Adani Mining Pty Ltd

NORTH GALILEE BASIN RAIL PROJECT

Environmental Impact Statement

Appendix A Terms of reference cross-reference

November 2013

Terms and abbreviations

Term and abbreviations	Definition
Adani	Adani Mining Pty Ltd
ALCAM	Australian Level Crossing Assessment Model
CAMBA	China-Australia Migratory Bird Agreement
CHMP	Cultural Heritage Management Plan
DEHP	Department of Environment and Heritage Protection
DNRM	Department of Natural Resources and Mines
EIS	Environmental impact statement
EP Act	*Environmental Protection Act 1999*
EPP	Environmental Protection Policy
ERA	Environmentally relevant activity
JAMBA	Japan-Australia Migratory Bird Agreement
NC Act	*Nature Conservation Act 1992*
NGA	National Greenhouse Accounts
ROKAMBA	Republic of Korea-Australia Migratory Bird Agreement
SCL	Strategic cropping land
The Project	North Galilee Basin Rail Project
TOR	Terms of reference

Terms of Reference Requirement / Section Number	Cross-reference
1.0 Executive Summary	
The executive summary should convey the most important and preferred aspects and options relating to the project in a concise and readable form. It should use plain English, avoid jargon, be written as a stand-alone document and be structured to follow the EIS. It should be easy to reproduce and distribute on request to those who may not wish to read or purchase the whole EIS. The executive summary should include: • the essential elements of the project description, including: title; proponent's name; a concise statement of the aims and objectives of the project; and detailed maps of the proposed location • an outline of the need for the project, including the consequences of it not proceeding, a discussion of the alternative options considered and reasons for selecting the proposed development option • a brief description of the project (pre-construction, construction, operational activities and decommissioning) and the existing environment, using visual aids where appropriate • an overview of the principal environmental impacts predicted and the proposed mitigation strategies • a summary of proponent's commitments • the legal framework for the project, decision-making authorities and advisory agencies.	Volume 1 Executive Summary
2.0 Glossary of Terms	
Provide a glossary of technical terms, acronyms, abbreviations and references	Volume 1 Terms and abbreviations
3.0 Introduction	
Clearly explain the function of the EIS, why it has been prepared and what it sets out to achieve. Include an overview of the structure of the document.	Volume 1 Chapter 1 Introduction, Section 1.6

Terms of Reference Requirement / Section Number	Cross-reference
3.1 Project Proponent	
Describe the proponent's experience, including: • the nature and extent of business activities • experience and qualifications • environmental record in Australia and internationally • the proponent's environmental, health, safety and community policies	Volume 1 Chapter 1 Introduction, Section 1.2 Volume 2 Appendix P Environmental management plan framework, Section 3.3 and Appendix B
3.2 Project Overview	
Briefly describe the key elements of the project with illustrations or maps. Summarise any major associated infrastructure requirements. Provide detailed project description as part of the requirements of Section 4 of this TOR .	Volume 1 Chapter 1 Introduction, Section 1.1
Briefly explain, using comparative analysis, how the project conforms to the objectives for sustainable development'—see the National Strategy for Ecologically Sustainable Development (Commonwealth of Australia 1992).	Volume 1 Chapter 1 Introduction, Section 1.6.6
3.3 Project Rationale	
Describe the specific objectives and justification for the project, including its strategic, economic, environmental and social implications, technical feasibility and commercial drivers. Discuss the relative importance of the project in a regional, state and national context.	Volume 1 Chapter 1 Introduction, Section 1.3
3.4 Relationship to other Projects	
Describe how the project relates to other major projects (of which the proponent should reasonably be aware) that have been, are being undertaken or that have been proposed or approved in the area potentially affected by the project. Projects for which information is publicly available and accessible prior to lodgement of the EIS for this project should be included in this assessment. Discuss how any opportunities to co-locate existing or proposed infrastructure, enabling efficiency gains and mitigating environmental and property impacts, have been considered and adopted or rejected. Discuss the opportunities in	Volume 1 Chapter 1 Introduction, Section 1.4 Volume 1 Chapter 1 Introduction, Section 1.5 Volume 1 Chapter 19 Cumulative

Terms of Reference Requirement / Section Number	Cross-reference
sufficient detail to enable the reader to understand the reasons for preferring certain options or courses of action and rejecting others.	impact assessment, Section 19.3
3.5 Project Alternatives	
Describe feasible alternatives including conceptual, technological and locality alternatives to the proposed project and the consequences of not proceeding with the project (including any impacts that would be avoided). Detail the criteria used to determine the alternatives and provide sufficient detail to convey why certain options or courses of action are preferred and why others are rejected (including the 'no action' option). Discuss the interdependencies of project components, particularly in regard to how any infrastructure requirements relate to the viability of the project.	Volume 1 Chapter 1 Introduction, Section 1.5
3.6 The EIA Process	
Provide an outline of the environmental impact assessment process, including the role of the EIS in the Coordinator-General's decision making process. The information in this section is required to ensure readers are informed of the process to be followed and are aware of any opportunities for input and participation. Inform the reader how and when properly made public submissions on the EIS will be addressed and taken into account in the decision-making process.	Volume 1 Chapter 1 Introduction, Section 1.6 Volume 2 Appendix B Public consultation, Section 3.2
3.7 Public Consultation Process	
The public consultation process should provide opportunities for community involvement and education. It may include interviews with individuals, public communication activities, interest group meetings, printed material and other mechanisms to encourage and facilitate active public consultation. The public consultation processes (community engagement) for all parts of the EIS should be integrated. Consultation with advisory agencies should be the principal forum for identifying legislation, regulations, policies and guidelines relevant to the project and EIS process	Volume 1 Chapter 1 Introduction, Section 1.7 Volume 2 Appendix B Public consultation

Terms of Reference Requirement / Section Number	Cross-reference
3.7.1 Consultation Report	
In addition to the statutory requirements for the proponent to undertake stakeholder consultation as per section 2.5 of *Preparing an environmental impact statement: Guideline for proponents* (Department of State Development, Infrastructure and Planning 2013a) including with resource tenure holders, an appropriate public consultation program is essential to the impact assessment process. The proponent should consult with local, State and Commonwealth government agencies, potentially affected local communities and interest groups. The EIS should describe the consultation that has taken place and how the responses from the community and agencies have been incorporated into the design and outcomes of the project. Include, as an appendix, a public consultation report detailing how the public consultation plan was implemented, and how the results of consultation have been considered by the proponent in the EIS process.	Volume 1 Chapter 1 Introduction, Section 1.7 Volume 2 Appendix B Public consultation
3.8 Project Approvals	
Identify Commonwealth, state and local legislation, approvals and plans relevant to the planning, approval, construction and operation of the project. Provide detail on the statutory approvals under State and Commonwealth law that will be required for the project to proceed and that will be assessed by the EIS process Outline the project's consistency with the existing national, state, regional and local planning framework that applies to the project location. Refer to all relevant statutory and non-statutory plans, planning policies, guidelines, strategies and agreements. Provide an outline of each ERA under the *Environmental Protection Act 1994* (EP Act) and associated activities that are to be carried out in connection with the project. If conditions for ERA approvals are being sought as an outcome from the EIS process, present a detailed description of each ERA. Provide details of the impact on land, water, air, noise and any other identified environmental values, as well as a detailed description of the waste generated from each ERA and its quantity, characteristics, handling, storage, management and intended treatment and disposal. Technical advice on requirements for applications for an environmental authority regarding impacts on air, land, water, waste and noise issues is available at: **www.business.qld.gov.au/business/running/environment/licences-**	Volume 1 Chapter 20 Legislation and approvals

Terms of Reference Requirement / Section Number	Cross-reference
permits/applying-environmental-authority/technical-information-requirements.	
4 Project description	
Describe the project through its lifetime of pre-construction, construction, operation and potential decommissioning. The EIS must describe and illustrate at least the following specific information about the proposed project: • a rationale for the project explaining the selection of the preferred operating scenario, including details such as cost, environmental impacts, and the operational efficiencies of each option • a description of the key components of the project including the use of text and design plans where applicable • the proposed tenure for the project area and the legal implications/requirements of this tenure • a summary of any environmental design features of the project • the expected cost, timing, and overall duration of the project, including details of and justification for, any staging of the development.	Volume 1 Chapter 2 Project description
4.1 Location	
Describe, using maps at suitable scales, the regional and local context of all project components and associated infrastructure. Provide real property descriptions of the project. Maps should show: • the precise location of the project components and associated infrastructure • state-controlled and local roads in the vicinity of the project • existing rail infrastructure in the vicinity of the project • the relationship of the project to existing and proposed infrastructure at the Port of Abbot Point. Describe and illustrate any existing mineral resource tenements, petroleum (including coal seam gas), geothermal and greenhouse gas tenures and licences overlying and adjacent to the project site, and any proposed applications required for this project.	Volume 1 Chapter 2 Project description, Section 2.2 Volume 1, Chapter 3, Land use and tenure

