contributions, management plans or strategies that can be documented in a Road-use Management Plan and are to be prepared in close consultation with relevant transport authorities (including local government). Strategies should consider those	Sections 13.3.3, 13.4.3, 13.5.3 and 13.6.3, and Appendix P



	transport authorities' works program and forward planning, and be in accordance with the relevant methodologies, guidelines and design manuals.	
8.8	Land (critical matter)	
	Describe potential impacts of the proposed land uses taking into consideration the proposed be used to avoid or minimise impacts. The impact prediction must address:	posed measures that
	• landscape (including visual amenity) and land uses (including any site-specific accreditations e.g. organic, bio-dynamic, European union cattle accreditation scheme (EUCAS) accreditation) in and around the project area, referring to regional plans and local government planning schemes;	Sections 10.4.1, 10.4.4, 10.4.6, 10.5, 10.7 and 10.8, and Appendices K and Q
	• any existing mining, petroleum, geothermal and greenhouse gas storage tenures overlying or adjacent to the project site, and any to be applied for as part of this project;	Sections 10.3.11, 10.4.11 and Appendix K
8.8.1	• regional cumulative (reversible and irreversible) impacts of existing and possible future resource developments (as described by approved plans and approvals, and other projects currently at referral stages of a related assessment under the <i>State Development and Public Works Organisation Act 1971</i> , SPA, EP Act, <i>Mineral Resources Act 1989</i> and the <i>Petroleum and Gas (Production and Safety) Act 2004</i>) on:	
	(a) Agricultural Land Classification Class A and B land	Section 10.4.11 and Appendix K
	(b) land used for a priority agricultural land use in the priority agricultural area	
	(c) areas within the Dawson River Valley Important Agricultural Area used for an agricultural use	
	 (d) areas of land mapped as strategic cropping land on a strategic cropping land trigger map; and 	
	• any infrastructure proposed to be located within, or which may have impacts on, the Stock Route Network.	Section 10.4.7
8.8.2	Address the requirements of the <i>Regional Planning Interests Act 2014</i> , including the requirements of the Central Queensland Regional Plan (October 2013).	Section 10.3.8 and Appendix K
8.8.3	Detail any known or potential sources of contaminated land that could be impacted by the project. Describe how any proposed land use may result in land becoming contaminated.	Sections 10.3.13, 10.4.10 and Appendix K
8.8.4	Identify existing or potential native title rights and interests possibly impacted by the project and the potential for managing those impacts by an Indigenous Land Use Agreement or other measure.	Sections 10.3.10 and
8.9	Biosecurity	
8.9.1	Propose detailed measures to remove, control and limit the spread of pests, weeds and disease, pathogens and contaminants on the project site and adjacent areas, particularly declared plants and animals under Queensland's <i>Biosecurity Act 2014</i> , the Commonwealth <i>Biosecurity Act 2015</i> and weeds of national significance (WONS).	Sections 7.9, 8.4 and 9.11.7 and Appendices F and G
8.9.2	Weed and pest animal management measures should be aligned with local government pest management priorities.	Sections 7.9, 8.4 and 9.11.7 and Appendices F and G
8.9.3	Detail a monitoring program (including properties adjoining the mine and, where coal haulage above already approved volumes is proposed along the haul route) that would audit the success of measures, whether objectives have been met, and describe corrective actions to be used if monitoring shows that objectives are not being met.	Sections 7.9, 8.4 and 9.11.7 and Appendices F and G



