



Jellinbah Group



LAKE VERMONT MEADOWBROOK PROJECT ENVIRONMENTAL IMPACT STATEMENT

TERMS OF REFERENCE RECONCILIATION TABLE



ENVIRONMENTAL SOLUTIONS



Lake Vermont Meadowbrook Project Terms of Reference Reconciliation Table

Terms of Reference		Section
Content requirements of the EIS		
3.0 Glossary		
-	Provide a Glossary of terms and a list of acronyms and abbreviations at the start of the EIS	Chapter 25
4.0 Executive Summary		
-	The EIS must include an executive summary which describes the proposed project and conveys the most important aspects and environmental management commitments relating to the proposed project; in a concise and readable form.	Chapter ES
5.0 Introduction		
5.1	<u>Project proponent</u>	Chapter 1, Section 1.1
	Provide information about the proponent(s) and their business, including: <ul style="list-style-type: none"> the proponent’s full name, street and postal address, and Australian Business Number, including details of any joint venture partners; and the nature and extent of the proponent’s business activities and experience in resource projects; 	
		Chapter 1, Section 1.1.1
		Chapter 1, Section 1.1.2
5.2	<u>The environmental impact statement process</u>	Chapter 1, Section 1.4.1, 1.4.2, 1.4.3
	The EIS should provide and outline, noting which milestones have been completed, and an estimated completion date for each remaining EIS stage. Highlight the steps in which the public will have the opportunity to provide input or comment. This information is required to ensure readers are informed of the EIS process and are aware of their opportunities for input and commenting.	
	Inform the reader how and when properly made public submissions on the EIS can be made and outline how the submissions are taken into account in the decision-making process.	Chapter 1, Section 1.4.3
5.3	<u>Project approvals process</u>	Chapter 1, Section 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 1.5.6, 1.5.7
	Describe all approvals under federal, state or local legislation that are required to enable the proposed project to be constructed and operated; and note the legislation under which the approvals are assessed and issued. This information must explain how the EIS fits into the assessment and approval processes for the EA and other approvals required of the proposed project before construction and operations can start.	
	As this proposed project is to be assessed under the bilateral agreement between the Australian Government and the State of Queensland, describe the approvals process under the EPBC Act.	Chapter 1, Section 1.5.1.1



Terms of Reference	Section
6.0 Consultation Process	
<p>Describe the consultation that has taken place and how responses from stakeholders, including government agencies and members of the community, have been incorporated into the design and outcomes of the proposed project.</p>	<p>Chapter 2, Section 2.1.2, 2.2.1, 2.2.2, 2.4.1,</p>
<p>Describe any proposed future consultation activities and outline how the results of that consultation will be used in the ongoing management of the proposed project.</p> <p>Provide information on the development and outcomes of the implementation of consultation for the people, organisations and communities identified as affected or interested persons and stakeholders for the proposed project. Describe issues of potential concern to all stakeholders at various stages of the proposed project from project planning to commencement, project operations and decommissioning. The description of the consultation should at least include the following matters:</p> <ul style="list-style-type: none"> • the objectives of the consultation process; • timing of consultation; • the number and interests of the people, organisations and communities involved in the consultation (particularly the affected and interested persons defined in sections 38 and 41 of the EP Act); • methods of consultation and communication; • reporting and feedback methods of the consultation process; • the potential impacts of the proposed activity on Strategic Cropping Area (SCA) in accordance with the Regional Planning Interests Act 2014 (RPI Act) Statutory Guideline (06/14) for public notification of assessment applications; • an assessment explaining how the consultation objectives have been met; and • an analysis of the issues and views raised and their completed or planned resolution, including any alterations to the proposed project as a result of the received feedback. 	<p>Chapter 2 Section 2.4.1, Appendix O – Section 4, Appendix T – Section 6</p>
7.0 Proposed project description and alternatives	
<p>Describe all aspects of the proposed project that are covered by the EIS's assessment. If there are any aspects of the proposed project that would be assessed separately, describe what they are, and how they would be assessed and approved.</p> <p>The description of the proposed project should include all on and off lease activities relevant to the proposed project, including construction, operation and decommissioning activities. If the delivery of the proposed project is to be staged, the nature and timing of the stages should be fully described.</p>	<p>Chapter 3, Section 3.3, 3.4, 3.5</p>
<p><u>Proposed project</u></p>	<p>-</p>
<p>Describe and illustrate the following specific information about the proposed project, including but not limited to:</p> <ul style="list-style-type: none"> • proposed project title; 	<p>Chapter 3, Section 3.1.1</p>
<p><u>7.1</u></p> <ul style="list-style-type: none"> • a clear outline of the proposed project's objective; 	<p>Chapter 3, Section 3.1.2</p>
<ul style="list-style-type: none"> • expected capital expenditure; 	<p>Chapter 3, Section 3.1.3</p>
<ul style="list-style-type: none"> • rationale for the proposed project; • background to the proposed project and justification for its need; 	<p>Chapter 3, Section 3.1.2</p>



Terms of Reference		Section
	<ul style="list-style-type: none"> proposed project description, including the nature and scale of all project components and activities; 	Chapter 3, Section 3.1.4
	<ul style="list-style-type: none"> whether it is a greenfield or brownfield site; 	Chapter 3, Section 3.1.4
	<ul style="list-style-type: none"> power and water supply; 	Chapter 3, Section 3.3.1, 3.3.6, 3.3.7, 3.5.2, 3.5.5
	<ul style="list-style-type: none"> transport requirements; 	Chapter 3, Section 3.3.2, 3.5.1
	<ul style="list-style-type: none"> regional and local context of the proposed project's footprint, including maps at suitable scales; 	Chapter 3, Section 3.2.1.3, 3.3.3, 3.3.9
	<ul style="list-style-type: none"> proposed timing of the development, including construction staging, likely schedule of works and anticipated mine life; 	Chapter 3, Section 3.1.5, 3.4.1
	<ul style="list-style-type: none"> relationship to other major projects or developments of which the proponent should reasonably be aware; 	Chapter 3, Section 3.1.6.1
	<ul style="list-style-type: none"> the workforce numbers for all project phases; 	Chapter 3, Section 3.1.7
	<ul style="list-style-type: none"> where personnel would be accommodated and the likely recruitment and rostering arrangements to be adopted; and 	Chapter 3, Section 3.1.7.2, 3.1.7.3, 3.1.7.4, 3.1.7.6
	<ul style="list-style-type: none"> proposed travel arrangements of the workforce to and from work, including use of a fly-in-fly-out (FIFO) or drive-in-drive-out (DIDO) workforce. 	Chapter 3, Section 3.1.7.5
	<u>Site description</u>	-
<u>7.2</u>	Provide real property descriptions of the proposed project land and adjacent properties, any easements, any existing underlying resource tenures, and identification number of any resource activity lease for the proposed project land that is subject to application.	Chapter 3, Section 3.2.1,
	Describe and illustrate with scaled maps the key infrastructure in and around the site, including state-controlled and local roads, rail lines and loading yards, airfields, ports or jetties, electricity transmission infrastructure, pipelines, and any other infrastructure in the region relevant to the proposed project.	Chapter 3, Section 3.2.2,
	Describe and illustrate the topography of the proposed project site and surrounding area and highlight and identify any significant features shown on the maps. Map the location and boundaries of the proposed project's footprint, including all infrastructure elements and development necessary for the proposed project. Show all key aspects, including excavations, stockpiles, areas of fill, subsidence areas, services infrastructure, plant locations, water or tailings storages, buildings, bridges and culvert, haul and access roads, causeways, stockpile areas and loading facilities and any areas of dredging or bed levelling. Include discussion of any environmental design features of these facilities including bunding of storage facilities.	Chapter 3, Section 3.2.3,



Terms of Reference		Section
	Describe and map in plan and cross-sections the geology and terrestrial landforms of the proposed project area. Indicate the boundaries of water catchments that are significant for the drainage of the site. Show geological structures, such as aquifers, faults and economic resources that could have an influence on, or be influenced by, the proposed project's activities.	Chapter 3 Section 3.2.4,
	Describe and illustrate the precise location of the proposed project in relation to any designated and protected areas, wetlands, waterbodies and waterways providing fish passage. This is to include the location of any proposed buffers surrounding the working areas; and lands identified for conservation, either through retention in their current natural state or to be rehabilitated.	Chapter 3 Section 3.2.6
	Describe, map and illustrate land and soil resources (types and profiles) of the proposed project area at a scale relevant to the site in accordance with the latest version of the department's Land—EIS information guideline (DES 2020). Identify soils that would require particular management due to wetness, erosivity, depth, acidity, salinity or other feature, including acid sulfate soils.	Chapter 3 Section 3.2.5
	Describe with concept and layout plans, in both plan- and cross-section views, requirements for constructing, upgrading or relocating all infrastructure associated with the proposed project. Show the locations of any necessary infrastructure easements on the plans, including infrastructure such as roads, rail (and the rail corridor), level crossings, conveyors, bridges, tracks and pathways, dams and weirs, bore fields, power lines and other cables, wireless technology (such as microwave telecommunications), and pipelines for any services, whether underground or above.	Chapter 3 Section 3.1.4, 3.2.2, 3.3.3,
7.3	<u>Proposed construction and operations</u>	-
	Describe the following information about the proposed project, provide maps and concept and layout plans for the following:	-
	<ul style="list-style-type: none"> existing land uses and any previous land use that might have affected or contaminated the land; 	Chapter 3 Section 3.2.5
	<ul style="list-style-type: none"> existing buildings, infrastructure and easements on the potentially affected land; 	Chapter 3 Section 3.2.2
	<ul style="list-style-type: none"> the precise location of works to be undertaken, structures to be built or components of the proposed project; 	Chapter 3 Section 3.1.4, 3.3
	<ul style="list-style-type: none"> all pre-construction activities, including vegetation clearing, site access, interference with watercourses, wetlands and floodplain areas; 	Chapter 3 Section 3.1.4, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.9
	<ul style="list-style-type: none"> the proposed construction methods, associated equipment and techniques; 	Chapter 3 Section 3.3.8
	<ul style="list-style-type: none"> road and rail infrastructure, and stock routes, including new constructions, closures and/or realignments; 	Chapter 3 Section 3.3.1, 3.3.2,
	<ul style="list-style-type: none"> the location, design and capacity of all other required supporting infrastructure, including water supply and storage, sewerage, electricity from the grid, generators and fuels (whether gas, liquid and/or solid), power stations and telecommunications; 	Chapter 3 Section 3.3