Terms of Reference Requirement / Section Number	Cross-reference
4.2 Construction Phase	
Provide a detailed staging plan and approximate timeframes for the project's construction activities. Provide an estimate of the number and roles of persons to be employed during the construction phase of the project. Provide the following information on the pre-construction and construction of the project, including detailed plans, drawings and maps. Describe all pre-construction activities, including nature, scale and timing of: • land acquisitions required, be it in full or as easements, leases • vegetation clearing • site access • earthworks • interference with watercourses and floodplain areas, including wetlands • site establishment requirements for construction facilities, including access measures, movement of materials and equipment, and expected size, source and control of the construction workforce accommodation, services (water, sewerage, communication, energy, medical, waste disposal, recreation) and safety requirements • temporary works • upgrade, relocation, realignment, deviation of or restricted access to roads and other infrastructure • equipment to be used. Describe all the construction elements of the project, including: • an indicative construction timetable, including expected commissioning and start-up dates and hours of construction • major work programs for the construction phase, including an outline of construction methodologies • construction equipment to be used • construction inputs, handling and storage including an outline of potential locations for source of construction	Volume 1 Chapter 2 Project description, Section 2.4

Terms of Reference Requirement / Section Number	Cross-reference
materials • hazardous materials to be transported, stored and/or used on site, including environmental toxicity data and biodegradability • clean-up and restoration of areas used during construction, including camp site(s) and storage areas.	
4.3 Operational Phase	
Provide full details of the operation for all elements of the project, including: • a description of the project site, including concept and layout plans of buildings, structures, plant and equipment to be employed • nature and description of all key operational activities including maintenance activities • the capacity of the project equipment and operations • estimated numbers and roles of persons to be employed during the operational phase of the project.	Volume 1 Chapter 2 Project description, Section 2.5
4.4 Associated Infrastructure	
Detail, with the aid of concept and layout plans, requirements for new infrastructure or upgrading/relocating existing infrastructure to service the project. Consider infrastructure such as transportation (road/rail/air/ship), water supply and storage, energy supply, telecommunications, stormwater, waste disposal and sewerage. Describe: • all infrastructure required to be constructed, upgraded, relocated or decommissioned for the construction and/or operation of the project, such as resource extraction areas, access roads including connections to public roads and proposed road/rail interfaces and treatments, power supply, connection to sewerage or water supply • the design and construction standards to be met, for example: • waterway crossings should be designed to meet the requirements of the *Fisheries Act 1994* and self-assessable codes for minor or temporary water barrier works) • water supply dams should be designed with reference to the referable dam provisions (Chapter 4) of the *Water*	Volume 1 Chapter 2 Project description, Section 2.3

Terms of Reference Requirement / Section Number	Cross-reference
Supply (Safety and Reliability) Act 2008 • alternative approaches or the opportunity to obtain materials from alternative sources. • proposed water storage or distribution infrastructure, including the process and criteria used to select the preferred design and construction techniques • the design and construction standards to be met for any infrastructure.	
4.5 Decommissioning and Rehabilitation	
Present a plan for decommissioning and rehabilitating the site. Refer to infrastructure that is not intended to be decommissioned. In this situation, describe the entity to which the infrastructure is intended to be transferred	Volume 1 Chapter 2 Project Description, Section 2.6
5.1 Climate and Natural Hazards	
Describe the climatic conditions that may affect management of the project. This includes a description of the vulnerability of the project area to seasonal conditions, extremes of climate (for example, cyclones) and natural or induced hazards (including bushfire). Provide a risk assessment and management plan detailing these potential climatic threats to the construction and operation of the project, including planning for response to flood damage of project infrastructure.	Volume 1 Chapter 17 Climate and natural hazards Volume 2 Appendix P Environmental management plan framework
5.1.1 Flood Management	
A desktop assessment of the rail line and surrounding catchments must be undertaken and the potential for flooding qualitatively described. The desktop assessment must also identify any high-risk watercourse crossing or floodplain locations that warrant further detailed quantitative assessment.	Volume 1 Chapter 17 Climate and natural hazards, Section 17.3.1, 17.3.2, 17.3.3 and 17.4.1
For these locations, a comprehensive flood study must be included in the EIS that includes: • quantification of flood impacts on properties surrounding and external to the project site from redirection or concentration of flows	Volume 1 Chapter 9 Water resources, Section 9.2.8, 9.3.4, 9.4.1 and 9.4.2 Volume 2 Appendix H2

Terms of Reference Requirement / Section Number	Cross-reference
• identification of likely increased flood levels, increased flow velocities or increased time of flood inundation as a result of the development.	Hydrology and hydraulics, Section 3 and 4
The EIS should describe the consultation that has taken place with landholders along the alignment regarding modelled impacts of the project on flooding. Include discussion of how the results of consultation has, or will be, considered by the proponent in the EIS process.	Volume 2 Appendix B Public consultation, Section 4.4, 4.8 and 4.10
The flood study should address any requirements of local or regional planning schemes for flood affected areas. The study report should include details of all calculations along with descriptions of base data and any potential for loss of flood plain storage. Reference must be made to any studies undertaken by the local council in relation to flooding.	Volume 1 Chapter 20 Legislation and approvals, Section 20.7 Volume 1 Chapter 9 Water resources, Section 9.3.4 Volume 2 Appendix H2 Hydrology and hydraulics, Section 3 and 4
5.2 Land	
Detail the existing land environment values for all areas associated with the project. Describe the potential for the construction and operation of the project to change existing and potential land uses of the project sites and adjacent areas.	Volume 1 Chapter 3 Land use and tenure
5.2.1 Land Use and Tenure	
Description of environmental situation Identify, with the aid of maps: • land tenure, including reserves, tenure of special interest (such as protected areas and forest reserves), existing and proposed gas infrastructure, water pipelines, powerlines and transport corridors, including stock routes, local roads, state-controlled roads and rail corridors	Volume 1 Chapter 3 Land use and tenure, Section 3.3.1, 3.3.2, 3.3.3, 3.3.4 and 3.3.5 Volume 2 Appendix C Land use and tenure, Section 3.1, 3.2, 3.3, 3.4 and 3.5

Terms of Reference Requirement / Section Number	Cross-reference
• existing land uses and facilities surrounding the project, including reference to agricultural land uses current or likely to be undertaken in the project area as referenced in the Queensland Agricultural Land Audit (Department of Agriculture, Fisheries and Forestry 2013)	Volume 1 Chapter 3 Land use and tenure, Section 3.3.5 Volume 2 Appendix C Land use and tenure, Section 3.5
• location, boundaries, and area and size of the project footprint, including easement widths and access requirements	Volume 1 Chapter 3 Land use and tenure, Section 3.3.3 Volume 2 Appendix C Land use and tenure, Section 3.3 Volume 1 Chapter 2 Project description, Section 2.2 and 2.3
• distance of the project from residential areas (dwellings, residential allotments, mobile home/caravan parks or other residential premises) and recreational areas	Volume 1 Chapter 3 Land use and tenure, Section 3.4.1 Volume 2 Appendix C Land use and tenure, Section 3.4.2
• declared water storage catchments	Volume 1 Chapter 3 Land use and tenure, Section 3.3.6 Volume 2 Appendix C Land use and tenure, Section 3.6 Volume 1, Chapter 9, Water resources, Section 9.3 Volume 2, Appendix H1, Water resources, Section 3.7
• location of the project in relation to environmentally sensitive areas and any proposed buffers surrounding the project area (for construction and operation)	Volume 1 Chapter 3 Land use and tenure, Section 3.3.6

Terms of Reference Requirement / Section Number	Cross-reference
	Volume 2 Appendix C Land use and tenure, Section 3.6 Volume 1 Chapter 6 Nature conservation, Section 6.3 Volume 1 Chapter 7 MNES, Section 7.3
• areas covered by applications for native title claims or native title determinations, providing boundary descriptions of native title representative body(ies), and whether it is necessary to notify the representative body(ies) or if there is evidence that native title does not exist.	Volume 1 Chapter 3 Land use and tenure, Section 3.3.7 Volume 2 Appendix C Land use and tenure, Section 4
Potential impacts and mitigation measures Describe the potential changes to existing and potential land uses due to the construction and operation of the project. In particular, describe the following: • impacts on project site and adjacent land uses and human activities and strategies for mitigation, such as those required by state planning policies and local government planning schemes	Volume 1 Chapter 3 Land use and tenure, Section 3.4.1 Volume 2 Appendix P Environmental management plan framework, Section 4.4
• possible effect on town planning objectives and controls, including local government zoning and strategic plans	Volume 1 Chapter 20 Legislation and Approvals, Section 20.7
• constraints to potential developments and possibilities of rezoning adjacent to the development area	Volume 1 Chapter 3 Land use and tenure, Section 3.4.1
• management of the immediate environs of the project including construction buffer zones	Volume 1 Chapter 3 Land use and tenure, Section 3.4.5 Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P

Terms of Reference Requirement / Section Number	Cross-reference
	Environmental management plan framework, Section 4.4
• proposed land use changes in any areas of high conservation value and information on how easement widths and vegetation clearance in sensitive environmental areas will be minimised	Volume 1 Chapter 3 Land use and tenure, Section 3.4.5 Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.4
• potential issues involved in proximity and/or co-location of other current or proposed infrastructure services	Volume 1 Chapter 3 Land use and tenure, Section 3.4.4
• any land units requiring specific management measures	Volume 1 Chapter 3 Land use and tenure, Section 3.4.7 Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4 Volume 2 Appendix P Environmental management plan framework, Section 4.4
• potential for native title rights and interests likely to be impacted upon by the project and the potential for managing those impacts by an Indigenous land use agreement or other native title compliance outcomes.	Volume 1 Chapter 3 Land use and tenure, Section 3.4.6 Volume 2 Appendix P Environmental management plan framework, Section 4.4