8.10	Waste management	
8.10.1	Describe all the expected significant waste streams from the proposed project activities (typically these would include waste rock, tailings and coarse rejects from mining activities, during the construction, operational, rehabilitation and decommissioning phases of the project.	Section 14.2 and Appendix E
8.10.2	Provide maps showing the location and design of all potential waste disposal structures including, spoil dumps, tailings dams, coarse rejects and landfills.	Section 2.5.1
8.10.3	Describe the quantity, form (liquid, solid, gas), hazard, and toxicity of each significant waste, as well as any attributes that may affect its likelihood of dispersal in the environment, as well as the associated risk of causing environmental harm.	Sections 2.5.1, 2.5.2, 2.5.3, 14.2 and 14.3 and Appendix E
8.10.4	Define and describe the objectives and practical measures for protecting or enhancing environmental values from impacts by wastes.	Sections 14.1 and 14.4
8.10.5	Assess the proposed management measures against the preferred waste management hierarchy, namely: avoid waste generation; reduce waste generation; cleaner production; recycle; reuse; reprocess and reclaim; waste to energy; treatment; disposal. This includes the generation and storage of waste.	Section 14.4
8.10.6	Describe how nominated quantitative standards and indicators may be achieved for waste management, and how the achievement of the objectives would be monitored, audited and managed.	Sections 14.4, 14.5, 14.6 and 14.7
8.10.7	Detail waste management planning for the proposed project especially how these concepts have been applied to prevent or minimise environmental impacts due to waste at each stage of the project.	Sections 14.4, 14.5, 14.6 and 14.7
8.10.8	Develop a spoil placement plan based on results of characterisation of waste rock (overburden and interburden), and rejects and tailings from coal processing, if applicable. Describe how spoil, coal rejects and tailings placement during the life of the project would achieve the objectives of the preferred rehabilitation strategy outlined in Section 8.1 of the TOR. Geospatial data used to generate any maps presented in the spoil placement plan should also be provided, in a form accepted by the administering authority.	Sections 2.5, 3.4.1, 3.4.2 and 14.6
8.10.9	Provide details on natural resource use efficiency (such as energy and water), integrated processing design, and any co-generation of power and by-product reuse as shown in a material/energy flow analysis.	Sections 14.4.2, 14.4.3 and 14.4.4
8.11	Cultural heritage	- -
8.11.1	Undertake research/studies as required under the <i>Aboriginal Cultural Heritage Act 2003</i> (ACH Act) and describe impacts on Indigenous cultural heritage, taking into account the practices and procedures that would be used to avoid or minimise impacts. Develop a Cultural Heritage Management Plan in accordance with the requirements of Part 7 of the ACH Act.	Sections 15.2.1, 15.3.1 and 15.4.1 and Chapter 18
8.11.2	For non-Indigenous historical heritage, undertake a study of, and describe, the known and potential historical cultural and landscape heritage values of the area potentially affected by the project. Any such study should be conducted by an appropriately qualified cultural heritage practitioner. Provide strategies to mitigate and manage any negative impacts on non-Indigenous cultural heritage values and enhance any positive impacts.	Sections 15.2.2, 15.3.2 and 15.4.2, Chapter 18 and Appendix R
8.12	Social and economic	
8.12.1	In accordance with the Coordinator-General's guideline Social impact assessment guideline, describe the likely social impacts (positive and negative) on affected communities and the proposed mitigation measures to be implemented.	Sections 9.15.2 ,16.2.3 and 16.2.4 and Appendices S to X



