Appendix 3

Coverage of Director-General's Requirements and Additional Matters for Consideration in the EIS

(Total No. of pages including blank pages = 34)

HY-TEC INDUSTRIES PTY LIMITED

ENVIRONMENTAL IMPACT STATEMENT

Appendix 3

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Table A3.1 Coverage of Director-General's Requirements in the EIS

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		Page 1 of 6
Pa	raphrased Requirement	Relevant EIS Section(s)
	GENERAL REQUIREMENTS	
CC	ne Environmental Impact Statement (EIS) for the development must meet the form and ontent requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000.</i>	
Cla	ause 6 - Relevant information and declaration.	Author's Certification (iii)
Cla	ause 7	
•	(1) The EIS must include	Executive
	- 1(a) Summary of the EIS.	Summary
	- 1(b) Statement of objectives of the development.	2.1
	- 1(c) Analysis of feasible alternatives.	2.15
	- 1(d)(i) Full description of the development.	Section 2
	- 1(d)(ii) Description of environment likely to be affected/significantly affected.	Section 3 and 4
	- 1(d)(iii) Likely impact of the development on the environment.	Section 4
	- 1(d)(iv) Measures to mitigate adverse effects of the development.	Section 4 and 5
	- 1(d)(v) List of approvals required.	1.6
	- 1(e) Compilation of mitigation measures.	Section 5
	- (2) Environmental Assessment Requirements for EIS.	Appendix 3
	- (3) Waivered assessment and amended conditions.	N/A
	- (4) Principles of ecologically sustainable development.	6.2.2
In	addition, the EIS must include a:	
•	detailed description of the development, including:	
	- justification for the proposed development;	2.2 and 6.3
	- alternatives considered;	2.15
	 likely components and staging of the development - including construction, operational stage/s and rehabilitation; and 	2.3, 2.5, 2.13
	- plans of any proposed building works.	N/A
•	consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments.	3.2.3
•	risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment.	3.3.1
•	detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: - a description of the existing environment, using sufficient baseline data;	1.5 and 2.3.2 and throughout Section 4
	- an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes;	Section 3, 4 and 6



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Table A3.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

			Page 2 of 6		
Pa	rap	phrased Requirement	Relevant EIS Section(s)		
	GENERAL REQUIREMENTS (Cont'd)				
	-	a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; and	Throughout Section 2, 3 and 4		
	-	a statement of commitments, outlining all the proposed environmental management and monitoring measures included in the EIS.	Section 5		
•		ne EIS must be accompanied by a report from a qualified quantity surveyor oviding:			
	-	a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all the assumptions and components from which the CIV calculation is derived;	Summary of Key Facts and Statistics		
	-	a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and	2.12		
	-	certification that the information provided is accurate at the date of preparation.	Author's Certification (iii)		
		KEY ISSUES	, ,		
SC	IL	AND WATER			
Th	e E	IS must address the following specific issues:			
•	La	and Resources - including a detailed assessment of the potential impacts on:			
	-	soils and land capability;	4.2.3		
	-	landforms and topography including rock formations, steep slopes, land slippage, etc.;	4.2.2		
	-	land use, including forestry use; and	4.2.4		
	-	extractive material resources, including assessment of the size and quality of the resource and description of the methods used to assess the resource and its suitability for the intended applications;	2.4.1 and 4.2.5		
•		etailed assessment of potential impacts on the quality and quantity of existing urface and ground water resources, including:			
	-	detailed modelling of potential groundwater impacts;	4.6.3		
	-	impacts on riparian, ecological, geomorphological and hydrological values of watercourses, including environmental flows, in particular Coxs River;	4.5.3		
	-	whether the development can operate to achieve a neutral or beneficial effect on water quality in the drinking water catchment, consistent with the provisions of State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011;	4.5.6.5		
•	а	detailed assessment of the potential impacts of the development on:			
	-	the quantity and quality of regional water supplies;	4.5 and SCSC		
	-	regional water supply infrastructure; and	Part 9		
	-	affected licensed water users and basic landholder rights (including downstream water users);			

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Table A3.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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		Page 3 of 6
Pa	raphrased Requirement	Relevant EIS Section(s)
	KEY ISSUES (Cont'd)	
SC	IL AND WATER (Cont'd)	
•	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;	4.5.5
•	identification of any licensing requirements or other approvals under the Water Act 1912 and/or Water Management Act 2000; and	1.6.1
•	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) or water source embargo;	2.10.4
•	a detailed description of the proposed water management system (including upgraded sewage system), water monitoring program and other measures to mitigate surface and groundwater impacts; and	4.5.4 and SCSC Part 9
•	a flood impact assessment, which identifies impacts on local and regional flood regimes and resultant impacts on infrastructure and public safety, including any measures proposed to mitigate potential flood impacts;	4.5.2.5
BI	DDIVERSITY	
Th	e EIS must include:	
•	accurate estimates of proposed vegetation clearing and impacts on regionally significant remnant vegetation, or vegetation corridors;	2.14.3, 4.7.3.1.1
•	a detailed assessment of potential impacts of the development on any terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems; and	4.7.5, 4.8.3.2.2, 4.8.5, 4.6.2
•	detailed description of the measures taken to avoid, reduce or mitigate impacts on biodiversity including an appropriate biodiversity offset strategy.	2.14, 4.7.4
TR	AFFIC AND TRANSPORT	
Th	e EIS must include:	
•	accurate predictions of the road and rail traffic generated by the construction and operation of the development;	2.8.3, 4.3.4
•	an assessment of potential traffic impacts on the safety and efficiency of the road network; and	4.3.6
•	a detailed description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road and rail networks in the surrounding area over the life of the development.	4.3.5
NOISE		
Th	e EIS must include and quantitative assessment of the potential:	
•	construction, operational and transport noise impacts;	4.9.6
•	reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed; and	4.9.4
•	monitoring and management measures, in particular real-time, attended noise monitoring.	4.9.7



Appendix 3

Table A3.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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Pa	raphrased Requirement	Relevant EIS Section(s)		
	KEY ISSUES (Cont'd)			
ΑI	R QUALITY			
Th	e EIS must include a quantitative assessment of the potential:			
•	construction and operational impacts, with a particular focus on dust emissions;	4.10.7		
•	dust generation from blasting and processing, as well as diesel emissions;	4.10.3		
•	reasonable and feasible mitigation measures to minimise dust and diesel emissions, including evidence that there are no such measures available other than those proposed; and	4.10.5		
•	monitoring and management measures, in particular real-time air quality monitoring.	4.10.8		
HE	RITAGE			
Th	e EIS must include:			
•	an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:			
	 demonstrate effective consultation with Aboriginal communities in determining and assessing impacts, and developing and selecting mitigation options and measures; and 	3.2.2.5.1, 4.11.2 and SCSC Part 8		
	 outline any proposed impact mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures). 	4.11.4		
•	a historic heritage assessment (including archaeology) including a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items and outline any proposed mitigation and management measures	4.12		
VI	SUAL			
Th	e EIS must include:			
•	a detailed assessment of the:			
	- changing landforms on the site during the various stages of the development;	4.4.3		
	 potential visual impacts of the development on private landowners in the surrounding area as well as key vantage points in the public domain, including Hassans Wall Lookout. 	4.4.3, 4.4.5		
•	a detailed description of the measures that would be implemented to minimise the visual impacts of the development.	4.4.4		
W	WASTE			
Th	e EIS must include:			
•	accurate estimates of the quantity and nature of the potential waste streams of the development;	2.9		
•	a waste disposal strategy;	2.9		
•	details of the importation of materials onto the site; and	N/A		
•	a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed.	2.9		

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Table A3.1 (Cont'd) Coverage of Director-General's Requirements in the EIS