Terms of Reference		Section
	<ul style="list-style-type: none"> changes to watercourses, waterways providing fish passage, flooding and overland flow on or off the site, including water diversions, crossings, flood levees, water off-takes and, locations of any proposed water discharge points; 	Chapter 3 Section 3.3.6
	<ul style="list-style-type: none"> any take of surface and groundwater (both direct and in-direct); 	Chapter 3 Section 3.5.5
	<ul style="list-style-type: none"> proposed tailings management and storage; 	Chapter 3 Section 3.4.2, 3.4.4
	<ul style="list-style-type: none"> any infrastructure alternatives, justified in terms of ecologically sustainable development, including energy and water conservation; 	Chapter 3 Section 3.6
	<ul style="list-style-type: none"> days and hours of construction and operation; 	Chapter 3 Section 3.1.5, 3.3.8
	<ul style="list-style-type: none"> proposed mine life, location, spatial extent and amount of resources to be mined and the resource base, including total seam thickness and seam depths; 	Chapter 3 Section 3.1.4, 3.2.4, 3.4.1
	<ul style="list-style-type: none"> mining sequence and cross sections showing profiles and geological strata and faults; 	Chapter 3 Section 3.2.4, 3.4.1
	<ul style="list-style-type: none"> the planned recovery of resources, including the location of any resources not intended to be mined that may be sterilised during mining activity or from related infrastructure; 	Chapter 3 Section 3.4.1
	<ul style="list-style-type: none"> planning to ensure recovery of the resource is undertaken efficiently to minimise or avoid wastage and sterilisation of resources; 	Chapter 3 Section 3.4.1
	<ul style="list-style-type: none"> the proposed methods, equipment and techniques for resource separation, beneficiation and processing; 	Chapter 3 Section 3.4.2
	<ul style="list-style-type: none"> process flow-sheets showing material balances for the processing plant; 	Chapter 3 Section 3.4.2
	<ul style="list-style-type: none"> the sequencing and staging of activities; 	Chapter 3 Section 3.4.1
	<ul style="list-style-type: none"> the proposed methods and facilities to be used for the storage, processing, transfer and loading of product; 	Chapter 3 Section 3.4.3
	<ul style="list-style-type: none"> the capacity of high-impact plant and equipment, their chemical and physical processes, and chemicals or hazardous materials to be used; 	Chapter 3 Section 3.4.6
	<ul style="list-style-type: none"> any activity that would otherwise be a prescribed environmentally relevant activity if it were not undertaken on a mining or petroleum lease; and 	Chapter 3 Section 3.4
	<ul style="list-style-type: none"> any new borrow pits, stream bed excavations, or expanded dredging, bed levelling, quarry and screening operations that may be required to service construction or operation of the proposed project. 	Chapter 3 Section 3.2.2, 3.3
7.4	<u>Feasible alternatives</u>	-



Terms of Reference		Section
	Present feasible alternatives of the proposed project. Address a range of alternatives, including conceptual, technological, locality, configuration, scale and individual elements or components that may improve environmental outcomes as well as the alternative of not proceeding with the proposed project.	Chapter 3 Section 3.6
	Describe and evaluate the comparative environmental, social and economic impacts of each alternative (including the option of not proceeding), with particular regard to the principles of ecologically sustainable development.	Chapter 3 Section 3.6
	Discuss each alternative and its potential impacts in sufficient detail to enable an understanding of the reasons for preferring certain options and courses of action while rejecting others. Justify why the proposed project and preferred options should proceed.	Chapter 3 Section 3.6
8.0 The environmental impact assessment process		
-	For each project specific matter outlined in section 9, the EIS must identify and describe the relevant environmental values, assess potential adverse and beneficial environmental, economic and social impacts of the proposed project; and outline the management, monitoring, planning and other measures proposed to avoid, minimise and/or mitigate any adverse environmental impacts of the proposed project. This must be addressed within the scope of the following requirements.	Noted
	<u>Environmental Values</u>	-
<u>8.1</u>	<p>For the purposes of the EIS process, 'environment' is defined in section 8 of the EP Act.</p> <p>Identify and describe the values that must be protected for all the relevant matters, including:</p> <ul style="list-style-type: none"> environmental values specified in the EP Act, the EP Regulation (e.g. environmental objectives and performance outcomes as defined in Schedule 8) environmental protection policies (EPPs) and associated guidelines; values under other State legislation, policies and guidelines, including the Vegetation Management Act 1999, the Nature Conservation Act 1992 and the Regional Planning Interests Act 2014; and values identified in the project specific matters in section 9. Consider all available baseline information relevant to the environmental risks of the proposed project, including seasonal and long-term variations. Describe the quality of all information, in particular the source of the information, how recent the information is, how the reliability of the information was tested and any assumptions and uncertainties in the information. 	Noted
	Consider all available baseline information relevant to the environmental risks of the proposed project, including seasonal and long-term variations. Describe the quality of all information, in particular the source of the information, how recent the information is, how the reliability of the information was tested and any assumptions and uncertainties in the information.	Chapters 5 Section 5, 7, 8, 9, 10, 11, 12, 13, 14, 17, 18, 20
	<u>Impact Assessment</u>	-
<u>8.2</u>	<p>Assess the impacts of the proposed project on environmental values. This includes demonstrating that the proposed project meets the environmental objectives and outcomes for each matter in section 9 and the environmental objectives and performance outcomes for any matters listed in Schedule 8 of the EP Regulation.</p> <p>Impact assessment must address:</p> <ul style="list-style-type: none"> the construction, operation and decommissioning stages of the proposed project short, medium, and long term scenarios 	Noted – refer to individual chapters



Terms of Reference	Section
<ul style="list-style-type: none"> • the nature and scale of an impact, including but not limited to: <ul style="list-style-type: none"> o the impact’s intensity and duration; o cumulative effects of the proposed project in combination with other major projects or developments of which the proponent should reasonably be aware; o the risk of environmental harm; o avoidance, mitigation and management strategies and if necessary, offsets provisions; o the potential for unforeseen impacts; o the risks associated with unlikely but potentially major impacts; o direct, indirect, secondary, permanent, temporary, unknown, unpredictable and/or irreversible impacts; o both positive and negative impacts; and o impact interactions. 	
<p><u>Cumulative impacts</u></p> <p>Assess the cumulative impacts of the proposed project on environmental values. Every effort should be made to find information from all sources relevant to the assessment of cumulative impacts, including other major projects or developments of which the proponent should reasonably be aware. The EIS must outline ways in which the cumulative impact assessment and management could subsequently be progressed further on a collective basis.</p> <p>Impact assessment must address cumulative impacts, including but not limited to:</p> <ul style="list-style-type: none"> • environmental values of land, air and water, public health and the health of terrestrial and aquatic ecosystems; • environmental values over time or in combination with other impacts in the dimensions of scale, intensity, duration or frequency of the impacts; and • impacts created by the activities on other adjacent, upstream and downstream developments and infrastructure, and landholders. 	<p style="text-align: center;">-</p> <p style="text-align: center;">Noted – refer to individual chapters</p>
<p><u>Avoidance and mitigation</u></p> <p>Propose and describe avoidance, mitigation and management strategies for the protection or enhancement of identified environmental values. Proposed strategies must:</p> <ul style="list-style-type: none"> • adhere to the department’s management hierarchy: (a) to avoid; (b) to minimise or mitigate, including best practice environmental management; once (a) and (b) have been applied, (c) if necessary and possible, to offset; • include an assessment of the expected or predicted effectiveness, of the mitigation measures for dealing with the proposed project’s relevant impacts; • the name of the entity responsible for endorsing or approving each mitigation measure or monitoring program; • any statutory or policy basis for the mitigation measures; • the cost of the mitigation measures; • include an environmental management plan setting out the framework for continuing management, mitigation and monitoring activities for the proposed project’s relevant impacts, including any provision for independent environmental auditing; • include an adaptive management approach to provide confidence that, based on current technologies, the impacts can be effectively managed over the long-term; and • be described in context of the department’s model conditions and/or site-specific, outcome-focussed conditions that can be measured and audited. 	<p style="text-align: center;">-</p> <p style="text-align: center;">Noted – refer to individual chapters and Chapter 22</p>



Terms of Reference		Section
	<p>For unproven elements of a resource extraction or processing process, technology or activity, identify and describe any global leading practice environmental management that would apply.</p> <p>Demonstrate that the design of the proposed project and its predicted outcomes:</p> <ul style="list-style-type: none"> • meet the environmental objectives and outcomes listed in section 9 for each matter and the performance outcomes stated in Schedule 8 of the EP Regulation; • address the matters outlined in Schedule 1 of the EP Regulation, including items 2 and 4; • are consistent with best practice environmental management during construction, operation, decommissioning and post-closure management of the proposed project; and • meet all statutory and regulatory requirements of the federal, state and local government, including any relevant plans, strategies, policies and guidelines. <p>Include a consolidated description of commitments to implement management measures, including monitoring activities.</p>	
	<p><u>Conditions and commitments</u></p>	-
8.5	<p>Provide sufficient evidence and detail through studies, proposed management measures and supporting information:</p> <ul style="list-style-type: none"> • to demonstrate that the predicted outcomes for the proposed project can be achieved; • to meet the requirements of sections Chapter 5, Part 2, Division 3 of the EP Act as relevant to the proposed project; • to meet the requirements of Schedule 1 of the EP Regulation; and • for the administering authority to make recommendations about the suitability of the proposed project, assess whether an approval should be granted and recommend draft conditions for inclusion on relevant approvals. 	Noted – refer to individual chapters and chapter 22
	<p><u>Critical matters</u></p>	-
8.6	<p>The detail in which the EIS deals with all matters relevant to the proposed project should be proportional to the scale of the impacts on environmental values. When determining the scale of an impact, consider the impact’s nature, intensity, duration, cumulative effect, irreversibility, the risk of environmental harm, management strategies and offset provisions.</p> <p>A critical matter is a project specific matter listed in section 9 that has one or more of the following characteristics:</p> <ul style="list-style-type: none"> • it has a high or medium probability of causing serious or material environmental harm, or a high probability of causing an environmental nuisance; • it is 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; • it is relevant to a controlling provision under the EPBC Act; and • it raises obligations under any other legislation applicable for the proposed project (e.g. Water Act 2000). <p>The final scope of critical matters will be determined by the administering authority when finalising the TOR. However, if a new additional critical matter becomes apparent after the final TOR are issued, the EIS must address that new matter.</p>	Noted – refer to individual chapters
9.0	Project specific matters	
9.1	<u>Climate</u>	



