

## **Appendix 2**

# **Coverage of Secretary's Environmental Assessment Requirements and Requirements of Consulted Government Agencies**

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The following table lists the relevant requirements provided by the Department of Planning & Environment that need to be addressed in the EIS for the Karuah South Quarry and where each requirement is addressed in the EIS.

**Table A2.1**  
**Coverage of Secretary's Environmental Assessment Requirements in the EIS**

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Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>GENERAL REQUIREMENTS</b>	
The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> .	Noted
<ul style="list-style-type: none"> <li>Clause 6 <ul style="list-style-type: none"> <li>Relevant information and declaration</li> </ul> </li> </ul>	page v
<ul style="list-style-type: none"> <li>Clause 7 <ul style="list-style-type: none"> <li>1(a) Summary of the EIS</li> </ul> </li> </ul>	Executive Summary
1(b) Statement of objectives of the development	2.1.1
1(c) Analysis of feasible alternatives	2.14
1(d) (i) Full description of the development	Section 2
1(d) (ii) Description of environment likely to be affected/significantly affected	Section 4 Section 5
1(d)(iii) Likely impact of the development on the environment	Section 5
1(d)(iv) Measures to mitigate adverse effects of the development	Section 5 Section 6
1(d)(v) List of approvals required	2.1.3 3.3
1(e) Compilation of mitigation measures	Section 6
2 Environmental Assessment Requirements for EIS	Appendix 2
3 Not applicable	Not Applicable
4 Principles of ecologically sustainable development	Noted
In particular, the EIS must include:	
<ul style="list-style-type: none"> <li>a stand-alone executive summary;</li> </ul>	Executive Summary
<ul style="list-style-type: none"> <li>a full description of the development, including: <ul style="list-style-type: none"> <li>the resource to be extracted, including the amount, type and composition;</li> </ul> </li> </ul>	2.2
<ul style="list-style-type: none"> <li>the site layout and extraction plan, including cross-sectional plans;</li> </ul>	2.1.2 2.5.2 2.5.3
<ul style="list-style-type: none"> <li>the production process and processing activities, including the in-flow and out-flow of materials and points of discharge to the environment;</li> </ul>	2.5.7 2.5.8 Section 5
<ul style="list-style-type: none"> <li>surface infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process);</li> </ul>	2.1.2
<ul style="list-style-type: none"> <li>a waste (overburden, rejects, tailings etc) management strategy;</li> </ul>	2.10
<ul style="list-style-type: none"> <li>a water management strategy;</li> </ul>	2.6 5.6.3 5.7.4

**Table A2.1 (Cont'd)**  
**Coverage of Secretary's Environmental Assessment Requirements in the EIS**

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Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>GENERAL REQUIREMENTS (Cont'd)</b>	
– a rehabilitation strategy to apply during, and after completion of, extraction operations, and proposed final use of site; and	2.12
– the likely interactions between the development and any existing, approved or proposed development in the vicinity of the site;	1.5 Section 5
• a strategic justification of the development focusing on site selection and the suitability of the proposed site;	Section 7
• a list of any approvals that must be obtained before the development may commence;	2.1.3 3.3
• an assessment of the likely impacts of the development on the environment, focussing on the key issues identified below, including:	
– a description of the existing environment likely to be affected by the development, using sufficient baseline data;	Section 4 Section 5
– 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;	Section 5
– a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and an assessment of:	Section 5 Section 6
○ 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; and	
○ whether contingency measures 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;	Section 5 Section 6
• a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS;	Section 6
• 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> );	3.3.4 3.3.6
• the reasons why the development should be approved, having regard to:	
– relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i> , including the objects of the Act;	7.3.4
– the biophysical, economic and social impacts of the project, including the principles of ecologically sustainable development;	7.3.2 7.3.3
– the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses;	1.5 2.12.4.4 4.4.2
– feasible alternatives to the development (and its key components), including the consequences of not carrying out the development;	2.14
• a signed declaration from the author of the EIS, certifying that the information contained within the document is neither false nor misleading.	page v

**Table A2.1 (Cont'd)**  
**Coverage of Secretary's Environmental Assessment Requirements in the EIS**

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Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>GENERAL REQUIREMENTS (Cont'd)</b>	
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.	To be Provided
<b>KEY ISSUES</b>	
The EIS must address the following key issues:	
<b>NOISE AND BLASTING</b>	
<ul style="list-style-type: none"> <li>a detailed assessment of the likely construction, operational and off-site transport noise impacts of the development in accordance with the <i>Interim Construction Noise Guideline</i>, <i>NSW Noise Policy for Industry</i> and the <i>NSW Road Noise Policy</i> respectively, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>;</li> </ul>	5.2
<ul style="list-style-type: none"> <li>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>;</li> </ul>	5.2.4
<ul style="list-style-type: none"> <li>proposed blasting hours, frequency and methods;</li> </ul>	2.9.1 2.5.2.2 2.5.3.2
<ul style="list-style-type: none"> <li>a detailed assessment of the likely blasting impacts of the development (including noise, vibrations, overpressure, visual and odour) on people, animals, buildings, infrastructure and significant natural features, having regard to the relevant ANZEC guidelines;</li> </ul>	5.2 5.2.7.2
<ul style="list-style-type: none"> <li>reasonable and feasible mitigation measures to minimise noise emissions; and</li> </ul>	5.2.5
<ul style="list-style-type: none"> <li>monitoring and management measures, in particular real-time and attended noise monitoring;</li> </ul>	5.2.5 5.2.9 Section 6
<b>AIR QUALITY</b>	
<ul style="list-style-type: none"> <li>a detailed assessment of potential construction and operational impacts, in accordance with the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>, and with a particular focus on dust emissions including PM<sub>2.5</sub> and PM<sub>10</sub>, and having regard to the <i>Voluntary Land Acquisition and Mitigation Policy</i>;</li> </ul>	5.1
<ul style="list-style-type: none"> <li>an assessment of potential dust and other emissions generated from processing, operational activities and transportation of quarry products;</li> </ul>	5.1.4 5.1.8
<ul style="list-style-type: none"> <li>reasonable and feasible mitigation measures to minimise dust and emissions; and</li> </ul>	5.1.7
<ul style="list-style-type: none"> <li>monitoring and management measures, in particular, real-time air quality monitoring;</li> </ul>	5.1.7 5.1.10 Section 6