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	Page 5 of 6		
Paraphrased Requirement	Relevant EIS Section(s)		
KEY ISSUES (Cont'd)			
GREENHOUSE GASES			
The EIS must include:			
 a quantitative assessment of potential Scope 1, 2 and 3 greenhouse gas emissions and the assessment of reasonable and feasible measures to minimise greenhouse gas emissions and ensure energy efficiency. 	4.10.5, 4.10.7.2		
HAZARDS			
The EIS must address potential hazards paying particular attention to public safety, including bushfires	4.13		
SOCIAL & ECONOMIC			
The EIS must include			
 potential impacts on local and regional communities, including impacts on social amenity; 	4.15.3		
 a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the development, including any infrastructure improvements, or contributions and/or voluntary planning agreement or similar mechanism; and 	4.15.4		
 a detailed assessment of the costs and benefits of the development as a whole, and whether it would result in a net benefit for the NSW community. 	4.15.5		
REHABILITATION			
The EIS must include the proposed rehabilitation strategy for the site having regard to the key principles in the Strategic Framework for Mine Closure, including:			
 rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; 	2.13.4, 2.13.5		
 nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and 	2.13.3		
 the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region. 	N/A		
PLANS AND DOCUMENTS			
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. These documents should be included as part of the EIS rather than as separate documents.	Throughout document		



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Paraphrased Requirement		Relevant EIS Section(s)
KEY ISSUES (Cont'd)		
CC	NSULTATION	
Co	ring the preparation of the EIS, you must consult with relevant local, State and mmonwealth Government authorities, service providers, community groups and ected landowners.	
In p	particular you must consult with the:	
•	Commonwealth Department of Sustainability, Environment, Water, Population and Communities;	
•	Office of Environment and Heritage (including the Heritage Branch);	
•	Environment Protection Authority;	
•	Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services;	3.2.2.4.2, 3.2.2.5.2
•	Department of Primary Industries (including the NSW Office of Water, NSW Forestry, Agriculture and Fisheries sections, Catchments and Lands (Crown Lands Division));	
•	Rural Fire Service;	
•	Roads and Maritime Services;	
•	Sydney Catchment Management Authority; and	
•	Blue Mountains City Council; and	
•	Lithgow City Council.	
Th	e EIS must:	
•	describe the consultation process used and demonstrate that effective consultation has occurred;	3.2.2
•	describe the issues raised by public authorities, service providers, community groups and landowners;	3.2.5
•	identify where the design of the development has been amended in response to issues raised; and	3.2.5 and throughout Section 4
•	otherwise demonstrate that issues raised have been appropriately addressed in the assessment.	3.2.5



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Table A3.2 Supplementary Director General's Requirements (Commonwealth Department of the Environment)

	of the Environment)	Page 1 of 5
Paraph	nrased Requirement	Relevant EIS Section(s)
	KEY ASSESSMENT REQUIREMENTS	
1.	Assessment under the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act).	This document
2.	Include enough information for the Minister for the Environment to make an informed decision on whether or not to approve the action under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	2.14, 4.7
3.	The requirements outlined below concerning matters in the EPBC Act and schedule 4 of the <i>Environment Protection and Biodiversity Conservation Regulations 2000</i> should be integrated into the assessment requirements of the EP&A Act.	2.14.2.2, 4.7.5.2.2
	GENERAL INFORMATION	
The	e background of the action including:	
a)	the title of the action;	Cover
b)	the full name and postal address of the designated proponent;	Author's Certification
c)	a clear outline of the objective of the action;	2.1
d)	the location of the action;	1.3
e)	the background to the development of the action;	1.4
f)	how the action relates to any other actions (of which the proponent should reasonably be aware) that have been, or are being, taken or that have been approved in the region affected by the action;	N/A
g)	the current status of the action; and	1.5
h)	the consequences of not proceeding with the action.	6.3.4
	DESCRIPTION OF THE ACTION	
A desc	ription of the action, including:	
a)	all the components of the action;	2.3
b)	the precise location of the preferred option for any works to be undertaken, structures to be built or elements of the action that may have relevant impacts;	Section 1 and Section 2
c)	how the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts;	2.5
d)	the timing and duration of the works to be undertaken;	2.5.4
e)	to the extent reasonably practicable, a description of any feasible alternatives to the controlled action that have been identified through the assessment, and their likely impact, including:	
	(i) if relevant, the alternative of taking no action;	2.15.3, 6.3.4
	(ii) a comparative description of the impacts of each alternative on the matters protected by the controlling provisions for the action; and	4.7.4.2, 4.7.5.7
	(iii) sufficient detail to make clear why any alternative is preferred to another; and	2.15.3, 4.7.5.7
f)	a description of short, medium and long-term advantages and disadvantages of the options.	4.7.5.7



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Paraphrase	ed Requirement	Relevant EIS Section(s)	
	n of the existing environment of the Proposal location and the surrounding hay be affected by the action, including but not limited to:		
a) Sur	veys using accepted methodology for targeting the species	4.7.3.1.2	
	escription of the distribution and abundance of this vulnerable species of <i>E. verulenta</i>	4.7.3.1 and SCSC Part 4 (Section 4)	
	DESCRIPTION OF THE RELEVANT IMPACTS OF THE ACTION		
Policy State Significance	nent of the relevant impacts of the action, with reference to the EPBC Act ment 1.1 Significant Impact Guidelines Matters of National Environmental e (2013) and the species specific guidelines, that the controlled action has, is likely to have. Information must include:		
	escription of the relevant impacts of the action on matters of national ironmental significance;		
	assessment of the nature and extent of the likely short term and long term vant impacts;	4.7.5 and SCSC Part 4	
	e whether any relevant impacts are likely to be unknown, unpredictable or versible;		
d) ana	lysis of the significance of the relevant impacts; and		
	technical data and other information used or needed to make a detailed essment of the relevant impacts.		
	PROPOSED SAFEGUARDS, MITIGATION AND OFFSET MEASURES		
action or propublic subm	Include a description of feasible avoidance and mitigation measures, changes to the action or procedures, which have been proposed by the proponent or suggested in public submissions, and which are intended to prevent or minimise relevant impacts. Include information relating to:		
min	escription of the mitigation measures that will be undertaken to prevent or imise the relevant impacts of the action. Mitigation measures should be ified and based on best available practices	2.14 and 4.7.4	
	assessment of the expected or predicted effectiveness of the mitigation asures including the effect on abundance and condition of the species;	2.14 and 4.7.4	
c) any	statutory or policy basis for the mitigation measures;	4.7.5.2	
con imp imp	ails of environmental management plans that set out the framework for tinuing management, mitigation and monitoring programs for the relevant acts of the action, including the person or agency responsible for lementing these programs and provisions for independent environmental iting;	2.14	
	name of the agency responsible for endorsing or approving each mitigation asure or monitoring program;	-	
	changes to the action which prevent or minimise relevant impacts on listed eatened species and communities; and	4.7.4	
g) othe	er details, including cost of measures, if relevant.	N/A	

Appendix 3

Table A3.2 (Cont'd) Supplementary Director General's Requirements (Commonwealth Department of the Environment)

