

Appendix 3

Coverage of Secretary's Environmental Assessment Requirements and Requirements of other Government Agencies

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Table A3-1
Secretary's Environmental Assessment Requirements
(Department of Planning – 17 September 2015)

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Paraphrased Requirement	Relevant EIS Section(s)
GENERAL	
- a full description of the development, including: - the resource to be extracted, demonstrating efficient resource recovery within environmental constraints, and having regard to DRE's requirements; - the mine layout and scheduling; - ore processing; - surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); - a waste (overburden, tailings, etc.) management strategy, having regard to the EPA's requirements; - a water management strategy, having regard to the EPA's and DPI's requirements; - a rehabilitation strategy, having regard to the key principles in the Strategic Framework for Mine Closure; and - the likely interactions between the development and any other existing, approved or proposed mining development in the vicinity of the site.	2.3.4 2.3 2.5 2.2 2.4 and 2.6 2.7 2.13 3.3.4 and 4.14
a list of any approvals that must be obtained before the development may commence.	2.1.3
- an assessment of the likely impacts of the development on the environment, focussing on the specific issues identified below, including: - a description of the existing environment likely to be affected by the development, using sufficient baseline data; - an assessment of the likely impacts of all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice; - a description of the measures that would be implemented to mitigate and/or offset the likely impacts of the development, and an assessment of: - whether these 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; - 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 if it is approved;	4.1 Various Section 4 subsections Various Section 4 subsections Various Section 4 subsections Various Section 4 subsections
a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS.	Appendix 5

Table A3-1 (Cont'd)
Secretary's Environmental Assessment Requirements
(Department of Planning – 17 September 2015)

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Paraphrased Requirement	Relevant EIS Section(s)
GENERAL (Cont'd)	
consideration of the development against all relevant environmental planning instruments (including Part 3 of the <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>).	3.3
the reasons why the development should be approved having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development.	5.2.3
In addition to the matters set out in Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>, the development application must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the: capital investment value (as defined in Clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived; and	2.12.2
jobs that would be created during each stage of the development.	2.12.3
LAND	
Including: an assessment of the likely impacts of the development on the soils and land capability of the site and surrounds;	4.12
an assessment of the likely agricultural impacts of the development;	4.13
an assessment of the likely impact of the development on landforms (topography), including the long term geotechnical stability of any new landforms (such as overburden dumps); and	2.13.3
an assessment of the compatibility of the development with other land uses in the vicinity of the development in accordance with the requirements in Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i>.	3.3.4
WATER	
Including: an assessment of the likely impacts of the development on the quantity and quality of the region's surface and groundwater resources, having regard to the EPA's and DPI's requirements and the <i>NSW Aquifer Interference Policy</i>;	4.4 and 4.5
an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users;	4.4 and 4.5
an assessment of the likely flooding impacts of the development;	4.4
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 infrastructure and water storage structures;	2.7.4
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;	2.7.4

Table A3-1 (Cont'd)
Secretary's Environmental Assessment Requirements
(Department of Planning – 17 September 2015)

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Paraphrased Requirement	Relevant EIS Section(s)
WATER (Cont'd)	
a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant Water Sharing Plan or water source embargo; and	2.7.4
a detailed description of the proposed water management system, water monitoring program and other measures to mitigate surface and groundwater impacts.	2.7, 4.4 and 4.5
BIODIVERSITY	
Including: an assessment of the likely biodiversity impacts of the development, having regard to the principles and strategies in the <i>NSW Biodiversity Offsets Policy</i> for Major Projects and the requirements of OEH;	4.3
measures taken to avoid, reduce or mitigate impacts on biodiversity;	4.3.7
accurate estimates of proposed vegetation clearing; and	4.3.6.1
a comprehensive offset strategy to ensure the development maintains and improves the biodiversity values of the region in the medium to long term.	4.3.9
HERITAGE	
Including: an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, having regard to the OEH's requirements.	4.8 and 4.9
AIR QUALITY	
Including: an assessment of the likely air quality impacts of the development in accordance with the <i>Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW</i> and the EPA's additional requirements, and having regard to the NSW Government's <i>Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments</i>; and an assessment of the likely greenhouse gas impacts of the development, having regard to the EPA's requirements.	4.2
NOISE	
Including: an assessment of the likely operational noise impacts of the development (including construction noise) under the <i>NSW Industrial Noise Policy</i>, including the obligations in chapters 8 and 9 of the policy, and having regard to the NSW Government's <i>Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Development</i> and the EPA's requirements;	4.6
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 under the <i>Interim Construction Noise Guideline</i>; and	NA
an assessment of the likely road noise impacts of the development under the <i>NSW Road Noise Policy</i>.	4.6