**Table A2.1 (Cont'd)**  
**Coverage of Secretary's Environmental Assessment Requirements in the EIS**

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Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>WATER</b>	
• 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;	5.6.4
• identification of any licensing requirements or other approvals under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i> ;	2.1.3 3.3.3
• 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);	5.6.4
• a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP;	5.6.3 5.7.4
• an assessment of the likely impacts on the quality and quantity of existing surface and ground water resources, including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives;	5.6.5 5.7.5
• an assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users; and	5.6.5 5.7.5
• a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts;	5.6.3 5.7.4 Section 6
<b>BIODIVERSITY</b>	
• accurate predictions of any vegetation clearing on site;	5.5.3 5.5.5
• a detailed assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, and having regard to the <i>NSW Biodiversity Offsets Scheme</i> and the <i>Biodiversity Assessment Method</i> ; and	5.5
• a strategy to offset any residual impacts of the development in accordance with the <i>NSW Biodiversity Offsets Scheme</i> .	2.13 5.5.4.1
<b>HERITAGE</b>	
• an assessment of the potential impacts on Aboriginal heritage (cultural and archaeological), including evidence of appropriate consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage; and	5.8 5.8.2 5.8.6 5.8.7
• identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items, having regard to the relevant policies and guidelines listed in Attachment 1;	5.9 5.9.6
<b>TRAFFIC AND TRANSPORT</b>	
• accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products;	2.7.3 5.4.3
• a detailed assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road network (as identified above); and	5.4.2 5.4.3 5.4.5
• a description of the measures that would be implemented to mitigate any impacts.	2.7.1 5.4.4 Section 6

**Table A2.1 (Cont'd)**  
**Coverage of Secretary's Environmental Assessment Requirements in the EIS**

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Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>LAND RESOURCES</b>	
<ul style="list-style-type: none"> <li>potential impacts on soils and land capability (including potential erosion and land contamination) and the proposed mitigation, management and remedial measures (as appropriate);</li> </ul>	5.10 5.10.3
<ul style="list-style-type: none"> <li>potential impacts on landforms (topography), paying particular attention to the long term geotechnical stability of any new landforms; and</li> </ul>	2.12
<ul style="list-style-type: none"> <li>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)</i> 2007, paying particular attention to the agricultural land use in the region;</li> </ul>	1.5 4.4.2
<b>WASTE</b>	
<ul style="list-style-type: none"> <li>including estimates of the quantity and nature of the waste streams that would be generated or received by the development and any measures that would be implemented to minimise, manage or dispose of these waste streams;</li> </ul>	2.10
<b>HAZARDS</b>	
<ul style="list-style-type: none"> <li>including an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, handling, storage and use of any hazardous or dangerous goods;</li> </ul>	2.11.2 5.2.5.3 5.11
<b>VISUAL</b>	
<ul style="list-style-type: none"> <li>including a detailed assessment of the likely visual impacts of the development (before, during and post-mining) on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to reasonable and feasible mitigation measures to minimise impacts (including lighting) of the development);</li> </ul>	5.3 Section 6
<b>SOCIAL AND ECONOMIC</b>	
<ul style="list-style-type: none"> <li>a detailed assessment of the likely social impacts of the development on the local and regional community in accordance with the <i>Social impact assessment guideline for State significant mining, petroleum production and extractive industry development</i>; and</li> </ul>	5.13
<ul style="list-style-type: none"> <li>a detailed assessment of the likely economic impacts of the development, paying particular attention to: <ul style="list-style-type: none"> <li>the significance of the resource;</li> </ul> </li> </ul>	2.2 5.12.2
<ul style="list-style-type: none"> <li>the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW; and</li> </ul>	5.12.3
<ul style="list-style-type: none"> <li>the demand for the provision of local infrastructure and services.</li> </ul>	5.12.2 5.12.3
<b>REHABILITATION</b>	
<ul style="list-style-type: none"> <li>including the proposed rehabilitation strategy for the site having regard to the key principles in the <i>Strategic Framework for Mine Closure</i>, including: <ul style="list-style-type: none"> <li>rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;</li> </ul> </li> </ul>	2.12
<ul style="list-style-type: none"> <li>nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and</li> </ul>	2.12.4.4
<ul style="list-style-type: none"> <li>the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.</li> </ul>	2.12 2.13 3.3.5

**Table A2.1 (Cont'd)**  
**Coverage of Secretary's Environmental Assessment Requirements in the EIS**

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Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>CONSULTATION</b>	
During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, Aboriginal stakeholders, community groups and affected landowners. You must consult with:	
• affected landowners;	3.2.1
• community groups;	3.2.1
• MidCoast Council;	3.2.4.4
• Office of Environment and Heritage (including the Heritage Branch);	3.2.4.2
• Environment Protection Authority;	3.2.4.2
• Division of Resources and Geoscience within the Department;	3.2.4.2
• Department of Primary Industries (including Crown Lands and Water, NSW Forestry, Agriculture and Fisheries);	3.2.4.2 3.2.4.3
• Hunter Local Land Services;	3.2.4.3
• Roads and Maritime Services; and	3.2.4.2
• NSW Rural Fire Service	3.2.4.3
The EIS must:	
• describe the consultation process used and demonstrate that effective consultation has occurred;	3.2
• describe the issues raised by public authorities, service providers, community groups and landowners;	3.2
• identify where the design of the development has been amended in response to issues raised; and	2.14
otherwise demonstrate that issues raised have been appropriately addressed in the assessment.	Section 5



The following table incorporates the issues raised by the other State Government Agencies for consideration, where applicable, during the preparation of the Environmental Impact Statement.