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Parapl	nrased Requirement	Relevant EIS Section(s)
	OFFSETS	
any pre enviror with the	impacts cannot be avoided or mitigated, an offset package to compensate for edicted or potential residual significant impacts on matters of national mental significance will be required. Offsets should demonstrate consistency e EPBC Act Environmental Offsets Policy (October 2012 or subsequent).	4.7.5.2.2
a)	the description of any offset package should include how the offset compensates for the residual impacts, when the offset will be delivered and how the offset will be managed;	2.14
b)	an assessment of the impact of the offset on other matters of environmental, economic, or social significance; and	2.14, 4.7.5
c)	analysis of cost, both financial and other, related to offsets.	2.14
	INFORMATION REQUIREMENTS FOR EPBC ACT OFFSETS	
Details	in relation to the proposed offsets package, including:	
a)	the location and size, in hectares;	2.14, 4.7.5
b)	maps clearly showing for each offset site:	
	i. the relevant ecological features	2.14
	ii. the landscape context; and	2.17
	iii. the cadastre boundary.	
c)	The current tenure arrangements of the proposed offset sites;	2.14
d)	Confirmed records of presence (or otherwise) of relevant protected matter(s) on the offset site; and	2.14.4
e)	Detailed information regarding the presence and quality of habitat for relevant protected matter(s) on the offset site. The quality of habitat should be assessed in a manner consistent with the approach outlined in the document titled <i>How to use the offset assessment guide</i> .	2.14.4
conser	e information and justification regarding how the offset package will deliver a vation outcome that will maintain or improve the viability of the protected (s) consistent with the EPBC Act environmental offsets policy (October 2012) ag:	4.7.5.2.2
a)	Management actions that will be undertaken that improve or maintain the quality of the proposed offset site(s) for the relevant protected matter. Management actions must be clearly described, planned and resourced as to justify any proposed improvements in quality for the protected matter over time	2.14.4, 4.7.5.2.2
b)	The time over which management actions will deliver any proposed improvement or maintenance of habitat quality;	2.14.4, 4.7.5.2.2
c)	The risk of damage, degradation or destruction to any proposed offset site in the absence of any formal protection and/or management over a foreseeable time period (20 years). Such risks may be based on:	
	 pending development applications, mining leases or other activities on or near the proposed offset site that indicate development intent; 	4.7.5.2.2
	ii. average risk of loss for similar sites; and	
	 presence and strength of formal protection mechanisms currently in place. 	

Appendix 3

Table A3.2 (Cont'd) Supplementary Director General's Requirements (Commonwealth Department of the Environment)

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Paraphrased Requirement	Relevant EIS Section(s)
INFORMATION REQUIREMENTS FOR EPBC ACT OFFSETS (Co	nt'd)
 d) the legal mechanism)s) that are proposed to protect offset site(s) into the future and avert any risk of damage, degradation or destruction. 	4.7.5.2.2
Provide information regarding how the proposed offsets package is additional to who is already required, as determined by law or planning regulations, agreed to under other schemes or programs or required under an existing duty-of-care.	2.14.4, 4.7.5.2.2
The overall cost of the proposed offsets package; including costs associated with, b not limited to	ut
 a) acquisition and transfer of lands/property; 	2.14, 4.7.5.2.2
b) implementation of all related management actions; and	·
c) monitoring, reporting and auditing of offset performance.	
OTHER APPROVALS AND CONDITIONS	
Any other requirements for approval or conditions that apply, or that the proponent reasonably believes are likely to apply, to the proposed action. Information must include:	
 details of any local or State government planning scheme, or plan or policy under any local or State government planning system that deals with the proposed action, including: 	
 i. what environmental assessment of the proposed action has been, of is being, carried out under the scheme, plan or policy; and 	or 4.7.5.2
ii. how the scheme provides for the prevention, minimisation and management of any relevant impacts.	4.7.5.2
 a description of any approval that has been obtained from a State, Territory Commonwealth agency or authority (other than an approval under the relevance) Act) including any conditions that apply to the action; 	
c) a statement identifying any additional approval that is required; and	1.6
 d) a description of the monitoring, enforcement and review procedures that appropriate or are proposed to apply, to the action. 	ply, 4.7.5.2
ECONOMIC AND SOCIAL MATTERS	
Describe short-term and long-term social and economic implications and/or impacts the proposal	of 4.15
ENVIRONMENTAL RECORD OF PERSON PROPOSING TO TAKE TH	E ACTION
A description of the environmental record of the person proposing to take the action including:	1.7
 Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use on natural resources against: 	
i. the proponent; and	N/A
 for an action for which a person has applied for a permit, the person making the application. 	n N/A
 b) If the person proposing to take the action is a corporation — details of the corporation's environmental policy and planning framework. 	1.7

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Paraph	rased Requirement	Relevant EIS Section(s)	
INFORMATION SOURCES			
For info	rmation given in an environment assessment, the draft must state:		
a)	the source of the information;		
b)	how recent the information is;	Noted	
c)	how the reliability of the information was tested; and	Noted	
d)	what uncertainties (if any) are in the information.		
	CONSULTATION		
A desc	iption of any consultation undertaken during the assessment, including:		
a)	Any consultation about the action, including:		
	 any consultation that has already taken place; 		
	ii. proposed consultation about relevant impacts of the action; and	3.2.2	
	iii. if there has been consultation about the proposed action — any documented response to, or result of, the consultation.		
b)	Identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.	3.2.2	



Table A3.3 Coverage of Environmental Issues Raised by Other Agencies

		Page 1 of 20
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	GENERAL	
DTIRIS – R&E (19/08/13)	Document the size and quality of the resource and demonstrate that both have been adequately assessed including the methods used and the adequacy of the methods for the intended applications.	2.4
	If describing only the additional resource to be used, a summary of the past resource assessments and past production should accompany the description.	1.4, 2.4
	Indicate intention to provide annual production data to DTIRIS – Mineral Resources Branch.	Section 5
	Ensure assessment of agricultural issues is consistent with the Departments' Guideline: Agricultural Issues for Extractive Industries.	4.14
EPA (20/08/13)	Include a Land Management Assessment that addresses land stabilisation techniques that will be employed during construction and operational activities to reduce the potential for destabilisation and erosion.	2.5
Lithgow City Council	Provide plans and a timeline indicating the amount of material proposed to be extracted on an annual basis.	2.5.4
(26/08/13)	Include details of proposed construction work including any plans.	Section 2
	Provide a landscaping plan timeline.	2.13.5, 2.13.6 ¹
	GEOLOGY AND RESOURCE ASSESSMENT	
DTIRIS -	The EIS should include:	
R&E (19/08/13)	A summary of the regional and local geology including information on the stratigraphic unit or units within which the resource is located.	2.4
	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 drill holes and/or trenches, and the area proposed for extraction. Relevant supporting documentation such as drill logs should be included or appended.	2.4, 2.5
	Characteristics of the material or materials to be produced:	
	 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. 	2.4
	 For other proposals, properties relevant to the range of intended uses for the particular material should be indicated. 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. 	2.4
	An assessment of the quality of the material and its suitability for the anticipated range of applications should be given.	2.4

¹ Section 2.13.6.1 provides a commitment (see also Commitment 19.1) to prepare a Rehabilitation Management Plan.



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Table A3.3 (Cont'd) Coverage of Environmental Issues Raised by Other Agencies

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	GEOLOGY AND RESOURCE ASSESSMENT (Cont'd)	
DTIRIS – R&E (19/08/13)	 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. 	2.5.4
	 If the proposal is an extension to an existing operation, details of history and past production should be provided. 	1.4
	 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. 	2.15, 6.3.4
	 Justification for the proposal in terms of the local and, if appropriate, the regional context. 	4.15.5, 6.3
	 Information on the location and size of markets to be supplied from the site. 	2.4.2
	Disposal of waste products and the location and size of stockpiles.	2.7, 2.9
	TRAFFIC AND TRANSPORT	
RMS (15/08/13)	Consider the potential impacts to the safety and efficiency of the classified road network.	4.3.6
	The EIS should include a Traffic Impact Assessment (TIA) that takes into account the key issues relevant to the scale of this proposal as set out in Table 2.1 of the Roads and Traffic Authority 'Guide to Traffic Generating Developments" as well as information relating to:	SCSC Part 1
	 The impact of the proposed development on the surrounding road network; 	4.3.6
	 the number and type of vehicles required to service the quarry; 	2.8.3, 4.3.4
	details of existing and proposed access conditions;	2.8.1
	intersection sight distances;	4.3.6
	impact on Transport (i.e. School Bus Routes);	4.3.6
	road traffic noise and dust generation;	4.9.6.2, 4.10.3
	 considerations for mining & extractive industries under Clause 16(1) of the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. 	3.2.3.3
	The TIA should consider the AUSTROADS 'Checklist for Traffic Impact Assessments' that is Appendix A of the Guide to Traffic Management Part 12: Traffic Impacts of Development 2009 (provided with the agency submission to the DGRs).	Table 1.4 of Part 1 of the SCSC
DTIRIS (19/08/13)	Document route(s) used to transport quarry products to market.	2.8.1
Lithgow City Council (03/09/13)	Consider the need for upgrades to the Glenroy Bridge based on the total number of trucks expected to use the bridge each day.	4.3.5