Table A3-1 (Cont'd)
Secretary's Environmental Assessment Requirements
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Paraphrased Requirement	Relevant EIS Section(s)
TRAFFIC AND TRANSPORT	
Including: an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the local and State road network, having regard to the RMS' requirements.	4.7
VISUAL	
Including: an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to the creation of any new landforms (bunds, etc.) and minimising the lighting impacts of the development.	4.10
HAZARDS	
Including: an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the handling and use of any dangerous goods risks, and in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development.	Appendix 4
SOCIAL & ECONOMIC	
Including: an assessment of the likely social impacts of the development; and	4.14
- an assessment of the likely economic impacts of the development, paying particular attention to: - the significance of the resource; - economic benefits of the project for the State and region; and - the demand for the provision of local infrastructure and services.	1.4.3 4.14.4 4.14.4 and 4.14.6
CONSULTATION	
- During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with the: - Commonwealth Department of the Environment; - Office of Environment and Heritage (including the Heritage Branch); - Environment Protection Authority; - Division of Resources and Energy within the Department of Industry; - Department of Primary Industries (DPI) (including DPI Water, NSW Forestry, Agriculture and Fisheries sections and Crown Lands); - Roads and Maritime Services; - Central West Local Land Services; and - Bogan Shire Council.	3.3.2 3.2.2 3.2.2 3.2.2 3.2.2 3.2.2 NA 3.2.2
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.	3.2.2

Table A3-2
Coverage of Environmental Issues

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
GENERAL		
Crown Lands 12/11/2014	The proponent should also consider access to water supply via the Nyngan to Cobar pipeline and whether a formal access will be required on Crown Land.	2.2.6
TRAFFIC AND TRANSPORT		
RMS 14/11/2014	- A traffic impact study prepared in accordance with the methodology set out in Section 2 of the RTA's <i>Guide to Traffic Generating Developments</i> and including: - Hours and days of construction and operation for the project and how traffic related operations will interact with other road users. 4.7.3 - Road transport volumes and types broken down into origin and destination, travel routes and peak hours for the construction, operation and decommissioning of the project. The study shall provide details of projected transport operations including volumes of traffic and tonnage to be transported. Volumes shall include mine input related traffic generation (e.g. fuel deliveries, potable water deliveries, maintenance, services) and impacts of mine related traffic generation on public roads with 10 year projection figures. The traffic study shall also address internal traffic movements and parking facilities. 4.7.2.2 and 4.7.3 - An assessment of cumulative traffic and transport impacts during construction and operation of the project. 4.7.5 - Any over size and over mass vehicles and loads expected for the construction, operation and decommissioning of the project. The shortest and least trafficked route should be given priority for the movement of construction materials and machinery to minimise risk and impact to other motorists so far as is reasonably practicable. 4.7.3 - Temporary and permanent staff numbers (including employees and contractors) during construction, operation and decommissioning of the project. Details of modes and volumes of transportation of mining staff to and from the site, measures proposed to minimise staff commuter traffic on the local and classified road network and measures to improve commuter safety shall also be included. 2.12.1 - The impact of traffic generated by the project and measures employed to promote traffic efficiency and road safety on the public road network during construction, operation and decommissioning of the project. 4.7.5 - Proposed access treatments shall be identified and be in accordance with the <i>Austroads Guide to Road Design</i> and Roads and Maritime Supplements including safe intersection sight distance. In particular, assessment of and required upgrades to the intersection of Gilgai Road and Barrier Highway (HW8) shall be provided. 4.7.4	