Terms of Reference Requirement / Section Number	Cross-reference
5.2.2 Scenic Amenity and Lighting	
Description of environmental values Describe, in general terms, the existing character of the landscape and the general impression that would be obtained while travelling through and around it. Outline existing landscape features, panoramas and views that have, or could be expected to have, value to the community. Include information such as maps and photographs.	Volume 1 Chapter 4 Scenic amenity and lighting, Section 4.3 Volume 2 Appendix D Scenic amenity and lighting, Section 3
Potential impacts and mitigation measures Describe the potential beneficial and adverse impacts of the project on landscape character and visual qualities of the site and the surrounding area. Explain what measures will be undertaken to avoid or mitigate the identified impacts. Provide an assessment of all potential impacts of the project's lighting, during all stages, with particular reference to objectives to be achieved and management methods and strategies to be implemented to avoid or mitigate, such as: • the visual impact at night • night operations/maintenance and effects of lighting on residents and terrestrial (and marine) fauna • the potential impact of increased vehicular traffic • changed habitat conditions for nocturnal fauna and associated impacts.	Volume 1 Chapter 4 Scenic amenity and lighting, Section 4.4.1, 4.4.2 and 4.4.3 Volume 1 Chapter 6 Nature conservation, Section 6.4.2 and 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.8
5.2.3 Topography, Geology and Soils	
Description of environmental values Provide maps locating the project in state, regional and local contexts. The topography should be detailed with contours at suitable increments, shown with respect to Australian Height Datum. Include significant features of the landscape and topography, and accompanying comments on the maps.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.1 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.1
Describe the geological properties that may influence ground stability or the quality of stormwater leaving any area disturbed by the project. Where the geology is such that significant fossil specimens may be uncovered during	Volume 1 Chapter 5 Topography, geology, soils and land

Terms of Reference Requirement / Section Number	Cross-reference
construction/operations, address the potential for significant finds.	contamination, Section 5.3.2 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.2 Volume 2 Appendix P Environmental management plan framework, Section 4.11
A desktop assessment of the soils environment should be undertaken with particular emphasis placed on identifying high risk sites which have the potential to be affected by the project. In these areas the soils must be described at a suitable scale, with particular reference to the expected physical and chemical properties of the materials that will influence erosion potential, stormwater run-off quality, rehabilitation and agricultural productivity of the land. Provide information on soil stability and suitability for construction of project facilities.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.3 and 5.3.6 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.3, 3.4 and 4
A desktop assessment should be undertaken to identify potential areas of acid sulphate soils. Where potential areas are identified, further investigations including field surveys should be undertaken in accordance with State Planning Policies and accepted industry guidelines.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.6 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.4
Describe, map and illustrate soil types and profiles. Undertake an appraisal of the depth and quality of useable soil. Assess each soil's agricultural land suitability.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.3, 5.3.4 and 5.3.5 Volume 2 Appendix E

Terms of Reference Requirement / Section Number	Cross-reference
	Topography, geology, soils and land contamination, Section 3.3 and 3.5
Provide an appraisal of geotechnical information on the soils' stability and suitability for construction of project facilities, including erosion potential, stormwater run-off quality, rehabilitation and agricultural productivity.	Volume 1 Chapter 5 Topography, geology, soils and land contamination
Identify any areas of land within the project study area identified as 'strategic cropping land or potential strategic cropping land' (SCL) as identified by the *Strategic Cropping Land Act 2011* (SCL Act) trigger maps.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.5 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.6
For relevant sections of the project area, provide a map and description of relevant coastal geomorphology, characterised and supported by illustrative mapping.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.1, 5.3.2 and 5.3.3 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.1, 3.2 and 3.3 Volume 1 Chapter 8 Coastal environment, Section 8.3
Potential impacts and mitigation measures Provide details of any potential impacts to the topography or geomorphology associated with the project and proposed mitigation measures.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4.1, 5.4.2 and 5.4.3

Terms of Reference Requirement / Section Number	Cross-reference
Identify the possible soil erosion rate for all permanent and temporary landforms and describe the techniques used to manage the impact. Identify all soil types and outline the erosion potential (both wind and water). Include an assessment of likely erosion effects, especially those resulting from removing vegetation, and constructing retaining walls both on site and off site for all disturbed areas.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4 Volume 1 Chapter 17 Climate and natural hazards, Section 17.4 Volume 2 Appendix P Environmental management plan framework, Section 4.4
Identify erosion management techniques to be used. Provide details of an erosion monitoring program (including rehabilitation measures for erosion problems identified during construction), and detail acceptable mitigation strategies.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Sections 5.4.1, 5.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.4
Discuss the potential for acid generation from disturbance of acid sulfate soils during earthworks and construction, and propose measures to manage soils and mitigate impacts for all site earthworks and construction activities. Should action criteria be triggered by acid generating potential as a result of testing potential areas, provide a site specific acid sulfate soils management plan prepared in accordance with State Planning Policies and accepted industry guidelines.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4.1, 5.4.2 and 5.4.3 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.4 Volume 2 Appendix P Environmental management plan framework, Section 4.4

Terms of Reference Requirement / Section Number	Cross-reference
Identify any areas within the project footprint likely to temporarily or permanently impact SCL and potential SCL. Where areas of identified SCL and potential SCL are likely to be permanently alienated by the project, address the requirements of the SCL Act as they apply to the components of the project, in consultation with the Department of Natural Resources and Mines to discuss undertaking the SCL assessment process defined by the SCL Act.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4.1 and 5.4.3
5.2.4 Land Contamination	
Description of environmental values Detail any known or potential sources of contaminated land within or adjoining the project area, , including the location of any potential contamination identified by landholders. Provide a description of the nature and extent of contamination at identified site(s).	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.3.7 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.7
Potential impacts and mitigation measures Discuss the management of any contaminated land and potential for contamination from construction, commissioning, operation and decommissioning.	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4 Volume 2 Appendix E Topography, geology, soils and land contamination, Section 3.7
Describe strategies and methods to be used to prevent and manage any land contamination resulting from the project, including the management of any acid generation or management of chemicals and fuels to prevent spills or leaks	Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4 Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.5 and 18.6 Volume 1 Chapter 9 Water resources, Section 9.4

Terms of Reference Requirement / Section Number	Cross-reference
	Volume 2 Appendix P Environmental management plan framework, Section 4.4 and 4.12
5.3 Coastal Environment	
Describe the existing coastal environment that may be affected by the project in the context of coastal values identified in the Queensland State of the Environment reports and environmental values as defined by the EP Act and environmental protection policies.	Volume 1 Chapter 8 Coastal environment, Section 8.3 Volume 1 Chapter 20 Legislation and Approvals, Section 20.4.2 Volume 1 Chapter 9 Water resources, Section 9.3.6
Identify actions associated with the project that are assessable development within the coastal zone and will require assessment under the provisions of the *Coastal Protection and Management Act 1995* (Qld) (Coastal Act).	Volume 1 Chapter 8 Coastal environment, Section 8.4 Volume 1 Chapter 20 Legislation and Approvals, Section 20.4.1
Assess the project's consistency with the relevant policies of the *Queensland Coastal Plan* (Department of Environment and Resource Management 2012a), including the Coastal Protection State Planning Regulatory Provision (SPRP) (Department of State Development, Infrastructure and Planning 2013b) and the State Policy: Coastal Management (Department of Environment and Resource Management 2011d). It is intended that the Coastal Protection SPRP will be replaced by the single State planning policy (single SPP) during 2013. Further information about the draft single SPP is available from the Department of State Development, Infrastructure and Planning at www.dsdip.qld.gov.au/about-planning/state-planning-policy.html.	Volume 1 Chapter 8 Coastal environment, Section 8.4 and 8.5 Volume 1 Chapter 20 Legislation and Approvals, Section 20.4.1 and 20.6.2
5.4 Nature Conservation	
5.4.1 Sensitive Environmental Areas	
Detail the existing nature conservation values that may be affected by the proposal. Describe the environmental values in	Volume 1 Chapter 6 Nature

Terms of Reference Requirement / Section Number	Cross-reference
terms of: • terrestrial and aquatic ecosystems and their interaction • biological diversity, including habitat of endangered, vulnerable and near-threatened (EVNT) and special least-concern species • integrity of existing ecological processes, including habitat of EVNT and special least-concern species • integrity of landscapes and places including wilderness and similar natural places. Surveys should be undertaken in those areas identified as key ecological areas during the desktop assessment. The survey effort should identify the existing flora and fauna values and the regional ecosystem associations that incorporate these values. The survey effort should be sufficient to identify, or adequately extrapolate, the floral and faunal values over the range of seasons, particularly during and following a wet season. The survey should account for the ephemeral nature of watercourses traversing the proposal area, and seasonal variation in fauna populations. Wherever possible, seek the involvement of the local Indigenous community in conducting field observations and survey activities, to identify the traditional and contemporary Indigenous uses of species. Also outline the proposed strategies to avoid, or minimise and mitigate, impacts on the identified values within the project's footprint. Identify key flora and fauna indicators for ongoing monitoring where a clear need for ongoing management has been identified by the above assessment.	conservation Volume 2 Appendix F Nature conservation Volume 2 Appendix P Environmental management plan framework, Section 4.2
Description of environmental values On a map of suitable scale, identify areas that are environmentally sensitive within the study area in proximity to the project. This should include areas classified as having national, state, regional or local biodiversity significance, or flagged as important for their integrated biodiversity values. Refer to Queensland legislation and policies on threatened species and ecological communities. Areas regarded as sensitive with regard to flora, fauna and ecological processes should be identified and mapped.	Volume 1 Chapter 6 Nature conservation, Section 6.3.1 and 6.3.2 Volume 2 Appendix F Nature conservation, Appendix B
Potential impacts and mitigation measures Discuss the impact of the project on species, communities and habitat of local, regional or state significance in sensitive	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.3