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	TRAFFIC AND TRANSPORT (Cont'd)	
BMCC (29/08/13)	Consider the risks associated with heavy truck transport of materials as they cross the Blue Mountains.	4.3.6
	Consider rail transport as an alternative transportation method of materials.	2.15.6
	WATER – GENERAL	
EPA	Include a Water Management Assessment that addresses the following:	
(20/08/13)	 Site wide water balance that details water flows, water quantities, water usage, water discharge, etc.; 	4.5.5
	Site wide management systems required during construction and operational activities, with a focus on erosion and sediment control — consistent with the EPA endorsed publication "Managing Urban Stormwater: soils and construction", Volume 1, Fourth Edition (Landcom, 2004/2006) and the EPA produced addendum Volume 2E, "Mines and Quarries" (DECC, 2008) and including compliance with any environment protection licence conditions (i.e. discharge limits);	4.5.4
	 Identifying the sizing of all on-site basins (i.e. Type D sediment basins); and 	4.5.4
	Mitigation and management strategies.	4.5.4
NOW (03/09/13)	The EIS should demonstrate that the proposed project complies with the relevant requirements of the Water Management Act 2000 (WMA 2000) including the objects and water management principles of the WMA 2000.	4.5.6
	The EIS should include:	
	 A description of the surrounding environment including surface water catchments, groundwater systems, dependent ecosystems and existing water users. 	4.5.2
	Identification of all existing and proposed works to take or manage water (i.e. water management works) including monitoring bores, and details of consistency with approval requirements.	2.10.4, 4.5.4
	Identification of all proposed controlled activities and aquifer interference activities, and details of consistency with relevant policies and guidelines.	2.10.4, 4.5.6
	 Details of critical thresholds for negligible impacts to surface and groundwater sources and dependent ecosystems. 	4.5.4
	A commitment to adequate ongoing monitoring of surface and groundwater sources and dependent ecosystems within and adjacent to the proposed project area to verify predictive assessments.	4.5.4, 4.6.4, Section 5
	Analysis of options for the proposed project in terms of avoiding impacts on surface and groundwater sources, floodplains, dependent ecosystems, basic landholder rights to water and adjacent/downstream licensed water users. If the options analysis cannot demonstrate avoidance, then mitigation, remediation and rehabilitation options should be examined.	4.5.4, 4.6.1, 4.8.4

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Government			Page 4 of 20
Agency		Paraphrased Requirement	Relevant EIS Section(s)
		WATER – GENERAL (Cont'd)	
NOW (03/09/13)	•	Contingency strategies linked to monitoring results and rehabilitation programs, including:	
(Cont'd)		 reporting procedures for ongoing monitoring programs, including mechanism for transfer of information to the Office of Water, 	Commitment 19.7
		 identification of any nominal thresholds as to the level of impact beyond which contingency strategies would be initiated, 	4.5.6.1 and Table 4.16
		- detailed description of the contingency strategies proposed, and	4.5.7.4, Table 4.20
		 any funding assurances covering the anticipated post development maintenance cost, for example, rehabilitation maintenance, ongoing monitoring. 	2.13.6.3
	•	A commitment to restore any land, water sources and dependent ecosystems which are degraded by the proposed project	2.13
	Th	e EIS should demonstrate:	
	•	An adequate and secure water supply for the proposal. Confirmation that water supplies for the project 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.	2.10.4, 4.5.5
	•	Identify through a water balance the:	
		- site water demands in terms of volume and timing;	
		 water sources (surface and groundwater) and extraction methods, locations, volumes and sources; 	
		- water disposal methods;	
		 water storage structures including maximum harvestable right dam capacity; 	4.5.5
		- any requirements to intercept groundwater; and	
		 proposed water supply arrangements against the rules for access licences and other applicable requirements of the relevant Water Sharing Plans. 	
	•	An impact assessment on adjacent licensed water users (surface and groundwater), riparian ecosystems and groundwater-dependent ecosystems. This is to meet the requirements of relevant state policy in addition to the objects and principles of the <i>Water Management Act</i> 2000.	2.10.4, 4.8.4, 4.5.5
	•	An assessment of the potential to intercept and/or impact groundwater and predicted dewatering volumes, water quality and disposal/retention methods. This will need to address the requirements of relevant policy including the Aquifer Interference Policy. It is recommended final landforms of open voids containing groundwater are minimised. Where there is ongoing groundwater take induced by evaporative loss this must be identified and addressed by retaining the appropriate water licence entitlement at the site.	4.6.3, 4.6.5

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Table A3.3 (Cont'd) Coverage of Environmental Issues Raised by Other Agencies

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		Page 5 of 20
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	WATER – GENERAL (Cont'd)	
NOW (03/09/13) (Cont'd)	 An impact assessment of any proposed works within or adjacent to watercourses and adequate provision of buffer requirements. Ability to achieve the principles of the Water Management Act 2000 and the requirements of the Guidelines for Controlled Activity Approvals. 	4.8.5, 4.5.6
	 Preparation of a surface water management plan and groundwater management plan to integrate the proposed water balance and management for the site and to identify adequate mitigating and monitoring requirements for both water quality and water volume. 	Commitment 19.7
	 Existing and proposed water licensing requirements in accordance with the Water Management Act 2000. This is to demonstrate that existing licences (include licence numbers) and licensed uses are appropriate, and to identify where additional licences are proposed. 	2.10.4
	• The proponent will be required to ensure they hold adequate licensed entitlement commensurate with the anticipated volume of groundwater take and surface water take prior to this take occurring. Groundwater take includes the volume of water intercepted by the proposed activities both via the quarry pit and any extraction bores, in addition to any ongoing take induced by evaporative loss within the pit. The annual requirements need to be regularly reviewed through updates of modelling and reviews of metering data.	2.10.4
	 Adequate mitigating and monitoring requirements to address surface water and groundwater impacts. 	4.5.4, 4.6.4
	Water Sharing Plans	
	Demonstrate that the proposed project is consistent with the rules within the following:	
	 Dharabuladh Management Zone of the Upper Nepean and Upstream Warragamba Water Source of the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011. 	2.10.4
	 Coxs River Fractured Rock Groundwater Source of the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011. 	
	Detail the extent to which the proposed project is consistent with relevant policies and guidelines, and justify any inconsistencies	3.2.3
Lithgow City	Provide details of erosion and sediment controls.	4.5.6.3
Council	Address the need for a Pollution Control Plan	N/A
(26/08/13)	as well as information and plans regarding discharge points and drainage.	4.5.4, 4.5.7