**Table A2.2**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

Page 1 of 17

Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>GENERAL ISSUES</b>		
DPE – Resources & Geoscience 20/10/17	The location of all existing, approved and proposed operations in relation to the project area should be identified in the Environmental Impact Statement (EIS).	1.5.2 1.5.3
	All environmental reports (EIS or similar) accompanying Development Applications for extractive industry lodged under the <i>Environmental Planning &amp; Assessment Act 1979</i> should include a resource assessment which: <ul style="list-style-type: none"> <li>Documents the size and quality of the resource and demonstrates that both have been adequately assessed; and</li> <li>Documents the methods used to assess the resource and its suitability for the intended applications.</li> </ul>	Appendix 4
	The above information should be summarised in the EIS, with full documentation appended.	2.2.3
Environment Protection Authority 20/10/17	Impacts related to the following environmental issues need to be assessed, quantified and reported on:	
	• Air Quality	5.1
	• Noise and Vibration	5.2
	• Water and Soil Quality and Management	2.6 5.6 5.7 5.10
	• Waste Management	2.10
	• Dangerous Goods, Chemical Storage and Bunding	5.11.2
	The objectives of the proposal should be clearly stated and refer to:	
	• The size and type of the operation;	2.1
	• The nature of the processes and the products, by-products and wastes produced;	2.5 2.10
	• The types and quantities of any chemicals to be used and stored onsite;	5.11.2
	• Proposed operational hours, including any heavy vehicle movements;	2.9.1
	• Proposed maximum and average annual production rates that will occur at the premises; and	2.5.5
	• Proposed staging and timing of the proposal.	2.3 2.4 2.5
	The EIS will need to fully identify all the processes and activities intended for the site over the life of the development. This will include details of:	

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>GENERAL ISSUES (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<ul style="list-style-type: none"> <li>The location of the proposed facility and details of the surrounding environment;</li> </ul>	1.3.2 1.5 4.4
	<ul style="list-style-type: none"> <li>The proposed layout of the site;</li> </ul>	2.1.2 2.3
	<ul style="list-style-type: none"> <li>Appropriate land use zoning;</li> </ul>	3.3.6
	<ul style="list-style-type: none"> <li>Ownership details of any residence and/or land likely to be affected by the proposed operations;</li> </ul>	4.4
	<ul style="list-style-type: none"> <li>Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc. in the locality that may be affected by the facility;</li> </ul>	1.5 4.4 Section 5
	<ul style="list-style-type: none"> <li>All equipment proposed for use at the site;</li> </ul>	2.5.4 2.5.6 2.5.8
	<ul style="list-style-type: none"> <li>All chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management;</li> </ul>	5.11.2
	<ul style="list-style-type: none"> <li>Clearly detail the boundary of the premises; and</li> </ul>	2.1
	<ul style="list-style-type: none"> <li>Methods to mitigate any expected environmental impacts of the development.</li> </ul>	Sections 5 & 6
<b>Monitoring Programs</b>		
	The EIS should include a detailed assessment of any weather monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.	4.3.1 5.1.10 5.2.9 5.6.6
<b>AIR QUALITY</b>		
Environment Protection Authority 20/10/17	The EIS should include an air quality impact assessment (AQIA) in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including, as a minimum the following components:	SCSC Part 1
	<b>Assessment Objective</b>	5.1.7
	<ul style="list-style-type: none"> <li>Demonstrate the proposed project will incorporate and apply best management practice emission controls; and</li> </ul>	
	<ul style="list-style-type: none"> <li>Demonstrate that the project will not cause violation of the project adopted air quality impact assessment criteria at any residential dwelling or other sensitive receptor.</li> </ul>	5.1.8
	<b>Assessment Criteria</b>	
	<ul style="list-style-type: none"> <li>Define applicable assessment criteria for the proposed development referencing the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including appendices and updates</li> </ul>	5.1.5
	<ul style="list-style-type: none"> <li>Demonstrate the proposal's ability to comply with the <i>relevant</i> regulatory framework, specifically the <i>Protection of the Environment Operations</i> (POEO) Act (1997) and the POEO (Clean Air) Regulation (2010).</li> </ul>	5.1.8

