

Appendix B

Environmental assessment requirements

Appendix B Environmental Assessment Requirements

Table B.1 Environmental Assessment Requirements

Requirement	Technical team	Addressed in EIS	Addressed in technical study
A full description of the development, including:		Chapter 2	-
the geological setting and resource to be extracted, demonstrating efficient resource recovery within environmental constraints	General	Chapter 2	-
the mine site and processing site layout and scheduling	General	Chapter 2	-
minerals processing	General	Chapter 2	Appendix CC
surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process)	General	Chapter 2	-
a waste (overburden, tailings, etc) management strategy	General / TSF Design	Chapter 2	Appendix D
a water management strategy	Water	Chapter 9	Appendix J & K
a rehabilitation strategy	Rehabilitation	Chapters 22 & 35	Appendix U
the likely interactions between the development and any other existing, approved or proposed mining related development in the vicinity of the sites	General	Chapter 5,	
a strategic justification of the development focusing on site selection and the suitability of the proposed sites	General	Chapter 38	
a list of any approvals that must be obtained before the development may commence	General	Chapter 38	Appendix B & E
an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including:			
a description of the existing environment likely to be affected by the development, using sufficient baseline data	General	Parts D & E	Appendix E
an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice	Various	Parts D & E	Appendix D to Appendix EE
a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development, and an assessment of: whether measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented, the likely effectiveness of these measures, and whether contingency plans would be necessary to manage any residual risks, and a description of the measures that would be implemented to monitor and report on the environmental performance of the development	Various	Parts D & E	Appendix D to Appendix EE
a consolidated summary of all he proposed environmental management and monitoring measures, identifying all the commitments in the EIS	General	Chapter 38	-
consideration of the development against all relevant environmental planning instruments (including Part 3 of the State Environmental Planning Policy Mining, Petroleum Production and Extractive Industries) 2007)	General	Chapter 3	-
the reasons why the development should be approved having regard to: relevant matters for consideration under the Environmental Planning Assessment Act 1979, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development, the biophysical, economic, and social costs and benefits of the development, the suitability of the sites with respect to potential land use conflicts with existing and future surrounding land uses and feasible alternatives to the development (and its key components), including the consequences of not carrying out the development.	General	Chapter 39	-
In addition to the matters set out in Schedule 1 of the Environmental Planning and Assessment Regulation 2000, the development application must be accompanied by a signed report from a suitably qualified person that includes an accurate estimate of the capital investment value of the development (as defined in Clause 3 of the Environmental Planning and Assessment Regulation 2000), including details of all the assumptions and components from which the capital investment value calculation is derived.	Provided in a separate report directly to DPE		
The EIS must address the following specific issues:			
Land: including an assessment of:			
the likely impacts of the development on the soils and land capability of the site and surrounds and a description of the mitigation and management measures to prevent, control or minimise impacts of the development	Soil	Chapter 7 & 23	Appendix H & W
the likely agricultural impacts of the development, including identification of any strategic agricultural land	AIS	Chapter 8 & 20	Appendix I & T
the likely impact of the development on landforms (ie local topography), including the long term geotechnical stability of any new landforms proposed on sited	Rehabilitation & Visual	Chapter 8 & 23	Appendix H
the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements of Clause 12 of State Environmental Planning Policy (mining, Petroleum Production and Extractive Industries) 2007, paying particular attention to the agricultural land use in the region	AIS & Social	Chapter 8 & 20	Appendix I & T

Water- including			
an assessment of the likely impacts of the development on the quantity and quality of surface and groundwater, having regard to the NSW Aquifer Interference Policy	Water	Chapters 9 & 24	Appendix J, K & X
an assessment of the hydrological characteristics of the site and downstream	Water	Chapters 9 & 24	Appendix J, K & X
an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure and systems and other water uses, including impacts to water supply from Carcoar Dam, riparian and licensed water users, use and discharge of water during construction, commissioning and maintenance of the pipeline infrastructure	Water	Chapters 9 & 24	Appendix J, K & X
a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply and transfer infrastructure and water storage structures and measures to minimise water use	Water	Chapter 9	Appendix J
demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP)	Water	Chapters 2 & 24	Appendix X
a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo	Water	Chapters 9 & 24	Appendix J, K & X
a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts	Water	Chapters 9 & 24	Appendix J, K & X
a description of construction erosion and sediment controls, how the impacts of the development on areas of erosion, salinity or acid-sulphate risk, steep gradient land or erodible soils types would be managed and any contingency requirements to address residual impacts	Soil and Water	Chapters 7, 9 & 24	Appendix H, J & X
an assessment of the potential flooding impacts of the project.	Water	Chapters 9 & 24	Appendix J & X
Noise, Vibration and Blasting:			
an assessment of the likely operational noise impacts of the development (including construction noise) in accordance with the Noise Policy for Industry NSW, and the Voluntary Land Acquisition and Mitigation Policy	Acoustics	Chapters 10 & 25	Appendix L & AA
if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities in accordance with the Interim Construction Noise Guideline	Acoustics	Chapters 10 & 25	Appendix L & AA
an assessment of the likely road noise impacts of the development in accordance with the NSW Road Noise Policy and	Acoustics	Chapters 10 & 25	Appendix L & AA
an assessment of the likely blasting impacts of the development on people, animals, buildings and infrastructure, and significant natural features, having regard to the relevant ANZECC guidelines	Acoustics	Chapters 10 & 25	Appendix L
Air Quality:			
an assessment of the likely air quality impacts of the development including cumulative impacts from nearby developments, in accordance with the Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW, and having regard to the NSW Government's Voluntary Land Acquisition and Mitigation Policy and	Air Quality	Chapters 11 & 26	Appendix M
an assessment of the likely greenhouse gas impacts of the development	Air Quality	Chapter 12	Appendix M
a description of the feasibility of measures that would be implemented to monitor and report on the emissions (including fugitive dust and greenhouse gases) of the development		Chapters 11, 12 & 26	Appendix M
Biodiversity:			
an assessment of the direct and indirect biodiversity impacts of the development throughout its life, and impacts on biodiversity values in the region, which:	Ecology	Chapters 13 & 27	Appendix N & X
for the open cut mine is assessed in accordance with the Framework for Biodiversity Assessment, and includes a strategy to offset any residual impacts in accordance with the NSW Biodiversity Offsets Policy for Major Projects	Ecology	Chapter 13	Appendix N
for the water supply pipeline is assessed in a Biodiversity Development Assessment Report in accordance with Section 7.9 of the Biodiversity Conservation Act 2016 (NSW), the Biodiversity Assessment Method, and includes a strategy to offset any residual impacts in accordance with the Biodiversity Conservation Act 2016 (NSW)	Ecology	Chapter 27	Appendix Y
an assessment of the likely impacts of the development on aquatic ecology and key Fisheries issues, including Aquatic Biodiversity and Key Fish Habitats	Ecology	Chapter 14 & 27	Appendix O
an assessment of impacts to koalas and koala habitat in accordance with State Environmental Planning Policy No.44- Koala Habitat Protection and	Ecology	Chapters 13 & 27	Appendix N & X
a detailed description of the proposed regime for minimising, managing and reporting on the biodiversity impacts of the development over time;	Ecology	Chapter 13 & 17	Appendix N & X
Heritage:			
an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, including adequate consultation with Aboriginal stakeholders having regard to the Aboriginal Cultural Heritage Consultation Requirements for Proponents (OEH, 2010) and	Heritage	Chapters 15, 16, 28 & 29	Appendix P & Z