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	SURFACE WATER	
NOW (03/09/13)	The predictive assessment of the impact of the proposed project on surface water sources should include:	
	 Identification of all surface water sources including watercourses and wetlands transected by or adjacent to the proposed project. 	4.5.2
	 A 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. 	4.8.3, 4.5.2
	Assessment of predicted impacts on:	
	 flow of surface water, sediment movement, channel stability, and hydraulic regime, 	4.5.5
	- water quality,	4.5.6
	- dependent ecosystems,	4.8.5
	- existing surface water users, and	4.5.2
	 planned environmental water and water sharing arrangements prescribed in the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011. 	2.10.4
Sydney Catchment Authority	Demonstrate the structural integrity of existing dams and proposed measures to capture and treat water and wastewater to ensure no impact on water quality within the Coxs River.	4.5.6
(26/08/13)	Assess potential risks to surface and groundwater quality during construction and operation, demonstrating clear consideration of the principle of achieving a neutral or beneficial effect on water quality in the drinking water catchment, consistent with the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.	4.5.6, 4.6.5
	Include a framework for the mitigation, monitoring and water quality impacts during construction and operation.	4.5.7
	Provision of a Water Cycle Management Study prepared in respect of the development that addresses the following matters:	
	 Pre-development and post development run off volumes and pollutant loads from the site of the proposed development. 	4.5.5
	 Details of the proposal to manage wastewaters associated with processing quarry materials, general stormwater runoff and human activities. 	4.5.4
	 Details of the assessment of the impacts associated with the relocation of any watercourses. 	N/A
	Assessment of the impacts of the development on receiving waters.	4.5.6
	Details of the location and storage of fuel, chemicals and oils.	2.10.7
	 Details of the location of unsealed roads and proximity to watercourses. 	2.10.1
	Details of the culvert crossing at Yorkeys Creek.	N/A ²

² Approved structure.



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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	SURFACE WATER (Cont'd)	
Sydney Catchment	Details of the structural stability of all stormwater dams and proposed measures to assess the integrity of all dams during the life of the project.	4.5.5
Authority (26/08/13) (Cont'd)	 Details of the ongoing maintenance and monitoring of dams and stormwater management measures on the site. 	4.5.4.3
(Cont d)	 Assess potential impacts and mitigation measures to protect surface and groundwater. 	4.5.4, 4.6.4
	 Have regard for operations during periods of wet weather. 	4.5.4
	 Consider the design, construction, operational and decommissioning phases. 	Section 2
	 Consider the principles outlined in the 'Managing Urban Stormwater – Soils and Construction – Mines and Quarries' manual prepared by the Department of Environment and Climate Change (2008). 	4.5.2.3
	Provide details of quarry performance with respect to water quality management	1.7
	Provide measures proposed to offset any impacts associated with construction activities	2.14
	Provide concept plans/protocols/procedures for the following:	
	Environmental Management Plan	Section 4
	Soil and Water Management Plan	4.5.4.1
	Procedures for managing spill	4.13.4.3
	 Details of practices proposed to ensure material transported by trucks for the site do not spill 	4.3.5
	Rehabilitation Plan	2.13.6
	Vegetation Clearing Protocol	2.5.3.1, 4.7.4.3
Lithgow City Council (26/08/13)	Demonstrate provision for annual monitoring of impacts to waterways including surface water, water quality, flooding and management.	4.5.4.3, 4.5.7
	GROUNDWATER	
NOW (03/09/13)	The predictive assessment of the impact of the proposed project on groundwater sources should include:	
	 Identification of groundwater sources which will be intersected or connected with as part of the proposed project. 	4.6.2
	 A detailed description of groundwater dependent ecosystems and existing groundwater users within the area, including basic landholder rights to water and adjacent licensed water users 	4.8.3.2.3, 4.6.2
	 Description of groundwater flow directions and rates, physical and chemical characteristics, and highest predicted groundwater level at the site. 	4.6.2
	 Details of any potential works likely to result in pollutants infiltrating into the groundwater. 	4.6.3
	 Details of proposed methods of waste water disposal and approval from the relevant authority. 	2.9

Table A3.3 (Cont'd) Coverage of Environmental Issues Raised by Other Agencies

	Coverage of Environmental issues Maiseu by Other Agencies	Page 8 of 20
Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	GROUNDWATER (Cont'd)	
NOW	Assessment of predicted impacts on the following:	
(03/09/13) (Cont'd)	 connectivity between porous/fractured rock, alluvial and surface water sources, 	4.6.5
	- yield of groundwater,	4.6.5
	- water quality,	4.6.5
	- groundwater dependent ecosystems, and	4.8.5.2
	- existing groundwater users.	4.6.5
	 Identification of any groundwater source or aquifer that may be sterilised as a consequence of the proposed project. 	N/A
	 Details of the predicted impacts of any final landform on the groundwater regime. 	4.6.5
	For GDEs (including potential GDEs) identified within the area, the EIS should provide:	
	Details of current GDE condition, and groundwater quality and	
	quantity requirements.	4.8.3
	Assessment of predicted impacts on GDEs.	4.8.5
	 Detailed description of any measures to be incorporated into the proposed project to avoid or minimise long-term actual and potential impacts on GDEs, including measures to: 	
	- maintain natural patterns of groundwater flow,	
	 avoid disrupting groundwater levels that are critical for ecosystems, 	4.8.4
	 avoid pollution or causing adverse changes in groundwater quality, and 	
	- rehabilitate degraded groundwater systems where practical.	
	BIODIVERSITY	
OEH (03/09/13)	Biodiversity impacts can be assessed using either the BioBanking Assessment Methodology (scenario 1) or a detailed biodiversity assessment (scenario 2).	
	The BioBanking Assessment Methodology can be used either to obtain a BioBanking statement, or to assess impacts of a proposal and to determine required offsets without obtaining a statement. In the latter instances, if the required credits are not available for offsetting, appropriate alternative options may be developed in consultation with OEH officers and in accordance with the 'NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects.	Scenario 2 used
	Scenario 2	
	Where a proposal is assessed outside the BioBanking Assessment Methodology the EIS should include.	4- 4-
	 a detailed biodiversity assessment, including assessment of impacts on threatened biodiversity, native vegetation and habitat. This assessment should address the matters included in the following sections. 	4.7, 4.8

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Government Agency		Paraphrased Requirement	Relevant EIS Section(s)
		BIODIVERSITY (Cont'd)	
OEH (03/09/13)	•	a field survey of the site should be conducted and documented in accordance with relevant guidelines, including:	
(Cont'd)		 the Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians (DECCW, 2009); 	
		 Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004); and 	4.7.2.2, 4.8.2.2
		 Threatened species survey and assessment guideline information on www.environment.nsw.gov.au/threatenedspecies/surveyassessm entgdlns.htm. 	
		- Commonwealth survey requirements (birds, bats, reptiles, frogs,	
		fish and mammals): ttp://www.environment.gov.au/epbc/publications/guidelines.html. These are relevant when species or communities listed under the Environment Protection and Biodiversity Conservation Act are present.	4.7.2.2 and SCSC Part 4
	•	It is preferable for proponents to use the Interim Veg Mapping Standard data form to collect the vegetation plot data for the project site, and any offset site associated with the project.	Noted
	•	If a proposed survey methodology is likely to vary significantly from the above methods, the proponent should discuss the proposed methodology with the OEH prior to undertaking the EIS, to determine whether the OEH considers that it is appropriate.	Noted
	•	Determining the list of potential threatened species for the site must be done in accordance with the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004) and the Guidelines for Threatened Species Assessment (Department of Planning, July 2005). The OEH Threatened Species website and the Atlas of NSW Wildlife database must be the primary information sources for the list of threatened species present. The BioBanking Threatened Species Database, the Vegetation Types databases and other data sources (e.g. PlantNET, Online Zoological Collections of Australian Museums previous or nearby surveys etc.) may also be used to compile the list.	4.7.3.3, 4.8.3.2, SCSC Part 4, SCSC Part 3
	•	The EIS should contain the following information as a minimum:	
		 The requirements set out in the Guidelines for Threatened Species Assessment (Department of Planning, July 2005); 	4.7.4, SCSC Part 4
		- Description and geo-referenced mapping of study area (and associated spatial data files), e.g. overlays on topographic maps, satellite images and /or aerial photos, including details of map datum, projection and zone, all survey locations, vegetation communities (including classification and methodology used to classify), key habitat features and reported locations of threatened species, populations and ecological communities present in the subject site and study area. Separate spatial files (.shp format) to be provided to the OEH should include, at a minimum, shapefiles of the project site, impact footprint, vegetation mapping and classification for both the impact and any offset site(s);	4.7.3, 4.8.3