Terms of Reference Requirement / Section Number	Cross-reference
environmental areas as identified above. Demonstrate how the project would comply with the following hierarchy: • avoiding impact on areas of remnant vegetation and areas of conservation value including habitat of listed species	
• mitigating impacts through rehabilitation and restoration	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
• replacing or offsetting the loss of conservation values, where impacts cannot be avoided or mitigated.	Volume 1 Chapter 6 Nature conservation, Section 6.4.4 Volume 2 Appendix O Offset strategy, Section 3
Describe and explain any departure from 'no net loss' of ecological values.	Volume 2 Appendix O Offset strategy, Section 1.3, 2.5.2 and 4
Discuss the boundaries of the areas impacted by the project within or adjacent to a threatened ecological community, including details of footprint width. If the project area will impact upon an endangered ecological community, include reasons for the preferred alignment and the viability of alternatives.	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2 Volume 1 Chapter 7 MNES, Section 7.8
Describe strategies for protecting Ramsar wetlands and discuss any obligations imposed by state or Commonwealth legislation or policies, or international treaty obligations (that is, China–Australia Migratory Bird Agreement (CAMBA), Japan–Australia Migratory Bird Agreement (JAMBA), Republic of Korea–Australia Migratory Bird Agreement (ROKAMBA)).	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2

Terms of Reference Requirement / Section Number	Cross-reference
Describe and assess the potential impacts of any actions of the project that require an authority under the *Nature Conservation Act 1992* (NC Act), and/or would be assessable development for the purposes of the *Vegetation Management Act 1999*. The assessment and supporting information should be sufficient for the administering authority to decide whether an approval should be granted, and to develop conditions.	Volume 1 Chapter 6 Nature conservation, Section 6.2.3, 6.2.5, 6.3, 6.4.1 and 6.4.2 Volume 1 Chapter 20 Legislation and approvals, Section 20.5.11
Management practices proposed for the project should address the performance requirements of the relevant policies and regional vegetation management codes.	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
Where Queensland legislation or policy requires an offset for a significant residual impact on a particular natural environmental value, the offset proposal(s) shall be consistent with the relevant legislation and policy.	Volume 1 Chapter 6 Nature conservation, Section 6.4.4 Volume 2 Appendix O Offset strategy, Section 3
5.4.2 Terrestrial Flora	
Description of environmental values Provide vegetation mapping for all relevant project sites, and for adjacent areas to illustrate interconnectivity. Mapping should also illustrate any larger scale interconnections between areas of remnant or regrowth vegetation where the project site includes a corridor connecting those other areas. Discuss any variances between site mapping and mapping produced by the Queensland Herbarium.	Volume 1 Chapter 6 Nature conservation, Section 6.3 Volume 2 Appendix F Nature conservation, Section 3
Highlight sensitive or important vegetation types, including any marine littoral and subtidal zone and riparian vegetation, and their value as habitat for fauna and conservation of specific rare floral and faunal assemblages or community types.	Volume 1 Chapter 6 Nature conservation, Section 6.3 Volume 2 Appendix F Nature conservation, Section 3.6 and 4

Terms of Reference Requirement / Section Number	Cross-reference
For each significant natural vegetation community likely to be impacted by the project, vegetation surveys should be undertaken at an appropriate number of sites, allowing for seasonal factors, and satisfy the following: • the relevant regional vegetation management codes • site data should be recorded in a form compatible with the Queensland Herbarium CORVEG database and HERBRECS • the minimum site size should be 10 × 50 metres • a complete list of species present at each site should be recorded • the surveys to include species structure, assemblage, diversity and abundance • the relative abundance of plant species present to be recorded • any plant species of conservation, cultural, commercial or recreational significance to be identified • specimens of species listed as protected plants under the Nature Conservation (Wildlife) Regulation, other than common species, are to be submitted to the Queensland Herbarium for identification • the methodology in *Biocondition: A Condition Assessment Framework for Terrestrial Biodiversity in Queensland: Assessment Manual* (version 2.1) (Eyre et al. 2011) and *Ecological Equivalence Methodology Guidelines* (version 1) (Department of Environment and Resource Management 2011a) for sites possibly requiring offset considerations under the Policy for Vegetation Management Offsets (version 3) (Department of Environment and Resource Management 2011b) or Queensland Biodiversity Offset Policy (version 1) (Department of Environment and Resource Management 2011c). Existing information on plant species may be used instead of new survey work, provided that the data is derived from previous surveys at the site consistent with the above methodology. The methodology used for flora surveys should be specified in the appendices to the report.	Volume 1 Chapter 6 Nature conservation, Section 6.2 and 6.3 Volume 2 Appendix F Nature conservation, Section 2 Volume 2 Appendix O Offset strategy, Section 3.3
Potential impacts and mitigation measures Describe the potential environmental impacts to the ecological values of the area arising from the construction, operation and decommissioning of the project including clearing, salvaging or removing vegetation. Discuss the indirect effects on remaining vegetation.	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2

Terms of Reference Requirement / Section Number	Cross-reference
Consider short- and long-term effects and comment on whether the impacts are reversible or irreversible. For all components of the project, discuss: • the potential impacts that clearing vegetation will have on listed species and communities in the extent of the proposed vegetation clearing	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2
• any management actions to minimise vegetation disturbance and clearance	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
• the ability of identified vegetation to withstand any increased pressure resulting from the project, and any measures proposed to mitigate potential impacts	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
• the methods to ensure rapid rehabilitation of disturbed areas following construction, including the species chosen for revegetation, which should be consistent with the surrounding associations	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2

Terms of Reference Requirement / Section Number	Cross-reference
• any post-construction monitoring and auditing programs	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
• the potential environmental harm on flora due to any alterations to the local surface and groundwater environment, with specific reference to impacts on riparian vegetation or other sensitive vegetation communities	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2 Volume 1 Chapter 9 Water resources, Section 9.4.1 and 9.4.2
• a description of any foreseen impacts which increase the susceptibility of ecological communities and species to the impacts of climate change.	Volume 1 Chapter 17 Climate change and natural hazards, Section 17.4.1
Outline how these measures will be implemented through proposed management practices for the project.	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
Weed management strategies are required for containing existing weed species (for example, parthenium and other declared plants) and ensuring no new declared plants are introduced to the area. Refer to the local government authority's pest management plan and any strategies and plans recommended for the project area by Biosecurity Queensland. Discuss the strategies in accordance with provisions of the *Land Protection (Pest and Stock Route Management) Act 2002* in the main body of the EIS and in a pest management plan within the proposed management practices for the project.	Volume 1 Chapter 6 Nature conservation, Section 6.3.8 and 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2

Terms of Reference Requirement / Section Number	Cross-reference
5.4.3 Terrestrial Fauna	
Description of environmental values Describe the terrestrial and riparian fauna occurring in the areas affected by the proposal, noting the broad distribution patterns in relation to vegetation, topography and substrate. Fauna survey methodology should be in accordance with the *Terrestrial Vertebrate Fauna Survey Assessment Guidelines for Queensland* (Eyre et al. 2012). The description of the fauna present or likely to be present in the study area should include: • species diversity and abundance of animals of recognised significance • any species that are poorly known but suspected of being rare or threatened • habitat requirements and sensitivity to changes, including movement corridors and barriers to movement • the existence of feral or introduced animals of economic or conservation significance existence (actual or likely) of any species and communities of conservation significance in the study area, including discussion of range, habitat, breeding • recruitment feeding and movement requirements, and current level of protection (for example, any requirements of protected area management plans or threatened species recovery plans) • habitat requirements and sensitivity to changes, including movement corridors and barriers to movement • an estimate of commonness or rarity for the listed or otherwise significant species • use of the area by migratory fauna • records in a form compatible with the Wildlife Online database.	Volume 1 Chapter 6 Nature conservation, Section 6.2 and 6.3 Volume 2 Appendix F Nature conservation, Section 2 and 4.3
Identify any species listed by the NC Act occurring in the project area. Identify any species listed by the 'Back on Track' species prioritisation methodology (refer to: **www.ehp.qld.gov.au/wildlife/prioritisation-framework/index.html**). Indicate how well any affected communities are represented and protected elsewhere in the bio-region where the project occurs. Specify the methodology used for fauna surveys. Provide relevant site data to the Department of Environment and Heritage Protection (DEHP) in a format compatible with the Wildlife Online database for listed threatened species (refer to: **www.ehp.qld.gov.au/wildlife/wildlifeonline/ index.html**).	Volume 1 Chapter 6 Nature conservation, Section 6.3.5 and 6.3.6 Volume 2 Appendix F Nature conservation, Section 4.3