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
BIODIVERSITY		
OEH 11/12/2014	Biodiversity impacts related to the proposed Nyngan Scandium 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 <i>Threatened Species Conservation Act 1995</i>.	4.3
	- Impacts on the following species and ecological communities will require further consideration and provision of the information specified in s9.2 of the Framework for Biodiversity Assessment: - Artesian Springs Ecological Community. - Winged Peppercress <i>Lepidium monoplacoides</i>. - Coolabah Bertya <i>Bertya opponens</i>. - Curly-bark Wattle <i>Acacia curranii</i>. - Lancewood <i>Acacia petraea</i>. - Shrub Sida <i>Sida rohlenae</i>. <i>Oldenlandia galioides</i>*. *This species may not appear in the Threatened Species Profile Database. Records dating from 2001 from the Canbelego Downs IBRA Subregion have recently been accepted by OEH as valid records.	4.3 and SCSC Part 3
CMA-CW 01/03/2012	Strategic Planning and Project Justification:	
	The requirements must include a strategic assessment of the need, scale, scope and location of the project in relation to the current and future demands for scandium and current supplies.	1.4.3
	Native Vegetation: We request the assessment include identification of any Endangered Ecological Communities (EEC) vegetation and outline a biodiversity offset strategy to compensate for the destruction of any mature trees with habitat values such as hollows.	4.3.5, 4.3.6 and 4.3.9
	The assessment will require the identification of any threatened species in the proposed project area and a clear outline of how the risks to native fauna will be mitigated during site preparation and operation.	4.3.5, 4.3.6 and 4.3.7
ABORIGINAL CULTURAL HERITAGE		
OEH 11/12/2014	The EIS must identify and describe the tangible and intangible Aboriginal cultural heritage values that exist across the whole area that will be affected by the Nyngan Scandium 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 <i>Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)</i> and consultation with OEH regional officers.	4.8
	Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the <i>Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW)</i> . The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.	4.8.2 and SCSC Part 8

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
ABORIGINAL CULTURAL HERITAGE (Cont'd)		
OEH 11/12/2014 (Cont'd)	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 will be documented and notified to OEH.	4.8.8 and 4.8.9
CMA-CW 01/03/2012	Cultural Heritage: The assessment must include the impacts on Aboriginal cultural heritage. This includes information to demonstrate the impacts on Aboriginal heritage values, both archaeological and culturally in the broader sense.	4.8
	The assessment must demonstrate the consultation processes with the local Aboriginal community and the Central West CMA prefers to see a proposed approach that undertakes a more detailed consultation with local people than simply the requirements outlined in the OEH Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation. The Central West CMA would favourably view the inclusion of a local Aboriginal community member in the site assessments for cultural heritage.	4.8.2 and SCSC Part 8
WATER AND SOILS		
OEH 11/12/2014	The EIS must map the following features relevant to water and soils including:	
	a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).	SCSC Part 9
	b. Rivers, streams, wetlands, estuaries (as described in Appendix 2 of the <i>Framework for Biodiversity Assessment</i>).	4.1.2
	c. Groundwater.	4.5.2
	d. Groundwater dependent ecosystems.	4.5.2
	e. Proposed intake and discharge locations.	NA
	• The EIS must describe background conditions for any water resource likely to be affected by the Nyngan Scandium Project, including:	
	a. Existing surface and groundwater.	4.4.2 and 4.5.2
	b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.	2.7.4
	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.	4.5
	d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the <i>ANZECC (2000) Guidelines for Fresh and Marine Water Quality</i> and/or local objectives, criteria or targets endorsed by the NSW Government.	SCSC Part 5

