

STATUTORY AUTHORITY REQUIREMENTS CHECKLIST

Agency	Issue	Where Addressed In EIS
PlanningNSW	Attachment 1	
	Summary of EIS.	Executive Summary
	Objectives of development proposal.	Section 5.1.1
	Analysis of feasible alternatives.	Section 8
	Consequences of not carrying out the development.	Section 8.12
	Justification for the proposal.	Section 9
	Description of the existing environment.	Section 3
	Likely impact on the environment.	Section 6
	Measures proposed to mitigate adverse impacts.	Section 7
	List of approvals to be obtained.	Section 2.8
	Principles of ecologically sustainable development.	Section 9.3
	Attachment 2 Specific Issues to be addressed in the EIS	
	Statutory Provisions Considerations of the objectives of relevant environmental planning instruments including:	Section 2
	<ul style="list-style-type: none"> • State Environmental Planning Policy (SEPP) “Traffic Generating Development”; 	Section 2.2
	<ul style="list-style-type: none"> • SEPP 33 “Hazardous and Offensive Industry”; 	Section 2.2
	<ul style="list-style-type: none"> • SEPP 44 “Koala Habitat Protection”; 	Section 2.2 and 3.4.4
	<ul style="list-style-type: none"> • SEPP 45 “Permissibility of Mining”; 	Section 2.2
	<ul style="list-style-type: none"> • Hunter Regional Environmental Plan 1989; 	Section 2.3
	<ul style="list-style-type: none"> • Muswellbrook Shire Council LEP 1985; and, 	Section 2.4
	<ul style="list-style-type: none"> • Upper Hunter Cumulative Impact Study and Action Strategy. 	Section 2.5
	Noise	Appendix H
	<ul style="list-style-type: none"> • Assessment of existing noise conditions and potential noise during construction and operational phases of the proposal. Specific attention must be paid to locations likely to be impacted by the proposal, especially on nearby non-mine residence. 	Appendix H Section 3.10
	<ul style="list-style-type: none"> • Road traffic noise impact assessment. 	Section 3.10.3
	<ul style="list-style-type: none"> • Mitigation and Management measures to minimize noise impacts and assess the ongoing mine performance. 	Section 7.4

Agency	Issue	Where Addressed In EIS
PlanningNSW	Air Quality	Appendix E
	<ul style="list-style-type: none"> Detailed assessment of the existing air quality characteristics and potential impacts on air quality and odour, particularly for cumulative impacts at non-mine owned residences; 	Appendix E Section 3.15
	<ul style="list-style-type: none"> Details of the proposed measures to minimise air quality impacts, monitoring methods and contingency plans. 	Section 7.8
	Ground and Surface Water	Appendix K
	<ul style="list-style-type: none"> Identification of existing groundwater and surface water conditions. This assessment must include a description of current groundwater regime, outlining flux, direction of movement and quality of the resource over a range of climatic conditions; 	Appendix K Section 3.14 and 3.14
	<ul style="list-style-type: none"> Details of potential impacts on groundwater and surface water conditions. 	Appendix K Section 6.8 and 6.9
	<ul style="list-style-type: none"> Anticipated groundwater make volumes and rates as a result of the proposed extension. 	Appendix K Section 7.7
	<ul style="list-style-type: none"> Proposed management to minimise adverse impacts on surface water and groundwater. 	Appendix K Section 7.7
	<ul style="list-style-type: none"> Details of water circuits for clean run-on, sediment laden and contaminated waters on site, and a system for use of contaminated water for dust suppression and other uses. 	Appendix K Section 5.17
	<ul style="list-style-type: none"> Poor quality water management to prevent contamination of adjacent areas. 	Appendix K Section 5.17
	<ul style="list-style-type: none"> Details of waters within the final void, longterm groundwater recovery make inflow rates and the levels and quality of void waters. 	Appendix K Section 7.7
	<ul style="list-style-type: none"> Management of any alteration in groundwater quality which occurs as a result of mining operations. Monitoring of surface and groundwater pre and post mining. 	Appendix K Section 7.7
	Blasting	
	<ul style="list-style-type: none"> Details of any blasting to be conducted at the project site. 	Section 4.6.2
	<ul style="list-style-type: none"> Identify any residential zones, dwellings or other sensitive structures business or land uses may be impacted by blasting. 	Section 6.5
	<ul style="list-style-type: none"> Mitigation and management measures to control the generation of blasting impacts. 	Section 7.4