an assessment of the impact on environmental heritage in accordance with the NSW Heritage Manual, including heritage conservation areas and State and local heritage items within and near the site, and detailed mitigation measures to offset potential impacts on Heritage values.	Heritage	Chapters 15, 16, 28 & 29	Appendix P & Z
Traffic and Transport:			
an assessment of the likely traffic and transport impacts of the development on the capacity, condition, safety and efficiency of the road network and any cumulative impacts of other developments in the locality	Traffic	Chapters 17 & 30	Appendix Q & BB
an assessment of the site access routes (including Mid Western Highway and Great Western Highway) and site access points in accordance with the Roads Act 1993 and	Traffic	Chapters 17 & 30	Appendix Q & BB
a description of the measures that would be implemented to mitigate and/ or manage potential traffic impacts including a schedule of all required road upgrades, road maintenance contributions, management of oversized and over mass traffic and other traffic control measures, developed in consultation with the relevant road authority (if required)	Traffic	Chapters 17 & 30	Appendix Q & BB
Hazards:			
Hazards- including an assessment of the likely risks to public safety, paying particular attention to potential geochemical and bushfire risks, and storage, handling, transport and use of any dangerous goods	General/risk	Chapter 18 & 31	Appendix R
Visual:			
the likely visual impacts of the development on private land in the vicinity of the development and key vantage points in the public domain, paying particular attention to any temporary and permanent modification of the landscape (eg overburden dumps, bunds, tailings facilities) and	Visual	Chapter 19 & 32	Appendix S
the lighting impacts of the development.	Visual	Chapter 19 & 32	Appendix S
Waste Management:			
a tailings risk assessment based on the tailings composition and identification, quantification and classification of the potential waste streams likely to be generated during construction and operation, including and not limited to non-production waster, reagent materials and cyanide compounds and	General	Chapters 2, 6, 21 & 34	Appendix D & F
description of the measures to be implemented to store, manage, reuse, recycle and safely dispose of these materials in accordance with the Protection and the Environment Operations (Waste) regulation 2014, including and not limited to operational water by-products, adequate spill detection and clean up systems, suitable locations for disposal or reuse of spoil generated during construction.	General	Chapter 21 & 34	Appendix D
Closure, Rehabilitation and Final Landform- including a Rehabilitation and Landscape Management Strategy providing			
a detailed overview of the final land-use and closure criteria for the development, including both the mine site and raw water pipeline and	Rehabilitation	Chapter 22 & 35	Appendix U
identification and discussion of opportunities to improve rehabilitation and environmental outcomes for existing disturbed areas within the project site and	Rehabilitation	Chapter 22 & 35	Appendix U
Socio-Economic- including an assessment of:			
an assessment of the social impacts of the project, prepared in accordance with the Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development (2017), including the likely impacts of the development on the local community, cumulative impacts (considering other mining developments in the locality), and consideration of workforce accommodation	Social	Chapter 20	Appendix T
an assessment of the likely economic impacts of the development, paying particular attention to:	Economic	Chapter 33	Appendix DD
the significance of the resource	Economic	Chapter 33	Appendix DD
economic benefits of the project for the State and the region;	Economic	Chapter 33	Appendix DD
demand for the provision of local infrastructure and services; and	Social	Chapter 20	Appendix T
consideration of the need for a Voluntary Planning Agreement in relation to the demand for the provision of local infrastructure and services.	Social	Chapter 20	Appendix T
Consultation:			
During the preparation of the EIS, you should consult with relevant local, State and Commonwealth Government authorities, infrastructure and service providers, community groups, Registered Aboriginal Parties (RAPs) affected landowners, and holders of existing mining and exploration authorities intersected by the proposed pipeline corridor.	General & Heritage	Chapter 4	Appendix P & Z (RAP consultation)
You must also establish a Community Consultative Committee for the project in accordance with the community Consultative Committee Guidelines for State Significance Projects, and consult with the committee during the preparation of the EIS.	General	Chapter 4	-
The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.	General	Chapter 4	-
Further consultation after 2 years:			

If you do not lodge a development application and an EIS for the development within 2 years of the issue date of these Environmental Assessment Requirements (EARs), you must consult further with the Secretary in relation to the predation of the EIS.	-	-	-
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Appendix B - Agency requirements

Table B.2 Agency Requirements

Agency	Requirement	Technical team	Addressed in EIS	Addressed in technical study
EPA				
	Site Layout:			
	provide maps, at an appropriate scale, with clearly identifies the proposed site layout relevant to the environmental features such as drainage lines, terrain etc, over the life of the Project	General	Part A	Appendix V
	provide maps which show land ownership information and impacts assessment information at an appropriate scale	General	Part A to Part E	Appendix A
	Tailings Dam Management:			
	proponent proposes a TSF linear system that will satisfy the tailings dam policy	TSF Design	Chapter 2	Appendix D
	undertake a tailings risk assessment based on the estimated tailings composition	TSF Design	Chapters 2 & 6	Appendix D & F
	The risk assessment should contain sufficient information to enable the EPA to carry out an independent assessment to determine if the tailings pose a high risk to the environment, as per the tailings dam policy, and therefore requiring a higher level of protection as stated in the tailings dam policy.	TSF Design	Chapters 2 & 6	Appendix D & F
	risk assessment should include detailed discussion of options to dispose of, and handle tailings as described above, which are substantial improvements to the dated method of slurry disposal within valley filled tailings dams	TSF Design	Chapter 6	Appendix D & F
	The EPA expects that this proposal utilise best management practice as detailed in the 'Tailings Management - Leading Practice Sustainable Development Program for the Mining Industry' (Australian Government 2016).	TSF Design	-	Appendix D & F
	TSF and CWS liner systems must be designed, constructed and operated to prevent pollution of waters (including surface and ground water) from seepage of contaminants (vertical and lateral) through the base and side walls.	TSF Design	Chapter 2	Appendix D
	A risk assessment process should be used to determine a suitable liner system including appropriate hydraulic conductivity and liner thickness.	TSF Design	Chapter 2	Appendix D & F
	Cyanide Use:			
	requests that the proponent provide a detailed justification on the requirement to use cyanide in the context of current mining best practice, as alternatives are known to be available	Processing	Chapter 2 & 6	Appendix CC
	requires a detailed geochemical assessment (beyond that described in the PEA) outlining: a) why the flotation method is not suitable, and b) why cyanide is a 'necessary reagent required in the proposed method of 'gravity-separation' and why no other alternative reagent is suitable.	Processing	Chapter 6	Appendix CC
	Air Quality			
	The goal should be to maintain existing rural air quality and protect sensitive receptors, both on and off site from adverse impacts of dust and odour and other relevant air pollutants.	Air quality	Chapters 11 & 26	Appendix M
	Background ambient air levels should be identified to inform the assessment.	Air quality	Chapters 11 & 26	Appendix M

	The EPA requests that modelling/estimation is carried out to determine that sufficient water is available for dust control and suppression, in addition to the water required for processing.	Air quality	Chapters 11 & 26	Appendix M
	The AQIA should:		Chapters 11 & 26	Appendix M
	1. Assess the risk associated with potential discharges of fugitive and point source emissions for all stages of the proposal and assessment of risk relating to environmental harm, risk to human health and amenity	Air quality	Chapters 11 & 26	Appendix M
	2. Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:	Air quality	Chapters 11 & 26	Appendix M
	a. proposal location	Air quality	Chapters 11 & 26	Appendix M
	b. characteristics of the receiving environment; and	Air quality	Chapters 11 & 26	Appendix M
	c. type and quantity of pollutants emitted.	Air quality	Chapters 11 & 26	Appendix M
	3. Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited:	Air quality	Chapters 11 & 26	Appendix M
	a. meteorology and climate	Air quality	Chapters 11 & 26	Appendix M
	b. topography	Air quality	Chapters 11 & 26	Appendix M
	c. surrounding land-use, receptors and	Air quality	Chapters 11 & 26	Appendix M
	d. ambient air quality.	Air quality	Chapters 11 & 26	Appendix M
	4. Include a detailed description of the proposal. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided.	Air quality	Chapters 11 & 26	Appendix M
	5. include a consideration of 'worst-case' emission scenarios and impacts at proposed emission limits	Air quality	Chapters 11 & 26	Appendix M
	6. Account for cumulative impacts associated with existing emission sources as well as any currently approved developments linked to the receiving environment	Air quality	Chapters 11 & 26	Appendix M
	7. Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is a sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2016).	Air quality	Chapters 11 & 26	Appendix M
	8. Demonstrate the projects ability to comply with the relevant regulatory framework, specifically the Protection of the Environment Operations (Clean Air) Regulation 2010.	Air quality	Chapters 11 & 26	Appendix M
	9. Provide an assessment of the project in terms of the priorities and targets adopted under the NSW State Plan 2010 and its implementation plan Action for Clean Air	Air quality	Chapters 11 & 26	Appendix M
	10. Detail emission control techniques and practices that will be employed by the proposal	Air quality	Chapters 11 & 26	Appendix M
	Greenhouse gas:			
	1. The EA should include a comprehensive assessment of, and report on, the project's predicted greenhouse gas emissions (tCO ₂ e). Emissions should be broken down by:	GHG	Chapter 12	Appendix M
	a. direct emissions (scope 1 as defined by the Greenhouse Gas Protocol- see reference below),	GHG	Chapter 12	Appendix M