Terms of Reference Requirement / Section Number	Cross-reference
Potential impacts and mitigation measures Describe potential impacts on terrestrial fauna, relevant wildlife habitat and other fauna conservation values, including: • impacts due to loss of range/habitat, food supply, nest sites, breeding/recruiting potential or movement corridors or as a result of hydrological change	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2
• impacts on native species, particularly species of conservation significance	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2
• cumulative effects of direct and indirect impacts	Volume 1 Chapter 19 Cumulative impact assessment, Section 19.4.5 and 19.4.6
• threatening processes leading to progressive loss	Volume 1 Chapter 6 Nature conservation, Section 6.3.8, 6.4.1 and 6.4.2
• a description of any foreseen impacts that increase the susceptibility of ecological communities and species to the impacts of climate change.	Volume 1 Chapter 17 Climate change and natural hazards, Section 17.4.1
Address any actions of the project or likely impacts that require an authority under the NC Act. Provide the following information on mitigation strategies: • measures to avoid and mitigate the identified impacts. Any provision for buffer zones and movement corridors, nature reserves or special provisions for migratory animals should be discussed and coordinated with the outputs of the flora assessment • details of the methodologies that would be used to avoid injuring livestock and native fauna as a result of the project's construction and operational works, and if accidental injuries should occur, the methodologies to assess and handle injuries • strategies for complying with the objectives and management practices of relevant recovery plans	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2

Terms of Reference Requirement / Section Number	Cross-reference
• measures to rehabilitate disturbed areas, which incorporate provision of nest hollows and ground litter, where appropriate.	
Outline how these measures will be implemented in the proposed management practices for the project. Address feral animal management strategies and practices. Refer to the local government authority's pest management plan and any strategies and plans recommended for the project area by Biosecurity Queensland. Discuss the strategies in accordance with the provisions of the *Land Protection (Pest and Stock Route Management) Act.* Any pest management plan is to incorporate strategies to manage designated pests as defined by the *Public Health Act 2005*.	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix Nature conservation, Section 5 Volume 2 Appendix P Environmental management plan framework, Section 4.2
5.4.4 Aquatic Biology and Ecology	
Description of environmental values Describe the aquatic flora and fauna present, or likely to be present, in the areas affected by the project, including marine species. Describe any wetlands listed by DEHP as areas of national, state or regional significance and detail their values and importance for aquatic flora and fauna species.	Volume 1 Chapter 6 Nature conservation, Section 6.3.6 and 6.3.7 Volume 2 Appendix F Nature conservation, Section 2.5.4 and 4.3.4
Fauna—turtles Describe the turtle species that may use beaches near the proposed development area. Undertake a desktop review of information on the turtle communities of the study area, particularly the green, hawksbill, loggerhead, olive ridley and flatback turtles, paying specific attention to any anecdotal or recorded information on turtle populations frequenting the port area and any known nesting sites.	Volume 1 Chapter Nature conservation, Section 6.3.6
Refer to studies of the turtle populations and consult the Department of National Parks, Recreation, Sport and Racing on historical data for the area, particularly on previously conducted nesting surveys.	Volume 1 Chapter Nature conservation, Section 6.3.6

Terms of Reference Requirement / Section Number	Cross-reference
Use this information to develop recommendations on the most appropriate management measures to be adopted to minimise the risk of turtle injury or death.	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2
Potential impacts and mitigation measures Discuss the potential impacts of the project on the aquatic species and ecosystems and describe proposed mitigation actions, including: • proposed location, type and design of waterway barrier works (temporary and permanent) that would impact on aquatic resources, particularly fish movement, with an appropriately scaled map • proposed stream diversions, causeway construction and crossing facilities, stockpiled material and other impediments that would restrict free movement of aquatic fauna • alternatives to waterway crossings where possible • measures to avoid fish spawning periods, such as seasonal construction of waterway crossings and measures to facilitate fish movements through water crossings • offsets proposed for unavoidable, permanent loss of fisheries habitat • methods to minimise the potential for introducing or spreading weed species or plant disease • monitoring aquatic biology health, productivity and biodiversity in areas subject to direct discharge. Address any actions of the project or likely impacts that require an authority under the relevant legislation, including the NC Act and/or the Fisheries Act. Outline how these measures will be implemented through proposed management practices for the project.	Volume 1 Chapter 6 Nature conservation, Section 6.4.1, 6.4.2, 6.4.3 and 6.4.4 Volume 2 Appendix P Environmental management plan framework, Section 4.2 Volume 2 Appendix O Offset strategy, Section 2.5.3 and 3
Provide details of the management methods which would avoid or minimise impacts on birds, marine mammals, turtles and fish, including migrations and marine plant propagation commensurate with the risk and severity of predicted impacts. In particular, present a discussion of existence (actual or likely) of any species and communities of conservation significance in the study area, including discussion of range, habitat, breeding, recruitment feeding and movement requirements, and current level of protection (for example, any requirements of protected area management plans or threatened species recovery plans, including, but not restricted to direct references to all relevant turtle species included in	Volume 1 Chapter 6 Nature conservation, Section 6.3 and 6.4 Volume 2 Appendix P Environmental management plan framework, Section 4.2

Terms of Reference Requirement / Section Number	Cross-reference
the *Recovery Plan for Marine Turtles in Australia* (Commonwealth of Australia 2003).	
Outline how these measures will be implemented through proposed management practices for the project.	Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management plan framework, Section 4.2 Volume 2 Appendix O Offset strategy, Section 3
5.5 Water Resources	
5.5.1 Description of Environmental Values	
Describe the existing resources and environmental values of surface water and groundwater as described under the EP Act (section 9) and the Environmental Protection (Water) Policy 2009 that may be affected by the project, including: • physical, chemical and biological characteristics of existing surface and groundwater within the area that may be affected by the project	Volume 1 Chapter 9 Water resources, Section 9.2.3, 9.3.5, 9.3.6 and 9.3.7 Volume 2 Appendix H1 Water resources, Section 3.5 and 3.6
• existing surface drainage patterns, flows, history of flooding including extent, levels and frequency and present water uses	Volume 1 Chapter 9 Water resources, Section 9.2.8, 9.3.3, 9.3.4, 9.3.7 and 9.3.8 Volume 2 Appendix H1 Water resources, Section 3.3, 3.4, 3.5 and 3.6
• baseline details on water assets, including environments supported by those assets.	Volume 1 Chapter 9 Water resources, Section 9.3.5, 9.3.7 and 9.3.8 Volume 2 Appendix H1 Water

Terms of Reference Requirement / Section Number	Cross-reference
	resources, Section 3.3, 3.4, 3.5, 3.6 and 3.7
Describe the environmental values of the surface waterways and groundwater of the affected area in terms of: • physical integrity, fluvial processes and morphology, including riparian zone vegetation and form, if relevant	Volume 1 Chapter 9 Water resources, Section 9.3.1, 9.3.5, 9.3.6 and 9.3.7 Volume 2 Appendix H1 Water resources, Section 3.3 and 3.4
• any proposed impoundment, extraction, use or loss of surface water or groundwater	Volume 1 Chapter 9 Water resources, Section 9.3.8 Volume 2 Appendix H1 Water resources, Section 3.7 Volume 2 Appendix H3 Construction water supply strategy
• hydrology of waterways and groundwater	Volume 1 Chapter 9 Water resources, Section 9.3.5 and 9.3.7 Volume 2 Appendix H2 Hydrology and hydraulics, Section 2 and 3
• sustainability, including both quality and quantity	Volume 1 Chapter 9 Water resources, Section 9.3.5 and 9.3.7 Volume 2 Appendix H3 Construction water supply

Terms of Reference Requirement / Section Number	Cross-reference
	strategy, Section 4 and 5
• dependent ecosystems	Volume 1 Chapter 9 Water resources, Section 9.3.5 Volume 2 Appendix H1 Water resources, Section 3.5 and 3.6 Volume 1 Chapter 6 Nature conservation, Section 6.4.1
• existing and other potential surface and groundwater users.	Volume 1 Chapter 9 Water resources, Section 9.3.8
5.5.2 Potential Impacts and Mitigation Measures	
Assess the project's potential impacts on water resource environmental values identified in the previous section. Define and describe the objectives and practical measures for protecting or enhancing water resource environmental values, to describe how nominated quantitative standards and indicators may be achieved, and how the achievement of objectives will be monitored, audited and managed. Include the following: • potential impacts on the flow and the quality of surface and groundwater from all phases of the project, with reference to their suitability for the current and potential downstream uses and discharge licences	Volume 1 Chapter 9 Water resources, Section 9.4.1, 9.4.2 and 9.4.3 Volume 1 Chapter 20 Legislation and approvals, Section 20.4.2 and 20.4.8 Volume 2 Appendix H3 Construction water supply strategy, Section 6
• an assessment of all likely impacts on groundwater depletion or recharge regimes	Volume 1 Chapter 9 Water resources, Section 9.4.1 and 9.4.2 Volume 2 Appendix H3 Construction water supply

Terms of Reference Requirement / Section Number	Cross-reference
	strategy
• potential impacts of surface water flow on existing infrastructure, with reference to the EPP (Water) and the *Water Act 2000*	Volume 1 Chapter 9 Water resources, Section 9.3.5 and 9.4.2 Volume 1 Chapter 20 Legislation and approvals, Section 20.4.2 and 20.4.8
• chemical and physical properties of any wastewater (including any contaminated stormwater at the point of discharge into natural surface waters), and its potential environmental harm to terrestrial and aquatic ecosystems .	Volume 1 Chapter 13 Waste, Section 13.4.2 and 13.4.1 Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2 Volume 1 Chapter 9 Water resources, Section 9.4
• an assessment of the potential to contaminate surface and groundwater resources and measures to prevent, mitigate and remediate such contamination.	Volume 1 Chapter 9 Water resources, Section 9.4.1, 9.4.2 and 9.4.3 Volume 1 Chapter 5 Topography, geology, soils and land contamination, Section 5.4.1 and 5.4.2
Assess the hydrological impacts of the proposal on surface water and water courses, particularly with regard to stream diversions, scouring and erosion, and changes to flooding levels and frequency of flooding, both upstream and downstream of the project. If flooding levels will be affected, modelling of afflux should be provided and illustrated with maps.	Volume 1 Chapter 9 Water resources, Section 9.4.1, 9.4.2 and 9.4.3 Volume 2 Appendix H2