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>AIR QUALITY (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<b>Existing Environment</b>	
	<ul style="list-style-type: none"> <li>Provide a detailed description of the existing environment within the assessment domain, including: <ul style="list-style-type: none"> <li>geophysical form and land-uses;</li> <li>location of all sensitive receptors;</li> <li>existing air quality; and</li> <li>local and regional prevailing meteorology.</li> </ul> </li> </ul>	4.1 4.4
		5.1.2
		5.1.3.2
		5.1.3.1
	<ul style="list-style-type: none"> <li>Justify all data used in the assessment, specifically including analysis of inter-annual trends (preferably <i>five</i> consecutive years of data), availability of monitoring data, and local topographical features.</li> </ul>	5.1.6
	<ul style="list-style-type: none"> <li>Meteorological modelling must be verified against monitored data. Verification should <i>involve</i> comparative analysis of wind speed, wind direction and temperature, at a minimum.</li> </ul>	5.1.3.1
	<ul style="list-style-type: none"> <li>A review of all existing, recently approved and planned developments likely to contribute to cumulative air quality impacts must be completed.</li> </ul>	5.1.3.2 5.1.8
	<b>Emissions Inventory</b>	
	<ul style="list-style-type: none"> <li>Provide a detailed description of the project and identify the key stages with regards to the potential for air emissions and impacts on the surrounding environment.</li> </ul>	Section 2 5.1.4
	<ul style="list-style-type: none"> <li>Identify all sources of air emissions, including mechanically generated, combustion and transport related emissions likely to be associated with the proposed <i>development</i>.</li> </ul>	5.1.4
	<ul style="list-style-type: none"> <li>Estimate emissions of TSP, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, (tonnes per year), at a minimum, for all identified sources during each key development stage.</li> </ul>	5.1.8
	<ul style="list-style-type: none"> <li>The emissions inventory must be explicitly coupled with the project description.</li> </ul>	Noted
	<ul style="list-style-type: none"> <li>Provide a detailed summary and justification of all parameters adopted within all emission estimation calculations, including site specific measurements, proponent recommended values or published literature.</li> </ul>	5.1.6.1
	<ul style="list-style-type: none"> <li>Document, including quantification and justification, all air quality emission control techniques/practices proposed for implementation during the project. As a minimum, consideration must be given to source control techniques, emission control through mine planning and reactive/predictive management techniques,</li> </ul>	5.1.7
	<ul style="list-style-type: none"> <li>Blasting emission estimation should provide specific details on likely activities, including the frequency of blasts, area per blast, amount and type of explosives used and blasting hours,</li> </ul>	5.1.6.1
	<ul style="list-style-type: none"> <li>Demonstrate that the proposed control techniques/practices are consistent with best management practice,</li> </ul>	5.1.7

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>AIR QUALITY (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<b>Dispersion Modelling and Interpretation of Results</b> <ul style="list-style-type: none"> <li>Atmospheric dispersion modelling should be undertaken in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including appendices and updates,</li> </ul>	5.1.6
	<ul style="list-style-type: none"> <li>Modelling must implement fit for purpose modelling techniques that: <ul style="list-style-type: none"> <li>have regard for the most up to date and scientifically accepted dispersion modelling techniques;</li> <li>contextualise all assumptions based on current scientific understanding and available data; and</li> <li>include a thorough validation of adopted methods and model performance,</li> </ul> </li> </ul>	5.1.6
	<p>Use an appropriate atmospheric dispersion model to predict, at a minimum, incremental ground level concentrations/levels of the following:</p> <ul style="list-style-type: none"> <li>24-hour and annual average PM<sub>10</sub> concentrations;</li> <li>24-hour and annual average PM<sub>2.5</sub> concentrations; and</li> <li>1-hour and annual average NO<sub>2</sub> concentrations, NO<sub>2</sub> concentrations should be assessed using a well justified approach for the transformation of NO<sub>x</sub> to NO<sub>2</sub>,</li> </ul>	5.1.8
	<ul style="list-style-type: none"> <li>Ground level concentrations of pollutants should be presented for surrounding privately-owned properties, site-owned properties and other sensitive receptors (as applicable).</li> </ul>	5.1.8
	<ul style="list-style-type: none"> <li>Undertake a cumulative assessment of predicted impacts. The contribution of all identified existing and recently approved developments should be accounted for in the cumulative assessment.</li> </ul>	5.1.8
	<ul style="list-style-type: none"> <li>Results of dispersion modelling should be presented as follows: <ul style="list-style-type: none"> <li>isopleth plots showing the geographic extent of maximum pollutant concentrations (incremental and cumulative);</li> <li>tables presenting the maximum predicted pollutant concentrations (increment and cumulative) and the frequency of any predicted exceedances at each surrounding privately-owned properties, mine-owned properties and other sensitive receptors (as applicable); and</li> <li>time series and frequency distribution plots of pollutant concentrations at each private receptor location at which an exceedance is predicted to occur. Where no exceedances are predicted, the analysis must be performed for the most impacted off site sensitive receptor.</li> </ul> </li> </ul>	5.1.8

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>AIR QUALITY (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<p><b>Air Quality Emission Control Measures</b></p> <ul style="list-style-type: none"> <li>• Provide a detailed discussion of all proposed air quality emission control measures, including details of a reactive/predictive management system. The information provided must include: <ul style="list-style-type: none"> <li>– explicit linkage of proposed emission controls to the site specific best practice determination assessment</li> <li>– timeframe for implementation of all identified emission controls;</li> <li>– key performance indicators for emission controls;</li> <li>– monitoring methods (location, frequency, duration);</li> <li>– response mechanisms;</li> <li>– responsibilities for demonstrating and reporting achievement of KPIs;</li> <li>– record keeping and complaints response register; and</li> <li>– compliance reporting.</li> </ul> </li> </ul>	<p>5.1.7 5.1.9.3 5.1.10 Section 6</p>
	<p><b>Monitoring Programs</b></p> <p>The EIS should include a detailed assessment of any air quality monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.</p>	<p>5.1.10 Section 6</p>
<b>NOISE AND VIBRATION</b>		
DPE – Resources & Geoscience 20/10/17	Assessment of noise and vibration impacts, and proposed measures to minimise these impacts.	<p>5.2 5.2.5 5.2.7</p>
Environment Protection Authority 20/10/17	The following matters should be addressed in relation to noise and vibration impacts associated with the proposal. This includes identification of the hours of operations, assessment of all activities where proposed, and impacts on sensitive receivers associated with the proposed hours of operation. The following matters should be addressed as part of the EIS.	<p>2.9.1 5.2</p>
	<p><b>General</b></p> <ul style="list-style-type: none"> <li>• Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009).</li> </ul>	<p>5.2.4.1 5.2.6.1 5.2.7.1</p>
	<ul style="list-style-type: none"> <li>• 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 (DEC, 2006).</li> </ul>	<p>5.2.4.2 5.2.6.2 5.2.7.2</p>

