

Appendix A

Martins Creek Quarry SSD 6612 - Secretary's Environmental Assessment Requirements Compliance and Adequacy Assessment Table

Secretary's Environmental Assessment Requirements dated 4 August 2016	
Requirements	EIS
General Requirements	
The Environmental Impact Statement (EIS) for the development must comply with the requirements in Clauses 6 & 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>	Application form, and all sections in EIS
A full description of the development including:	Section 5 of the EIS
<ul style="list-style-type: none"> the resource to be extracted, demonstrating efficient resource recovery within environmental constraints, and having regard to NSW Trade and Investment's requirements (see Attachment 2) 	Appendix K Section 8.5
<ul style="list-style-type: none"> the site layout and extraction plan 	Appendix C Section 5
<ul style="list-style-type: none"> processing activities 	Appendix C Section 5
<ul style="list-style-type: none"> a waste (overburden, leachate etc) management strategy, dealing with the EPA's requirements (see Attachment 2) 	Appendix C
<ul style="list-style-type: none"> a water management strategy, dealing with the EPA's and Department of Primary Industries' requirements (see Attachment 2) 	Appendix C and Appendix G Section 8.6
<ul style="list-style-type: none"> a rehabilitation strategy, having regard to the key principles in the Strategic Framework for Mine Closure; and 	Appendix L Section 5.5
<ul style="list-style-type: none"> the likely interactions between the development and any other existing, approved or proposed extractive industry development in the vicinity of the site (such as the Brandy Hill Quarry) 	Appendix G, H, I Sections 4.9; 8.2 and 8.13
<ul style="list-style-type: none"> A list of any approvals that must be obtained before the development may commence 	Section 6.9 of the EIS
<ul style="list-style-type: none"> An assessment of the likely impacts of the development on the environment, focussing on the specific issues identified below, including: 	Section 8 of the EIS
<ul style="list-style-type: none"> a description of the existing environment likely to be affected by the development, using sufficient baseline data 	Section 2 of the EIS and data in relevant Appendices
<ul style="list-style-type: none"> 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 8 of the EIS
<ul style="list-style-type: none"> a description of the measures that would be implemented to mitigate and/or offset the likely impacts of the development, and an assessment of: <ul style="list-style-type: none"> whether these measures are consistent with industry best practice, and represent the full range of reasonable and feasible mitigation measures that could be implemented; 	Appendix C Section 9 of the EIS

Secretary's Environmental Assessment Requirements dated 4 August 2016	
Requirements	EIS
<ul style="list-style-type: none"> ○ the likely effectiveness of these measures; and ○ whether contingency plans would be necessary to manage any residual risks 	
<ul style="list-style-type: none"> • a description of the measures that would be implemented to monitor and report on the environmental performance of the development if it is approved 	Appendix C Section 9 of the EIS
<ul style="list-style-type: none"> • A consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS 	Appendix C Section 9 of the EIS
<ul style="list-style-type: none"> • Consideration of the development against all relevant environmental planning instruments (including Part 3 of the SEPP (Mining, Petroleum Production and Extractive Industries 2007)); and 	Section 6 of the EIS and relevant Appendices
<ul style="list-style-type: none"> • The reasons why the development should be approved having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development 	Section 10 of the EIS
<p>In addition to the matters set out in Schedule 1 of the EP&A Regulation 2000, the development application must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the:</p> <ul style="list-style-type: none"> • capital investment value (as defined in Clause 3 of the EPA Regulation 2000) of the development, including details of all the assumptions and components from which the capital investment value calculation is derived; and • jobs that would be created during each stage of the development. 	Appendix C
Key Issues	EIS
Traffic and Transport	
<ul style="list-style-type: none"> • 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, the public roads in the Dungog Shire, Maitland City and Port Stephens LGAs likely to be so used and the times during which those roads would be used; 	Appendix H Section 8.2
<ul style="list-style-type: none"> • a detailed assessment of potential traffic impacts on the capacity, condition, safety and efficiency of the local and State road network (as identified above), having regard to the requirements of the RMS, Dungog Shire, Maitland City and Port Stephens Councils (see Attachment 2); 	Appendix H Section 8.2
<ul style="list-style-type: none"> • a detailed assessment of the existing railway siding facility at the site as an alternative transport option for delivering quarry products and avoiding potential impacts associated with road delivery; and 	Appendix D Section 4
<ul style="list-style-type: none"> • a detailed description of the measures or works (including concept plans) that would be used and/or implemented to upgrade, maintain and improve the capacity, efficiency and safety of the road network used by the development. 	Appendix H Section 8.2