Agency	Issue	Where Addressed In EIS
PlanningNSW	Cumulative Impacts	Section 6
	<ul style="list-style-type: none"> • Identification of cumulative impacts, particularly on nearby non-mine owned residences, including: <ol style="list-style-type: none"> i. Noise conditions; ii. Air quality and dust; and iii. Surface and groundwater quality and quantity. 	Section 6.14 Section 6.14.3 Section 6.14.2 Section 6.14.1
	Spoil and Waste Management	
	<ul style="list-style-type: none"> • Details of waste management practices including refuse material, wastewater and environmental management measures proposed to be adopted. 	Section 4.6.3 and 5.19
	Erosion and Sediment	
	<ul style="list-style-type: none"> • Details of practices to manage soil erosion and ensure sediment control, including: <ul style="list-style-type: none"> - proposed soil conservation strategies; - impact of any unstable soils on any rehabilitation; and - design of diversions. 	Section 3.8.5
	Rehabilitation	Section 5
	<ul style="list-style-type: none"> • Outline of a rehabilitation plan. 	Section 4.7 and 5.15
	<ul style="list-style-type: none"> • Measures to minimize soil erosion. 	Section 4.6.6
	<ul style="list-style-type: none"> • Management of stockpiled soils and topsoil. 	Section 4.6.6
	<ul style="list-style-type: none"> • Landscaping and proposed Revegetation works. 	Section 4.7 and 5.14
	<ul style="list-style-type: none"> • Details of backfilling of the No. 1 and No. 2 pit, with attention to management of inert coarse overburden and soil materials. 	Figure 5.6
	Indigenous and Non-Indigenous Heritage	Appendix I
	<ul style="list-style-type: none"> • Provide an Aboriginal heritage assessment. 	Appendix I Section 3.16.1
	<ul style="list-style-type: none"> • Provide an assessment of European heritage. 	Appendix I Section 3.16.3
	<ul style="list-style-type: none"> • Details of impacts of surface works and infrastructure on areas of cultural and/or archaeological sensitivity. 	Section 6.11
	<ul style="list-style-type: none"> • Proposed mitigative and management measures. 	Section 7.9
	<ul style="list-style-type: none"> • Include documentation from the Aboriginal community outlining their assessment and recommendations. 	Appendix J
	<ul style="list-style-type: none"> • Identify any native title rights in relation to Crown land, in accordance with the Native Title (Commonwealth) Act 1993; 	N/A. No Crown Land affected by the No. 1 Open Cut Extension.

Agency	Issue	Where Addressed In EIS
PlanningNSW	<ul style="list-style-type: none"> Investigation of any Aboriginal land claim pursuant to the Aboriginal Land Rights Act, 1983. 	Appendix D
	Greenhouse	Section 6
	<ul style="list-style-type: none"> A greenhouse gas assessment incorporating: <ul style="list-style-type: none"> i. Quantitative model of each greenhouse gas produced per year; ii. Discussion of the types of greenhouse gases being emitted. iii. Discussion of the alternative options considered for: <ul style="list-style-type: none"> - fuel source; and - alternative technologies. iv. Justification for the chosen fuel source and technology. 	Section 6.10.1
	Transport/Traffic	Appendix L
	<ul style="list-style-type: none"> A traffic impact study. 	Appendix L Section 3.11
	<ul style="list-style-type: none"> Measures to ensure the maintenance of the current level of operating conditions. 	Section 6.61
	Overburden	Section 4.3.3
	<ul style="list-style-type: none"> Details of overburden placement and management including potential salinity issues and measures to minimise impacts on vegetation. 	N/A Overburden is emplaced “inpit”
	Hazards	Section 6
	<ul style="list-style-type: none"> Identification of hazards (natural and otherwise). 	Section 6.13
	<ul style="list-style-type: none"> A discussion of measures to minimise the risks associated with hazards. 	Section 6.13
	Visual	Section 3
	<ul style="list-style-type: none"> Details of the visual impact of all components of the proposal, including any emplacement areas, stockpiles, surface facilities and night lighting. 	Section 6.7.1
	<ul style="list-style-type: none"> Clear illustrations of predicted visual impacts through the life of the mine from sensitive receiver locations. 	Section 6.7.1
	<ul style="list-style-type: none"> Proposed management measures to limit visual effect. 	Section 7.6
	Flora and Fauna	Appendix F
	<ul style="list-style-type: none"> Impact on flora and fauna, particularly critical habitats, threatened species, populations or ecological communities, or their habitats. The assessment should involve the following steps: 	Appendix F Section 6.2