	b. Scope 2 and 3 indirect emissions (all other emissions that are a consequence of the mine's activities, including annual emissions for each year of the project, before and after implementation of the project, including annual emissions for each year of the project (construction, operation and decommissioning).	GHG	Chapter 12	Appendix M
	2. If relevant, greenhouse emission intensity (per unit of production) should be compared before and after the project. Emission intensity should be compared with best practice if possible	GHG	Not applicable – this is a Greenfield development	-
	3. Greenhouse emissions should be estimated using an appropriate methodology in accordance with NSW, Australian and International Guidelines (refer guidelines mentioned in Attachment 2).	GHG	Section 12.1	Appendix M
	4. The EA should identify which emissions would be covered by the Federal Government's Carbon Pollution Reduction Scheme.	GHG	Not applicable - there is no Carbon Pollution Reduction Scheme in place.	-
	5. The EA should also evaluate and report on the feasibility of measures to reduce greenhouse gas emissions associated with the project, concentrating on emissions not covered by the CPRS	GHG	Chapter 12	Appendix M
	6. The proponent should also identify if there are any cost-effective opportunities to reduce scope 3 emissions (e.g. by using methods of supply or distribution).	GHG	Chapter 12	Appendix M
	Impacts of Noise and Vibration			
	Potential impacts on the noise amenity of the surrounding area should be assessed in accordance with the NSW Government's Industrial Noise Policy (INP).	Acoustics	Chapters 10 & 25	Appendix L & AA
	In particular, seasonality assessments are to be undertaken to assess the impact of temperature inversions and wind conditions.	Acoustics	Chapters 10 & 25	Appendix L & AA
	The noise assessment must include (but not be limited to) an assessment of the C-weighted noise (low frequency) as well as A-weighted noise.	Acoustics	Chapters 10 & 25	Appendix L & AA
	1. In relation to noise, the following matters should be addressed (where relevant as part of the Environmental Assessment) General:	Acoustics	Chapters 10 & 25	Appendix L & AA
	2. Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009).	Acoustics	Chapters 10 & 25	Appendix L & AA
	3. Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the Noise Policy for Industry.	Acoustics	Chapters 10 & 25	Appendix L & AA
	4. Detail the proposed hours of operation for each major noise source activity and the monitoring program and justification process that will be utilised to alter mining activities from day and afternoon to 24 hour.	Acoustics	Chapters 10 & 25	Appendix L & AA
	5. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the Assessing Vibration: a technical guideline (DECC, 2006)	Acoustics	Chapters 10 & 25	Appendix L & AA

6. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in Australian and New Zealand Environment Council- Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990)	Acoustics	Chapters 10 & 25	Appendix L & AA
Road			
7. Undertake a road traffic noise assessment in accordance with the requirements of the NSW Road Noise Policy. Note: The NSW Road Noise Policy replaced the Environmental Criteria for Road Traffic Noise from 1 July 2011. Guidance has been developed to assist practitioners and authorities understand which policy is to be applied to projects during the transition period from the Environmental Criteria for Road Traffic Noise (ECRTN) to the Road Noise Policy (RNP).	Acoustics	Chapters 10 & 25	Appendix L & AA
8. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the Environmental Criteria for Road Traffic Noise (EPA, 1999).	Acoustics	Chapters 10 & 25	Appendix L & AA
9. Noise from new or upgraded public roads should be assessed using the Environmental Criteria for road Traffic Noise (EPA, 1999).	Acoustics	NA	NA
Waste, chemicals and hazardous materials			
The EA should identify all wastes to be generated by all aspects of the project and identify procedures for the handling and management of all wastes produced.	Hazards/waste	Chapter 18, 21 & 34	Appendix R
Assessment of the potential for acid mine drainage from acid forming materials should be assessed and management/mitigation measures identified.	Geochemical/surface water and	Chapter 18, 21 & 34	Appendix R
Management actions for tailings material during processing should be identified, including actions to prevent potential impacts to groundwater, surface water or any other environmental aspect.	TSF Design, surface and groundwater	Chapters & 9	Appendix D, J & K
Provide details of the quantity and type of both liquid and non-liquid waste generated, handled, processed or disposed of at the premises. Wastes must be classified according to the Waste Classification Guidelines (EPA 2014).	General	Chapters 2, 21 & 34	Appendix D
Provide details of how waste will be handled and managed onsite to minimise pollution, including:	General	Chapters 2, 21 & 34	-
a) stockpile location and management	General	Chapter 2 (waste rock)	-
labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).	General	Chapter 2 (waste rock)	-
proposed height limits for all waste to reduce the potential for dust and odour	General	Chapter 2 (waste rock)	-
procedures for minimising the movement of waste around the site and double handling	General	Chapter 2 (waste rock)	-
measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric, liners etc.	General	Chapters 2 (waste rock) & 9	Appendix J
b) Provide details of waste rock emplacement areas with particular attention to:	General	Chapter 2 (waste rock)	-
the quantity of waste rock likely to be generated	General	Chapter 2 (waste rock)	-

	proposed strategies for the handling, reuse/recycling and disposal of waste rock	General	Chapter 2 (waste rock)	-
	identification of the history of the waste rock and whether there is any likelihood of contaminated material and if so, measures for the management of any contaminated material and	Geochemical/surface water and groundwater	Chapter 2 (waste rock)	Appendix G
	designation of transport routes for the transport of waste rock	NA	NA	NA
	details of procedures for the assessment, handling, storage, transport and disposal of all hazardous waste used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.	General	Chapter 18, 21 & 34	Appendix R
	details of the type and quantity of any chemical substances (including hydrocarbon (oils and fuels, explosives etc). To be used or stored and describe arrangements for their safe use and storage.	General	Chapter 18	Appendix R
Soils				
	1. An assessment of potential impacts on soil and land resources should be undertaken, being guided by Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:	Soil	Chapter 7 & 23	Appendix H
	soil erosion and sediment transport- in accordance with Managing Urban Stormwater: Soils and Construction Vol.1 (Landcom 2004) and Vol.2 (installation of services, waste landfills, unsealed roads, main roads, mine quarries) (DECC 2008).	Soil	Chapter 7 & 23	Appendix H
	2. A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.	Soil	Chapter 7 & 23	Appendix H
Water				
	The environmental outcomes of the project in relation to water should be that: there is no pollution of waters (Including surface and groundwater); and polluted water (including process/tailings waters, wash down waters, polluted stormwater or sewerage) is captured onsite and collected, treated and beneficially reused, where safe and practical to do so.	Surface water	Chapter 9 & 24	Appendix J & X
	The EA should document the measures that will achieve the above outcomes in the construction, operation and post operations phases of the project.	Surface water	Chapter 9 & 24	Appendix J & X
	Construction activities will need to demonstrate best practice sediment and erosion control and management in accordance with the reference document Managing Urban Stormwater: Soils and Construction (NSW Landcom)	Surface water	Chapter 9 & 24	Appendix J & X
	1. describe the project including position of any intakes and discharges, volumes, water quality and frequency of all water discharges	Surface water	Chapter 9 & 24	Appendix J & X
	2. demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.	Surface water	Chapter 9 & 24	Appendix J & X
	3. include a water balance for the including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.	Surface water	Chapter 9 & 24	Appendix J

4. describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.	Surface water and groundwater	Chapter 9 & 24	Appendix J, K & X
5. describe any drainage lines, creek lines, etc that will be impacted by the project	Surface water	Chapter 9 & 24	Appendix J & X
6. State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters. Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.	Surface water	Chapter 9 & 24	Appendix J & X
7. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality.	Surface water	Chapter 9 & 24	Appendix J & X
8. State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.	NA	NA	NA
Impact Assessment			
9. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment	Surface water and groundwater	Chapter 9 & 24	Appendix J, K & X
10. Whether the project will significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.	Surface water	Chapter 9 & 24	Appendix J & X
11. Identify potential impacts on watercourses and the management/mitigation measures that will be implemented where mining activities occur in proximity to or within a watercourse.	Surface water	Chapter 9 & 25	Appendix J & X
12. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to: protect the Water Quality Objectives for receiving waters where they are currently being achieved and contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.	Surface water	Chapter 9 & 26	Appendix J & X
13. Assess impacts on groundwater and groundwater dependent ecosystems	Groundwater and	Chapters 9, 13, 24 & 27	Appendix K, N, Y & X
14. Describe in detail how stormwater will be managed both during and after construction	Surface water	Chapter 9 & 24	Appendix J & X
15. Provide detailed water management strategies for all disturbance areas, paying particular attention to the waste rock emplacement areas and potential impacts on groundwater and offsite surface water resources including particular reference to the management of channel and overland flows into and within the disturbance area.	Surface water and groundwater	Chapter 2, 9 & 27	Appendix J, K & X
16. Provide plans for any proposed relocation/realignment of all creeks and/or drainage lines including design, timelines and completion criteria and sufficient evidence to demonstrate that the proposed plans are achievable, reasonable and feasible in the short and long term.	Surface water and closure	Chapter 2 & 22	Appendix J & U
Monitoring			
17. Describe how predicted impacts will be monitored and assessed over time	Surface water and groundwater	Chapter 9 & 24	