8.12.2	Describe the likely impacts (positive and negative) of the project on the economies materially impacted by the project and any mitigation measures to be implemented. The analysis should describe both the potential and direct economic impacts including estimated costs, if material, on industry and the community (including impacts on land productivity and property values).	Sections 9.16.3, 16.3.3 and 16.3.4 and Appendix Y	
8.12.3	Discuss the potential impact on the normal supply/demand of extractive resource availability in the region both during and after construction and any economic consequences and proposed mitigation measures (if required) for the region.	Sections 9.16.3 and 16.3 and Appendix Y	
	The assessment should identify opportunities to capture the social and economic benefits of the project, including:		
	 strategies for ensuring local suppliers of goods and services receive full, fair and reasonable opportunity to tender for work throughout the life of the project through adopting policies such as the Queensland Resources and Energy Sector Code of Practice for Local Content administered by Queensland Resources Council; 	Sections 9.15.3 and 16.2.4 and Appendices S and X	
	 employment development and training strategies and implementation plans for local residents, including members of Indigenous communities, women and people with a disability; 	Sections 16.2.3, 16.2.4 and Appendices S and W	
8.12.4	 opportunities to support the agricultural and tourism industries and other local small businesses; 	Sections 9.15, 9.16, 16.2.4 and 16.3.4 and Appendices S, X and Y	
	 any recruitment and training programs to be offered; 	Sections 9.15.3, 16.2.4 and 16.3.4 and Appendices S, W and Y	
	 regional workforce development plans, including recruitment, training development programs and initiatives to be offered; 	Section 9.15.3, 16.2.4 and Appendices S, W and Y	
	 strategies that promote the location of workers and their families in regional centres; and 	Section 9.15.3, 16.2.4 and Appendices S, W and Y	
	 a description of estimated proportions, use and characteristics of 457 visa, FIFO, drive-in, drive-out and local workers during the construction and operational phases of the project. 	Sections 2.1.8, 9.4.2 and 16.2.3 and Appendices S and Y	
8.13	Hazards and safety		
	Describe the potential risks to people and property that may be associated with the project in the form of a preliminary risk assessment for all components of the project and in accordance with relevant standards. The assessment should include:		
	 potential hazards, accidents, spillages, fire and abnormal events that may occur during all stages of the project, including estimated probabilities of occurrence; 	Section 17.4	
8.13.1	 hazard analysis and risk assessment in accordance with AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines and with HB203:2006 Environmental Risk Management Principles and Processes; 	Section 17.5	
	 identifying all hazardous substances to be used, stored, processed or produced and the rate of usage; 	Section 17.4.2	
	 potential wildlife hazards, natural events (e.g. cyclone, storm tide inundation, flooding, bushfire) and implications related to climate change; 	Sections 2.3.6, 2.3.7, 6.3.1-6.3.7, 6.3.9-6.3.13 7.8.2, 9.8, 9.9, 9.10, 9.11 and 17.4 and Appendix C	



	 a description of natural hazards that may affect the site and at a minimum the 1% annual exceedance probability (AEP) of 100 year average reoccurrence interval (ARI) level, including mapping of the potential hazard areas at the site; 	Sections 6.2, 6.3, 9.9 and 17.4.1 and Appendix C
	 how development will avoid or mitigate the risks and how the development siting and layout responds to these hazards to minimise risks to personal safety and assets; and 	Sections 2.3.7, 6.4.1 -6.4.4, 6.5.3, 9.8, 9.9, 9.10, 9.11 and 17.6, Chapter 18 and Appendices A and C
	 how the project may potentially affect hazards away from the project site (e.g. changing flooding characteristics). 	Sections 6.3 and 17.4.1 and Appendix C
8.13.2	Provide details on the safeguards that would reduce the likelihood and severity of hazards, consequences and risks to persons, within and adjacent to the project area(s). Identify the residual risk following application of mitigation measures. Present an assessment of the overall acceptability of the impacts of the project in light of the residual uncertainties and risk profile.	Sections 6.4, 6.5.3, 17.5 and 17.6, Chapter 18 and Appendices A and C
8.13.3	Provide an outline of the proposed integrated emergency management planning procedures (including evacuation plans, if required) for the range of situations identified in the risk assessment developed in this section.	Section 17.6
8.13.4	Outline any consultation undertaken with the relevant emergency management authorities, including the Local Disaster Management Group.	Section 17.6.2, Attachment 3, Appendix S
9.0	Appendices to the EIS	
9.1	Appendices should provide the complete technical evidence used to develop assertions and findings in the main text of the EIS.	Noted
9.2	No significant issue or matter should be mentioned for the first time in an appendix— it must be addressed in the main text of the EIS.	Noted
9.3	Include a table listing the section of the EIS where each requirement of the TOR is addressed.	Attachment 2
9.4	Include a glossary of terms and a list of acronyms and abbreviations.	Chapter 21

Additional matters have been addressed in the EIS consistent with the contemporary generic terms of reference (DES, 2022).