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	BIODIVERSITY (Cont'd)	
OEH (03/09/13)	 Description of survey methodologies used, including timing, location and weather conditions; 	4.7.2, 4.8.2
(Cont'd)	 Detailed description of vegetation communities (including classification and methodology used to classify) and including all plot data. The vegetation classification used needs to be matched with Biometric and Endangered Ecological Community classifications. The condition of vegetation needs to be documented included areas of derived grassland. Plot data should be supplied to the OEH in electronic format (e.g. MS-Excel) and organised by vegetation community; 	2.14.3, 4.7.3.1
	 Details, including qualifications and experience of all staff undertaking the surveys, mapping and assessment of impacts as part of the EIA; 	1.8, SCSC Parts 4 and 5
	 Identification of national and state listed threatened biota known or likely to occur in the study area and their conservation status; 	4.7.3, 4.8.3
	 Description of the likely impacts of the proposal on biodiversity and wildlife corridors, including direct and indirect and construction and operation impacts. Wherever possible, quantify these impacts such as the amount of each vegetation community or species habitat to be cleared or impacted, or any fragmentation of a wildlife corridor; 	4.7.3, 4.8.3
	 Identification of the avoidance, mitigation and management measures that will be put in place as part of the proposal to avoid or minimise impacts, including details about alternative options considered and how long term management arrangements will be guaranteed; 	4.7.4, 4.8.4
	 Description of the residual impacts of the proposal. If the proposal cannot adequately avoid or mitigate impacts on biodiversity, then a biodiversity offset package is expected (see the requirements for this below); and 	4.7.5, 4.8.5
	 Provision of specific Statement of Commitments relating to biodiversity. 	Section 5 (Commitments 5.7 & 11.1 to 11.15)
	 An assessment of the significance of direct and indirect impacts of the proposal must be undertaken for threatened biodiversity known or considered likely to occur in the study area based on the presence of suitable habitat. This assessment must take into account: the factors identified in s.5A of the EP&A Act; and 	4.7.5.7, 4.8.5.3, SCSC Parts 4
	 the factors identified in s.5A of the EF&A Act, and the guidance provided by The Threatened Species Assessment Guideline – The Assessment of Significance (DECCW, 2007). 	and 5

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	BIODIVERSITY (Cont'd)	
OEH (03/09/13) (Cont'd)	 Where an offsets package is proposed by a proponent for impacts to biodiversity (and a BioBanking Statement has not been sought) this package should: Meet either the OEH's Principles for the use of biodiversity offsets 	4.7.5.2
	in NSW or the OEH Interim policy on assessing and offsetting biodiversity impacts of part 3A developments.	
	 Identify the conservation mechanisms to be used to ensure the long term protection and management of the offset sites; and 	4.7.5.2
	 Include an appropriate Management Plan (such as vegetation or habitat) that has been developed as a key amelioration measure to ensure any proposed compensatory offsets, retained habitat enhancement features within the development footprint and/or impact mitigation measures (including proposed rehabilitation and/or monitoring programs) are appropriately managed and funded. 	2.14.1, Commitment 19.2
	 Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby OEH estate reserved under the National Parks and Wildlife Act 1974 or any marine and estuarine protected areas under the Fisheries Management Act 1994 or the Marine Parks Act 1997 should be considered. 	N/A
	With regard to the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, the assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.	4.7.3, 4.8.3
DTIRIS – R&E (19/08/13)	Assess the ecological sustainability of the proposal.	2.14, 4.7, 4.8
	THREATENED SPECIES	
OEH (03/09/13)	Address the requirements of legislation that governs threatened species protection and impact assessment in NSW including the provisions of the <i>Threatened Species Conservation Act (1995)</i> (TSC Act).	4.7.3, 4.8.3
	Consider any endangered species, endangered ecological communities, critically endangered ecological communities and vulnerable ecological communities, critical habitat, key threatening processes and the preparation of both Recovery Plans and Threat Abatement Plans as described in the TSC Act.	4.7.3, 4.8.3
	For any threatened species that are found or likely to occur in the area undertake an Assessment of Significance that considers OEH's Threatened species assessment guidelines: The assessment of Significance.	4.7.5, 4.8.5
	Should a Species Impact Statement be required include methods to reduce the impact on the protected and threatened species	N/A

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	FLORA	
OEH (03/09/13)	The EIA documentation should include a report on the flora that includes the following.	
(Cont'd)	 detailed location map and identification of the area surveyed (including the location of photographs, transects, areas of significance, etc.), 	4.7.3.1.1
	 At least one of the following: a land satellite image, vegetation communities map, aerial photograph, or a remnant vegetation map. 	4.7.3.1.1
	 A map identifying the vegetation communities located in the study area and the areas of each vegetation community to be impacted. 	4.7.3.1.1
	 A complete plant list (including scientific names of those plants) of all tree, shrub, ground cover and aquatic species, categorised according to country of origin (i.e. native versus exotic). 	SCSC Part 4 (Appendix 6)
	 A detailed description of vegetation structure (in terms of a scientifically accepted classification system) and spatial distribution (i.e. plant densities and patterning) on the site, including a vegetation map. 	4.7.3,
	 Describe the condition and integrity of the vegetation including a description of any past disturbance. 	SCSC Part 4 (Section 4.3)
	 An account of the likely original vegetation communities (pre-, or at early settlement), and an assessment of the likely regional distribution of the original communities. 	
	 An assessment of whether the plant communities are adequately represented in conservation reserves or otherwise protected. 	SCSC Part 4 (Section 7)
	 An account of the hydrology of the area and how this relates to the dynamics of the vegetation communities. 	4.8.3.2.3
	 A list of known and likely threatened species as listed under Schedules 1 & 2 (Threatened Species Conservation Act 1995) which might occur at the site. The OEH database needs to be accessed and the likelihood of occurrence of threatened flora species determined. 	4.7.3
	 An assessment of the impacts of the proposal on flora, on-site and off- site (e.g. siltation, water availability or drainage changes) and measures to mitigate these impacts. 	4.7.4
	 An assessment of the significance of the impact of the development at both the site and at the regional scale. 	4.7.5
	 A detailed rehabilitation/management plan including a list of the plant species to be used during rehabilitation (if required). 	2.13.6
	Detail methodologies used and a list of the reference literature cited.	SCSC Part 4 (Section 3 and References)



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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	FAUNA	
OEH (03/09/13)	The EIA document should include a report on the fauna (including protected and threatened species), that includes the following:	
	 detailed location map and identification of the area surveyed (including the location of photographs, transects, areas of significance etc.); 	4.7.3.2
	 at least one of the following: a land satellite image, vegetation communities map, aerial photograph, or a remnant vegetation map; 	4.7.3.2
	 a complete list of all known and likely terrestrial and aquatic species (e.g. birds, mammals, reptiles and amphibians including scientific names). It is suggested that invertebrates also be considered as they form part of the food chain for many fauna species, those species which are protected, threatened or listed under any international agreements, as well as introduced species; 	SCSC Part 4 (Appendix 9)
	those species known or likely to breed in the area;	4.7.3.2, 4.8.3.2
	 any species which have specific habitat requirements found within the project area; 	4.7.3.2, 4.8.3.2
	 those species or populations which may be near the limit of their geographic range or are a disjunct/isolated population; 	4.7.3.2, 4.8.3.2
	 assessment of the importance or otherwise of the location as a corridor, migratory route or drought refuge, in relation to other remnant vegetation, riparian and wetland areas or habitat in the region; 	4.7.5.4
	 assessment of the impacts of the proposal on all fauna and its habitat, at both the site and at the regional scale; 	4.7.5, 4.8.5
	 identification of any mitigation measures proposed to limit or ameliorate the impact of the proposal; and 	4.7.4, 4.8.4
	 detailed methodologies used and a list of the reference literature cited. 	SCSC Part 4 (Section 3 and References)
	If relevant the EIS should address the requirements of State Environmental Planning Policy No. 44 (Koala Habitat Protection) 2000.	SCSC Part 2 Section 3.2.3.3
NSW	The General Requirements of the EIS include the following:	
Primary Industries (19/08/13)	 The area which may be affected either directly or indirectly by the development or activity should be identified and shown on an appropriately scaled map (1:25000) and aerial photographs. 	4.8.2
	 All waterbodies and waterways within the proposed area of development are to be identified. 	4.8.3
	 A description and maps of aquatic vegetation, snags, gravel beds and any other protected, threatened or dominant habitats should be presented. Description should include area, density and species composition. 	4.8.3
	 A survey of fish species should be carried out and results included. Existing data should be used only if collected less than 5 years previously. 	4.8.3