Terms of Reference		Section
	Conduct the assessment in accordance with the latest version of the department’s Climate—EIS information guideline (DES 2020). Describe the proposed project area’s climate patterns that are relevant to the environmental impact assessment, with particular regard to the proposed project’s discharges to water and air, and the propagation of noise. Provide climate data in a statistical form, including long-term averages and extreme values. It should also be illustrated by bar charts, wind rose diagrams or other relevant graphic means as necessary.	Chapter 4, Section 4.1
	Assess the vulnerability of the area to natural and induced hazards, including floods, bushfires and cyclones. Consider the relative frequency and magnitude of these events together with the risk they pose to the construction, operation and decommissioning of the proposed project, as well as the rehabilitation of the site. Describe measures that would be taken to minimise the risks of these events.	Chapter 4, Section 4.2 Chapter 16, Section 16.6 Appendix L Section 3.3.4.2 Appendix V, Section 8
	Assess the proposed project’s vulnerabilities to climate change (e.g. changing patterns of rainfall, hydrology, temperature and, extreme weather events). The assessment of climate hazards and risks should reference relevant climate projection data and employ standard risk assessment methodologies. Describe the adaptation strategies and/or activities designed to minimise climate change impacts to the proposed project, subsequent land uses on that site (e.g. rehabilitation projects) and surrounding land uses. Adaptation activities must be designed to avoid perverse outcomes, such as increased emissions of greenhouse gases or maladaptive outcomes for surrounding land uses.	Chapter 4, Section 4.3, 4.4 Appendix L Section 4.7 Appendix V, Section 7 and Section 8
	<u>Land (critical matter)</u>	-
<u>9.2</u>	Conduct the impact assessment in accordance with the latest version of the department’s Land—EIS information guideline (DES 2020), Applications for activities with impacts to land (ESR/2015/18391), DAFF Environmental impact assessment companion guide (DAFF 2014), RPI Act statutory guideline 11/16 companion guide (DILGP 2017) and, if the proposed activities are in a SCA, refer to 03/14 of the guideline Carrying out resource activities in the Strategic Cropping Area and, and, if any quarry material is needed for construction, the department’s Quarry material—EIS information guideline (DES 2020). The impact assessment will consider the Mackay, Isaac and Whitsunday Regional Plan (2012) for any areas identified as being of regional interest under the RPI Act. Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the EP Regulation.	Chapter 5, Section 5.1, Appendix C – Section 2.1
	Describe potential impacts of the proposed land uses, taking into consideration the proposed measures that would be used to avoid or minimise impacts. The impact prediction must address the following matters:	-
	<ul style="list-style-type: none"> any changes to the landscape and its associated visual amenity in and around the proposed project area; 	Chapter 5, Section 5.4.8
	<ul style="list-style-type: none"> any existing or proposed mining tenement under the Mineral Resources Act 1989, petroleum authority under the Petroleum and Gas (Production and Safety) Act 2004, petroleum tenure under the Petroleum Act 1923, geothermal tenure under the Geothermal Energy Act 2010 and greenhouse gas tenure under the Greenhouse Gas Storage Act 2009 overlying or adjacent to the proposed project site; 	Chapter 5 section 5.3.10 and 5.4.6



Terms of Reference	Section
<ul style="list-style-type: none"> • temporary and permanent changes to land uses of the proposed project site and adjacent areas, considering: <ul style="list-style-type: none"> o actual and potential agricultural uses; o regional plans and local government planning schemes; o any Key Resource Areas that were identified as containing important extractive resources of state or regional significance which the state considers worthy of protection; o strategic cropping land, priority agricultural areas, priority living area and strategic environmental areas under the Regional Planning Interests Act 2014 and the trigger map for strategic cropping land; o findings of the Agricultural Land Audit; and o constraints to the expansion of existing and potential agricultural land uses. 	<p>Chapter 3, section 3.1.4, 3.3.9, 3.4.7, 3.4.1</p> <p>Chapter 5, (figure 5.2) sections 5.2, 5.3.1, 5.4.4</p> <p>Appendix I, Section 3.2</p>
<ul style="list-style-type: none"> • identify any existing or proposed incompatible land uses within and adjacent to the site, including the impacts on economic resources and the future availability and viability of the resource including extraction, processing and transport location to markets; and 	<p>Chapter 5, Section 5.4.4, 5.4.6</p>
<ul style="list-style-type: none"> • identify any infrastructure proposed to be located within, or which may have impacts on, the stock route network^{2,3} associated with the Land Protection (Pest and Stock Route Management Act) 2002. 	<p>Chapter 5, Section 5.3.5, 5.3.5</p>
<p>Assess the proposed project against the requirements of the Regional Planning Interests Act 2014. Further advice is provided in DILGP's RPI Act statutory guideline 11/16 companion guide (DILGP 2017) and the DAFF Environmental impact assessment companion guide (Department of Agriculture, Fisheries and Forestry, August 2014).</p>	<p>Chapter 5, Section 5.3.7</p>
<p>Propose suitable measures to avoid or minimise impacts related to land use.</p>	<p>Chapter 5, section 5.4.4</p> <p>Appendix B, Section 3.5.10.3</p>
<p>Show how landforms, during and after disturbance, will be stable over time and will meet any requirements of proposed project or property plans under the Soil Conservation Act 1986.</p>	<p>Chapter 1, section 1.5.2</p> <p>Chapter 5, Section 5.4, 5.4.1, 5.5</p> <p>Appendix C, Section 4</p>
<p>Detail any known or potential sources of contaminated land that could be impacted by the proposed project. Describe how any proposed land use may result in land becoming contaminated.</p>	<p>Chapter 3, section 3.4.1.10, 3.5.5.5</p> <p>Chapter 5, section 5.4.5</p> <p>Appendix B, Section 3.5.5.5, 3.5.8</p>
<p>Identify existing or potential native title rights and interests possibly impacted by the proposed project and the potential for managing those impacts by an Indigenous Land Use Agreement or other measure in accordance with the Native Title (Queensland) Act 1993 and consistent with the Queensland Government Native title work Procedures.</p>	<p>Chapter 3, Section 3.4.1.10</p> <p>Chapter 5, Section 5.3.9</p>



Terms of Reference		Section
		Chapter 6, Section 6.2.2.1, 6.5.5 Appendix B, section 3.5.5.5
	Detail (including with the use of maps) the following native title considerations: <ul style="list-style-type: none"> • current tenure of all land or waters within the project area (which may include creeks); • land or waters where native title has been determined to exist by the Federal Court; • land or waters that are covered by a native title determination application; and • land or waters that are covered by a registered Indigenous Land Use Agreement. 	Chapter 3 section 3.1.8, Figure 3.8 Chapter 5, Section 5.3.9, 5.4.7
	Describe pathways for resolving any native title considerations that comply with the Queensland Government’s Native title work procedures (such as the negotiation and registration of an Indigenous Land Use Agreement).	Chapter 5 section 5.3.9
	Subsidence (critical matter)	-
9.2.1	For underground mines and any other projects likely to cause land subsidence, assess and provide comprehensive surface subsidence predictions using tools or techniques that enable the location, extent and scale of subsidence, and its effect over time on surface landforms and hydrology to be understood. Propose detailed mitigation measures for any significant impacts that would result from subsidence, including impacts on infrastructure, land, hydrology, flora and fauna.	Chapter 5 sections 5.4.1, 5.5.1, Chapter 6, Section 6.5.3.1, 6.5.3 Chapter 8, sections, 8.3.8, 8.3.9 Chapter 9, sections 9.4.4, 9.5 Chapter 10 sections 10.5.1.3, 10.5.2.2, 10.5.2.1, 10.5.2.3, 10.5.2.4, 10.6.1, 10.7.2, 10.8, Chapter 11, section 11.5.2.4, Appendix A – Section 4
<u>9.3</u>	<u>Rehabilitation (critical matter)</u>	-
	Mining projects	-
9.3.1	Address the rehabilitation requirements of the EP Act, including the provisions requiring a proposed progressive rehabilitation and closure plan (PRC plan). Demonstrate that the proposed rehabilitation is consistent with the department’s guideline Progressive rehabilitation and closure plans (ESR/2019/49644) and best practice approaches about the strategies and methods for progressive and final rehabilitation.	Chapter 6, Section 6.3



Terms of Reference		Section
	Demonstrate that the rehabilitation of the environment disturbed by construction, operation, and decommissioning of the proposed project can meet the environmental objectives and performance outcomes in Schedule 8A of the EP Regulation.	Chapter 6, Section 6.5.5
	Proposed PRC plan	-
9.3.1.1	<p>Provide a proposed PRC plan for the proposed project. The plan must show how and where activities will be carried out on land in a way that maximises the progressive rehabilitation of the land to a stable condition and provide for the condition to which the holder must rehabilitate the land before the EA may be surrendered.</p> <p>The proposed PRC plan must consist of two components:</p> <ul style="list-style-type: none"> rehabilitation planning part; and progressive rehabilitation and closure plan schedule (PRCP schedule). <p>The proposed PRC plan should be consistent with the information requirements in the department's Submission of a progressive rehabilitation and closure plan (ESR/2019/49575).</p>	Appendix B
9.3.1.2	Provide the rehabilitation planning part of the proposed PRC plan, by addressing the following:	-
	<ul style="list-style-type: none"> describe each resource tenure, including the area of each tenure; 	Appendix B, Section 3.1.1
	<ul style="list-style-type: none"> describe the relevant activities and the likely duration of the relevant activities; 	Appendix B, Section 3.1.1.2, Table 1
	<ul style="list-style-type: none"> consider the rehabilitation and final land use for the strategic cropping area in accordance with the relevant sections of RPI Act; 	Appendix B, Section 3.5, 3.1.6.4
	<ul style="list-style-type: none"> include a detailed description, including maps, of how and where the relevant activities are to be carried out; 	Appendix B, Section 3.1
	<ul style="list-style-type: none"> include details of the consultation undertaken by the applicant in developing the proposed PRC plan; 	Appendix B, Section 3.2
	<ul style="list-style-type: none"> include details of how the applicant will undertake ongoing consultation in relation to the rehabilitation to be carried out under the plan; 	Appendix B, Section 3.2.2
	<ul style="list-style-type: none"> state the extent to which each proposed post-mining land use or non-use management area is consistent with the outcome of consultation with the community in developing the plan and any strategies or plans for the land of a local government, the State or the Commonwealth; 	Appendix B, Section 3.2.1, 3.2.2
	<ul style="list-style-type: none"> for each proposed post-mining land use, state the applicant's proposed methods or techniques for rehabilitating the land to a stable condition in a way that supports the rehabilitation milestones under the proposed PRCP schedule; 	Appendix B, Section 3.3.4.1, 3.5, 3.5.5.4, 3.7.1
	<ul style="list-style-type: none"> identify the risks of a stable condition for land identified as a proposed post-mining land use not being achieved, and how the applicant intends to manage or minimise the risks; 	Appendix B, Section 3.6
	<ul style="list-style-type: none"> for each proposed non-use management area, state the reasons the applicant considers the area cannot be rehabilitated to a stable condition because of either of the below: 	Appendix B, Section 3.4