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>NOISE AND VIBRATION (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<ul style="list-style-type: none"> <li>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).</li> </ul>	5.2.7.2
	<b>Industry</b> <ul style="list-style-type: none"> <li>Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the NSW Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes.</li> </ul>	5.2.4.1 5.2.6.1 5.2.7.1
	<b>Road</b> <ul style="list-style-type: none"> <li>Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the NSW Road Noise Policy (DECCW, 2011).</li> </ul>	5.2.4.1 5.2.6.1 5.2.7.1
	<ul style="list-style-type: none"> <li>Noise from new or upgraded public roads should be assessed using the NSW Road Noise Policy (DECCW, 2011).</li> </ul>	Not Applicable
	<b>Monitoring</b> Detail monitoring that will be conducted to assess the impacts of the proposal.	5.2.9
	<b>Monitoring Programs</b> The EIS should include a detailed assessment of any noise monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.	5.2.9
<b>TRAFFIC AND TRANSPORT</b>		
Roads and Maritime Services 19/10/17	The EIS should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:	Noted
	<ul style="list-style-type: none"> <li>Road and Related Facilities within the Department of Planning EIS Guidelines, and,</li> </ul>	
	<ul style="list-style-type: none"> <li>Section 2 Traffic Impact Studies of Roads and Maritime's Guide to Traffic Generating Developments 2002.</li> </ul>	
	Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime's <i>Guide to Traffic Generating Developments 2002</i> and is to include (but not be limited to) the following:	
	<ul style="list-style-type: none"> <li>Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject property.</li> </ul>	5.4
	<ul style="list-style-type: none"> <li>Current traffic counts for affected traffic routes and intersections.</li> </ul>	5.4.2.2
	<ul style="list-style-type: none"> <li>The anticipated additional vehicular traffic generated from both the construction and operational stages of the project.</li> </ul>	5.4.3

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>TRAFFIC AND TRANSPORT (Cont'd)</b>		
Roads and Maritime Services 19/10/17 (Cont'd)	<ul style="list-style-type: none"> <li>The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation.</li> </ul>	5.4.3
	<ul style="list-style-type: none"> <li>Consideration of the traffic impacts on existing and proposed intersections, in particular, the first classified road intersection/s encountered following the local road network from the site, and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development during both the construction and operational stages. The traffic impact shall also include the cumulative traffic impact of other proposed developments in the area.</li> </ul>	5.4.3 5.4.5
	<ul style="list-style-type: none"> <li>Identify the necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Roads and Maritime and Council.</li> </ul>	2.7.1
	<ul style="list-style-type: none"> <li>Traffic analysis of any major / relevant intersections impacted, using SIDRA or similar traffic model, including: <ul style="list-style-type: none"> <li>Current traffic counts and 10 year traffic growth projections</li> <li>With and without development scenarios</li> <li>95<sup>th</sup> percentile back of queue lengths</li> <li>Delays and level of service on all legs for the relevant intersections</li> <li>Electronic data for Roads and Maritime review.</li> </ul> </li> </ul>	5.4.3 5.4.5
		Available upon request
<b>BIODIVERSITY</b>		
Office of Environment & Heritage 25/10/17	<ul style="list-style-type: none"> <li>Biodiversity impacts related to the proposed development (SSD 17_8795) 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 <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and Biodiversity Assessment Method.</li> </ul>	5.5.2
	<ul style="list-style-type: none"> <li>The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.</li> </ul>	5.5.4



**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>BIODIVERSITY (Cont'd)</b>		
Office of Environment & Heritage 25/10/17 (Cont'd)	<ul style="list-style-type: none"> <li>The BDAR must include details of the measures proposed to address the offset obligation as follows; <ul style="list-style-type: none"> <li>The total number and classes of biodiversity credits required to be retired for the development/project;</li> <li>The number and classes of like-for-like biodiversity credits proposed to be retired;</li> <li>The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;</li> <li>Any proposal to fund a biodiversity conservation action;</li> <li>Any proposal to conduct ecological rehabilitation (if a mining project);</li> <li>Any proposal to make a payment to the Biodiversity Conservation Fund.</li> </ul> </li> </ul>	Sections 6 and 7 of BDAR
	<ul style="list-style-type: none"> <li>The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.</li> </ul>	1.7
<b>SURFACE WATER</b>		
DPI – Crown Lands and Water Division 20/10/17	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.	5.6.4
	A detailed and consolidated site water balance.	5.6.4
	Assessment of impacts on surface water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses and riparian land, and measures proposed to reduce and mitigate these impacts.	5.6 5.6.3 5.6.5
	Proposed surface water monitoring activities and methodologies.	5.6.6
	Consideration of relevant policies and guidelines.	5.6
Environment Protection Authority 20/10/17	<b>Describe Proposal</b> <ul style="list-style-type: none"> <li>Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.</li> </ul>	5.6.3.1
	<ul style="list-style-type: none"> <li>Demonstrate that all practical options to avoid discharges have been implemented and environmental impact minimised where discharge is necessary.</li> </ul>	5.6.3.1 5.6.1
	<ul style="list-style-type: none"> <li>Where relevant include a water balance for the development 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.</li> </ul>	5.6.4 5.6.3.1