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
OEH 11/12/2014 (Cont'd)	- The EIS must assess the impacts of the Nyngan Scandium Project on water quality, including: a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the Nyngan Scandium 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. b. Identification of proposed monitoring of water quality.	4.4 and 4.5 4.4.6 and 4.5.6
	- The EIS must assess the impact of the Nyngan Scandium Project on hydrology, including: a. Water balance including quantity, quality and source. b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. 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). e. Changes to environmental water availability, both regulated/licensed and unregulated/rules based sources of such water. 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. g. Identification of proposed monitoring of hydrological attributes.	2.7.4 4.4.5 4.3.6 and 4.4.5 4.4.5 4.4.5 4.4.4 and 4.5.4 4.4.6 and 4.5.6
NOW 28/11/2014	It is recommended that the EIS be required to include:	
	Details of water proposed to be taken (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan.	2.7.4
	Assessment of any volumetric water licensing requirements (including those for ongoing water take following completion of the project).	2.7.4
	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.	2.2.6
	A detailed and consolidated site water balance.	2.7.4
	A detailed assessment against the NSW Aquifer Interference Policy (2012) using the NSW Office of Water's assessment framework.	4.5.5.5

Table A3-2 (Cont'd)
Coverage of Environmental Issues

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
NOW 28/11/2014 (Cont'd)	Assessment of impacts on surface and ground water 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.	4.4.5 and 4.5.5
	An assessment of any proposed modification to surface water management including modelling of redistribution of waters and an assessment of impact on neighbouring properties and the associated watercourse and floodplain.	4.4.5 and SCSC Part 4
	Full technical details and data of all surface and groundwater modelling, and an independent peer review.	SCSC Parts 4 and 5
	Proposed surface and groundwater monitoring activities and methodologies.	4.4.6 and 4.5.6
	Proposed management and disposal of produced or incidental water.	2.7.3
	Details surrounding the final landform of the site, including final void management (where relevant) and rehabilitation measures.	2.13
	Assessment of any potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts.	4.4.5 and 4.5.5
	Consideration of relevant policies and guidelines.	3.3
	A statement of where each element of the SEARs is addressed in the EIS (i.e. in the form of a table).	Appendix 3
	Water Sharing Plan The proposal is located within the area covered by the <i>Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources</i>, <i>Water Sharing Plan for the Macquarie Cudgegong Regulated Rivers Water Source</i> and the <i>Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources</i>. The EIS is required to:	2.7.4
	Demonstrate how the proposal is consistent with the relevant rules of the Water Sharing Plan including rules for access licences, distance restrictions for water supply works and rules for the management of local impacts in respect of surface water and groundwater sources, ecosystem protection (including groundwater dependent ecosystems), water quality and surface-groundwater connectivity.	
	Provide a description of any site water use (amount of water to be taken from each water source) and management including all sediment dams, clear water diversion structures with detail on the location, design specifications and storage capacities for all the existing and proposed water management structures.	2.7.4
	- Provide an analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of any relevant WSP, including: - Sufficient market depth to acquire the necessary entitlements for each water source. - Ability to carry out a "dealing" to transfer the water to relevant location under the rules of the WSP. - Daily and long-term access rules. - Account management and carryover provisions.	2.2.6
	Provide a detailed and consolidated site water balance.	2.7.4