	18. The proponent should develop a water quality and aquatic ecosystem monitoring program to monitor the responses for each component or process that affects the Water Quality Objectives that includes, for example: adequate data for evaluating compliance with water quality standards and/or Water Quality Objectives and measurement of pollutants identified or expected to be present in any discharge.	Surface water and Aquatic ecology	Chapter 9, 14 & 24	Appendix J, O & X
	19. Water quality monitoring should be undertaken in accordance with the Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004).	Surface water and groundwater	Chapter 9 & 24	Appendix J, K & X
Cabonne Council				
	1. Need for the project			
	Project objectives and proposed development including employment, hours of operation, proposed processing operations.	General	Chapter 2 & 39	-
	2. Natural and Cultural Environment			
	Impact on natural, historical (including archaeology and heritage) and cultural environment with emphasis on land use conflict.	Heritage	Chapter 15, 16, 20, 28 & 29	Appendix P & Z
	Environmental characteristics of the site (land ownership, meteorology, topography, drainage, geology, water resources, ecology, socio-economic profile, visual characteristics and site visibility, existing noise climate, proximity of dwellings to the mine).	Heritage	Parts D & E	Appendices G - EE
	Environmental impact of the proposed development upon the natural environment, in particular the existing hydrology of the landscape and any impact posed by the development proceeding.	Heritage	Parts D & E	Appendices G - EE
	3. Water Management			
	Impact assessment (surface water run-off)	Surface water	Chapter 9 & 24	Appendix J
	Impact assessment (groundwater system)	Groundwater	Chapter 9 & 24	Appendix K
	Water demand and supply (existing and proposed)	Surface water	Chapter 2, 9 & 24	Appendix J, K & X
	4. Air Quality Control and Management			
	Dust Control	Air quality	Chapter 11 & 26	Appendix M
	5. Noise Impacts			
	Noise controls proposed	Acoustics	Chapter 10 & 25	Appendix L & AA
	Noise assessment	Acoustics	Chapter 10 & 25	Appendix L & AA
	6. Blasting Impacts			
	Blasting control measures and impact assessment	Acoustics	Chapter 10	Appendix L
	7. Traffic and Transportation Issues			
	Access	Traffic &	Chapter 17 & 30	Appendix Q & AA
	Use of public roads/crown roads	Traffic/General	Chapter 5, Chapter 17 & 30	Appendix, A, Q & AA
	Increased truck traffic levels on main roads	Traffic &	Chapter 17 & 30	Appendix Q & AA
	Truck traffic levels and impact upon local roads	Traffic &	Chapter 17 & 30	Appendix Q & AA
	8. Site land Management			

	Site land Management Strategy	Soils	Chapter 7 & 23	Appendix H
	Visual Screening	Visual	Chapter 19	Appendix S
	Rehabilitation strategy	Rehabilitation	Chapter 22 & 35	Appendix U
	Future rehabilitation options for the site	Rehabilitation	Chapter 22 & 35	Appendix U
	9. Environmental risk assessment and public safety, with particular reference to the impact of ore processing and storage of mine waste materials in tailing dams	General/hazard and risk/water/tailing	Chapter 2 & 9	Appendix D, F, J & K
	10. Environmental monitoring	Water, ecology, aquatic ecology,	Parts D & E	Appendices G - EE
	11. Flora and Fauna Assessment	Ecology	Chapter 13 & 27	Appendix N & Y
DOI - Water				
	Annual volumes of surface water and groundwater proposed to be taken by the activity (including through pit inflows and direct capture from storages) from each surface and groundwater source as defined by the relevant water sharing plan (WSP). This is recognised as a key issue for this project as the Department is aware of limitations in available surface water entitlement within the relevant water source	Surface water, groundwater	Chapter 9 & 24	Appendix J & K, X
	The identification of an adequate and secure water supply for the life of the project. Confirmation that water can be sourced from an appropriately authorised and reliable supply. This is to include an assessment of the current market depth where water entitlement is required to be purchased.	Surface water, groundwater	Chapter 2, 9 & 24	Appendix E, J & K, X
	A detailed and consolidated site water balance and proposed water management infrastructure	Surface water	Chapter 9	Appendix J
	Assessment of impacts on surface and groundwater sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land and groundwater dependent ecosystems and measures proposed to reduce and mitigate these impacts	Surface water, groundwater	Chapter 9 & 24	Appendix J & K, X
	Assessment of the ecological value of the riparian areas and any groundwater dependent ecosystems to be impacted within the disturbance footprint and potential impact zone of the project	Ecology and groundwater	Chapter 9, 13, 24 & 27	Appendix K, N, Y & X
	Assessment of the hydrological characteristics of the site and downstream and an impact assessment of the project on downstream water users and the environment. An assessment over wet, dry and average periods will be required. Impacts to water supply from Carcoar Dam and riparian and licensed water users will need to be addressed.	Surface water	Chapter 9	Appendix J
	An assessment of risk and potential impacts to downstream surface and groundwater users and the environment due to the proposed location of a Tailings Storage Facility (TSF) on the headwaters of the Belubula River. The ability to effectively monitor and apply mitigation measures to potential impacts is of critical concern due to no buffer between the TSF and the watercourse and the potential for interaction with the fractured groundwater system which increases the uncertainty of flow paths. The risk assessment should clearly identify the users and the water source at risk and consider the ability to rehabilitate if seepage/TSF failure occurs and the associated time period.	Surface water, groundwater, TSF design	Chapter 2, 6 & 9	Appendix D, F, J & K

	Key policies for the project to be assessed against includes; the NSW Aquifer Interference Policy (2012) using DOI Water's assessment framework, the "Guidelines for Controlled Activities on Waterfront Land (NRAR 2018)" and the Harvestable Right provisions of the Water Management Act 2000	Surface water & groundwater	Chapter 9 & 24	Appendix J, K & X
	An assessment against the rules of the groundwater and surface water sharing plans relevant to the site	Surface water & groundwater	Chapter 9 & 24	Appendix J, K & X
	Full technical details and data of all surface and groundwater modelling and an independent peer review	Surface water & groundwater	Chapter 9	Appendix J, K
	Proposed management and disposal of produced or incidental water	Surface water &	Chapter 9 & 24	Appendix J, K & X
	Proposed surface and groundwater monitoring activities and methodologies	Surface water &	Chapter 9 & 24	Appendix J & K
	Consideration of relevant policies and guidelines	Surface water &	Chapter 9 & 24	Appendix J & K
	A statement of where each element of the SEARs is addressed in the EIS in the form of a table.	Surface water &	Chapter 1, 9 & 24	Appendix B, J & K
DPI - Fisheries				
	The EIS should include an assessment of the impacts on aquatic biodiversity and the requirement for aquatic biodiversity offsets as per the following link: www.environment.nsw.gov.au/resources/biodiversity/14817agoffs.pdf .	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
	The EIS should address impacts on Key Fish Habitats (Third order streams or larger under the Strahler Stream Order System) such as the Belubula River (Strahler fifth order stream), Tributary F (Strahler fourth order stream), and an unnamed Tributary (Strahler third order stream).	Aquatic ecology	Chapter 14	Appendix O
	Conduct an aquatic ecological assessment and address impacts to key Fisheries-related issues including: Aquatic Biodiversity; Dams, Waterway Crossings & Barriers to Fish Passage; Threatened Species, populations and ecological communities and Riparian Buffer Zones).	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
	The aquatic ecological assessment should include the following information:			
	A recent aerial photograph (preferably colour), map or GIS of the locality which maps the key fish habitat of the development site, and the waterway classes as defined in Tables 1 and 2 of the Policy & Guidelines document above.	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
	Aerial extent of the key fish habitat types to be affected either directly or indirectly by the development or activity should be identified and shown on recent aerial photograph map or GIS.	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
	Description and quantification of aquatic and riparian vegetation should be presented and mapped. This should include an assessment of the extent and condition of riparian vegetation and the extent and condition of freshwater aquatic vegetation in the presence of significant habitat features (eg gravel beds, snags, reed beds etc)	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
	Quantification of the extent of aquatic and riparian habitat removal or modification which will result from the proposed development, and impacts on fish passage.	Aquatic ecology	Chapter 14	Appendix O
	Determination of aquatic biodiversity offsets required (see NSW Biodiversity Offsets Policy for Major Projects, Fact Sheet: Aquatic Biodiversity) at http://www.environment.nsw.gov.au/resources/biodiversity/14817agoffs.pdf .	-	Chapter 14	Appendix O
	Detailed maps outlining the proposed realignment of new waterways within the project area.	-	-	-
	Detailed maps outlining compensatory habitats and significant habitat features that will be created to offset the loss of aquatic and riparian habitat.	-	-	-