**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>SURFACE WATER (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<b>Background Conditions</b>	
	<ul style="list-style-type: none"> <li>Describe existing surface water quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal. Issues to be discussed should include but are not limited to: <ul style="list-style-type: none"> <li>a description of any impacts from existing industry or activities on water quality</li> </ul> </li> </ul>	5.6.2.7
	<ul style="list-style-type: none"> <li>a description of the condition of the local catchment e.g. erosion, soils, vegetation cover, etc.</li> </ul>	5.6.2
	<ul style="list-style-type: none"> <li>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 (<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>).</li> </ul>	5.6.2.7
	<ul style="list-style-type: none"> <li>State the indicators and associated trigger values or criteria for the identified environmental values. This information should be based on the ANZECC (2000) Guidelines for Fresh and Marine Water Quality as a minimum but should also be based on advice from Hunter Water Corporation given the sensitive receiving environment of Grahamstown Dam water supply.</li> </ul>	5.6.2.7
	<ul style="list-style-type: none"> <li>State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.</li> </ul>	5.6.2.7
	<b>Impact Assessment</b>	
	<ul style="list-style-type: none"> <li>Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.</li> </ul>	5.6.5
	<ul style="list-style-type: none"> <li>Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to: <ul style="list-style-type: none"> <li>protect the Water Quality Objectives for receiving waters where they are currently being achieved; and</li> <li>contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.</li> </ul> </li> </ul>	5.6.5.3
	<ul style="list-style-type: none"> <li>Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.</li> </ul>	Not Applicable
	<ul style="list-style-type: none"> <li>Propose water quality limits for any discharge(s) that adequately protects the receiving environment.</li> </ul>	5.6.6.1
	<ul style="list-style-type: none"> <li>Describe how stormwater will be managed both during and after construction.</li> </ul>	5.6.3

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>SURFACE WATER (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<b>Monitoring</b> <ul style="list-style-type: none"> <li>Describe how predicted impacts will be monitored and assessed over time.</li> </ul>	5.6.6
	<b>Monitoring Programs</b> <p>The EIS should include a detailed assessment of any water monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.</p>	5.6.6
Office of Environment & Heritage 25/10/17	<ul style="list-style-type: none"> <li>The EIS must map the following features relevant to water including: <ul style="list-style-type: none"> <li>Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).</li> </ul> </li> </ul>	5.6.2
	<ul style="list-style-type: none"> <li>Wetlands as described in s4.2 of the Biodiversity Assessment Method.</li> </ul>	5.6.2.3
	<ul style="list-style-type: none"> <li>The EIS must describe background conditions for any water resource likely to be affected by the development, including:</li> </ul>	
	<ul style="list-style-type: none"> <li>a) Existing surface water.</li> </ul>	5.6.2
	<ul style="list-style-type: none"> <li>b) Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.</li> </ul>	5.6.5
	<ul style="list-style-type: none"> <li>The EIS must assess the impacts of the development on water quality, including: <ul style="list-style-type: none"> <li>a) The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development 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.</li> </ul> </li> </ul>	5.6.5.3
	<ul style="list-style-type: none"> <li>b) Identification of proposed monitoring of water quality.</li> </ul>	5.6.6.1
	<ul style="list-style-type: none"> <li>The EIS must assess the impact of the development on hydrology, including: <ul style="list-style-type: none"> <li>a) Water balance including quantity, quality and source.</li> </ul> </li> </ul>	5.6.4
	<ul style="list-style-type: none"> <li>b) Effects to downstream rivers, wetlands, estuaries, marine waters and flood plain areas.</li> </ul>	5.6.5
	<ul style="list-style-type: none"> <li>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 (e.g. river benches).</li> </ul>	5.6.5.2
	<ul style="list-style-type: none"> <li>e) Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</li> </ul>	5.6.5.1

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>SURFACE WATER (Cont'd)</b>		
Office of Environment & Heritage 25/10/17 (Cont'd)	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.	5.6.3
	g) Identification of proposed monitoring of hydrological attributes.	5.6.6.2
<b>GROUNDWATER</b>		
DPI – Crown Lands and Water Division 20/10/17	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.	5.6.4
	Assessment of impacts on 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.	5.7 5.7.3 5.7.5
	Proposed groundwater monitoring activities and methodologies.	5.7.4.1 5.7.4.2
	Consideration of relevant policies and guidelines.	5.7
Environment Protection Authority 20/10/17	<b>Background Conditions</b>	
	<ul style="list-style-type: none"> <li>Describe existing groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.</li> </ul>	5.7.2.4
	<ul style="list-style-type: none"> <li>Issues to be discussed should include but are not limited to: <ul style="list-style-type: none"> <li>a description of any impacts from existing industry or activities on water quality</li> </ul> </li> </ul>	5.7.2.4
	<ul style="list-style-type: none"> <li>an outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment historic river flow data</li> </ul>	5.7.2
	<b>Impact Assessment</b>	
	<ul style="list-style-type: none"> <li>Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.</li> </ul>	5.7.5
	<ul style="list-style-type: none"> <li>Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to: <ul style="list-style-type: none"> <li>protect the Water Quality Objectives for receiving waters where they are currently being achieved; and</li> <li>contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.</li> </ul> </li> </ul>	5.7.4 5.7.5 5.7.4 5.7.5
	<ul style="list-style-type: none"> <li>Assess impacts on groundwater and groundwater dependent ecosystems.</li> </ul>	5.5.3.2 5.7.5.5