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
NOW 28/11/2014 (Cont'd)	Licensing Considerations The EIS is required to provide:	
	Identification of water requirements for the life of the project in terms of both volume and timing (including predictions of potential ongoing groundwater take following the cessation of operations at the site - such as evaporative loss from open voids or inflows).	2.7.4
	Details of the water supply source(s) for the proposal including any proposed surface water and groundwater extraction from each water source as defined in the relevant Water Sharing Plan/s and all water supply works to take water.	2.2.6
	Explanation of how the required water entitlements will be obtained (Le. through a new or existing licence/s, trading on the water market, controlled allocations etc).	2.2.6 and 2.7.4
	Information on the purpose, location, construction and expected annual extraction volumes including details on all existing and proposed water supply works which take surface water, (pumps, dams, diversions, etc).	2.2.6 and 2.7.4
	Details on all bores and excavations for the purpose of investigation, extraction, dewatering, testing and monitoring. All predicted groundwater take must be accounted for through adequate licensing.	4.5
	Details on existing dams/storages (including the date of construction, location, purpose, size and capacity) and any proposal to change the purpose of existing dams/storages.	2.7.3
	Details on the location, purpose, size and capacity of any new proposed dams/storages.	2.7.3
	Applicability of any exemptions under the Water Management (General) Regulation 2011 to the project.	NA
	Surface Water Assessment	
	The predictive assessment of the impact of the proposed project on surface water sources should include the following:	
	Identification of all surface water features including watercourses, wetlands and floodplains transected by or adjacent to the proposed project.	4.1.2
	Identification of all surface water sources as described by the relevant water sharing plan.	2.7.4 and 4.1.2
	Detailed description of dependent ecosystems and existing surface water users within the area, including basic landholder rights to water and adjacent downstream licensed water users.	4.4.2
	Description of all works and surface infrastructure that will intercept, store, convey, or otherwise interact with surface water resources.	2.7.3

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
NOW 28/11/2014 (Cont'd)	- Assessment of predicted impacts on the following: - flow of surface water, sediment movement, channel stability, and hydraulic regime; - water quality; - flood regime; - dependent ecosystems; - existing surface water users; and - planned environmental water and water sharing arrangements prescribed in the relevant water sharing plans.	4.4.5
		4.4.5
		4.4.5
		NA
		4.4.5
		NA
	Groundwater Assessment To ensure the sustainable and integrated management of groundwater sources, the EIS needs to include adequate details to assess the impact of the project on all groundwater sources including: Works likely to intercept, connect with or infiltrate the groundwater sources.	4.5.5
	Any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.	NA
	Bore construction information is to be supplied to the Office of Water by submitting a "Form A" template. The Office of Water will supply "GW" registration numbers (and licence/approval numbers if required) which must be used as consistent and unique bore identifiers for all future reporting.	NA
	A description of the watertable and groundwater pressure configuration, flow directions and rates and physical and chemical characteristics of the groundwater source (including connectivity with other groundwater and surface water sources).	4.5.2 and 4.5.5
	Sufficient baseline monitoring for groundwater quantity and quality for all aquifers and GDEs to establish a baseline incorporating typical temporal and spatial variations.	4.5.6
	The predicted impacts of any final landform on the groundwater regime.	2.13.5
	The existing groundwater users within the area (including the environment), any potential impacts on these users and safeguard measures to mitigate impacts.	4.5.2 and 4.5.5
	An assessment of groundwater quality, its beneficial use classification and prediction of any impacts on groundwater quality.	4.5.2 and 4.5.5
	An assessment of the potential for groundwater contamination (considering both the impacts of the proposal on groundwater contamination and the impacts of contamination on the proposal).	4.5.5
	Measures proposed to protect groundwater quality, both in the short and long term.	4.5.4
	Measures for preventing groundwater pollution so that remediation is not required.	4.5.4