Terms of Reference		Section
	<ul style="list-style-type: none"> o carrying out rehabilitation of the land would cause a greater risk of environmental harm than not carrying out the rehabilitation or; o the risk of environmental harm as a result of not carrying out rehabilitation of the land is confined to the area of the relevant resource tenure and the applicant considers, having regard to each public interest consideration, that it is in the public interest for the land not to be rehabilitated to a stable condition; and o demonstrate that any capture of surface or underground water is in accordance with the Water Plan (Fitzroy Basin) 2011. 	
	<ul style="list-style-type: none"> • include copies of reports or other evidence relied on by the applicant for each proposed non-use management area; 	Appendix B, Section 3.6
	<ul style="list-style-type: none"> • for each proposed non-use management area, state the applicant’s proposed methodology for achieving best practice management of the area to support the management milestones under the proposed PRCP schedule for the area; and 	Appendix B, Section 3.6
	<ul style="list-style-type: none"> • include other information requirements outlined in the department’s statutory guideline Progressive rehabilitation and closure plans (ESR/2019/49646). 	Appendix B, Section 3.3.4.1
9.4	<u>Water</u>	-
	Water quality (critical matter)	-
9.4.1	Conduct the impact assessment in accordance with the department’s Water—EIS information guideline (DES 2020), Applications for activities with impacts to water (ESR/2015/183710), Water quality guidelines (Queensland Government, 2020), Monitoring and sampling manual (DES 2018), and the Groundwater quality assessment guideline (DSITI 2017). Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the EP Regulation.	Chapter 7 – Section 7.1, Section 7.4.4, Chapter 8 – Section 8.1, Appendix E – Section 6, Appendix F - Section 2, Section 3 Appendix I, Section 7.1.1, Section 1.2.4
	With reference to the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 and section 9 of the EP Act, identify the environmental values and water quality objectives for surface waters within the proposed project area and immediately downstream that may be affected by the proposed project, including any human uses and cultural values of water.	Chapter 8.2.1, Chapter 5 Section 5.5.3 Appendix F - Section 2.2, Section 4.4
	Define the relevant water quality objectives applicable to the environmental values and demonstrate how these will be met by the proposed project during construction, operation, decommissioning and following proposed project completion. Where locally relevant water quality objectives are not available these should be defined according to the department’s latest Water quality guidelines (Queensland Government, 2020) and the procedures outlined in the guideline Deciding aquatic ecosystem indicators and local water quality guidelines under the Environmental Protection (Water) Policy (draft 2009) or relevant updates for all waters, including any semi-permanent or permanent pools, including stock water.	Chapter 8, section 8.2.8, 8.2.6, 8.3.4 Appendix F - Section 3.1, figure 4.12 Appendix Y, section 5.4



Terms of Reference		Section
	Detail the chemical, physical and biological characteristics of surface waters and groundwater within the area that may be affected by the proposed project and at suitable reference locations using sufficient data to define natural variation, including seasonal variation.	Chapter 8, Section 8.2.5, 8.2.6, 8.4.5 Appendix F Section 4.6, 4.7, Appendix E Section 4.3 Appendix I, Section 7.1.3, 4, figure 4-1
	Describe the quantity, quality, location, duration and timing of all potential and/or proposed releases of contaminants, during construction, operation, decommissioning, rehabilitation and following proposed project completion. Releases may include controlled water discharges to surface water streams, uncontrolled discharges when the design capacity of storages is exceeded, spills of products during loading or transportation, contaminated run-off from operational areas of the site (including seepage from waste rock dumps) or run-off from disturbed acid sulfate soils.	Chapter 8, Section 8.2.7, Appendix F Section 3, 2.2, 5.4 Appendix Y, Section 2.2
	Assess the potential impact of any releases from point or diffuse sources on all relevant environmental values and water quality objectives of the receiving environment, during construction, operation, decommissioning, rehabilitation and following proposed project completion. The impact assessment should consider the resultant quality and hydrology of receiving waters and the assimilative capacity of the receiving environment.	Chapter 8.2.7, 8.3, Appendix F, Section 5.4
	Describe how water quality objectives would be achieved and environmental impacts would be avoided or minimised through the implementation of management strategies that comply with the management hierarchy and management intent of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019. Appropriate management strategies may include the use of erosion and sediment control practices, and the separation of clean storm water run-off from the run-off from disturbed and operational areas of the site.	Chapter 5, Section 5.5.1 Chapter 8, Section 8.4, Appendix F – Section 5.2, 5.3, 7.7.3
	Describe how monitoring would be used to demonstrate that objectives were being assessed, audited and met. 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 to be used if objectives are not likely to be met.	Chapter 8, Section 8.4.3, 8.4.5, 8.4.8 Chapter 11, figure 11-3 Appendix F Section 6.3.4
	Water resources (critical matter)	-
9.4.2	Conduct the impact assessment in accordance with the department’s Water—EIS information guideline (DES 2020) and DAFF Environmental impact assessment companion guide (DAFF 2014). Address the requirements of section 126A of the EP Act.	Chapter 7, Section 7.4.4 Appendix I, Section 6.2.4, 6.2.7.1, 7.1.3



Terms of Reference	Section
<p>Describe present and potential users and uses of water in areas potentially affected by the proposed project, including municipal, agricultural, industrial, recreational and environmental uses of water.</p>	<p>Chapter 7, Section 7.2.6, 7.3.2</p> <p>Chapter 8, Section 8.2.4,</p> <p>Appendix F, Section 4</p>
<p>Describe the quality, quantity and significance of groundwater in the proposed project area and any surrounding area potentially affected by the proposed project's activities. Include the following:</p> <ul style="list-style-type: none"> • characterise: the nature, type, geology/stratigraphy and depth to and thickness of the aquifers; their transmissivity; and value as water supply sources; • analyse the movement of underground water to and from the aquifer(s), including how the aquifer(s) interacts with other aquifers and surface water; • characterise the quality and volume of the groundwater, including seasonal variations of groundwater levels and provide drawdown contours across the different stages of mine life; and • provide surveys of existing groundwater supply facilities (e.g. bores, wells, or excavations) and data from field tests. 	<p>Chapter 7.2.3, 7.2.4, 7.2.5, 7.3.2.6, 7.4.4</p> <p>Appendix I, Table 3-1, Section 3.3.1, 4.2.1.2, 7.1.3</p> <p>Appendix E, Figures 4-10, 4-13</p>
<p>Model and describe the inputs, movements, exchanges and outputs of surface water and groundwater that would or may be affected by the proposed project. The models used to estimate associated water take should take into account the climatic conditions at the site, assess the potential impacts on water resources and include a site water balance. The model should be peer-reviewed by an independent appropriately qualified person(s) consistent with the Australian groundwater modelling guidelines (Barnett et al 2012).</p>	<p>Chapter 7, Section 7.3.1, 7.3.2.4</p> <p>Chapter 8, Section 8.3.3, Appendix E, Section 6.2.7.1</p>
<p>Provide a description of the proposed project's impacts at the local scale and in a regional context, including:</p> <ul style="list-style-type: none"> • changes in flow regimes from diversions, water take and discharges; • groundwater draw-down and recharge; • management of mine affected water; • alterations to riparian vegetation and bank and channel morphology; and • direct and indirect impacts arising from the development. 	<p>Chapter 7, Section 7.3,</p> <p>Chapter 8, Section 8.3, Figure 8-1</p> <p>Appendix E,, Section 6.2.7.1, 7.2, 7.3</p>
<p>Provide a mine water management plan, for the life of the proposed project, which details management strategies of mine-affected water, sediment-affected water and drainage from areas not disturbed by mining activities. Any water taken off site for further use must also be accounted for and must be consistent with the General Use Approval for associated water (including coal seam gas water).</p>	<p>Chapter 5, Section 5.5.3,</p> <p>Chapter 7, Section 7.4.2, 7.4.4, 7.4.6, 7.4.7, 7.4.8</p> <p>Chapter 8, Section 8.4.3,</p> <p>Chapter 9, Section 9.4</p>



Terms of Reference		Section
	Identify any approval or allocation that would be needed under the Water Act 2000 for the take or interference with surface or underground water. Specifically address whether or not the proposed project would take water from, or affect recharge to, aquifers of the Great Artesian Basin. Describe the practices and procedures that would be used to avoid or minimise impacts on water resources.	Chapter 7, Section 7.3.2, 7.3.4, Chapter 8, Section, 8.3.12, Appendix E – Attachment A Appendix F, Section 5.3
	Describe how ‘make good’ provisions would apply to any water users that may be adversely affected by the proposed project. Propose a network of groundwater monitoring bores before and after the commencement of the proposed project that would be suitable for the purposes of monitoring groundwater quality and hydrology impacts that may occur as a result of the resource activity. Include details on investigation timeframes and actions if exceedances are detected.	Chapter 7.4.1, Appendix E, Section 6.2.6, 7.1.3
	Include maps of suitable scale showing the location of diversions and other water-related infrastructure in relation to resource infrastructure. Detail any significant diversion or interception of overland flow, including the effects of subsidence. Describe watercourse diversion design, operation and monitoring based on current engineering practice and the DNRME guideline Works that interfere with water in a watercourse—watercourse diversions authorised under the Water Act 2000 if any features within the proposed project area are identified as ‘yet to be mapped’ on the Watercourse Identification Mapping in Queensland Globe, the proponent should contact DNRME to request a watercourse determination for those features.	Chapter 8, Section 8.3, Figure 8-1 Appendix F, Section 4.3
	Describe the options for supplying water to the proposed project and assess any potential consequential impacts in relation to the objectives of any water plan, water management protocol and associated planning documents that may apply.	Chapter 7, Section 7.3.2, 7.3.4, Chapter 8, Section 8.3.12, Appendix E, Appendix F
	Describe the proposed supply of potable water for the proposed project, including temporary demands during the construction period. Also describe on-site storage and treatment requirements for waste water from accommodation and/or offices and workshops. The EIS must satisfy the information requirements contained in the IESC’s Information guidelines (IESC, 2020), including relevant information guidelines explanatory notes (e.g. uncertainty analysis, assessing groundwater-dependent ecosystems).	Chapter 3, Section 3.3.7, Chapter 8, Section 8.4, Appendix F
	<u>Flooding</u>	-
9.4.3	Describe the history of flooding onsite and in proximity to the site. Describe current flood risk for a range of annual exceedance probabilities up to the probable maximum flood for the proposed project site. Use flood modelling to assess how the proposed project may potentially change flooding and run-off characteristics on-site and both upstream and downstream of the site. The assessment should consider all infrastructure associated with the proposed project, including levees, roads, and linear infrastructure, and all proposed measures to avoid or minimise impacts. Describe the potential impacts on ecological function and connectivity, including any impacts downstream / off-site resulting from altered flow paths, changes in flow velocity and changes in inundation periods.	Chapter 9, Section 9.2.4, 9.2.5, 9.2.6, 9.3, 9.4, 9.4.2 Appendix Z, Section 1.2, 2, 3.2, 3.3