Blasting and Vibration	
<ul style="list-style-type: none"> proposed hours, frequency, methods and impacts; and an assessment of the likely blasting impacts of the development on people, buildings, animals, infrastructure and significant natural features having regard to the relevant ANZECC guidelines 	Appendix I Section 8.3
Air Quality	
<ul style="list-style-type: none"> construction and operational impacts, with a particular focus on dust emissions including PM2.5 and PM10; dust generation from blasting and processing, as well as diesel emissions and dust generated from the transportation of quarry products; reasonable and feasible mitigation measures to minimise dust and diesel emissions; and monitoring and management measures, in particular, real-time air quality monitoring. 	Appendix F Section 8.1
Noise	
<ul style="list-style-type: none"> construction, operational and off-site transport noise impacts in accordance with the Interim Construction Noise Guideline, NSW Industrial Noise Policy and the NSW Road Noise Policy respectively reasonable and feasible mitigation measures to minimise noise emissions; and monitoring and management measures, in particular real-time and attended noise monitoring 	Appendix I Section 8.3
Water	
<ul style="list-style-type: none"> an assessment of the potential impacts of the development on: <ul style="list-style-type: none"> the quantity and quality of regional water supplies; regional water supply infrastructure; and affected licensed water users and basic landholder rights (including downstream water users) the Hunter Estuary Wetlands site, which is a wetland of international importance (Ramsar wetland) 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; an assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; <ul style="list-style-type: none"> 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); a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo; and a detailed description of the proposed water management system (including sewage), water monitoring program and other measures to mitigate surface and groundwater impacts. 	Appendix G Section 8.6

Land	
<ul style="list-style-type: none"> • an assessment of the likely impacts of the development on the soils, land capacity; • an assessment of the likely impact of the development on landforms (topography), paying particular attention to the long term geotechnical stability of any new landforms (such as overburden dumps); and • an assessment of the compatibility of the development in accordance with the requirements in Clause 12 of <i>State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007</i> 	Appendix K Section 8.5
Biodiversity	
<ul style="list-style-type: none"> • an assessment of the likely biodiversity impacts of the project, having regard to OEH's and the Commonwealth Department of the Environment's (DoE's) requirements (see Attachment 2) • an offset strategy prepared in accordance with OEH and DoE requirements; 	Appendix L Section 8.7
Heritage	
<ul style="list-style-type: none"> • an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the development, having regard to OEH's requirements (see Attachment 2). 	Appendices M and N Sections 8.8 and 8.9
Visual	
<ul style="list-style-type: none"> • an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, paying particular attention to the creation of any new landforms (noise bunds, etc) 	Appendix P Section 8.12
Greenhouse Gas	
<ul style="list-style-type: none"> • an assessment of the likely greenhouse gas emissions of the development, dealing with the EPA's requirements (see Attachment 2) 	Appendix F Section 8.1
Hazards	
<ul style="list-style-type: none"> • an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks and the transport, handling and use of any dangerous goods 	Appendix J Section 8.4
Social and Economic	
<ul style="list-style-type: none"> • an assessment of potential impacts on local and regional communities including impacts on social amenity; • 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 • 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. 	Appendix O Section 8.11
Rehabilitation	
Including the proposed rehabilitation strategy for the site having regard to the key principles in the Strategic	Appendix L