Agency	Issue	Where Addressed In EIS
PlanningNSW	<ul style="list-style-type: none"> Conduct baseline surveys, and consult relevant databases 	Appendix F Section 3.4
	<ul style="list-style-type: none"> Describe the types and condition of habitats in, and adjacent to, the land to be affected by the proposal. 	Appendix F Section 3.4.1
	<ul style="list-style-type: none"> Prepare a list of species, populations or ecological communities, or their habitats, that may occur on the site, and conduct targeted surveys for these. 	Appendix F
	<ul style="list-style-type: none"> Apply the “8 part test” to species, populations or ecological communities, or their habitats, that may be affected by the proposal. 	Appendix F Section 3.4.3
	<ul style="list-style-type: none"> Prepare a Species Impact Statement for any critical habitats, species, populations or ecological communities, or their habitats affected by the proposal. 	N/A
	<ul style="list-style-type: none"> Management measures to reduce the impact of the proposal on flora and fauna, including the opportunities to protect the dryland box/ironbark community. 	Section 7.1
	Mine Operation	Section 5 and 4
	<ul style="list-style-type: none"> Describe all the components that make up the proposal, including surface infrastructure. 	Section 5 and 4
	<ul style="list-style-type: none"> A clear identification of the development application area. 	Figure i
	<ul style="list-style-type: none"> Details of the interrelationship with existing developments and approved development consents. 	Section 4.1
	<ul style="list-style-type: none"> Details of Mining Operations Plan 	Section 5
	<ul style="list-style-type: none"> Provide a resources and reserve statement 	Table 4.2 and 5.1
	<ul style="list-style-type: none"> Provide details of the proportion of product coal to be transported to export domestic markets. 	Section 4.4.6

Agency	Issue	Where Addressed In EIS
	Miscellaneous	
	<ul style="list-style-type: none"> • An assessment of all other potential environmental impacts of the proposal, by reference to the relevant matters in section 79C of the <i>Environmental Planning and Assessment Act, 1979</i>, including impacts on heritage items, Aboriginal sites, and soil erosion. 	Section 2.9
Muswellbrook Shire Council and PlanningNSW	Issues Raised at the Planning Focus Meeting by Government Agencies	
	Environment Protection Authority	
	<ul style="list-style-type: none"> • Management Programs – Air quality, water, noise, spontaneous combustion. 	Section 7.3, 7.4, 7.7 and 7.8
	<ul style="list-style-type: none"> • Water Balance – Flow floods, discharge into the Hunter River, tributary impacts. 	Section 7.7
	<ul style="list-style-type: none"> • Noise – Industrial noise policy, predictions, goals. 	Appendix H Section 6.5, 3.9 and 7.4
	<ul style="list-style-type: none"> • Blasting – Impacts on surrounding environments to be monitored. 	Section 7.4
	<ul style="list-style-type: none"> • Networks and technology used for monitoring impacts. 	Section 4.6
	<ul style="list-style-type: none"> • Ecological Sustainable Development. 	Section 9.3
	<ul style="list-style-type: none"> • Green house gases, ozone depletion. 	Section 6.10.1
	Department of Land and Water Conservation	
	<ul style="list-style-type: none"> • Surface water and Underground water. 	Appendix K Section 3.13 and 3.14
	<ul style="list-style-type: none"> • Aspects of rehabilitation. 	Section 4.7 and 5.14
	<ul style="list-style-type: none"> • Pit emplacements, segregation and mixing of overburden. 	Section 5.6
	<ul style="list-style-type: none"> • Crown Roads and road closures. 	Section 5.4.2
	<ul style="list-style-type: none"> • Revegetation programs 	Section 4.7, 5.14 and 5.13