Terms of Reference		Section
	Evidence should be provided to demonstrate that the securing of storage containers of hazardous contaminants during flood events meets the requirements of Schedule 8 of the EP Regulation.	Chapter 9.3, 16.5.2, Appendix F
	Describe, illustrate and assess where any proposed infrastructure, including tailing storage facilities or dams, voids and waste rock dumps, disturbed and rehabilitated areas, would lie in relation to the extent to any modelled flood level, including the probable maximum flood level. Describe management actions to minimise impacts of flooding to mine infrastructure and manage in mine pit water post-flooding.	Chapter 9, Section 9.4.1, 9,5, Appendix Z, Section 3.3
	Assess the proposed project’s vulnerabilities to climate change (e.g. changing patterns of rainfall, hydrology, temperature and extreme weather events). Describe possible adaptation strategies (preferred and alternative) based on climate change projections for the proposed project site.	Chapter 9.4.7, Appendix F
	<u>Regulated Structures</u>	-
	Conduct the impact assessments on regulated structures in accordance with the latest version of the department’s Regulated structures—EIS information guideline (DES 2020), the department’s Guideline on Structures which are dams or levees constructed as part of environmentally relevant activities (ESR/2016/193413), and the department’s Manual for assessing hazard consequence categories and hydraulic performance of structures (ESR/2016/193314).	Chapter 9.4, Appendix F
	Describe the purpose of all dams or levees proposed on the proposed project site. Show their locations on appropriately scaled maps, and provide plans and cross-sections, illustrating such features as embankment heights, spillways, discharge points, design storage allowances, and maximum volumes. Describe how storage structures and other infrastructure would be sited to avoid or minimise risks from flooding.	Chapter 9.3, Appendix F
<u>9.5</u>	Where proposed project infrastructure comprises dams or other structures for a) storing potentially hazardous materials, and b) levees for excluding floodwaters from operational areas, undertake a consequence category assessment for each dam or levee, according to the criteria outlined in the department’s Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/193315). The assessment must be undertaken for the three different failure event scenarios described in the department’s manual, i.e. for seepage, overtopping and dam break. Regulated structures must comply with the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/193316) in accordance with Schedule 8, Division 2of the EP Regulation.	Chapter 9.3.3, Appendix F
	Following the consequence category assessment, determine the consequence category (‘low, significant, or high’) according to Table 1 of the department’s Manual for assessing hazard categories and hydraulic performance of structures (ESR/2016/193317) and provide certified copies of the consequence category determination for each of the proposed dams or levees assessed.	Chapter 9.3.3, Appendix F
	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.	Chapter 9.5, Appendix F
	<u>Flora and fauna (critical matter)</u>	-
<u>9.6</u>	Describe the potential direct and indirect impacts on the biodiversity and natural environmental values of affected areas impacted by the construction, operation and decommissioning of the proposed project. Take into account any proposed avoidance	Chapter 10, Section 10.5.2



Terms of Reference	Section
<p>and/or mitigation measures. The EIS should provide information based on relevant guidelines, including but not limited to the latest version of the department's EIS information guidelines (DES 2020) that cover flora and fauna, aquatic ecology, groundwater dependent ecosystems, water, matters of national environmental significance, and biosecurity.</p>	<p>Chapter 11, Section 11.3.3, 11.5.2.1, 11.5.2.2, 11.5.2.3 Figure 11-4 Appendix F, Section 2.1. Chapter 21,</p>
<p>Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the EP Regulation.</p>	<p>Chapter 10, Section 10.1 Chapter 11, Section 11.5.1.1, 11.5.2.4</p>
<p>The assessment should include the following key elements:</p> <ul style="list-style-type: none"> • identification of all significant species and ecological communities, including MSES and MNES, listed flora and fauna species, and regional ecosystems, on the proposed project's site and in its vicinity; 	<p>Chapter 10, Section 10.5.2.1, 10.6.1, 10.6.2, 10.6.3, 10.6.5, 10.6.7, 10.6.8, Figure 10-17, 10-19 Table 10-12, 10-16 Chapter 11, Section 11.2, 11.3, 11.4, 11.6, Appendix G – Section 6.2, Appendix H – Section 5.2</p>
<ul style="list-style-type: none"> • terrestrial and aquatic ecosystems (including groundwater dependent ecosystems and subterranean fauna, e.g. stygofauna) and their interactions. Stygofauna assessment guidance is available through the department's Background information on sampling bores and stygofauna and the former Department of Science, Information Technology, Innovation and the Arts Guideline for the environmental assessment of subterranean aquatic fauna; 	<p>Chapter 10, Section 10.3, 10.4, Chapter 11, Section 11.3.5.2, 11.4, Appendix G – Section 8, Section 9, Appendix H – Section 8</p>
<ul style="list-style-type: none"> • biological diversity; 	<p>Chapter 10.4, Chapter 11, Section 11.4, 11.4.5, 11.4.6, 11.4.7</p>



Terms of Reference	Section
	<p>Appendix G – Section 11,</p> <p>Appendix H, Section 8.6.1, Appendix D</p>
<ul style="list-style-type: none"> the integrity of ecological processes, including habitats of listed threatened, near threatened or special least-concern species; 	<p>Chapter 10, Section 10.4.2, 10.4.4, 10.7.2</p> <p>11.4.8, 11.4.9, Appendix G – Section 11, 11.2.2,</p> <p>Appendix H – Section 5.2</p>
<ul style="list-style-type: none"> connectivity of habitats and ecosystems; 	<p>Chapter 10, Section 10.4.5, 10.5.2.4, 10.7.2,</p> <p>Appendix G – Section 10. 11</p>
<ul style="list-style-type: none"> the integrity of landscapes and places, including wilderness and similar natural places; 	<p>Chapter 10, Section 10.4.5, 10.5.2.4, 10.7.2</p> <p>Appendix G – Section 10, 11</p>
<ul style="list-style-type: none"> chronic, low-level exposure to contaminants or the bio-accumulation of contaminants; 	<p>Chapter 10, Section 10.5.2.1, 10.5.2.2, 10.6.1</p> <p>Chapter 11.5.2.5,</p> <p>Appendix G, Section 11.1.1, Appendix C (to appendix G)</p>
<ul style="list-style-type: none"> direct and indirect impacts on terrestrial and aquatic species and ecosystems whether due to: vegetation clearing; hydrological changes; discharges of contaminants to water, air or land; noise; and other relevant matters; 	<p>Chapter 10, Section 10.5,</p> <p>Chapter 11, Section 11.5, 11.5.2.2</p> <p>Appendix G – Section 10, Section 11,</p> <p>Appendix H, - Section 9,</p> <p>Appendix I – Section 6.2.5,</p>



Terms of Reference	Section
	Appendix J – Section 1.5
<ul style="list-style-type: none"> impacts of waterway barriers on fish passage in all waterways, including mapped waterways on the Queensland Waterways for Waterway Barrier Works spatial data layer and unmapped waterways that meet the definition of a waterway as per the spatial user guide, Guide for the determination of waterways using the spatial data layer Queensland waterways for waterway barrier works; and 	<p>Chapter 10, Section 10.4.7</p> <p>Chapter 11, Section 11.5, Figure 11-3</p> <p>Appendix H – Section 9.1.2</p>
<ul style="list-style-type: none"> describe any actions of the proposed project that require an authority under the Nature Conservation Act 1992, and/or would be assessable development for the purposes of the Vegetation Management Act 1999, the Regional Planning Interests Act 2014, the Fisheries Act 1994 and the Planning Act 2016.18 Features to consider include regional ecosystems, environmentally sensitive areas, wetlands, nature refuges, protected areas and strategic environmental areas propose practical measures to avoid, minimise, mitigate and/or offset direct or indirect impacts on ecological environmental values. 	<p>Chapter 10, Section 10.5, 10.5.4, 10.7, 10.7.5, 10.8,</p> <p>Chapter 11, Section 11.5,</p> <p>Appendix G – Section 2, Section 8.5, Section 10,</p> <p>Appendix H – Section 4.1.5</p>
<p>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.</p>	<p>Chapter 10, Section 10.6, 10.8,</p> <p>Chapter 11, Section 11.5, 11.6,</p> <p>Appendix G – Section 10, Appendix H – Section 10</p>
<p>Propose measures that would avoid the need for waterway barriers; or propose measures to mitigate the impacts of their construction and operation.</p>	<p>Chapter 11, Section 11.5, 11.6,</p> <p>Appendix H – Section 10.2</p>
<p>Assess the need for buffer zones and the retention, rehabilitation or planting of movement corridors. The assessment should take account of the role of buffer zones in maintaining and enhancing riparian vegetation to enhance water quality and habitat connectivity.</p>	<p>Chapter 10, Section 10.5.2.4,</p> <p>Appendix G – Section 6</p>
<p>Propose rehabilitation success criteria, in relation to natural values, that would be used to measure the progressive rehabilitation of disturbed areas. 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, in</p>	<p>Chapter 6, Section 6.3.4, 6.5.3.1</p>