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
NOW 28/11/2014 (Cont'd)	Protective measures for any groundwater dependent ecosystems (GDEs).	NA
	Proposed methods of the disposal of waste water and approval from the relevant authority.	NA
	The results of any models or predictive tools used.	4.5.3
	Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:	
	Any proposed monitoring programs, including water levels and quality data.	4.5.6
	Reporting procedures for any monitoring program including mechanism for transfer of information.	4.5.6
	An assessment of any groundwater source/aquifer that may be sterilised from future use as a water supply as a consequence of the proposal.	4.5.5
	Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).	4.5.5
	Description of the remedial measures or contingency plans proposed.	4.5.4
	Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.	NA
	Groundwater Dependent Ecosystems	
	The EIS must consider the potential impacts on any Groundwater Dependent Ecosystems (GDEs) at the site and in the vicinity of the site and:	
	- Identify any potential impacts on GDEs as a result of the proposal including: - the effect of the proposal on the recharge to groundwater systems; - the potential to adversely affect the water quality of the underlying groundwater system and adjoining groundwater systems in hydraulic connections; and - the effect on the function of GDEs (habitat, groundwater levels, connectivity).	4.5.2.5 4.5.2.5 NA
	Provide safeguard measures for any GDEs.	NA

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
NOW 28/11/2014 (Cont'd)	Watercourses, Wetlands and Riparian Land The EIS should address the potential impacts of the project on all watercourses likely to be affected by the project, existing riparian vegetation and the rehabilitation of riparian land. It is recommended the EIS provides details on all watercourses potentially affected by the proposal, including: - Scaled plans showing the location of: - wetlands/swamps, watercourses and top of bank; - riparian corridor widths to be established along the creeks; - existing riparian vegetation surrounding the watercourses (identify any areas to be protected and any riparian vegetation proposed to be removed); - the site boundary, the footprint of the proposal in relation to the watercourses and riparian areas; and - proposed location of any asset protection zones.	Figures 4.1 and 4.2
	Photographs of the watercourses/wetlands and a map showing the point from which the photos were taken.	NA
	A detailed description of all potential impacts on the watercourses/riparian land.	NA
	A detailed description of all potential impacts on the wetlands, including potential impacts to the wetlands hydrologic regime; groundwater recharge; habitat and any species that depend on the wetlands.	NA
	A description of the design features and measures to be incorporated to mitigate potential impacts.	NA
	Geomorphic and hydrological assessment of water courses including details of stream order (Strahler System), river style and energy regimes both in channel and on adjacent floodplains.	NA
	Landform rehabilitation (including final void management)	
	The Environmental Impact Statement report should include:	
	Justification of the proposed final landform with regard to its impact on local and regional surface and groundwater systems;	2.13.3
	A detailed description of how the site would be progressively rehabilitated and integrated into the surrounding landscape;	2.13.5
	Outline of proposed construction and restoration of topography and surface drainage features if affected by the project;	2.13.3
	Detailed modelling of potential groundwater volume, flow and quality impacts of the presence of an inundated final void (where relevant) on identified receptors specifically considering those environmental systems that are likely to be groundwater dependent;	SCSC Part 5
	An outline of the measures to be put in place to ensure that sufficient resources are available to implement the proposed rehabilitation; and	2.13
	The measures that would be established for the long-term protection of local and regional aquifer systems and for the ongoing management of the site following the cessation of the project.	2.13

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WATER AND SOILS (Cont'd)		
CMA-CW 01/03/2012	Water sources: An assessment of the surface water impacts of the proposed developments, particularly in terms of the surface water flow in the site and potential for contamination from leachate and soil/sedimentation risks.	4.4
	An assessment of the risks of groundwater interference during establishment and operation and that assessment outlines mitigation measures to these risks.	4.5
	The assessment should outline the potential water demands during operation and demonstrate the availability of adequate and secure water supplies for the life of the project.	2.7.4
	If the area is determined as being on flood prone land, the assessment needs to include the likelihood of flood risks and how flood design has been considered in the operation.	NA
	Soil: The assessment must outline the soil types covered in the proposed site and outline how the operation will mitigate risks in regard to the removal of the topsoil, storage of the overburden, replacement of the waste material and rehabilitation of the area upon completion of operation.	4.12
FLOODING		
OEH 11/12/2014	- The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas).	Figures 4.1 and 4.2
	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 probable maximum flood, or an equivalent extreme event.	2.2.7
	- The EIS must model the effect of the proposed Nyngan Scandium Project (including fill) on the flood behaviour under the following scenarios: a. Current flood behaviour for a range of design events as identified in 8) above. 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.	4.4.3
	- 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. 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. c. Relevant provisions of the NSW Floodplain Development Manual 2005.	4.4.3 4.4.3 4.4.3 and SCSC Part 4