	Detailed maps that outline and assess the geomorphic stability of the proposed realignments of the new waterways including re-creation of the sinuosity/complexity of the new waterways.	-	-	-
	Details of the location of all waterways crossings and construction designs, such as bridges or culverts, mine access tracks, or pipeline waterway crossings.	-	-	-
	Details of the location of all waterway realignments, including a detailed rehabilitation plan for the aquatic environment and the adjacent riparian zone, and a timetable for construction of the proposal with details of various phases of construction.	-	-	-
	Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimisation eg Environment Management Plans.	Aquatic ecology	Chapter 14	Appendix O
	DPI Fisheries will therefore require the negotiation of a compensatory habitat package through the use of aquatic biodiversity offsets and/or supplementary measures to ensure that such outcomes are achieved.	Aquatic ecology	Chapter 14	Appendix O
	Watercourse diversions must emulate a natural meandering watercourse that provides for fish passage within the diversion and also at the confluence to other tributaries that are Key Fish Habitat such as Tributary F (Strahler fourth order stream) and an unnamed Tributary (Strahler third order stream) connecting to the Belubula River diversion from the eastern side.	-	-	-
	Existing and proposed waterway crossings should comply with DPI Fisheries Guideline document: Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings. In particular, a proposed new realignment of Dungeon Road will likely involve a waterway crossing over the Belubula River, and the Mine access road will involve a waterway crossing over Tributary A. The closure of existing sections of Dungeon Road should enable the removal of waterway crossings that may potentially impede fish passage in Key Fish Habitats such as the existing crossing on Tributary A.	No water way crossings proposed	-	Appendix O
	The "Pipeline Development" and related waterway crossings should be assessed in the EIS. DPI Fisheries should be consulted with regards to any temporary measures that will result in blocking fish passage. This includes coffer dams, temporary access tracks or redirecting flows whilst the pipeline is constructed.	Aquatic ecology	Chapter 27	Appendix Y
	The proposal should include a threatened aquatic species assessment (as per part 7A Fisheries Management Act 1994) to address whether there are likely to be any significant impacts on listed threatened species, populations or ecological communities listed under the Fisheries Management Act 1994.	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
	Riparian buffer zones should be protected in accordance with the DPI Fisheries Policy and Guidelines for Fish Habitat Conservation and Management (Update 2013) available on the Department's website at http://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitatconservation . Adequate riparian buffer zones should be established adjacent to the Belubula River and its tributaries in order to minimise the indirect impacts of the development on waterways.	Aquatic ecology	Chapter 14 & 27	Appendix O & Y
DoI Crown lands				
	Describe the impacts on Crown land and Crown waterways, namely Dungeon Creek and the Belubula River located within and adjacent to the Project and the mitigation measures to minimise impacts	Surface water	Chapters 5 & 9	Appendix J

	The applicant is required to consult with Crown Lands to determine the closure and purchase of roads that will be impacted.	General	Chapter 4	-
	The applicant is required to consult with Crown Lands to determine the purchase of Crown waterway that is impacted.	General	Chapter 4	-
	The applicant is required to consult with Crown Lands to determine if any further action is required in regards to easements or tenures to secure access to Crown parcels.	General	Chapter 4	-
	The applicant is required to consult with stakeholders that manage or tenure Crown Lands.	General	Chapter 4	-
DPI - Agriculture				
	The proposal is located on and adjacent to agricultural land, including mapped Biophysical Strategic Agricultural Land (BSAL) and is. The EIS should include preparation of an Agriculture Impact Statement.	General/Agriculture	Chapter 8	Appendix I
DPE Resources & Geoscience Division				
	The general requirement for the Environmental Impact Statement (EIS) to include (amongst other aspects of the project) a full description of the development (including that of the geology and the resource);	General	Chapter 2	-
	a strategic justification of the development;	General	Chapter 39	-
	a list of approvals (including a mining lease) that must be obtained before the development can commence;	General	Chapter 3	-
	a consideration of the development against all relevant planning instruments (including the Mining SEPP);	General	Chapter 3	-
	and the suitability of the sites with respect to potential land use conflicts with existing and future surrounding land uses.	Social/Agriculture	Chapter 8 & 20	Appendix I & T
Pipeline Corridor				
	The Proponent should consult with holders of existing mining and exploration authorities intersected by the corridor. Evidence of consultation should be included in the EIS.	General	Chapter 4	-
Biodiversity Offsets				
	The Division requests that the Proponent consider potential resource sterilisation in relation to any proposed biodiversity offsets areas.	Ecology	Chapter 13	Appendix N
	The EIS must therefore clearly illustrate the location (including offsite locations) of any biodiversity offsets being considered for the project (including both the mine site and pipe line corridor) and their spatial relationship to known and potential mineral and construction material resources and existing mining titles and exploration tenements.	Ecology	Chapter 13	Appendix N
	The Division requests consultation with both GSNSW and holders of existing mining and exploration authorities affected by planned biodiversity offsets. Evidence of consultation should be included in the EIS.	Ecology	Chapter 4	Appendix N
DPE - Resources Regulator				

	Post-mining land use	Rehabilitation	Chapter 22	Appendix U
	(a) identification and assessment of post-mining land use options;	Rehabilitation	Chapter 22	Appendix U
	(b) identification and justification of the preferred post-mining land use outcome(s), including a discussion of how the final land use(s) are aligned with relevant local and regional strategic land use objectives;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(c) identification of how the rehabilitation of the project will relate to the rehabilitation strategies of neighbouring mines within the region, with a particular emphasis on the coordination of rehabilitation activities along common boundary areas;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	Rehabilitation objectives and domains	Rehabilitation	Chapter 22 & 35	Appendix U
	(d) inclusion of a set of project rehabilitation objectives and completion criteria that clearly define the outcomes required to achieve the post-mining land use for each domain. Completion criteria should be specific, measurable, realistic and time-bound. If necessary, objective criteria may be presented as ranges;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	Rehabilitation Methodology	Rehabilitation	Chapter 22 & 35	Appendix U
	(e) details regarding the rehabilitation methods for disturbed areas and expected time frames for each stage of the rehabilitation process;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(f) mine layout and scheduling, including maximising opportunities for progressive final rehabilitation. The final rehabilitation schedule should be mapped against key production milestones (ie ROM tonnes) of the mine layout sequence before being translated to indicative timeframes throughout the mine life. The min plan should maximise opportunities for progressive rehabilitation;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	Conceptual Final Landform Design	Rehabilitation	Chapter 22 & 35	Appendix U
	(g) inclusion of a drawing at an appropriate scale identifying key attributes of the final landform, including final landform contours and the location of the proposed final land use(s);	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	Monitoring and Research	Rehabilitation	Chapter 22 & 35	Appendix U
	(h) outlining the monitoring programs that will be implemented to assess how rehabilitation is trending towards the nominated land use objectives and completion criteria;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(i) details of the process for triggering intervention and adaptive management measures to address potential adverse results as well as continuously improve rehabilitation practices;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(j) outlining any proposed rehabilitation research programs and trials, including their objectives. This should include details of how the outcomes of research are considered as part of the ongoing review and improvement of rehabilitation practices;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	Post-closure maintenance	Rehabilitation	Chapter 22 & 35	Appendix U
	(k) description of how post-rehabilitation areas will be actively managed and maintained in accordance with the intended land use(s) in order to demonstrate progress towards meeting the rehabilitation objectives and completion criteria in a timely manner;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	Barriers of limitations to effective rehabilitation	Rehabilitation	Chapter 22 & 35	Appendix U
	(l) identification and description of those aspects of the site or operations that may present barriers or limitations to effective rehabilitation, including:	Rehabilitation and closure	Chapter 22 & 35	Appendix U