Terms of Reference		Section
	suitable habitat, elements such as provision of low shrubs, ground level hollow logs, stick piles, nest hollows, ground litter and fish passage and habitat.	Chapter 11, Section 11.5.2.2 Appendix B
	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.	Chapter 10, Section 10.6.9, Appendix G – Section 11
	Offsets	-
	For any significant residual impact, propose offsets that are consistent with the following requirements as set out in applicable State and Commonwealth legislation or policies:	Chapter 21, Appendix K
9.6.1	<ul style="list-style-type: none"> 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 Environmental Offsets Act 2014 and the latest version of the Queensland Environmental Offsets Policy; and 	Chapter 10, Section 10.9.1, Chapter 11, Section 11.5.1.2,11.5.2.1, 11.5.2.2, 11.6.1.4 Appendix K, Section 9.2, 9.3 Appendix U
	<ul style="list-style-type: none"> where Commonwealth offset policy requires an offset for significant residual 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. 	Chapter 10, Section 10.9.1, Chapter 11, Section 11.5.2.2 Appendix K, Section 2.5.3, 8.4.7
	Biosecurity	-
	Conduct the impact assessment in accordance with the latest version of the department’s Biosecurity—EIS information guideline (DES 2020).	Chapter 12,
9.6.2	Describe the current distribution and abundance of pest animals and weeds on the proposed project site.	Chapter 12, Section 12.2.1, 12.2.2 , Appendix G – Section 10.5
	Describe the impact the proposed project’s construction and operation will have on the spread of pest animals, weed species and disease.	Chapter 12, Section 12.3
	Propose detailed measures to remove, control and limit the spread of pests, weeds disease, pathogens and contaminants on the proposed project site and any areas under the proponent’s control. This includes declared plants and animals under Queensland’s Biosecurity Act 2014, the Commonwealth Biosecurity Act 2015 and weeds of national significance (WONS) and designated pest under the Queensland Public Health Act 2005.	Chapter 12, Section 12.4 Chapter 22



	Terms of Reference	Section
	All proposed measures are to be in accordance with biosecurity surveillance or prevention measures authorised under the Biosecurity Act 2014 aligned with local government pest management priorities, including the Isaac Regional Biosecurity Plan 2020-2023/19.	
	Detail a monitoring program that would audit the success of biosecurity measures, identify whether objectives have been met, and describe corrective actions to be used if monitoring indicates objectives are not being met.	Chapter 12, Section 12.4.5, 12.4.4
9.7	<u>Air</u>	-
	Describe the existing air environment at the proposed project site and the surrounding region.	Chapter 13.2, Appendix L – Section 3.3
	Provide an emissions inventory and description of the characteristics of contaminants or materials that would be released from point and diffuse sources and fugitive emissions when carrying out the activity (point source and fugitive emissions). The description should address the construction, commissioning, operation, upset conditions, and closure of the proposed project.	Chapter 13, Section 13.2.4, 13.3, 1.1, Appendix L – Section 3.5.7
	Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the EP Regulation.	Chapter 13, Section 13.1, 13.5 Appendix L
	Predict the impacts of the releases from the activity on environmental values of the receiving environment using established and accepted methods and in accordance with the EP Regulation, Environmental Protection (Air) Policy 2019 (EPP (Air)), and the latest version of the department’s Air—EIS information guideline (DES 2020) and Applications for activities with impacts to air (ESR/2015/184020). The description of impacts should take into consideration the sensitivity and assimilative capacity of the receiving environment and the practices and procedures that would be used to avoid or minimise impacts. The impact prediction must address the cumulative impact of any release with other known releases of contaminants, materials or wastes associated with existing development and possible future development (as described by approved plans and existing project approvals). It should also quantify the human health risk and amenity impacts associated with emissions from the proposed project for all contaminants whether or not they are covered by the National Environmental Protection (Ambient Air Quality) Measure or the EPP (Air).	Chapter 3, Section 2.1.2.3 Chapter 13, Section 13.1.2.5, 13.3, 13.5.2 Appendix L – Section 3.1.3, 3.6
	Describe the proposed mitigation measures to limit impacts from air emissions and how the proposed activity will be consistent with best practice environmental management. The EIS must address the compatibility of the proposed project’s air emissions with existing or potential land uses in surrounding areas. Potential land uses might be gauged from the zonings of local planning schemes, State Development Areas or other relevant planning frameworks.	Chapter 13, Section 13.5, Appendix L – Section 3.3.4.1, 3.5.3, 3.5.4, 3.7, 13.3.1.2
	Describe how the proposed project’s air emission objectives would be achieved, monitored, audited and reported, and how corrective actions would be managed for the life of the proposed project.	Chapter 13, Section 13.4, 13.5, Appendix L
	Proponents are responsible for determining if they have obligations under the Commonwealth National Greenhouse and Energy Reporting Act 2007 (NGER Act) and ensuring that information regarding greenhouse gas emissions and energy production and	Chapter 13, Section 13.3.3 and 13.3.4,



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	consumption provided in the EIS is consistent with requirements of the NGER Act and its subordinate legislation.	Appendix L – Section 3.7
	Provide an inventory of projected annual emissions for each relevant greenhouse gas, with total emissions expressed in ‘CO2 equivalent’ terms. Estimate emissions from upstream activities associated with the proposed project, including the fossil fuel based electricity to be used during construction, operation and decommissioning and briefly describe the methods used to make the estimates. The National Greenhouse and Energy Reporting (Measurement) Determination 2008 provides methods and criteria for calculating greenhouse gas emissions and energy data under the NGER Act which can be used in combination with the National greenhouse energy report technical guidelines (DAWE, 2020) as a reference source for emission estimate methods and supplemented with information from other sources where practicable and appropriate.	Chapter 13, Section 13.3.3, 13.3.4, Appendix L – Section 4
	The proposed project must include estimates of coal seam methane to be released as well as emissions resulting from such activities as transportation of products and consumables, and energy use at the proposed project site.	Chapter 3, Section 3.4.1.5 Chapter 13, Section 13.1.2.3, 13.3.3, 13.3.4, Appendix L – Section 4.4, 4.5.1
	Assess the potential impacts of operations within the proposed project area on the state and national greenhouse gas inventories and propose greenhouse gas abatement measures, including: <ul style="list-style-type: none"> • a description of the proposed preferred and alternative measures to avoid and/or minimise greenhouse gas emissions directly resulting from activities of the proposed project, including such activities as transportation of products and consumables, and energy use by the proposed project • an assessment of how the preferred measures minimise emissions and achieve energy efficiency; • a comparison of the preferred measures for emission controls and energy consumption with best practice environmental management in the relevant sector of industry; and • a description of any opportunities for further offsetting of greenhouse gas emissions through indirect means. 	Chapter 13, Section 13.5.2, 13.5.3, Appendix L – Section 4.7,
	Describe flare emissions if gas flaring will be used during the commissioning stages and/or during the emergency under normal operation. If the flare is expected to be used continuously for more than three months to incinerate the waste gases, then conduct the impact assessment from this source for inclusion in the EIS as a separate item of the assessment.	Chapter 3, Section 3.4.1.5 Chapter 13, Section 13.3.1, 13.5.3, Appendix L – Section 3.5.2
9.8	<u>Noise and vibration</u> Describe and illustrate the locations of any sensitive receptors that are listed in Schedule 1 of the Environmental Protection (Noise) Policy 2019. Also describe any other environmental values that could be impacted by emissions from the proposed project. commissioning, operation, upset conditions, and closure of the proposed project. Fully describe the sources and characteristics of noise and vibration that would be emitted during the construction, commissioning, operation, upset conditions, and closure of the proposed project.	- Chapter 14, Section 14.3.1, Appendix M – Section 3.1, Section 6.3



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	Conduct a noise and vibration impact assessment in accordance with the latest version of the department’s Noise and vibration—EIS information guideline (DES 2020) and Applications for activities with noise impacts (ESR/2015/183822). The assessment must address low-frequency (<200 Hz) noise emissions and potential cumulative impact of the proposed project with other emissions of noise from any existing developments and known possible future development in the area.	Chapter 14, Section 14.12.4, 14.4, Appendix M – Section 5 and section 6.5
	Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the EP Regulation.	Chapter 14, Section 14.1, 14.2, 14.4, Appendix M – Section 4, Section 6, Section 8
	Describe how the proposed activity would be managed to be consistent with best practice environmental management, including the control of background creep in noise as outlined in the Environmental Protection (Noise) Policy 2019. The EIS must address the compatibility of the proposed project’s noise emissions with existing or potential land uses in surrounding areas. Potential land uses might be gauged from the zonings of local planning schemes, State Development Areas or other relevant planning frameworks.	Chapter 14, Section 14.4.5, 14.5, Appendix M – Section 8
	Describe how the environmental management objectives for noise and vibrations would be achieved, monitored, audited and reported, and how corrective actions would be managed.	Chapter 14, Section 14.5, Appendix M – Section 8.2 and section 8.3
	<u>Waste management</u>	-
	Conduct the impact assessment in accordance with the latest version of the department’s Waste—EIS information guidelines (DES 2020) and Applications for activities with waste impacts (ESR/2015/183623). Demonstrate that the proposed project can meet the environmental objectives and performance outcomes in Schedule 8 of the EP Regulation.	Chapter 15, Section 15.2, 15.5, 15.7.2, 15.7.3
	Describe all the expected waste streams from the proposed project activities during the construction, operational, rehabilitation and decommissioning phases of the proposed project. Waste streams for resource projects would typically include: waste rock, tailings and coarse rejects from mining and mineral processing; salt from petroleum and gas projects; and brackish, saline or mine affected water from all types of resource projects.	Chapter 15, Section 15.6, Table 15.2
9.9	Describe the quantity, and physical and chemical characteristics of each significant waste, any attributes that may affect its dispersal in the environment, and its associated risk of causing environmental harm.	Chapter 15, Section 15.6, 15.10 Table 15.2, 15.3
	Define and describe objectives and practical measures for protecting or enhancing environmental values from impacts from wastes.	Chapter 15, Section 15.1, 15.5, 15.7
	Assess and describe the proposed management measures against the preferred waste management hierarchy, namely: avoid and reduce waste generation; cleaner production; reduce; recycle; reuse; reprocess and reclaim; waste to energy; treatment; disposal. This includes the generation and storage of waste.	Chapter 15, Section 15.6, Table 15.2