Terms of Reference Requirement / Section Number	Cross-reference
	Hydrology and hydraulics, Section 5
Describe the options for supplying water to the project considering water resource availability and impacts on water users, and assess the consequential impacts in relation to any water resource plan and resource operations plan that may apply. Identify any approval or allocation that would be needed under the Water Act.	Volume 1 Chapter 9 Water resources, Section 9.4.1, 9.4.2 and 9.4.3 Volume 2 Appendix H3 Construction water supply strategy, Section 3, 4, 5 and 6 Volume 1 Chapter 20 Legislation and approvals, Section 20.4.8
Strategies should be adequately detailed to demonstrate best practice management and that environmental values of receiving waters will be maintained to nominated water quality objectives. Describe the monitoring programs that will assess the effectiveness of management strategies for protecting water resources during the construction, operation and decommissioning of the project. Outline how these strategies are incorporated into appropriate sections of proposed management practices and management plans.	Volume 1 Chapter 9 Water resources, Section 9.3.6, 9.4.1, 9.4.2 and 9.4.3 Volume 2 Appendix P Environmental management, Section 4.7
5.6 Air Quality	
5.6.1 Description of Environmental Values	
Describe the existing air quality that may be affected by the project in the context of environmental values as defined by the EP Act and Environmental Protection (Air) Policy 2008 (EPP (Air)). Discuss the existing local and regional air shed environment, including: • background levels and sources of particulates	Volume 1 Chapter 10 Air quality, Section 10.3.1 and 10.3.6 Volume 2 Appendix I Air quality, Section 3.2
• any pollutants (including greenhouse gases)	Volume 1 Chapter 10 Air quality,

Terms of Reference Requirement / Section Number	Cross-reference
	Section 10.3.6 Volume 2 Appendix I Air quality, Section 3.2 Volume 1 Chapter 11 Greenhouse gas, Section 11.3
• any baseline monitoring results, sensitive receptors.	Volume 1 Chapter 10 Air quality, Section 10.3.1 and 10.3.6 Volume 2 Appendix I Air quality, Section 3.2 and 3.3
Data on local meteorology and ambient levels of pollutants should be gathered to provide a baseline for later studies	Volume 1 Chapter 10 Air quality, Section 10.3.6 Volume 2 Appendix I Air quality, Section 3.1
5.6.2 Potential Impacts and Mitigation Measures	
Consider the following air quality issues and their mitigation: • an inventory of air emissions from the project expected during construction and operational activities (including source, nature and levels of emissions)	Volume 1 Chapter 10 Air quality, Section 10.4.1 and 10.4.2 Volume 2 Appendix I Air quality, Section 5.1, 5.2 and 5.3
• ground level predictions should be made at any site that includes the environmental values identified by the EPP (Air), including any sites that could be sensitive to the effects of predicted emissions	Volume 1 Chapter 10 Air quality, Section 10.4.1 and 10.4.2 Volume 2 Appendix I Air quality, Section 5.3
• dust and odour generation from construction activities, especially in areas where construction activities are adjacent	Volume 1 Chapter 10 Air quality,

Terms of Reference Requirement / Section Number	Cross-reference
to existing road networks or are in close proximity to sensitive receivers	Section 10.4.1 and 10.4.2 Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.4, 18.5 and 18.6
• climatic patterns that could affect dust generation and movement	Volume 1 Chapter 17 Climate and natural hazards, Section 17.3.3 and 17.4.1
• vehicle emissions and dust generation along major haulage routes (including coal dust associated with rail haulage) both internal and external to the project site	Volume 1 Chapter 10 Air quality, Section 10.4.1 and 10.4.2
• human health risk associated with emissions from project activities	Volume 1 Chapter 10 Air quality, Section 10.2.5 and 10.4.1
• impacts on terrestrial flora and fauna.	Volume 1 Chapter 10 Air quality, Section 10.2.5 Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2
Detail the best practice mitigation measures together with proactive and predictive operational and maintenance strategies that could be used to prevent and mitigate impacts.	Volume 1 Chapter 10 Air quality, Section 10.4.3 Volume 2 Appendix P Environmental management, Section 4.1
Discuss potential air quality impacts from emissions, with reference to the National Environmental Protection (Ambient Air Quality) Measure 2003 (Cwlth) and the EPP (Air).	Volume 1 Chapter 10 Air quality, Section 10.2.5, 10.4.1 and 10.4.2

Terms of Reference Requirement / Section Number	Cross-reference
5.7 Greenhouse Gas Emissions	
5.7.1 Description of Environmental Situation	
Provide an estimate of projected annual emissions for each relevant greenhouse gas, with total emissions expressed in 'CO2 equivalent' terms for: • scope 1 emissions • scope 2 emissions	Volume 1 Chapter 11 Greenhouse gas, Section 11.2.4, 11.3.1 and 11.3.2 Volume 2 Appendix P Environmental management plan framework, Section 4.3
Briefly describe method(s) by which estimates were made. Use the *National Greenhouse Accounts (NGA) Factors* (Commonwealth of Australia 2012b) as a reference source for emission estimates, supplemented by other sources where practicable and appropriate. As a requirement of the NGA factors, estimates should include the loss of carbon sink capacity of vegetation due to clearing and impoundment.	Volume 1 Chapter 11 Greenhouse gas, Section 11.2
5.7.2 Potential Impacts and Mitigation Measures	
Discuss the potential for greenhouse gas abatement measures, including: • the proposed measures (alternatives and preferred) to avoid and/or minimise direct greenhouse gas emissions	Volume 1 Chapter 11 Greenhouse gas, Section 11.4 Volume 2 Appendix P Environmental management plan framework, Section 4.3
• how the preferred measures minimise emissions and achieve energy efficiency	Volume 1 Chapter 11 Greenhouse gas, Section 11.4 Volume 2 Appendix P Environmental management plan framework, Section 4.3

Terms of Reference Requirement / Section Number	Cross-reference
• any opportunities to further offset greenhouse gas emissions through indirect means including sequestration and carbon trading.	Volume 1 Chapter 11 Greenhouse gas, Section 11.4 Volume 2 Appendix P Environmental management plan framework, Section 4.3
5.8 Noise and Vibration	
5.8.1 Description of Environmental Values	
Describe the existing noise and vibration environment that may be affected by the project in the context of the environmental values defined by the Environmental Protection (Noise) Policy 2008 (EPP (Noise)). Refer to the following documents: • *Noise Measurement Manual* (Environment Protection Agency 2000) • *Guideline: Noise and vibration from blasting* (Environmental Protection Agency 2006) • *Guideline: Planning for Noise Control* (Environmental Protection Agency 2004) • *Australian Standard AS 2187.2-2006 Explosives – Storage and Use, Part 2 Use of Explosives* (Standards Australia 2006).	Volume 1 Chapter 12 Noise and vibration, Section 12.2.3, 12.3.2 and 12.3.3 Volume 2 Appendix J Noise and Vibration, Section 2.3, 3.1, 3.2 and 3.3
Identify sensitive noise receptors adjacent to all project components and estimate typical background noise and vibration levels based on surveys at representative sites. Discuss the potential sensitivity of such receptors and nominate performance indicators and standards.	Volume 1 Chapter 12 Noise and vibration, Section 12.3.1, 12.4.1 and 12.4.2 Volume 2 Appendix J Noise and Vibration, Section 3.1 and 4
5.8.2 Potential Impacts and Mitigation Measures	
Describe the impacts of noise and vibration generated during the pre-construction, construction, operational and decommissioning phases of the project. Noise and vibration impact analysis should include: • the levels of noise and vibration generated, including noise contours, assessed against current typical background	Volume 1 Chapter 12 Noise and vibration, Section 12.4 Volume 2 Appendix J Noise and

Terms of Reference Requirement / Section Number	Cross-reference
levels, using modelling (such as Environmental Noise Model or SoundPLAN) where appropriate	Vibration, Section 2.5.3, 2.5.3, and 5
• impact of noise, including low frequency noise (noise with components below 200 Hz) and vibration at all potentially sensitive receivers (for example, residences, social and public infrastructure, such as health, recreational and educational facilities, roads) compared with the performance indicators and standards nominated above in Section 3.8.1	Volume 1 Chapter 12 Noise and vibration, Section 12.4 Volume 2 Appendix J Noise and Vibration, Section 5
• impact on terrestrial, avian and aquatic fauna	Volume 1 Chapter 6 Nature conservation, Section 6.4.1 and 6.4.2
• proposals to minimise or eliminate these effects	Volume 1 Chapter 12 Noise and vibration, Section 12.4.3
• mitigation options for sensitive receptors that are otherwise unable to achieve a satisfactory internal noise level for the preservation of health and wellbeing as identified within the EPP (Noise).	Volume 1 Chapter 12 Noise and vibration, Section 12.4.3 Volume 2 Appendix P Environmental management, Section 4.6
In the evaluation of predicted noise and vibration impacts, consider the *Rail Infrastructure Noise Guideline* (Environment Protection Agency (NSW), 2013).	Volume 1 Chapter 12 Noise and vibration, Section 12.4 Volume 2 Appendix J Noise and Vibration, Section 5
Night-time surface works Provide details of any night-time surface work proposed. Specifically include: • the reasons why night-time work may be undertaken (for example, to avoid peak traffic periods, or to undertake work in a rail corridor)	Volume 1 Chapter 12 Noise and vibration, Section 12.3.2 and 12.4.2 Volume 1 Chapter 2 Project