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>GROUNDWATER (Cont'd)</b>		
Environment Protection Authority 20/10/17 (Cont'd)	<b>Monitoring</b> <ul style="list-style-type: none"> <li>Describe how predicted impacts will be monitored and assessed over time.</li> </ul>	5.7.4.1 5.7.4.2
	<b>Monitoring Programs</b> The EIS should include a detailed assessment of any water monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.	5.7.4.1 5.7.4.2
Office of Environment & Heritage 25/10/17	The EIS must map the following features relevant to water including:	
	<ul style="list-style-type: none"> <li>Groundwater.</li> </ul>	5.7
	<ul style="list-style-type: none"> <li>Groundwater dependent ecosystems.</li> </ul>	5.5.3.2 5.7.2.5 5.7.5.5
	<ul style="list-style-type: none"> <li>Proposed intake and discharge locations.</li> </ul>	5.6.3
	<ul style="list-style-type: none"> <li>The EIS must describe background conditions for any water resource likely to be affected by the development, including:               <ul style="list-style-type: none"> <li>a) Existing groundwater.</li> </ul> </li> </ul>	5.7.2
	<ul style="list-style-type: none"> <li>c) Water Quality Objectives (as endorsed by the NSW Government <a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>) including groundwater as appropriate that represent the community's uses and values for the receiving waters.</li> </ul>	5.6.2.7 5.7.2.4 5.7.2.5 5.7.2.6
	<ul style="list-style-type: none"> <li>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.</li> </ul>	5.6.2.7
	<ul style="list-style-type: none"> <li>The EIS must assess the impacts of the development on water quality, including:               <ul style="list-style-type: none"> <li>a) The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development 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.</li> </ul> </li> </ul>	5.6.5 5.7.5 5.6.3 5.7.4
	<ul style="list-style-type: none"> <li>b) Identification of proposed monitoring of water quality.</li> </ul>	5.6.6.1 5.7.4.2
	<ul style="list-style-type: none"> <li>The EIS must assess the impact of the development on hydrology, including:               <ul style="list-style-type: none"> <li>c) Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.</li> </ul> </li> </ul>	5.7.5.5
	<ul style="list-style-type: none"> <li>e) Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</li> </ul>	5.7.4.4

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>FLOODING</b>		
Office of Environment & Heritage 25/10/17	<ul style="list-style-type: none"> <li>The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including: <ul style="list-style-type: none"> <li>a) Flood prone land.</li> <li>b) Flood planning area, the area below the flood planning level.</li> <li>c) Hydraulic categorisation (floodways and flood storage areas).</li> </ul> </li> </ul>	5.6.2.4 5.6.5.4
	<ul style="list-style-type: none"> <li>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.</li> </ul>	
	<ul style="list-style-type: none"> <li>The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul>	
	<ul style="list-style-type: none"> <li>Modelling in the EIS must consider and document: <ul style="list-style-type: none"> <li>a) The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.</li> <li>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.</li> <li>c) Relevant provisions of the NSW Floodplain Development Manual 2005.</li> </ul> </li> </ul>	
	<ul style="list-style-type: none"> <li>The EIS must assess the impacts on the proposed development on flood behaviour, including: <ul style="list-style-type: none"> <li>a) Whether there will be detrimental increases in the potential flood affection of other properties, assets and infrastructure.</li> <li>b) Consistency with Council flood plain risk management plans.</li> <li>c) Compatibility with the flood hazard of the land.</li> <li>d) Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.</li> <li>e) Whether there will be adverse effect to beneficial inundation of the flood plain environment, on, adjacent to or downstream of the site.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul> </li> </ul>	

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
FLOODING (Cont'd)		
Office of Environment & Heritage 25/10/17 (Cont'd)	i) Emergency management, evacuation and access, and contingency measures for the development considering the full range or 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.	
ABORIGINAL CULTURAL HERITAGE		
Office of Environment & Heritage 25/10/17	<ul style="list-style-type: none"><li>The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). 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 (DECCW, 2011) and consultation with OEH regional branch officers.</li></ul>	5.8
	<ul style="list-style-type: none"><li>Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.</li></ul>	5.8.2
	<ul style="list-style-type: none"><li>Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.</li></ul>	5.8
HISTORIC HERITAGE		
Office of Environment & Heritage 25/10/17	<ul style="list-style-type: none"><li>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:</li></ul>	5.9
	<ul style="list-style-type: none"><li>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),</li></ul>	5.9.6
	<ul style="list-style-type: none"><li>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),</li></ul>	1.7
	<ul style="list-style-type: none"><li>c) include a statement of heritage impact for all heritage items (including significance assessment),</li></ul>	5.9.6