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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 reported, and how corrective actions would be managed.	Chapter 15, Section 15.9 Table 15.4
Detail waste management planning for the proposed project, in particular how measures have been applied to prevent or minimise environmental impacts due to waste at each stage of the proposed project.	Chapter 15, Section 15.6, 15.72 Table 15.2, 15.4
Describe procedures to prevent the attraction or propagation of pests, vectors or vermin and other threats to public health or that may result in any contamination of water supplies.	Chapter 15, Section 15.6, Table 15.2, 15.4, 15.7 Chapter 16, Section 16.6.7
Waste management planning will include detail of all identified waste types (inclusive of sewage sludge waste), waste volumes, storage methods, transportation methods and proposed locations for waste disposal, including intended burying of waste.	Chapter 15, Section 15.6, Table 15.2
Use a material/energy flow analysis to provide details of natural resource use efficiency (such as energy and water), integrated processing design, and any co-generation of power and by-product reuse.	Chapter 15, Section 15.6.4, 15.6.5
Detail the geochemistry of all waste rock, including spoil, tailings and rejects. Assess the potential risks associated with this waste stream and describe the management of progressive placement and any disposal strategy to minimise any potential impacts on environmental values of the proposed project area. Detail how high risk waste material will be managed in the rehabilitation plan.	Chapter 15, Section 15.2.2, 15.8
Identify the quantity, quality and location of all potential discharges of water and contaminants by the proposed project, including treated wastewater and sewage. Describe whether the discharges would be from point sources (whether uncontrolled and controlled discharges) or diffuse sources (such as irrigation to land of treated wastewater/sewage effluent) and describe the receiving environment (such as land or surface waters).	Chapter 8, Section 8.2.7, Chapter 15, Section 15.2.3
<p>Provide a risk assessment of the potential impacts on waters, in the near-field or far-field, resulting from controlled or uncontrolled discharges from the site. Address the following matters with regard to every potential discharge of contaminated water:</p> <ul style="list-style-type: none"> • describe the circumstances in which controlled and uncontrolled discharges might occur; • provide stream flow data and information on discharge water quality, including any potential variation in discharge water quality that will be used in combination with proposed discharge rates to estimate in-stream dilution and water quality. Chemical and physical properties of any waste water, including concentrations of constituents, at the point of entering natural surface waters should be discussed along with toxicity of effluent constituents to human health, flora and fauna; • provide an assessment of the available assimilative capacity of the receiving waters given existing water quality and other potential point source discharges in the catchment. Options for controlled discharge at times of natural stream flow should be investigated to ensure that adequate flushing of waste water is achieved; • provide water quality limits that are appropriate to maintain background water quality and protect other water uses; and • describe the necessary streamflow conditions in receiving waters under which controlled discharges will be allowed. 	Chapter 8, Section 8.2.7, Chapter 15, Section 15.2.3



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	Provide relevant information on existing and proposed sewage infrastructure relevant to environmentally relevant activity (ERA) 63, by referring to relevant department policies and guidelines, depending on the proposed sewage collection and treatment infrastructure proposed the reuse and/or disposal of treated wastewater and sewage wastes generated.	Chapter 15, Section 15.7.3
	Identify end of waste codes under the Waste Reduction and Recycling Act 2011 as per the relevant guidelines for irrigation, drilling mud, and associated water. The uses might include aquaculture, coal washing, dust suppression, construction, landscaping and revegetation, industrial and manufacturing operations, research and development and domestic, stock, stock intensive and incidental land management. Additional end of waste framework guidelines are available on the department’s website.	Chapter 15, Section 15.6.2.4
	Undertake water balance modelling applying appropriate techniques, such as the Model for Effluent Disposal via Irrigated Land (MEDLI), to ascertain suitable wet weather storage volume(s), sufficient irrigation area(s), suitable effluent irrigation rates and suitable vegetation to be irrigated to ensure sustainable effluent irrigation for the predicted volume of sewage that will be generated and treated, and then land irrigated.	Chapter 15, Section 15.7.3 Table 15.5
	<u>Hazards and safety</u>	-
	Describe the potential risks to people and property that may be associated with the proposed project in the form of a risk assessment for all components of the proposed project and in accordance with relevant standards. The assessment should address the following matters:	Chapter 16, Section 16.9.2
	<ul style="list-style-type: none"> the safety of employees during design and planning of the proposed project; 	Chapter 16, Section 16.5.1, Appendix N – Section 5.11
	<ul style="list-style-type: none"> potential hazards (including those associated with radiation sources, petroleum and gas pipelines, abandoned mines, explosive magazines and the storage and use of explosives as part of construction), accidents, spillages, fire and abnormal events that may occur during all stages of the proposed project, including estimated probabilities of occurrence; 	Chapter 16, Section 16.5.2, Appendix N – Section 5.1
9.10	<ul style="list-style-type: none"> 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 and the Queensland Emergency Risk Management Framework (Queensland Government, 2020) as the endorsed approach to disaster and emergency risk management in Queensland; 	Chapter 16, Section 16.1, 16.4, Appendix N – Section 5, and Section 4
	<ul style="list-style-type: none"> demonstrate that any major hazard facility involving dangerous and hazardous materials is appropriately located in accordance with State Development Assessment Provisions, Code 21, Hazardous chemical facilities (Queensland Government, 2020); 	Chapter 16, Section 16.5.2, Appendix N – Section 5.11
	<ul style="list-style-type: none"> identify all hazardous substances and any explosives to be used, transported, stored, processed or produced and the rate of usage; evaluate the risks associated with the secure storage, use and transportation of explosives to ensure the risks are within an acceptable standard in accordance with Australian Standard AS2187.1 Explosives-storage transport and use; 	Chapter 16, Section 16.5.2, Appendix N – Section 5.11
	<ul style="list-style-type: none"> identify the need for appropriate explosive licences and notice of proposed blasting prior to explosives use. Describe the safety and health management system that will 	Chapter 16,



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	control the risk to the safety and health of persons who may be affected by coal mining operations to an acceptable level and in accordance with the Coal Mining Safety and Health Act 1999 and the Coal Mining Safety and Health Regulation 2017;	Section 16.5.2, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • consider geophysical risk management such as earthquakes. The State Earthquake Risk Assessment includes probabilities of major seismic events for all local government areas and should be used to inform risk consideration and management; 	Chapter 16, Section 16.6.1, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • address the risk to the proposed project from other natural events such as cyclone and severe wind hazard, heat and heatwave risk drought, flooding, bushfire and implications related to climate change and adaptation with reference the Queensland Emergency Risk Management Framework, the State Heatwave Risk Assessment, and Natural Hazard Risk and Resilience spatial layer; 	Chapter 4, Section 4.3, Chapter 16, Section 16.6.2, 16.6.3, 16.6.4, 16.6.5, 16.6.6, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • potential wildlife hazards, including a development of a mosquito management plan in accordance with Queensland Health guidelines; 	Chapter 12, Section 12.4.3, Chapter 16, Section 16.6.7, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • describe natural hazards that may affect the site with at least a 1% Annual Exceedance Probability (AEP) or 100 year average recurrence interval (ARI) level, including mapping of the potential hazard areas at the site; 	Chapter 16, Section 16.6, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • describe how siting, layout and operation of the development will avoid or mitigate the risks, particularly with regard to the release of hazardous materials during natural hazard events; 	Chapter 16, Section 16.7, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • provide details on the safeguards that would reduce the likelihood and severity of hazards, consequences and risks to persons, within and adjacent to the proposed project area(s). Identify the residual risk following application of proposed mitigation measures. Present an assessment of the overall acceptability of the impacts of the proposed project in light of the residual uncertainties and risk profile; and 	Chapter 16, Section 16.9, Appendix N – Section 5.11
	<ul style="list-style-type: none"> • As part of the emergency response plan include: <ul style="list-style-type: none"> o a bushfire management plan, certified by a suitably qualified person, in consultation with the Queensland Fire and Emergency Services addressing construction and operations, including the following information at a minimum: <ul style="list-style-type: none"> a) a bushfire hazard analysis b) mitigation strategies to achieve the relevant development outcomes in Part E of the State Planning Policy– Natural Hazards, Risk and Resilience (DILGP 2017) 	Chapter 16, Section 16.9, Appendix N – Section 5.1.2 and section 5.1.3



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	<ul style="list-style-type: none"> c) provides details of the proposed ongoing management of fuel loads across the subject site through grazing or mechanical means including the asset protection zone proposed o a safety and emergency management plan addressing construction and operations, including the following information at a minimum: <ul style="list-style-type: none"> a) evacuation plans for the construction and operation phases of the development b) safety management plans and emergency response procedures in consultation with the state and regional emergency service providers (including Queensland Fire and Emergency Services) and provide an adequate level of training to staff who will be tasked with emergency management activities. 	
	<p>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.</p>	<p>Chapter 16, Section 16.9.2, Appendix N – Section 5.1</p>
	<p>Outline any consultation undertaken with the relevant emergency management authorities, including the local disaster management group.</p>	<p>Chapter 16, Section 16.9.2, 16.9.3, 2.2.2, Appendix N – Section 5.1</p>
<p><u>9.11</u></p>	<p><u>Cultural heritage</u></p>	
	<p>Conduct the impact assessment in accordance with the latest version of the department’s Aboriginal and Torres Strait Islander cultural heritages—EIS information guideline (DES 2020) and Non-Indigenous cultural heritage—EIS information guideline (DES 2020).</p>	<p>Chapter 17, Appendix O – Section 5</p>
	<p>Unless section 86 of the Aboriginal Cultural Heritage Act 2003 or Torres Strait Islander Cultural Heritage Act 2003 applies, the proponent must develop a Cultural Heritage Management Plan in accordance with the requirements of Part 7 of these Acts.</p>	<p>Chapter 17, Section 17.4.1</p>
	<p>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 proposed project. Any such study should be conducted by an appropriately qualified cultural heritage practitioner. Provide strategies to mitigate and manage any negative impacts of the proposed project on non-Indigenous cultural heritage values and enhance any positive impacts. Management and mitigation strategies should include provisions for the management of discoveries of potentially significant archaeological artefacts in accordance with section 89 of the Queensland Heritage Act 1992 and include reference to the guidelines for Archaeological Investigations (DES, October 2019) and Assessing cultural heritage significance: Using the cultural heritage criteria (DES, October 2017).</p>	<p>Chapter 17, Section 17.2.2, 17.3.2, 17.4.2, Appendix O – Section 5</p>
	<p><u>Social (critical matter)</u></p>	<p>-</p>
<p><u>9.12</u></p>	<p>Prepare a Social Impact Assessment (SIA) for the proposed project that is consistent with the requirements of the Strong and Sustainable Resource Communities Act 2017 (SSRC Act) and the Coordinator-General’s SIA guideline (March 2018).</p>	<p>Chapter 18, Appendix P – Section 3.1</p>
	<p>Develop the SIA in consultation with the Office of the Coordinator-General, Department of State Development, Manufacturing, Infrastructure and Planning. The SIA is to describe the</p>	<p>Chapter 18, Section 18.1,</p>