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Government Agency		Paraphrased Requirement	Relevant EIS Section(s)
	AQUATIC ECOLOGY (Cont'd)		
NSW Primary Industries (19/08/13) (Cont'd)	•	Identification of recognised recreational and commercial fishing grounds, aquaculture farms and/or other waterways users.	4.8.3
	•	Details of the location of all component parts of the proposal, including any auxiliary infrastructure, timetable for construction of the proposal with details of various phases of construction.	Section 2
	•	Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimisation and site rehabilitation, e.g. Environment Management Plans, Rehabilitation Plans, Compensatory offsets.	2.13 and throughout Section 4
	•	For each freshwater body identified on the plan, the plan should include, either by annotation or by an accompanying table, hydrological and stream morphology information such as: flow characteristics, including any seasonal variations, bed substrate, and bed width.	4.8.3 and SCSC Part 5
	•	For each marine or estuarine area identified on the plan, the plan should include, either by annotation or by an accompanying table, hydrological and stream morphology information such as: tidal characteristics, bed substrate, and depth contours.	N/A
	Fo	r any dredging and reclamation activities describe the following:	
	•	Purpose of works	
	•	Type(s) and distribution of marine vegetation in the vicinity of the proposed works	
	•	Method of dredging to be used	
	•	Timing and Duration of works	
	•	Dimension of area of works including levels and volume of material to be extracted or placed as fill	
	•	Nature of sediment to be dredged, including Acid Sulphate Soil, contaminated soils, etc.	N/A
	•	Method of marking area subject to works	
	•	Environmental safeguards to be used during and after works	
	•	Measures for minimising harm to fish habitat under the proposal	
	•	Spoil type and source location for reclamation activities	
	•	Method of disposal of dredge material	
	•	Location and duration of spoil stockpiling, if planned	

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Table A3.3 (Cont'd) Coverage of Environmental Issues Raised by Other Agencies

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Government	Paraphrased Requirement	Relevant EIS
Agency	·	Section(s)
1004	AQUATIC ECOLOGY (Cont'd)	I
NSW Primary Industries (19/08/13) (Cont'd)	For activities that damage marine vegetation describe the following:	
	Type of marine vegetation to be harmed	
	Map and density distribution of marine vegetation	
	Reasons for harming marine vegetation	
	Methods of harming marine vegetation	
	Construction details	N/A
	Duration of works/activities	
	 Measures for minimising harm to marine vegetation under the proposal and details of compensatory habitat development to replace lost vegetation. 	
	 Method and location of transplanting activities or disposal of marine vegetation 	
	For activities that block fish passage describe the following:	
	 Type of activity, e.g. works in a stream that change flow or morphological 	
	 characteristics of the stream, including culvert and causeway construction, sediment 	
	and erosion control measures, stormwater diversion structures.	N/A
	 Length of time fish passage is to be restricted, whether permanent or temporary 	
	 Timing of proposed restriction. Should be timed to avoid interfering with migratory movements of fish. 	
	Remediation or compensatory works to offset any impacts	
DTIRIS - DPI (19/08/13)	Complete a threatened aquatic species assessment (Section 5c, EP&A Act 1979) including a Seven Part Test. List threatened species and consider habitat types present within the study area, recent records of threatened species in the locality and the known distributions of these species.	4.8.5
	Describe any commercial, recreational and indigenous fishing activities that may be affected by the activity, including regular commercial fishing grounds, popular recreational fishing sites, and recognised indigenous harvesting sites.	4.8.3
	Assess whether the activity will impact on the continuing operation and viability of nearby aquaculture or mariculture ventures.	N/A
	Consider the potential influence of previous land and water uses and the effect of these on the proposed site.	4.8.3
	Provide a description of aquatic habitat including such components as stream morphology, in-stream and riparian vegetation, water quality and flow characteristics, bed morphology, vegetation (both aquatic and adjacent terrestrial), water quality and tide/flow characteristics. The condition of the habitat within the area should be described and discussed, including the presence and prevalence of introduced species.	4.8.3
	Provide a description of the habitat requirements of threatened species likely to occur in the study area.	4.8.5.3

Table A3.3 (Cont'd) Coverage of Environmental Issues Raised by Other Agencies

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	AQUATIC ECOLOGY (Cont'd)	
DTIRIS - DPI (19/08/13) (Cont'd)	The EIS must: • describe and discuss significant habitat areas within the study area;	SCSC Part 5 (Section 4)
	outline the habitat requirements of threatened species likely to occur in the study area;	4.8.5.3
	 indicate the location, nature and extent of habitat removal or modification which may result from the proposed action; 	4.8.4
	discuss the potential impact of the modification or removal of habitat;	4.8.5
	 identify and discuss any potential for the proposal to introduce barriers to the movement of fish species; and 	N/A
	 describe and discuss any other potential impacts of the proposal on fish species or their habitat. 	4.8.4
	Describe other locally occurring populations of species likely to have their lifecycle patterns disrupted by the proposal. Discuss the extent, security and viability of remaining habitat in the locality.	4.8.3
	Consider how the proposal has been or may be modified and managed to conserve fisheries habitat on the subject site and in the study area.	4.8.4
	Consider developing long term management strategy to protect areas within the study area which are of particular importance for fish species. This may include proposals to restore or improve habitat.	4.8.4
DTIRIS - DPI (Fisheries)	Document proposed pre-construction monitoring plans or on-going monitoring of the effectiveness of the mitigation measures must be outlined in detail.	4.8.6
(03/09/13)	The aquatic ecological environmental assessment should include:	
	A recent aerial photograph (or reproduction) (preferably colour) of the locality.	4.8.2
	The area which may be affected either directly or indirectly by the development or activity should be identified and shown on an appropriately scaled map (and aerial photographs).	4.8.3
	Identification of waterways within the area of development.	4.8.3
	 A description and quantification of aquatic and riparian vegetation, including mapping. This should include an assessment of the extent and condition of riparian vegetation and the extent and condition of freshwater aquatic vegetation and the presence of significant habitat features (e.g. gravel beds, snags, reed beds, etc.). 	4.8.3
	 Quantification of the extent of aquatic and riparian habitat removal or modification which will result from the proposed development. 	4.8.4
	 Aspects of the management of the proposal, both during construction and after completion, which relate to impact minimisation. 	4.8.5



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Table A3.3 (Cont'd) Coverage of Environmental Issues Raised by Other Agencies