Terms of Reference Requirement / Section Number	Cross-reference
• the likely duration of work (if known) • the proposed hours of the work • the nature of the work to be undertaken • the likely impact on residents and the associated mitigation measures to be undertaken by the proponent • the methods that will be used to communicate with affected residents.	description, Section 2.4.2 Volume 1 Appendix B Public consultation, Section 2
5.9 Waste	
5.9.1 Waste Generation	
Identify and describe all sources, likely volumes and quality (where applicable) of waste associated with pre-construction, construction, operation and decommissioning of all aspects of the project. Refer to regulated waste listed in Schedule 7 of the Environmental Protection Regulation 2008 (Qld). Describe: • waste generated by delivery of material to site(s) • all chemical and mechanical processes conducted on the construction sites that produce waste • the amount and characteristics of solid and liquid waste produced on site by the project • hazardous materials to be stored and/or used on site, including environmental toxicity data and biodegradability.	Volume 1 Chapter 13 Waste, Section 13.4 Volume 1 Chapter 18 Hazard, risk, health and safety Section 18.4
5.9.2 Waste Management	
Detail the proposed management of solid and liquid waste. Assess the potential impact of all waste generated during construction and operation, with regard for best practice waste management strategies, the Environmental Protection (Waste Management) Policy 2000 and *the Environmental Protection (Waste Management) Regulation 2000* (Qld). Provide details of each type of waste in terms of: • the options available for avoidance and minimisation	Volume 1 Chapter 13 Waste, Section 13.4.1, 13.4.2 and 13.4.3
• operational handling and fate of all waste including storage	Volume 1 Chapter 13 Waste, Section 13.5.2 Volume 2 Appendix P Environmental management,

Terms of Reference Requirement / Section Number	Cross-reference
	Section 4.5
• on-site treatment methods proposed for any waste	Volume 1 Chapter 13 Waste, Section 13.5.2 Volume 2 Appendix P Environmental management, Section 4.5
• methods of disposal (including the need to transport waste off site for disposal) proposed to be used for any trade, liquid or solid waste	Volume 1 Chapter 13 Waste, Section 13.3.1 and 13.5.2 Volume 1 Chapter 9 water resources, Section 9.4 Volume 2 Appendix P Environmental management, Section 4.5
• the potential level of impact on environmental values	Volume 1 Chapter 13 Waste, Section 13.5.2 Volume 1 Chapter 9 water resources, Section 9.4 Volume 1 Chapter 6 Nature conservation Section 6.4.1, 6.4.3
• measures to ensure stability of the waste storage areas and impoundments	Volume 1 Chapter 13 Waste, Section 13.4.2 Volume 1 Chapter 9 water resources, Section 9.4 Volume 2 Appendix P

Terms of Reference Requirement / Section Number	Cross-reference
	Environmental management, Section 4.5
• methods to prevent seepage and contamination of groundwater from stockpiles, storage areas and impoundments	Volume 1 Chapter 13 Waste, Section 13.4.1 and 13.5.2 Volume 2 Appendix P Environmental management, Section 4.5
• measures to minimise attraction of vermin, insects and pests	Volume 1 Chapter 13 Waste, Section 13.5.2 Volume 1 Chapter 6 Nature conservation, Section 6.4.3 Volume 2 Appendix P Environmental management, Section 4.2
• options available for using recycled materials	Volume 1 Chapter 13 Waste, Section 13.5.2 Volume 2 Appendix P Environmental management, Section 4.5
• market demand for recyclable waste (where appropriate)	
• decommissioning of the construction site.	Volume 1 Chapter 13 Waste, Section 13.4.4
5.10 Transport	

Terms of Reference Requirement / Section Number	Cross-reference
Present a transport assessment for each project-affected mode (road, rail and air) as appropriate for construction and operational phases of the project. The assessment report should provide sufficient information to allow an independent assessment of how existing transport infrastructure will be affected by project transport at the local and regional level e.g. local roads and state-controlled roads.	Volume 1 Chapter 14 Transport Volume 2 Appendix K Transport
5.10.1 Existing Infrastructure	
Describe the extent, condition and capacity of the existing transport infrastructure on which the project will depend	Volume 1 Chapter 14 Transport, Section 14.3 Volume 2 Appendix K Transport Section 3
5.10.2 Transport Activities and Routes	
Freight Provide a summary of all the freight tasks (inputs and outputs, including wastes) associated with all phases of the project.	Volume 1 Chapter 14 Transport, Section 14.3 Volume 2 Appendix K Transport Section 3
Traffic generation For each mode of transport and for the construction and operational phases of the project, provide traffic generation information on: • existing background traffic including volumes, composition, peak traffic and peak times along the transport routes to and from the project • background traffic growth for the transport routes for all stages of the project life • the construction of any project-related plant and utilities within or impacting on the jurisdiction of any transport authority • the stages, timing and duration of each stage/phase and how these impact on the transport-related infrastructure • comparison of the traffic situation and road conditions with and without the project • expected volumes of project inputs and outputs of transported raw materials, plant, construction materials and	Volume 1 Chapter 14 Transport, Section 14.4

Terms of Reference Requirement / Section Number	Cross-reference
operational equipment, waste, hazardous goods and finished products for all phases of the project • the movements of project inputs and outputs through the local and regional transport network (including number and type of vehicles, mode, volume, composition, trip timing and routes) • traffic generated by workforce personnel including visitors (volume, composition, timing and routes) • likely heavy, oversize and indivisible loads (volume, composition, timing and routes) highlighting any vulnerable bridges and structures along proposed routes. Describe: • access locations (existing and proposed) to state-controlled roads • locations of proposed road-crossing points	
5.10.3 Potential Impacts	
Impact assessment reports should include details of the adopted assessment methodology (for impacts on roads: the road impact assessment report in accordance with the *Guidelines for Assessment of Road Impacts of Development*) (Department of Main Roads 2006). Assessment of traffic impacts is to include the transport arrangements for permanent and temporary workforce associated with all phases of the project. Assess project impacts on: • local and state-controlled road networks, including key road and road/rail intersections, at all project stages. Any impact to level crossings should be assessed using the Australian Level Crossing Assessment Model (ALCAM) • existing rail infrastructure, with particular reference to any rail crossings and infrastructure at the Port of Abbot Point • capacity, safety, local amenity, efficiency and condition of transport operations, services and assets from either transport or project operations, including an assessment of pavement life of the road network as a result of the project. Refer, where relevant, to the *Queensland Road Safety Action Plan 2013–2015* (Department of Transport and Main Roads 2013) • possible interruptions to transport operations • the nature and likelihood of product-spill to both land and marine environments during transport, if relevant • driver fatigue for workers travelling to and from regional centres and key destinations • any existing or proposed strategies for public passenger transport and active transport and address, where relevant, requirements of Part 2A of the Transport Planning and Coordination Act	Volume 1 Chapter 14 Transport, Section 14.5 Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.4 and 18.5.1

Terms of Reference Requirement / Section Number	Cross-reference
• access to transport for people with a disability • transport and handling of hazardous substances and dangerous goods	
• the cumulative impact of this project adding to the impact of other known proposed or current major projects impacting on the road network	Volume 1 Chapter 19 Cumulative impact assessment, Section 19.4.12
5.10.4 Infrastructure Alterations	
Detail: • any proposed alterations or new transport-related infrastructure and services required by the project (as distinct from impact mitigation works) including the potential need for interface agreements with rail transport operators and/or road authorities, where rail or road crossings are required • construction of any project-related plant and utilities, within or impacting on the jurisdiction of any transport authority.	Volume 1 Chapter 14 Transport, Section 14.5 Volume 1 Chapter 20 Legislation and approval, Section 20.3, 20.4 and 20.5 Volume 2 Appendix P Environmental management plan framework, Section 4.9
5.10.5 Transport Impact Management Strategies	
Discuss and recommend how identified impacts will be mitigated so as to maintain safety, efficiency and condition of each mode. These mitigation strategies are to be prepared in close consultation with relevant transport authorities (including local government). Findings of studies and transport infrastructure impact assessments should be an input into preparing a transport management plan	Volume 1 Chapter 14 Transport, Section 14.5 and 14.6 Volume 2 Appendix B Public consultation, Section 3
Road/rail management planning Outline: • procedures for assessing and agreeing on the scope of required mitigation works with road/rail corridor managers (for example, maintenance or upgrades), including any associated works, such as sourcing water and gravel	Volume 1 Chapter 14 Transport, Section 14.6 Volume 1 Chapter 18 Hazard, risk, health and safety, Section