	(i) evaluation of the likely effectiveness of the proposed rehabilitation techniques against the rehabilitation objectives and completion criteria;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(ii) an assessment and life of mine management strategy of the potential for geochemical constraints to rehabilitation (eg acid rock drainage, spontaneous combustion etc), particularly associated with the management of overburden/interburden and reject material;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(iii) the processes that will be implemented throughout the mine life to identify and appropriately manage geochemical risks that may affect the ability to achieve sustainable rehabilitation outcomes;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(iv) a life of mine tailings management strategy, which details measures to be implemented to avoid the exposure of tailings material that may cause environmental risk, as well as promote geotechnical stability of the rehabilitated landform; and	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(v) existing and surrounding landforms (showing contours and slopes) and how similar characteristics can be incorporated into the post-mining final landform design. This should include an evaluation of how key geomorphological characteristics evident in stable landforms within the natural landscape can be adapted to the materials and other constraints associated with the site.	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(m) Where a void is proposed to remain as part of the final landform, include:	Rehabilitation	Chapter 22 & 35	Appendix U
	(i) a constraints and opportunities analysis of final void options, including backfilling, to justify that the proposed design is the most feasible and environmentally sustainable option to minimise the sterilisation of land post-mining;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(ii) a preliminary geotechnical assessment to identify the likely long term stability risks associated with the proposed remaining high wall(s) and low wall(s) along with associated measures that will be required to minimise potential risks to public safety; and	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(iii) outcomes of the surface and groundwater assessments in relation to the likely final water level in the void. This should include an assessment of the potential for fill and spill along with measures required be implemented to minimise associated impacts to the environment and downstream water users.	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(n) Where the mine includes underground workings:	NA	Chapter 22 & 35	Appendix U
	(i) determine (with reference to the groundwater assessment) the likelihood and associated impacts of groundwater accumulating and subsequently discharging (eg acid or neutral mine drainage) from the underground workings post cessation of mining; and	NA	Chapter 22 & 35	Appendix U
	(ii) consideration of the likely controls required to either prevent or mitigate against these risks as part of the closure plan for the site.	NA	Chapter 22 & 35	Appendix U
	(o) consideration of the controls likely to be required to either prevent or mitigate against rehabilitation risks as part of the closure plan for the site;	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(p) where an ecological land use is proposed, demonstrate how the revegetation strategy (eg seed mix, habitat features, corridor width etc) has been developed in consideration of the target vegetation community(s);	Rehabilitation and closure	Chapter 22 & 35	Appendix U
	(q) where the intended land use is agriculture, demonstrate that the landscape, vegetation and soil will be returned to a condition capable of supporting this; and	Soils & Rehabilitation	Chapter 22 & 35	Appendix U
	(r) consider any relevant government policies.	Rehabilitation	Chapter 22 & 35	Appendix U

	Provide a brief description of risks (taken directly from Project Detail & Assessment section)	Rehabilitation	Chapter 22 & 35	Appendix U
	(s) closure assessment of tailings storage facility	Rehabilitation	Chapter 22 & 35	Appendix U
	(i) provide a detailed options analysis of tailings treatment and disposal methods that may be applicable to the type of tailings generated from this project. This analysis must provide a clear justification of the preferred tailing treatment to demonstrate the feasibility of achieving low maintenance, safe stable non-polluting rehabilitation outcomes, with specific reference to long term seepage management.	TSF design & rehabilitation and closures	Chapter 2 & 6	Appendix U
	(ii) provide both operational and post closure site water balance modelling for the tailings storage facility catchment. The water balance modelling must consider both volume and quality of water contained and in discharge/seepage (both surface and groundwater systems).	Surface water	Chapter 9	Appendix J
	(iii) final capping material concept design, source of capping material and long term design considerations, taking into account the required performance of the capping material long term and likely environmental risks ie consolidation of underlying tailing materials.	Rehabilitation and closure	Chapter 22	Appendix U
OEH - Heritage Council				
	Prepare a Heritage Impact Statement (HIS) or Statement of Heritage Impact (SOHI) (in accordance with the guidelines in the NSW Heritage Manual) which identifies: all heritage items within and near the site, including built heritage, landscapes and archaeology, detailed mapping of these items and assessment of why the items and site(s) are of heritage significance; and	Heritage	Chapter 16, 29	Appendix P & Z
	detailed mitigation measures to offset potential impacts on heritage values.	Heritage	Chapter 16, 29	Appendix P & Z
	The HIS/SOHI must assess heritage impacts of the proposed works on the heritage significance of the site; and the visual impacts of the proposed development on views to and from surrounding heritage items.	Heritage	Chapter 16, 29	Appendix P & Z
	A historic archaeological assessment is to be prepared by a suitably qualified historical archaeologist in accordance with the documents: Archaeological Assessments Guidelines (1996), Assessing Significance for Historical Archaeological Sites and 'Relics' (2009)	Heritage	Chapter 16, 29	Appendix P & Z
	This assessment should identify what relics, if any, are likely to be present, assess their historic significance and consider the impacts from the proposal on this potential heritage resource.	Heritage	Chapter 16, 29	Appendix P & Z
	Where harm is likely to occur, any mitigation measures would avoid or ameliorate the impact with specific emphasis on in situ conservation and interpretation where State significant or substantially intact relics are identified.	Heritage	Chapter 16, 29	Appendix P & Z
	If harm cannot be avoided, an appropriate Research Design and Excavation Methodology must also be prepared to guide any proposed excavations. The methodology should include appropriate actions to guide archaeological test excavation, salvage or monitoring; stop work provisions should relics be found; appropriate recording, storage and public display provisions for relics following archaeological investigations.	Heritage	Chapter 16, 29	Appendix P & Z
OEH - Biodiversity- Mine Site				
	1. Biodiversity impacts related to the proposed McPhillamys Gold Project are to be assessed and documented in accordance with the Framework for Biodiversity Assessment, unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the Threatened Species Conservation Act 1995	Ecology	Chapter 13	Appendix N

	2. A strategy to offset any residual impacts of the development in accordance with the NSW Biodiversity Offset Policy for Major Projects	Ecology	Chapter 13	Appendix N
OEH - Biodiversity - Pipeline				
	3. Biodiversity impacts related to the proposed McPhillamys Gold Project are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s 6.12) Biodiversity Conservation Regulation 2017 (s. 6.8) and Biodiversity Assessment Method including details of the measures proposed to address the offset obligation as follows:	Ecology	Chapter 27	Appendix X
	the total number and classes of biodiversity credits required to be retired for the development/project	Ecology	Chapter 27	Appendix X
	the number and classes of like-for-like biodiversity credits proposed to be retired	Ecology	Chapter 27	Appendix X
	the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules	Ecology	Chapter 27	Appendix X
	any proposal to fund a biodiversity conservation action	Ecology	Chapter 27	Appendix X
	any proposal to conduct ecological rehabilitation (if a mining project)	Ecology	Chapter 27	Appendix X
	any proposal to make a payment to the Biodiversity Conservation Fund (FUND)	Ecology	Chapter 27	Appendix X
	if requesting the application of the variation rules, the BDAR must contain details of what reasonable steps have been taken to attempt the required like-for-like biodiversity credits.	Ecology	Chapter 27	Appendix X
	The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application for the Biodiversity Assessment Method Order 2017 under S6.10 of the Biodiversity Conservation Act 2016.	Ecology	Chapter 27	Appendix X
OEH -Aboriginal heritage				
	4. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the McPhillamys Gold Project and Document these in the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECW, 2011) and consultation with OEH regional officers.	Heritage	Chapter 15, 28	Appendix P & Z
	5. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural heritage consultation requirements for proponents 2010 (DECW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.	Heritage	Chapter 15, 28	Appendix P & Z
	6. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.	Heritage	Chapter 15, 28	Appendix P & Z
OEH - Historic heritage				