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<p>potential social impacts (both positive and negative) of the proposed project and must identify relevant and effective impact mitigation and benefit enhancement measures.</p>	<p>Appendix P – Section 2.4</p>
<p>The SIA is required to include detailed assessment of the following key matters in accordance with the SIA guideline:</p> <ul style="list-style-type: none"> • community and stakeholder engagement; • workforce management; • housing and accommodation; • local business and industry procurement; and • health and community well-being. 	<p>Chapter 18, Section 18.3, Appendix P – Section 4, section 5.3, section 5.5, section 5.7 and section 5.8</p>
<p>The SIA is to include an analysis of the capacity of relevant towns within 125 km radius of the proposed main access to provide workers for the construction and operational phases of the proposed project and the impacts of a resident workforce on housing and social infrastructure. The information provided in the EIS (including the SIA) will inform the Coordinator-General's decision under Section 12 of the SSRC Act on whether personnel employed during the construction phase of the proposed project should be protected by the SSRC Act's antidiscrimination and 100 percent FIFO prohibition provisions.</p>	<p>Chapter 18, Section 18.2.1, Appendix P - Section 5</p>
<p>Identify and assess the potential impacts of the project on existing health services in the construction and operational phases and describe how the health services are likely to be affected and the impact of these services on neighbouring communities and towns.</p>	<p>Chapter 18, Section 18.3, Appendix P – Section 6</p>
<p>Community and stakeholder engagement for social impact assessment</p> <p>The SIA is to be informed by an inclusive and collaborative community and stakeholder engagement process, consistent with the SIA guideline. Community and stakeholder engagement is to be iterative throughout preparation of the SIA and engagement with local government must commence at an early stage.</p> <p>The SIA is to demonstrate evidence of engagement outcomes from local government, state agencies, local and regional employment and training providers, public and private housing providers, local and regional commerce and community development groups, social and public service providers, emergency services and public health providers and any other relevant stakeholders. The SIA must be informed by the results from community and stakeholder engagement.</p>	<p>Chapter 18, Section 18.2.1, 18.2.2, Appendix P – Section 4, section 4.2</p>
<p>Key SIA outcomes</p> <p>The SIA must clearly identify measures for prioritising the recruitment of workers from local and regional communities. This includes describing how the recruitment hierarchy for workers in section 9 (3A) of the SSRC Act will be implemented.</p> <p>Where a FIFO workforce is proposed, the SIA must identify measures for managing this workforce in accordance with the SIA guideline, as well as sections 6 and 8 of the SSRC Act and the relevant provisions in the Anti-Discrimination Act 1991. The SIA will need to include a target for obtaining a local workforce and set the maximum proportion of FIFO workers for the proposed project. This is to be supported by a rationale to ensure local benefit.</p> <p>The SIA must include a social impact management plan (SIMP) with management measure to mitigate the impacts and enhance the potential benefits identified in the assessment of the five key matters listed above in accordance with the SIA guideline. In particular the SIMP must:</p> <ul style="list-style-type: none"> • address barriers that may impact choice for workers to live local and provide support for people in local and regional communities to engage in project employment opportunities; and • provide management measures to ensure availability and affordability of local and regional housing and accommodation is not adversely impacted. 	<p>Chapter 18, Section 18.4, Appendix P – Section 6, Appendix T – Section 2, section 3, section 4, section 5, section 6 and section 8.</p>



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	<p>The SIMP must describe a practical basis for the implementation of management measures identified through the SIA process. The SIMP is to include timeframes for implementation, roles and responsibilities, stakeholders and potential partnerships. Potential partnerships include opportunities for linkages with other projects planned or operating in the area and possible alignment with existing strategies that would benefit the management of cumulative social impacts.</p> <p>The SIMP must include a process of review throughout the proposed project lifecycle to ensure management measures continue to be effective, and where not achieving the stated outcomes, are amended to appropriately mitigate impacts. A monitoring program must be included in the SIMP to consider the ongoing effectiveness of the management measures. The SIA Guideline sets out the monitoring, review and compliance requirements.</p>	
	<u>Economics</u>	-
<u>9.13</u>	<p>Identify the potential adverse and beneficial economic impacts of the proposed project on the local and regional area and the State. Estimate the costs and benefits and economic impacts of the proposal using both regional impact analysis and cost–benefit analysis. Undertake the analysis in accordance with the Coordinator-General’s Economic impact assessment guideline (DSDMIP 2017). Separately address each major stage of the proposed project (e.g. construction, operation and decommissioning).</p>	<p>Chapter 19, Section 19.3,</p> <p>Appendix Q – Section 5, Section 7, Section 8</p>
	<p>Provide an analysis of the economic costs to agricultural activities on land, including any impacts to supply chains.</p>	<p>Chapter 19, Section 19.3.2,</p> <p>Appendix Q – Section 5.3.3, Section 6.2.2</p>
	<u>Transport</u>	-
	<p>The EIS should include a clear summary of the total transport task for the proposed project, including workforce, inputs and outputs, during the construction, operational and decommissioning phases of the proposed project. The proponent should make appropriate choices for modes of transport to ensure efficiency and minimise impacts on the community.</p>	<p>Chapter 20, Section 20.2, 20.3.2.1, 20.3.2.2, Table 20.2</p> <p>Appendix R – Section 4</p>
<u>9.14</u>	<p>Undertake the impact assessment in accordance with the department’s Transport—EIS information guideline (DES 2020). The methods used should include the following matters:</p> <ul style="list-style-type: none"> for impacts on roads: a traffic impact assessment report in accordance with the Guide to traffic impact assessment (DTMR 2018) with traffic data in DTMR-suitable formats for impacts on rail level crossings: the Australian Level Crossing Assessment Model (ALCAM, 2020) 	<p>Chapter 20, Section 20.3.1, 20.3.2.2, 20.3.2.6, 20.3.1.4</p> <p>Appendix R – Section 3.6, 5,</p>
	<p>Present the transport assessment for each proposed project-affected mode (road, rail, air, port and sea) as appropriate for each phase of the proposed project. Provide sufficient information to allow an independent assessment of how existing transport infrastructure will be affected by proposed project transport at the local and regional level (e.g. local roads and state-controlled roads).</p>	<p>Chapter 20, Section 20.2, 20.3, 20.4, 20.5, 20.6,</p> <p>Appendix R – Section 3, section 4, section 5</p>



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	Discuss how identified impacts will be mitigated for each transport mode. Mitigation strategies may include works, contributions or other strategies that can be documented in a road-use management plan. The strategies should be prepared in close consultation with relevant transport authorities, including local government and the Queensland Police Service. Strategies should consider the transport authorities' works programs and forward planning, and be in accordance with the relevant methodologies, guidelines and design manuals.	Chapter 20, Section 20.3.3, 20.4.3, 20.5.3, 20.6.3, Appendix R – section 8.2
	<u>Matters of National Environmental Significant under EPBC Act (critical matter)</u>	-
9.15	<p>The following matters must be considered when preparing the EIS, the:</p> <ul style="list-style-type: none"> EIS must state and address the controlling provisions and describe the particular aspects of the environment leading to the controlled action declaration under the EPBC Act. EIS must provide enough information about the proposed project and its relevant impacts to allow the Australian Government's Environment Minister to make an informed decision whether to approve the proposed project under the EPBC Act. assessment of the potential impacts, mitigation measures and any offsets for residual impacts must be dealt with in a stand-alone section of the EIS that fully addresses the matters relevant to the controlling provisions. Proponents should refer to department's MNES—EIS information guideline (DES 2020) for additional guidance. 	Chapter 21
	Refer to Appendix 3 for the complete TOR for MNES under the EPBC Act requirements.	Noted
	When water resources for a coal seam gas development or large coal mine are a controlling provision, the proposed project's EIS is referred to the Independent Expert Scientific Committee (IESC) on Coal Seam Gas and Large Coal Mining Development. The IESC provides scientific advice to decision makers on potential impacts from CSG and large coal mining developments on Australia's water resources. That typically occurs in time for the IESC's views to be considered by the administering authority when deciding the suitability of the proposed project and developing conditions for any approval.	Noted
10	Commitments	-
-	The EIS must provide a consolidated description of all the proponent's commitments to implement avoidance, mitigation, management and design measures (including monitoring activities and management plans) that would need to be applied to meet the predicted project outcomes. Should the proposed project proceed, these commitments should be able to be carried over into the approval conditions as relevant.	Chapter 22
11	Conditions	-
-	Propose conditions that may be placed on the EA and any other required approvals or licenses. For the EA, conditions may be taken directly from the department's environmental authority conditions (DES, 2020), including model operating conditions for mining and petroleum activities and/or modified or developed to suit site and project specific issues.	Chapter 23, Appendix B
	As part of the PRC plan (refer to Section 9.3) provide a PRCP schedule which sets out the milestones and conditions that relate to the completion of progressive rehabilitation and mine closure. The PRC plan must be consistent with the department's guideline Progressive rehabilitation and closure plans (ESR/2019/496425).	Appendix B (Appendix A)
12	Appendices to the EIS	-
-	Appendices to the EIS must include the technical data collected, and evidence used to develop assertions and findings in the main text of the EIS.	Noted



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	No significant issue or matter, including statements of uncertainty associated with assertions and findings should be mentioned for the first time in an appendix—it must be addressed in the main text of the EIS.	Noted
	The EIS must include a table listing the section and sub-sections of the EIS where each requirement, including specific elements of the TOR is addressed.	Attachment 2
13	Spatial and electronic data presentation	-
-	<p>Maps included in the EIS should have contours at suitable increments relevant to the scale, location, potential impacts and type of proposed project, shown with respect to Australian Height Datum (AHD) and drafted to Geocentric Datum of Australia 2020 (GDA2020). In relatively flat locations, contours should be at one metre intervals. Geographical coordinates should be presented as latitude and longitude against the GDA2020.</p> <p>Provide spatial data presented in the EIS to the department in appropriate electronic form, such as shape files. This includes all water quality and waste water quality data. Refer to the department’s guideline Spatial information submission (ESR/2018/433726) for information on the format for spatial information.</p>	Provided with EIS submission