<p>Framework for Mine Closure, including:</p> <ul style="list-style-type: none"> • rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria; • nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and • the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region. 	<p>Section 5.5</p>
<p>Consultation</p>	
<p>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. In particular, you must consult with the:</p> <ul style="list-style-type: none"> • Commonwealth Department of the Environment • Office of Environment and Heritage (including the Heritage Branch) • Environment Protection Authority • Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services • Department of Primary Industries (including the NSW Office of Water, NSW Forestry, Agriculture and Fisheries sections and Crown Lands division) • Roads and Maritime Services • Hunter Local Land Services • Dungog Shire Council • Maitland City Council • Port Stephens Council; and • community groups including but not limited to: Paterson Progress Association, Bolwarra Heights Community Group and the Voice of Wallalong and Woodville <p>The EIS must:</p> <ul style="list-style-type: none"> • describe the consultation process used and demonstrate that effective consultation has occurred; • describe the issues raised by public authorities, service providers, community groups and landowners; • identify where the design of the development has been amended in response to issues raised; and • otherwise demonstrate that issues raised have been appropriately addressed in the assessment. 	<p>Appendix E Section 7</p>

DEPARTMENT OF PLANNING AND ENVIRONMENT'S ADEQUACY ASSESSMENT - CORRESPONDENCE DATED 29.7.16	EIS
The 'Certification' in Section 11 does not satisfy Clause 6 (f) (i) and (ii) in Part 3, Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> . This should also be placed in an earlier section of the EIS.	Page 3
Further comment is required in relation to alternatives and justification for the proposed development, particularly in the context of the scale of extraction (1.5 million tonnes of hard rock per annum) and the life of the site (30 years). Comment around the need for the development at this scale based on anticipated market requirements, and the environmental constraints of the site and surrounding receivers should be provided.	Section 4 including Section 4.5 and Appendix D
Further justification for extension of operating hours from current conditions should be provided. Such a justification should take into account market requirements and potential environmental impacts, particularly road network performance and potential noise impacts on surrounding receivers. It is noted that this has been done to some extent in relation to the proposed operating hours for the rail siding in the Noise Impact Assessment.	Section 4 including Section 4.5 and Appendix D
The Commonwealth Department of the Environment (DoE) declared the project to be a controlled action on 21 July 2016. The project will therefore require an assessment under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> . The EIS should be updated to reflect this requirement and the key controlling provisions identified by the DoE. The Department will forward additional environmental assessment requirements that need to be addressed in the revised EIS so that the assessment can be undertaken in accordance with the Bilateral Agreement between the NSW and Commonwealth governments (ie. through a streamlined assessment process that satisfies both NSW and Commonwealth legislation).	Appendix L and Section 8.7
The presentation of data in Table 2-7 of the traffic impact assessment (Appendix V) could be improved by identifying the quantity of quarry product hauled from the site (in addition to, or in place of financial activity in the particular period of reference).	Appendix H
Further comment/ discussion is required in relation to the additional measures listed in section 5.3 of the traffic impact assessment (Appendix V) and the anticipated effect/ improvement these measures may have on identified traffic and road network impacts. Noting predicted deterioration of road network performance to level of service F in some situations, further discussion of the acceptability of this impact and potential mitigation and management measures should also be clearly included. At present, the EIS proposes little in the way of solutions to mitigate and manage these impacts.	Appendix H and Section 8.2
The air quality impact assessment (Appendix U of the EIS) does not adequately assess the potential impacts of blast fume or diesel emissions from plant and equipment, as required by the SEARs.	Appendix F and Section 8.1
Although the air quality impact assessment (Appendix U of the EIS) lists predicted air quality impacts at individual receivers, it does not adequately assess potential impacts on vacant land (including situations where applicable air quality criteria may be exceeded over more than 25% of the property).	Appendix F and Section 8.1
The EIS does not adequately discuss and propose reasonable and feasible air quality mitigation measures (dust and diesel	Appendix F and Section 8.1