**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>HISTORIC HERITAGE (Cont'd)</b>		
Office of Environment & Heritage 25/10/17 (Cont'd)	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	5.9.6
	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.	Not Applicable
<b>LAND RESOURCES</b>		
DPI – Crown Lands and Water Division 20/10/17	Assessment of all impacts to current and potential agricultural resources, and proposed measures to avoid or mitigate these impacts.	5.10
	Identification of any Crown land affected by the proposal and assessment of potential impacts.	Not Applicable
Environment Protection Authority 20/10/17	The EIS should include: <ul style="list-style-type: none"> <li>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) with particular attention given to: <ul style="list-style-type: none"> <li>Soil erosion and sediment transport - in accordance with Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (E. Mines and quarries) (DECC 2008).</li> </ul> </li> </ul>	5.6.3.1.3 5.6.5.3 5.10
	<ul style="list-style-type: none"> <li>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.</li> </ul>	5.6.3.1 5.10.3
Office of Environment & Heritage 25/10/17	The EIS must map the following features relevant to soils including:	
	<ul style="list-style-type: none"> <li>Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).</li> </ul>	5.10.2
<b>RESOURCE ASSESSMENT</b>		
DPE – Resources & Geoscience 20/10/17	<ul style="list-style-type: none"> <li>A summary of the regional and local geology including information on the stratigraphic unit or units within which the resource is located.</li> </ul>	2.2.1 2.2.2
	<ul style="list-style-type: none"> <li>The amount of material to be extracted and the method or methods used to determine the size of the resource (e.g. drilling, trenching, geophysical methods). Plans and cross-sections summarising this data, at a standard scale, showing location of drillholes and/or trenches, and the area proposed for extraction, should be included in the EIS. Relevant supporting documentation such as drill logs should be included or appended. Major resource proposals should be subject to extensive drilling programs to identify the nature and extent of the resource.</li> </ul>	2.2.2 2.2.3 Appendix 4

**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>RESOURCE ASSESSMENT (Cont'd)</b>		
DPE – Resources & Geoscience 20/10/17 (Cont'd)	<ul style="list-style-type: none"> <li>Characteristics of the material or materials to be produced:</li> </ul>	2.5.7
	<ul style="list-style-type: none"> <li>c) For hard rock aggregate proposals, information should be provided on properties such as grainsize and mineralogy, nature and extent of weathering or alteration, and amount and type of deleterious minerals, if any.</li> </ul>	2.2.2 2.2.3 Appendix 4
	<ul style="list-style-type: none"> <li>d) For other proposals, properties relevant to the range of intended uses for the particular material should be indicated.</li> </ul>	Not Applicable
	<ul style="list-style-type: none"> <li>Details of tests carried out to determine the characteristics of the material should be included or appended. Such tests should be undertaken by NATA registered testing laboratories.</li> </ul>	Appendix 4
	<ul style="list-style-type: none"> <li>An assessment of the quality of the material and its suitability for the anticipated range of applications should be given.</li> </ul>	2.2.2 2.2.3 Appendix 4
	<ul style="list-style-type: none"> <li>The amount of material anticipated to be produced annually should be indicated. If the proposal includes a staged extraction sequence, details of the staging sequence needs to be provided. The intended life of the operation should be indicated.</li> </ul>	2.5.5
	<ul style="list-style-type: none"> <li>An assessment of alternative sources to the proposal and the availability of these sources. The impact of not proceeding with the proposal should be addressed.</li> </ul>	2.14
<b>WASTE</b>		
Environment Protection Authority 20/10/17	The EIS should:	
	<ul style="list-style-type: none"> <li>Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.</li> </ul>	2.2.2
	<ul style="list-style-type: none"> <li>Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste. Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines.</li> </ul>	2.10
	<ul style="list-style-type: none"> <li>Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling. Note: All waste must be classified in accordance with EPA's Classification Guidelines.</li> </ul>	2.10
	<ul style="list-style-type: none"> <li>b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as: <ul style="list-style-type: none"> <li>Sediment traps</li> <li>Diversion banks</li> <li>Sediment fences</li> <li>Bunds (earth, hay, mulch)</li> <li>Geofabric liners</li> <li>Other control measures as appropriate</li> </ul> </li> </ul>	2.4.2 5.6.3



**Table A2.2 (Cont'd)**  
**Coverage of Issues Identified by Other Government Agencies for Consideration in the EIS**

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Agency / Organisation	Paraphrased Relevant Requirement	Relevant EIS Section(s)
<b>REHABILITATION</b>		
DPE – Resources & Geoscience 20/10/17	Proposed rehabilitation procedures during, and after completion of, extraction operations, and proposed final use of site.	2.12
<b>DANGEROUS GOODS, CHEMICAL STORAGE AND BUNDING</b>		
Environment Protection Authority 20/10/17	<ul style="list-style-type: none"> <li>The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, Chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.</li> </ul>	5.11.2
	<ul style="list-style-type: none"> <li>The EIS should identify any fuel or chemical storage areas proposed for the site.</li> </ul>	2.8.5
	<ul style="list-style-type: none"> <li>The EIS should consider compliance with the following legislation, standards and guidelines where relevant: <ul style="list-style-type: none"> <li>Australian Standard AS 1940:2004 The Storage and Handling of Flammable and Combustible Liquids</li> </ul> </li> </ul>	5.8.5
<b>BUSH FIRE</b>		
NSW Rural Fire Service 19/10/17	The environmental assessment for the development of a hard rock quarry should address the following matters relating to bush fire:	
	<ul style="list-style-type: none"> <li>the aim and objectives of 'Planning for Bush Fire Protection 2006';</li> </ul>	5.11.3.2
	<ul style="list-style-type: none"> <li>identification of potential ignition sources during construction and operation of the development';</li> </ul>	5.11.3.4
	<ul style="list-style-type: none"> <li>storage of fuels and other hazardous materials (e.g. explosives for blasting);</li> </ul>	5.11.2
	<ul style="list-style-type: none"> <li>proposed bush fire protection measures for the development, including vegetation management and fire suppression capabilities;</li> </ul>	5.11.3.4
	<ul style="list-style-type: none"> <li>operational access to the site for fire fighting appliances; and</li> </ul>	5.11.3.4
	<ul style="list-style-type: none"> <li>emergency and evacuation planning.</li> </ul>	5.11.3.4

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