Terms of Reference Requirement / Section Number	Cross-reference
• strategies to minimise the effects of project transport on existing and future public road or rail corridors • steps to be taken to prevent access from public roads/rail corridors to the project sites • strategies to maintain safe access to public road/rail reserves to allow road/rail/pipeline maintenance activities • process for decommissioning any temporary access to road/rail reserves, for example, stockpile sites. Findings of studies and transport infrastructure impact assessments should be an input into preparing a draft road-use management plan. Conditions of approval for transport management impacts should also be detailed in the proposed management practices	18.5.1 and 18.6.1 Volume 2 Appendix P Environmental management plan framework, Section 4.9
5.11 Indigenous Culture Heritage	
Unless an exemption applies under section 86 of the *Aboriginal Cultural Heritage Act 2003*, a Cultural Heritage Management Plan (CHMP) must be prepared in accordance with the requirements of Part 7 of that Act. The gazetted *Cultural Heritage Management Plan Guidelines* may assist in the development of the CHMP. The EIS project manager must be made aware of the progress of the CHMP approval process and of any related issues that should be addressed in the Coordinator-General's EIS evaluation report	Volume 1 Chapter 15 Cultural Heritage, Section 15.3.2 and 15.3.3 Volume 2 Appendix P Environmental management plan framework, Section 4.11
5.12 Non-Indigenous Culture Heritage	
Include a cultural heritage study/survey that describes non-Indigenous cultural heritage sites and places, and their values. Any such study should be conducted by an appropriately qualified cultural heritage practitioner.	Volume 1 Chapter 15 Cultural Heritage, Section 15.2 and 15.3 Volume 2 Appendix L Cultural heritage, Section 3
Provide an assessment of any likely effects on sites of non-Indigenous cultural heritage values. Provide strategies to mitigate and manage any negative impacts on non-Indigenous cultural heritage values and enhance any positive impacts.	Volume 1 Chapter 15 Cultural Heritage, Section 15.3.3 and 15.4
As a minimum, investigation, consultation, impact assessment, management and protection strategies should satisfy statutory responsibilities and duties of care.	Volume 1 Chapter 15 Cultural Heritage, Section 15

Terms of Reference Requirement / Section Number	Cross-reference
6 Social and economic	
The construction and operation of the project should aim to meet the following objectives: • avoid or mitigate adverse social and economic impacts arising from the project • capitalise on opportunities potentially available to affected communities. In accordance with the Coordinator-General's *Social impact assessment guideline*, (Department of State Development, Infrastructure and Planning 2013c) describe the likely social impacts (positive and negative) on affected communities taking into account proposed mitigation measures. The proponent should consult the office of the Coordinator-General about the application of social impact assessment, as it will vary on a case-by-case basis, depending on the duration and extent of potential impacts. The assessment should include, but not be limited to, the following key elements: • community and stakeholder engagement • workforce management • housing and accommodation • local business and industry content • health and community wellbeing.	Volume 1 Chapter 16 Social and economic impacts, Section 16.5 and 16.6 Volume 2 Appendix M Social baseline, Section 3 and 4
Describe the likely impacts (positive and negative) of the project on the economies materially impacted by the project. The analysis should describe both the potential and direct economic impacts including estimated costs, if material, on industry and the community. The assessment should identify opportunities to capture the economic benefits of the project, including: • strategies for ensuring local suppliers of goods and services receive full, fair and reasonable opportunity to tender for work throughout the life of the project through adopting policies such as the Queensland Resources and Energy Sector Code of Practice for Local Content administered by Queensland Resources Council • employment strategies for local residents including members of Indigenous communities and people with a disability • opportunities to support the tourism industry • any recruitment and training programs to be offered.	Volume 1 Chapter 16 Social and economic impacts, Section 16.5 and 16.6 Volume 2 Appendix P Environmental management plan framework, Section 4.10

Terms of Reference Requirement / Section Number	Cross-reference
7.1 Hazard and Risk Assessment	
Describe the potential hazards and risks to people and property that may be associated with the project, which may include but are not restricted to: • identifying potential hazards, accidents, spillages, fire and abnormal events that may occur during all stages of the project, including possible risk of occurrence • identifying all hazardous substances to be used, stored, processed or produced and the rate of usage • potential wildlife hazards, natural events (for example, cyclone, storm surge, flooding, bushfire) and implications related to climate change • assess how the project may potentially affect hazards away from the project site (for example changing flooding characteristics)	Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.3 and 18.4
Undertake a preliminary risk assessment for all components of the project, as part of the EIS process in accordance with relevant standards.	Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.2.5
Provide details on the safeguards that would reduce the likelihood and severity of hazards, consequences and risks to persons, within and adjacent to the project area(s). Present a comparison of assessed and mitigated risks with acceptable risk criteria for land uses in and adjacent to the project area(s).	Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.5 Volume 2 Appendix P Environmental management plan framework, Section 3
7.2 Health and Safety	
Describe the existing health and safety values of the community, workforce, suppliers and other stakeholders in terms of the environmental factors that can affect human health, public safety and quality of life, such as air pollutants, odour, lighting and amenity, dust, noise and water.	Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.3 Volume 1 Chapter 10 Air quality, Section 10.3

Terms of Reference Requirement / Section Number	Cross-reference
	Volume 1 Chapter 12 Noise and Vibration, Section 12.3 Volume 1 Chapter 9 Water resources 9.3.5, 9.3.6 and 9.3.7
Define and describe the objectives and practical measures for protecting or enhancing health and safety community values.	Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.6.1
Assess the cumulative effects on public health values and occupational health and safety impacts on the community, workforce and regional health services from project operations and emissions. Recommend any practical monitoring regimes in this section.	Volume 1 Chapter 19 Cumulative impact assessment, Section 19.4.15
Include relevant consultation undertaken with the appropriate regional health service providers and emergency management authorities.	Volume 1 Chapter 18 Hazard, risk, health and safety, Section 18.6.1 Volume 2 Appendix B Public consultation, Section 4 and 5
7.3 Emergency Management Plan	
The development of emergency and evacuation planning and response procedures is to be determined in consultation with state and regional emergency service agencies, including commitments to consult with Local and District Disaster Management Groups 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. This includes strategies to deal with natural disasters during operation and construction including identification of key stakeholders.	Volume 2 Appendix P Environmental management plan framework, Section 3.11 and Appendix D

Terms of Reference Requirement / Section Number	Cross-reference
8 Cumulative impacts	
Summarise the project's cumulative impacts and describe these impacts in combination with those of existing or proposed project(s) publicly known or advised by the office of the Coordinator-General to be in the region, to the greatest extent practicable. Assess cumulative impacts with respect to both geographic location and environmental values. In particular, address cumulative impacts in sensitive environmental areas identified in section 5.4.1 of this TOR .	Volume 1 Chapter 19 Cumulative impact assessment, Section 19.3 and 19.4
Explain the methodology used to determine the cumulative impacts of the project, detailing the range of variables considered (including relevant baseline or other criteria upon which the cumulative aspects of the project have been assessed, where applicable).	Volume 1 Chapter 19 Cumulative impact assessment, Section 19.2
9 Commitments and management practices	
Provide a consolidated list detailing all proponent commitments to implement management measures (including any monitoring programs) relevant to the project and its potential impacts. Commitments to environmental performance may be included in the Coordinator-General's evaluation report as conditions, to ensure the commitments are met. Provide detail of the management practices proposed to prevent or minimise adverse impacts associated with each phase of the project. The management practices must address discrete project elements and provide life-of-project control strategies. Management practices must be based on investigations undertaken during the EIS process and the findings presented in the EIS document; management practices proposed should be commensurate with the risk and severity of predicted impacts.	Volume 1 Chapter 21 Environmental management, Section 21.2 Volume 2 Appendix P Environmental management plan framework, Section 4
Proposed management practices may be collated to produce a consolidated management plan.	Volume 1 Chapter 21 Environmental management, Section 21.2.4, 21.2.5 and 21.2.6 Volume 2 Appendix P Environmental management plan framework, Section 4

Terms of Reference Requirement / Section Number	Cross-reference
Detail how the project area will be rehabilitated after each relevant activity ceases. Include details of any site management plan that relates to the proposed project area, including performance criteria and implementation strategies.	Volume 2 Appendix P Environmental management plan framework, Section 4
10 Conclusions and recommendations	
Make conclusions and recommendations with respect to the project, based on the studies presented, mitigation measures and management practices proposed, and conformity of the project with legislative and policy requirements.	Volume 1 Chapter 22 Conclusion and recommendations
11 References	
All references consulted should be presented in the EIS in a recognised format.	Volume 1 Chapter 23 References
12 Appendices	
Provide the following as appendices to the EIS: • final TOR for this EIS	Volume 2 Appendix A Terms of reference cross-reference
• TOR cross-reference table, which links the requirements of each section/Section of the TOR with the corresponding section of the EIS, where those requirements have been addressed	Volume 2 Appendix A Terms of Reference cross reference
• a list of the project approvals required by the project	Volume 1 Chapter 20 Legislation and approvals
• the consultation report, as described in Section 3.7	Volume 2 Appendix B Public consultation
• a list of the relevant qualifications and experience of the key study team members and specialist sub-consultants	Volume 2 Appendix Q EIS team summary
• a glossary of technical terms	Volume 1 Terms and abbreviations

Terms of Reference Requirement / Section Number	Cross-reference
• a list of abbreviations	Volume 1 Terms and abbreviations
• any reports of specialist studies undertaken as part of the EIS	Volume 2 Appendix B to Volume 2 Appendix O
• a copy of the proponent's corporate environmental policy and planning framework document	Volume 2 Appendix P Environmental management plan framework
• a list of all commitments made by the proponent in the EIS, with cross-references to the relevant section in the EIS	Volume 2 Appendix S Commitments
• a copy of the proponent's land acquisition protocols.	Volume 2 Appendix R Adani land acquisition protocol

GHD

145 Ann Street Brisbane QLD 4000
GPO Box 668 Brisbane QLD 4001
T: (07) 3316 3000 F: (07) 3316 3333 E: bnemail@ghd.com

G:\41\26457\WP\450303.docx

Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	D. Marsh.	P. Bradley		P. Bradley		25/09/2013

www.ghd.com