Agency	Issue	Where Addressed In EIS
	Department of Mineral Resources	
	<ul style="list-style-type: none"> • Mining lease requirements 	Section 2.8
	<ul style="list-style-type: none"> • Issues concerning ground heating, dust and soil movements. 	Section 5,6 and 7
	<ul style="list-style-type: none"> • Final landform details of underground/open cut mining and post mining use. 	Section 5.13 and 5.14
	<ul style="list-style-type: none"> • Conceptual understanding in pit mine sequencing. 	Figure 5.5
	Department of Agriculture	
	<ul style="list-style-type: none"> • Final closure issues 	Section 5.13
	<ul style="list-style-type: none"> • Linkage of mine rehabilitation areas 	Section 5.14
	<ul style="list-style-type: none"> • Future land use i.e. waste areas and their impacts on vineyard operations. 	N/A
	<ul style="list-style-type: none"> • Ecological issues – rehabilitation programs and their relationships with vegetation areas in the locality. 	Section 4.7 and 5.14
	Mine Subsidence Board	
	<ul style="list-style-type: none"> • Approval required for any new infrastructure. 	Section 5.4.2
Muswellbrook Shire Council and PlanningNSW	<ul style="list-style-type: none"> • Program for moving cyclone fence surrounding subsidence areas. 	Section 5.4.2
	National Parks and Wildlife Service	
	<ul style="list-style-type: none"> • Aboriginal involvement in the consultation processes. 	Appendix I and J Section 3.16
	<ul style="list-style-type: none"> • Archaeological assessments 	Appendix I and J Section 3.16
	<ul style="list-style-type: none"> • Subsidence to be researched and managed. 	Section 5.4.3
	<ul style="list-style-type: none"> • Requirements of Aboriginal assessments. 	Section 3.16
	<ul style="list-style-type: none"> • Voluntary employment. 	N/A
	<ul style="list-style-type: none"> • Section 90 Consent to Destroy to be considered. 	Section 7.9 and 6.11
	Roads and Traffic Authority	
	<ul style="list-style-type: none"> • Traffic Impacts – to be addressed 	Section 6.6
	<ul style="list-style-type: none"> • Muswellbrook By-Pass – 2 options have been severed because of the proposal. 	Section 2.4 and 3.11.3
	Wonnarua Tribal Council	
	<ul style="list-style-type: none"> • Archaeological assessments of areas of disturbance. 	Appendix I and J Section 3.16
	<ul style="list-style-type: none"> • Aboriginal Employment: recognise as separate issue to EIS. 	Noted
	<ul style="list-style-type: none"> • Freehold Land Titles 	
	Wonnarua Land Council	
	<ul style="list-style-type: none"> • Habitat, particularly ‘A’ area: Habitat will disappear with open cut. 	Section 6.2

Agency	Issue	Where Addressed In EIS
	<ul style="list-style-type: none"> • Trees: Defoliation occurrence. 	N/A
	<ul style="list-style-type: none"> • Recycling of timber. 	Section 6.2
	<ul style="list-style-type: none"> • Employment issues. 	Section 3.17.4
	Coal Compensation Board	
	<ul style="list-style-type: none"> • “Anvil Hill” The viability of area ‘b’. 	N/A
	Muswellbrook Shire Council	
	<ul style="list-style-type: none"> • Synoptic Plan. 	Figure 5.5
	<ul style="list-style-type: none"> • Upper Hunter Cumulative Impact Study. 	Section 2.5
	<ul style="list-style-type: none"> • Roads issues – co-ordination of roads authority. 	
	<ul style="list-style-type: none"> • Use of final land form i.e. expansion of waste fill areas. 	Section 5.13
	<ul style="list-style-type: none"> • Issues relating to spontaneous combustion. 	Section 3.9, 5.4.3 and 5.5.3
Environment Protection Authority	<p>1. Executive Summary</p> <ul style="list-style-type: none"> • The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes. 	Executive Summary
	<p>2. The Proposal</p> <p>2.1 Objects of the proposal clearly stated and refer to the following;</p> <ul style="list-style-type: none"> • The size and type of operation. • The anticipated level of performance in meeting required environmental standards and cleaner production principals. • The staging and timing of the proposal. • The proposals relationship to any other industry or facility. <p>2.2 Provide a detailed description of the proposed development which includes the following;</p> <ul style="list-style-type: none"> • A description of the proposed development including the rail and conveyor systems and coal storage, handling and loading facilities supported by detailed site layout and locality maps. • Details of the coal handling arrangements during the initial development headings. • A description of the operation of the proposed washery rejects emplacement facilities. • Outline construction works. 	<p>Section 5</p> <p>Figure 5.5</p> <p>Section 5</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>