Table A3-2 (Cont'd)
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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
FLOODING (Cont'd)		
OEH 11/12/2014 (Cont'd)	- The EIS must assess the impacts on the proposed Nyngan Scandium Project on flood behaviour, including: a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure. b. Consistency with Council floodplain risk management plans. c. Compatibility with the flood hazard of the land. d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. 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. 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. h. Whether the proposal incorporates specific measures to manage risk to life from flood. i. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES. j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.	4.4.5 NA 4.4.5 SCSC Part 4 4.4.5 4.4.5 NA NA NA NA
	GEOLOGY AND RESOURCES	
	Additional details to those contained within the PEA are required in the final EIS with regard to the geological description of the project and resource definition. These are:	
	specific details about the location, shape, physical dimensions, mineralogy and ore mineral distribution for individual ore bodies/lenses;	2.3.2
	specific details of the mineralogy, whole-rock, minor and trace element geochemistry of the ore, tailings and waste rock;	2.3.2
	supporting information including plans and cross-sections to show the extent of the mineralised zones to be mined and those located adjacent beneath planned mining voids which may be sterilised by the planned backfilling of the open cut(s);	NA
	additional details about the size and depth of the open cut - with information about the location of the water table and planned base of mining;	2.3.3
	if more than one ore zone is to be mined then the resource estimates for each ore zone must be included;	NA
Resources and Energy 24/11/2014		

Table A3-2 (Cont'd)
Coverage of Environmental Issues

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
LIFE OF MINE PRODUCTION SCHEDULE		
Resources and Energy 24/11/2014	The proponent must supply a life of mine production schedule for each year of operation of the mine and for the life of the project. The production schedule is to include: details of run-of-mine ore, low grade ore-mineralised waste and waste rock tonnage planned to be extracted for each year and for the life of the project, and an estimate of the saleable product produced for each year and the life of the project;	2.3.7
	in terms of text, plans or charts, an EIS must clearly show the proposed extent and sequence of the development; and	Figure 2.3
	an estimate of which market segment that product tonnes would be sold into e.g. export/domestic mineral product.	1.4.3
SOCIO-ECONOMIC		
CMA-CW 01/03/2012	Social Impacts and Community Consultation: The assessment must outline the social benefits to the local community as well as identifying the social impacts and mitigation strategies for the project.	4.14
	Consultation on the project must include the Central West CMA, relevant agencies, the local Aboriginal community as well as the Local Aboriginal Land Council (LALC), relevant local interest community groups e.g. Landcare, Bogan Shire Council, and community stakeholders in the town of Nyngan.	3.2.1
	The consultation process should outline the approach to distribute information about the project during the assessment, preparation, operation and rehabilitation phases. The assessment should also outline the methods of actively engaging stakeholders on issues that are of concern to them.	3.2.1
	The assessment must clearly show the dates of consultation and copies of information distributed as part of the consultation process and describe the issues raised during the consultation and where the issues are addressed in the assessment.	3.2.1
REHABILITATION		
CMA-CW 01/03/2012	Rehabilitation of the site: The assessment must include a detailed outline of how the site will be rehabilitated at the end of the project's operational phase. This plan should have the objective of rehabilitating the site to a level that demonstrates an increase in the environmental values of sites when compared to the pre-operational site.	2.13
	This rehabilitation strategy should strive to include the employment of local people throughout implementation.	2.12.1
	The strategy also needs to outline ongoing environmental monitoring of the site, post rehabilitation to ensure minimal potential for degradation in the future.	2.13.6