	7. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:	Heritage	Chapter 16, 29	Appendix P & Z
	a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures generally consistent with the NSW Heritage Manual (1996).	Heritage	Chapter 16, 29	Appendix P & Z
	b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria).	Heritage	Chapter 16, 29	Appendix P & Z
	c. include a statement of heritage impact for all heritage items (including significance assessment)	Heritage	Chapter 16, 29	Appendix P & Z
	d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas and architectural noise treatment (as relevant), and	Heritage	Chapter 16, 29	Appendix P & Z
	e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.	Heritage	Chapter 16, 29	Appendix P & Z
OEH - Water and soils				
	8. The EIS must map the following features relevant to water and soils including:	Soils and water	Chapter 7, 9, 23 & 24	Appendix H & X
	a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map)	Soils	Chapter 7 & 23	Appendix H & T
	b. Rivers, streams, wetlands, estuaries (as described in s4.1 of the Biodiversity Assessment Method (Pipeline) and s.4.1 of the Framework for Biodiversity Assessment (Mine Site)).	Water	Chapter 9 & 24	Appendix J & K
	c. Wetlands as described in s4.1 of the Biodiversity Assessment Method (Pipeline) and s.4.1 of the Framework for Biodiversity Assessment (Mine Site)	Water	Chapter 9 & 24	Appendix J & K
	d. Groundwater	Groundwater	Chapter 9 & 24	Appendix J & K
	e. Groundwater dependent ecosystems	Ecology	Chapter 9 & 24	Appendix J & K
	f. Proposed intake and discharge locations	Surface water	Chapter 9 & 24	Appendix J & K
	9. The EIS must describe background conditions for any water resource likely to be affected by the McPhillamys Gold Project, including:	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	a. Existing surface and groundwater	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations	Surface water	Chapter 9 & 24	Appendix J & K
	c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.	Surface water	Chapter 9 & 24	Appendix J & K

	d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.	Surface water	Chapter 9 & 24	Appendix J & K
	10. The EIS must assess the impacts of the project on water quality, including:	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	a. The nature and degree of impact on receiving waters for both surface and groundwater demonstrating how the project protects the Water Quality Objectives where they are currently being achieved and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	b. Identification of proposed monitoring of water quality	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	11. The EIS must assess the impact of the project on hydrology, including:	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	a. Water balance including quantity, quality and source	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems	Ecology	Chapter 9 & 24	Appendix J & K
	d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (eg river benches).	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	e. Changes to environmental water availability, both regulated/licensed and unregulated/rules based sources of such water.	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
	g. Identification of proposed monitoring of hydrological attributes.	Surface water and groundwater	Chapter 9 & 24	Appendix J & K
OEH Flooding				
	12. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:	Surface water	Chapter 9	Appendix J
	a. Flood prone land	Surface water	Chapter 9	Appendix J
	b. Flood planning area, the area below the flood planning level	Surface water	Chapter 9	Appendix J
	c. Hydraulic categorisation (floodways and flood storage areas).	Surface water	Chapter 9	Appendix J
	13. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probably maximum flood, or in an equivalent extreme event	Surface water	Chapter 9	Appendix J

	14. The EIS must model the effect of the proposed project (including fill) on the flood behaviour under the following scenarios:	Surface water	Chapter 9	Appendix J
	a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change	Surface water	Chapter 9	Appendix J
	15. Modelling in the EIS must consider and document:			
	a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood	Surface water	Assessed in accordance with consultation with OEH	-
	b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.	Surface water	Assessed in accordance with consultation with OEH	-
	c. Relevant provisions of the NSW Floodplain Development Manual 2005.	Surface water	Assessed in accordance with consultation with OEH	Appendix J
	16. The EIS must assess the impacts on the proposed project on flood behaviour, including:	Surface water	Assessed in accordance with consultation with OEH & Chapter 24	Appendix J
	a. Whether there will be detrimental increases in the potential flood affection of other properties, assets and infrastructure	Surface water	Assessed in accordance with consultation with OEH & Chapter 24	Appendix J
	b. Consistency with Council floodplain risk management plans	Surface water	Assessed in accordance with consultation with OEH & Chapter 24	Appendix J & X
	c. Compatibility with the flood hazard of the land.	Surface water	Assessed in accordance with consultation with OEH & Chapter 24	Appendix J & X
	d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.	Surface water	Assessed in accordance with consultation with OEH & Chapter 24	Appendix J & X
	e. Whether there will be adverse effect to beneficial inundation of the floodplain environment on, adjacent to or downstream of the site.	Surface water	Assessed in accordance with consultation with OEH	-
	f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.	Surface water	Assessed in accordance with consultation with OEH & Chapter 24	Appendix X
	g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.	Surface water	Assessed in accordance with consultation with OEH	-
	h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.	Not applicable	-	-

	i. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probably maximum flood or equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.	Surface water	Assessed in accordance with consultation with OEH	-
	j. Any Impacts the development may have on the social and economic costs to the community as consequence of flooding.	Surface water	Assessed in accordance with consultation with OEH	-
RMS	A traffic impact study prepared in accordance with the methodology set out in Section 2 of the RTA's Guide to Traffic Generating Developments 2002, including:	Traffic	Chapter 17 & 30	Appendix Q & AA
	Hours and days of construction	Traffic	Chapter 17 & 30	Appendix Q & AA
	Schedule for phasing/staging of the project	Traffic	Chapter 17 & 30	Appendix Q & AA
	Traffic volumes:	Traffic	Chapter 17 & 30	Appendix Q & AA
	Existing background traffic	Traffic	Chapter 17 & 30	Appendix Q & AA
	Project-related traffic for each stage of the project including construction, operation and decommission	Traffic	Chapter 17 & 30	Appendix Q & AA
	Project cumulative traffic volumes.	Traffic	Chapter 17 & 30	Appendix Q & AA
	Traffic volumes are to also include a description of:	Traffic	Chapter 17 & 30	Appendix Q & AA
	ratio of light vehicles to heavy vehicles	Traffic	Chapter 17 & 30	Appendix Q & AA
	peak times for existing traffic	Traffic	Chapter 17 & 30	Appendix Q & AA
	peak times for project-related traffic	Traffic	Chapter 17 & 30	Appendix Q & AA
	transportation hours	Traffic	Chapter 17 & 30	Appendix Q & AA
	project-related traffic interaction with existing and projected background traffic,	Traffic	Chapter 17 & 30	Appendix Q & AA
	the origin, destination and routes for:	Traffic	Chapter 17 & 30	Appendix Q & AA
	employee and contractor light traffic	Traffic	Chapter 17 & 30	Appendix Q & AA
	heavy traffic	Traffic	Chapter 17 & 30	Appendix Q & AA
	over size and over mass traffic	Traffic	Chapter 17 & 30	Appendix Q & AA
	A description of all over size and over mass vehicles and the materials to be transported, including proposed travel routes	Traffic	Chapter 17 & 30	Appendix Q & AA
	The impact of traffic generation on the public road network and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning of the project	Traffic	Chapter 17 & 30	Appendix Q & AA
	The need for improvements to the road network, and the improvements proposed such as road widening and intersection treatments, to cater for and mitigate the impact of project related traffic.	Traffic	Chapter 17 & 30	Appendix Q & AA

	At the proposed mine location, the Mid Western Highway, pursuant to Section 49 of the Roads Act 1993 is a controlled access road. There are currently four agreed access points along the frontage to the Mid Western Highway with two being coincident. The proposed mine site entrance does not currently match any of the current locations. Once a new access point is agreed in consultation with Roads and Maritime and relevant stakeholders, the remaining current accesses should be removed. Scope for access by Emergency vehicles needs to be considered and catered for appropriately.	Traffic	Chapter 17 & 30	Appendix Q & AA
	Proposed road facilities, access and intersection treatments are to be identified and be in accordance with Austroads Guide to Road Design including Safe Intersection Sight Distance (SISD).	Traffic	Chapter 17 & 30	Appendix Q & AA
	The layout of the internal road network, parking facilities and infrastructure within the project boundary	Traffic	Chapter 17 & 30	Appendix Q & AA
	An assessment of the likely risks to public safety, in particular, transport and use of any dangerous goods, and in accordance with State Environmental Planning Policy No.33- Hazardous and Offensive Development and transporting reagents in accordance with the requirements of Australian Dangerous Goods Code and Australian Standard 4452 Storage and Handling of Toxic Substances.	Traffic	Chapter 17 & 30	Appendix Q & AA
	Identification and assessment of potential impacts of mining operations, such as blasting, lighting, visual and drainage, including the pipeline development on the function and integrity of all affected roads.	Traffic	Chapter 17 & 30	Appendix Q & AA
	The mine site will be visible to motorists using the Mid Western Highway as well as public vantage points to the south and west. Roads and Maritime will await further investigation into impacts of lighting from the site and potential mitigating measures such as establishing visual screens, construction of buildings and structures using non-reflective cladding and colours.	Traffic	Chapter 17 & 30	Appendix Q & AA
	Local climate conditions that may affect road safety for mine related traffic during construction, operation and decommissioning of the project (e.g. fog, wet and dry weather, icy road conditions).	Traffic	Chapter 17 & 30	Appendix Q & AA
	A Traffic Management Plan (TMP) developed in consultation with relevant councils and Roads and Maritime. The TMP is to identify and provide management strategies to manage the impacts to project related traffic, including:	Traffic	Chapter 17 & 30	Appendix Q & AA
	Haulage of materials to site;	Traffic	Chapter 17 & 30	Appendix Q & AA
	The management and coordination of construction and staff vehicle movements to and from site and measures to be employed to limit disruption to other motorists. The management of construction staff access to the work site is to include strategies and measures employed to manage the risks of driver fatigue, road hazards and driver behaviour. This is to include a Driver Code of Conduct:	Traffic	Chapter 17 & 30	Appendix Q & AA
	The Great Western Highway (HW5) is a Controlled Access Road, under section 49 of the Roads Act 1993 where the proposed pipeline crosses	Traffic	Chapter 17 & 30	Appendix Q & AA
	A Construction Management Plan (CMP) is to be developed for the pipeline development in consultation with Roads and Maritime and bounding Councils	Traffic	Chapter 17 & 30	Appendix Q & AA