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
	AQUATIC ECOLOGY (Cont'd)	
DTIRIS – DPI (Fisheries) (03/09/13)	Riparian Buffer Zones Ensure the proposed extension does not encroach within 100 metres of the river, due to the Coxs River being a TYPE 1 (Highly Sensitive Key Fish Habitat) CLASS 1 Waterway	Noted
(Cont'd)	The proposal is to include a threatened aquatic species assessment to address whether there are likely to be any significant impacts on listed threatened species, populations or ecological communities listed under the Fisheries Management Act 1994 (FMA). Species, populations and ecological communities likely to be present within this catchment include:	4.8.5.3.1, SCSC Part 5 (Section 7.5)
	The Macquarie Perch, Macquaria australasica.	
	NOISE AND VIBRATION	
EPA (20/08/13)	The Proponent must carry out a detailed Noise Impact Assessment and Modelling that addresses the following:	4.9.6.2
	 Off-site road noise impacts focusing on current versus proposed hours of operation — consistent with the NSW Road Noise Policy (DECCW, 2011); 	4.9.6.2
	 Construction noise impacts — consistent with the NSW Interim (Final) Construction Noise Guideline (DECC, 2009); 	4.9.6.1
	 Operational noise impacts — consistent with the NSW Industrial Noise Policy (EPA, 2000/2001) and the Assessing Vibration: a technical guidelines (DEC, 2006); and 	4.9.6.1, 4.9.6.3
	Mitigation and management strategies.	4.9.4
DTIRIS – R&E (19/08/13)	Assess noise and vibration impacts, and proposed measures to minimise these impacts.	4.9.5, 4.9.6
Lithgow City Council (26/08/13)	Consider the impact of construction and operational noise and vibration on the Glenroy Bridge and camping area.	4.3.5
	AIR QUALITY	
EPA (20/08/13)	The Proponent must carry out an Air Quality/Odour Assessment and Modelling that addresses the following:	
	 Point source emissions from plant and equipment and potential impacts. 	4.10.7
	Fugitive source emissions from exposed areas and other surfaces.	4.10.7
	Mitigation and management strategies.	4.10.5
DTIRIS – R&E (19/08/13)	Assess dust impacts, and proposed measures to minimise these impacts.	4.10.5, 4.10.7

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)	
HAZARDS			
EPA (20/08/13)	The EIS must identify all hazardous materials to be used during construction and operational activities, and mitigation and management mechanisms to appropriately deal with storage, handling (including spill response) and disposal.	4.13.4	
Lithgow City Council (26/08/13)	Provide details of hazardous material management.	4.13.4	
NSW Rural Fire Service (28/08/13)	Consider preparing a Bush Fire Emergency Evacuation Plan in accordance with the NSW Rural Fire Service document <i>Guide for Developing a Bush Fire Emergency Evacuation Plan</i>	4.13.2.4	
	VISUAL AMENITY		
DTIRIS – R&E (19/08/13)	Assess visual impacts, and proposed measures to minimise these impacts.	4.4.4, 4.4.5	
BMCC (29/08/13)	Consider the potential impact to visual amenity at vantage points on the Blue Mountains Escarpment within the Blue Mountains Local Government Area.	4.4.3	
	HERITAGE		
OEH	The EIS should contain:		
(03/09/13)	A description of the Aboriginal objects and declared Aboriginal places located within the area of the proposed development.	4.11.3	
	 A description of the cultural heritage values, including the significance of the Aboriginal objects and declared Aboriginal places, that exist across the whole area that will be affected by the proposed development, and the significance of these values for the Aboriginal people who have a cultural association with the land. 	4.11.3	
	A description of how the requirements for consultation with Aboriginal people as specified in clause 80C of the <i>National Parks and Wildlife Regulation 2009</i> have been met.	4.11.2.2	
	The views of those Aboriginal people regarding the likely impact of the proposed development on their cultural heritage. If any submissions have been received as a part of the consultation requirements, then the report must include a copy of each submission and your response.	4.11.2.2	
	 A description of the actual or likely harm posed to the Aboriginal objects or declared Aboriginal places from the proposed activity, with reference to the cultural heritage values identified and the need to apply for an Aboriginal Heritage Impact Permit (AHIP). 	4.11.5	
	A description of any practical measures that may be taken to protect and conserve those Aboriginal objects or declared Aboriginal places.	4.11.4	
	 A description of any practical measures that may be taken to avoid or mitigate any actual or likely harm, alternatives to harm or, if this is not possible, to manage (minimise) harm. 	4.11.4	

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)	
	HERITAGE (Cont'd)		
OEH (03/09/13) (Cont'd)	 A specific Statement of Commitment that the Applicant will complete an Aboriginal Site Impact Recording Form and submit it to the Aboriginal Heritage Management Information Management System (AHIMS) Registrar, for each AHIMS site that is harmed through the proposed development. 	Section 5	
	In addressing these requirements, the proponent must refer to the following documents:		
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010).	4.11.2 and SCSC Part 6	
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010).		
	HEALTH AND SAFETY		
DTIRIS – R&E (19/08/13)	 All operations are to comply with the following Acts & Regulations Work Health & Safety Act 2011 Work Health & Safety Regulations 2011 Mine Health & Safety Act 2004 Mine Health & Safety Regulations 2007 	Noted	
	The mine holder must nominate the mine operator in writing on the prescribed form to the Chief Inspector as required by the Mine Health & Safety Act 2004 Section 22 prior to the commencement of extraction.	Noted	
	The operator of the mine must appoint a production manager as required by the Mine Health & Safety Regulation 2007 Clause 16 and the operator must notify the Chief Inspector of the appointment in writing as required by The Mine Health & Safety Regulation 2007 Clause 18 prior to the commencement of extraction.	Noted	
	Any blasting operations carried out by the mine operator must comply with the Explosives Act 2003 and the Explosives Regulations 2005.	Noted	
	WASTE MANAGEMENT		
EPA (20/08/13)	The EIS should identify all wastes to be generated during construction and operational activities, and mitigation and management mechanisms to deal with this waste in accordance with the principles of Waste Avoidance and Resource Recovery.	2.9	
Lithgow City Council (26/08/13)	Provide details of Waste Management Plans	2.9	
	REHABILITATION		
DTIRIS – R&E (19/08/13)	Document proposed rehabilitation procedures during, and after completion of, extraction operations, and proposed final use of site	2.13	
NOW (03/09/13)	The EIS should provide: Details of proposed rehabilitation measures to restore any land, water sources and dependent ecosystems which are degraded by the proposed project.	2.13.6	
	Justification of criteria regarding completion of any rehabilitation program.	2.13.4	

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Government Agency	Paraphrased Requirement	Relevant EIS Section(s)		
REHABILITATION (Cont'd)				
NOW (03/09/13) (Cont'd)	 Details of the measures to be undertaken to ensure that sufficient resources are available to implement the proposed rehabilitation program. 	2.13.6		
	 Justification of the proposed final landform with regard to minimising impacts on local and regional surface and groundwater sources, floodplains, dependent ecosystems, basic landholder rights to water and adjacent/downstream licensed water users. 	2.13.3		
	 Details of measures for the ongoing management of the site following the cessation of the proposed project. 	2.13.6		
Lithgow City Council (26/08/13)	Address a Rehabilitation Cost Estimate through a bond.	2.13.6.3		
BMCC (29/08/13)	Consider innovative reuses of the quarry after the extractive phase which provide for community use of the site in the post operative phase. For example recreational off-road and trail bike uses.	Noted		
	STATEMENT OF COMMITMENTS			
EPA (20/08/13)	The EIS should include a Statement of Commitments that relate to the Proposal and the Key Issues.	Section 5		
	SOCIO-ECONOMIC			
Lithgow City Council (26/08/13)	Consider entering into a Voluntary Planning Agreement with the Lithgow City Council.	Noted		
CUMULATIVE IMPACTS				
EPA (20/08/13)	Include a cumulative impact assessment of the Proposal in connection with any nearby or relevant industries.	4.2.4		

HY-TEC INDUSTRIES PTY LIMITED

ENVIRONMENTAL IMPACT STATEMENT

Appendix 3

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