emissions) as required by the SEARs.	
Further comment/ justification is required to support the use of road-influenced noise levels monitored at Location D to represent background noise levels in NAG3 (particularly in the day time period, where monitored background noise (RBL) >30 dB(A)).	Appendix I and Section 8.3
The noise impact assessment (Appendix S of the EIS) does not adequately identify potentially affected receiver locations, nor explain or provide justification for the delineation of NAGs. The boundary of each NAG is not clearly shown. Subject to addressing/ clarifying these two points, further discussion and justification for background noise monitoring locations may be required.	Appendix I and Section 8.3
The air quality impact assessment appears to identify a significant number of residential receivers in relatively close proximity to the proposed development site, and it is unclear whether these receivers have been adequately accommodated in the NAGs as defined in the noise impact assessment, and whether noise impacts on these receivers have been fully and appropriately assessed.	Appendix I and Section 8.3
The noise impact assessment (Appendix S of the EIS) does not adequately detail the current noise performance of the existing development, and particularly whether exceedance of project specific noise limits that may otherwise apply to a new development on the site are complied with or exceeded.	Appendix I and Section 8.3
The derivation and adoption of 'project specific noise levels' in Table 7 of the noise impact assessment (Appendix S of the EIS) is not consistent with the <i>NSW Industrial Noise Policy</i> . The proposed development should be assessed against project specific noise limits derived in accordance with that policy, with exceedances of the project specific noise limits identified before consideration of the potential for reasonable and feasible mitigation and management measures to adequately address/ resolve any such exceedances.	Appendix I and Section 8.3
The noise impact assessment (Appendix S of the EIS) does not adequately indicate predicted project-related noise levels at individual receiver locations, nor where project specific noise levels are exceeded over 25% of any vacant property. The approach to aggregating predicted noise levels across NAGs does not provide an adequate appreciation of the extent of noise impacts and the number/ nature/ location of receivers that may be affected by project noise.	Appendix I and Section 8.3
Further discussion/ justification is required to support the assessment of road traffic noise for the daytime period (7:00 am to 10:00pm) but not the short period of potential road transport during the night time period (potential dispatch by road from 5:30 am to 7:00 am).	Appendix I and Section 8.3
It is unclear whether the mitigation and management measures listed in section 7 of the noise impact assessment (Appendix S of the EIS) have been taken into account in the noise modelling for the proposed development. Notwithstanding, further commentary is required (including quantitative evaluation where appropriate) to demonstrate the likely effect of these mitigation and management measures on predicted noise impacts from the proposed development.	Appendix I and Section 8.3

The EIS does not adequately assess potential rail noise impacts (off-site movements), nor justify that such an assessment is not required, despite the proposed development contemplating the haulage of extractive material by rail.	Appendix I and Section 8.3
Further comment/ justification is required to support the use of the three sampling events summarised in section 5.6 of the water quality impact assessment (Appendix T of the EIS) as being representative of longer- term water quality at each of the monitoring locations. The EIS does not adequately indicate the location of each monitoring point. The operational and meteorological conditions (contemporaneous or recent rainfall) are not clearly detailed for each sampling event.	Appendix G and Section 8.6
The water quality impact assessment (Appendix T of the EIS) does not adequately detail the anticipated frequency and volume of water discharges (per event) from the site under dry, average and wet weather conditions. The water quality impact assessment does not adequately assess the implications of water discharges on the quality of water in receiving environments. The assessment also does not discuss or assess the geomorphological impacts of discharges from the site.	Appendix G and Section 8.6
The water quality impact assessment (Appendix T of the EIS) does not adequately demonstrate or justify the sufficiency of the groundwater monitoring data, including spatial distribution of monitoring locations, number of monitoring events and consideration of factors such as seasonality and groundwater recharge/ flushing through rainfall.	Appendix G and Section 8.6
The EIS does not adequately assess the potential impacts of the proposed development on soils and land capability, as required by the SEARs.	Appendix K and Section 8.5
The EIS does not adequately demonstrate that proposed offset areas have or are likely to have sufficient area and biodiversity values (as credits) to sufficiently offset the loss of biodiversity values as a consequence of the proposed development.	Appendix L
The EIS does not adequately demonstrate that the proposed development maintains or improves the biodiversity values of the region in the medium to long term, as required by the SEARs.	N/A The SEARs were amended in August 2016 to remove this requirement
The EIS does not nominate a final land use for the site, having regard to relevant strategic land use planning or resource management plans or policies, as required by the SEARs.	Section 5.5 and Appendix L
The VPA proposes financial contributions for the upkeep and maintenance of roads, which are managed by the relevant roads authority under the <i>Roads Act 1993</i> . The VPA should be between the Applicant and the relevant roads authorities (ie. the relevant local Council and/or RMS). The Minister for Planning (and the Department of Planning and Environment) are not responsible for the upkeep and maintenance of roads.	N/A The EIS does not address the specific terms of the VPA.