	The CMP is to detail how traffic generation, traffic movements and construction activities on or close to the classified road network will be managed to ensure the safety and traffic efficiency of the classified road network is not compromised by construction activities.	Traffic	Chapter 17 & 30	Appendix Q & AA
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McPhillamys Gold Project EIS

Table B.3 Environmental Assessment Requirements - Commonwealth Requirements

Requirement	Addressed in EIS	Addressed in technical study
<i>Introduction</i>		
1. On 28 May 2019, a delegate of the Federal Minister for the Department of the Environment and Energy determined that the McPhillamys Gold Project was a controlled action under section 75 of the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). The EPBC Act controlling provisions for the proposed action are:	-	-
i. listed threatened species and communities (sections 18 and 18A).	Chapter 13	Appendix N
2. The proposed action will be assessed in accordance with the <i>NSW Bilateral Agreement relating to environmental assessment 2015</i> and as such, is required to be assessed in the manner specified in Schedule 1 to that Agreement including, addressing the matters outlined in Schedule 4 of the <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> (EPBC Regulations).	-	-
3. The proponent must undertake an assessment of all protected matters that may be impacted by the development under the controlling provisions identified in paragraph 1. The Commonwealth Department of Environment and Energy (DoEE) considers that the proposed action is likely to have a significant impact on the following:	Chapter 13 - Section 13.8	Appendix N - Section 8.1
i. listed threatened species and communities (sections 18 and 18A);	Chapter 13 - Section 13.8	Appendix N - Section 8.1
a) White Box- Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland- Critically Endangered;	Chapter 13 - Section 13.8	Appendix N - Section 8.1
b) Koala (Qld, NSW and the ACT) (<i>Phascolarctus cinereus</i>)- Vulnerable.	Chapter 13 - Section 13.8	Appendix N - Section 8.1
4. The proponent must consider each of the protected matters under the triggered controlling provisions that may be impacted by the action. Note that this may not be a complete list and it is the responsibility of the proponent to undertake an analysis of the significance of the relevant impacts and ensure that all protected matters that are likely to be significantly impacted are assessed for the Commonwealth Minister's consideration	Chapter 13 - Section 13.8	Appendix N - Section 8.1
General Requirements		
<i>Relevant Regulations</i>		
5. The Environmental Impact Statement (EIS) must address the matters outlined in Schedule 4 of the EPBC Regulations and the matters outlined below in relation to the controlling provisions.	Parts A-D	Appendix N
<i>Project Description</i>		
6. The title of the action, background to the action of the action and current status.	Chapter 2	-
7. The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on Matters of National Environmental Significance (MNES).	Chapter 2	-
8. How the action relates to any other actions that have been, or are being taken in the region affected by the action.	Chapter 5	-

9. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.	Chapter 2	-
<i>Impacts</i>		
10. The EIS must include an assessment of the relevant impacts of the action on the matters protected by the controlling provisions, including:	Chapter 13/ Section 13.5.1	Appendix N - Section 8.1
i. a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;	Chapter 13/ Section 13.5.1	Appendix N - Section 8.1
ii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;	Chapter 13/ Section 13.5.1	Appendix N - Section 8.1
iii. analysis of the significance of the relevant impacts; and	Chapter 13/ Section 13.5.1	Appendix N - Section 8.1
iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.	Chapter 13/ Section 13.5.1	Appendix N - Section 8.1
<i>Avoidance, mitigation and offsetting</i>	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
11. For each of the relevant matters protected that are likely to be significantly impacted by the action, the EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action including:	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
i. a description and an assessment of the expected or predicted effectiveness of the mitigation measures	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
ii. any statutory policy basis for the mitigation measures;	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
iii. the cost of the mitigation measures;	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
iv. an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program	Chapter 13/ Section 13.5.2	Appendix N - Section 8.1
12. Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.	Chapter 13/ Section 13.7	Appendix N - Section 8.1
13. For each of the relevant matters likely to be impacted by the action the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any:	Chapter 13 - Section 13.8	Appendix N - Section 8.1
i. conservation advice or recovery plan for the species or community,	Chapter 13 - Section 13.8	Appendix N - Section 8.1
ii. Relevant threat abatement plan for a process that threatens the species or community,	Chapter 13 - Section 13.8	Appendix N - Section 8.1
iii. wildlife conservation plan for the species	Chapter 13 - Section 13.8	Appendix N - Section 8.1
iv. any strategic assessment.	Chapter 13 - Section 13.8	Appendix N - Section 8.1
[Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database. Http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl]		
Specific Risks		
Key risks from the Commonwealth perspective include:	Chapter 13 - Section 13.8	Appendix N - Section 8.1

threats to EPBC Act listed threatened ecological communities from vegetation clearing; and	Chapter 13 - Section 13.8	Appendix N - Section 8.1
threats to EPBC Act listed fauna from clearance of habitat	Chapter 13 - Section 13.8	Appendix N - Section 8.1
Key Issues	Chapter 13 - Section 13.8	Appendix N - Section 8.1
Biodiversity (threatened species and communities)		
<i>Assessment Requirements</i>		
14. The EIS must identify each EPBC Act listed threatened species and community likely to be impacted by the action. For any species and communities that are likely to be impacted, the proponent must provide a description of the nature, quantum and consequences of the impacts. For species and communities potentially located in the project area or in the vicinity that are not likely to be impacted, provide evidence why they are not likely to be impacted.	Chapter 13 - Section 13.8	Appendix N - Section 8.1
15. For each of the EPBC Act listed threatened species and communities likely to be impacted by the action the EIS must provide a separate:		
a. description of the habitat (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans;	Chapter 13 - Section 13.3	Appendix N - Section 8.1
b. details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements;	Chapter 13 - Section 13.3	Appendix N - Section 8.1
c. description of the relevant impacts of the action having regard to the full national extent of the species or community's range;	Chapter 13- Section 13.5	Appendix N - Section 8.1
d. description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action;	Chapter 13 - Section 13.9	Appendix N - Section 8.1
e. identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account;	Chapter 13 - Section 13.8	Appendix N - Section 8.1
f. description of any offsets proposed to address residual adverse significant impacts and how these offsets will be established.	Chapter 13 - Section 13.7	Appendix N - Section 8.1
g. details of how the current published NSW Framework for Biodiversity Assessment (FBA) has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts; and	Chapter 13 - Section 13.9	Appendix N - Section 8.1
h. details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the action in accordance with the FBA and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites;	Chapter 13 - Section 13.9	Appendix N - Section 8.1

[Note: for the purposes of approval under the EPBC Act, it is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action and deliver an overall conservation outcome that improves or maintains the viability of the MNES i.e. 'like for like'. In applying the FBA, residual impacts on EPBC Act listed threatened ecological communities must be offset with Plant Community Type(s) (PCT) that are ascribed to the specific EPBC listed ecological community. PCTs from a different vegetation class will not generally be acceptable as offsets for EPBC listed communities.]	Chapter 13 - Section 13.9	Appendix N - Section 8.1
16. Any significant residual impacts not addressed by the FBA may need to be addressed in accordance with the EPBC Act Environmental Offset Policy (http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy).	Chapter 13 - Section 13.9	Appendix N - Section 8.1
Other approvals and conditions		
17. Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations 2000.	EIS	Appendix N
Environmental Record or person proposing to take the action	Chapter 13	Appendix N
18. Information in relation to the environmental record of a person proposing to take the action must include details as prescribed in Schedule 4 Clause 6 of EPBC Regulations 2000.	Controlled action referral to DoE	-
Information Sources		
19. For information given in an EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.	Part H	Appendix N - Section 10