Agency	Issue	Where Addressed In EIS
	<p>3.Air</p> <p>3.1 General</p> <ul style="list-style-type: none"> • Demonstrate ability to operate within EPA Air Quality objectives. • Description of existing air quality and meteorology. • Identification and location of fixed and mobile sources of dust/air emissions. • Location of all emission sources marked on a plan. • Provide details of the project that are essential for predicting and assessing impacts on air quality. • Describe the topography and surrounding land. • Provide details of the exact locations of dwellings, schools and hospitals. 	<p>Appendix E</p> <p>Section 6.10</p> <p>Section 3.15 and 3.3 Appendix E</p> <p>N/A</p> <p>Appendix E</p> <p>Section 3</p> <p>Figure 3.7</p>

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p data-bbox="480 248 756 275">3.2 Impact Assessment</p> <ul style="list-style-type: none"> <li data-bbox="480 293 948 320">• Dust emission inventory calculations. <li data-bbox="480 331 975 405">• Estimate of the resulting ground level concentrations of all pollutants. <li data-bbox="480 416 927 443">• Description of methodology used. <li data-bbox="480 454 888 481">• Air quality impact predictions. <li data-bbox="480 492 1115 566">• Assessment if the impact of the mine on local and regional air quality. <li data-bbox="480 577 1114 651">• Assessment of cumulative air quality impacts and methodology used. <li data-bbox="480 663 1142 736">• Assessment of potential impacts on air quality other than dust. <li data-bbox="480 748 1062 822">• Estimate the total annual volume of all major greenhouse gases that are likely to be emitted. <li data-bbox="480 833 1134 907">• Estimate the net increase or decrease in greenhouse gas emissions from the proposed development. <li data-bbox="480 918 1137 992">• Measures to minimise the emission of all greenhouse gasses from the proposed development. <li data-bbox="480 1003 1107 1077">• Consider renewable energy technology for onsite power generation. <li data-bbox="480 1088 1128 1252">• Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals. <li data-bbox="480 1263 1072 1382">• Describe the contribution (if any) that the development will make to regional and global pollution. <li data-bbox="480 1393 1145 1467">• Assessment of the impacts on air quality of dust and pollutants generated during construction works. <li data-bbox="480 1478 1142 1552">• Investigation of the propensity of coal seams to self heat and the likelihood of spontaneous combustion. 	<p data-bbox="1177 248 1327 322">Appendix E Section 6.10</p> <p data-bbox="1177 1397 1230 1424">N/A</p> <p data-bbox="1177 1480 1469 1554">Section 5.4.3, 5.5.3, 3.9, 4.6.8</p>

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>3.3 Mitigation</p> <ul style="list-style-type: none"> • Outline specifications of pollution control equipment and management protocols for both point and fugitive emissions. • Specific consideration should be given to measures to minimise the emission of all major greenhouse gases from the proposed development. • Describe consideration of stockpile alignment and optimum stockpile height to minimise wind erosion. • Detail of a management plan to minimise spontaneous combustion. • An air quality-monitoring program. • Control measures to minimise dust generation during construction. • Detail of contractual arrangements between applicant and contractors aimed at attributing responsibility for controlling pollutants. 	Appendix E Section 7.8, 6.10 and 3.15
	<p>4. Noise And Vibrations</p> <p>4.1 General</p> <ul style="list-style-type: none"> • The EIS must assess the likelihood and implications of intrusive noise and loss of amenity due to noise. <p>The EIS should also include the following;</p> <ul style="list-style-type: none"> • Identify all noise and vibration sources. • Detail all potential noise generating activities and equipment including off-site rail movements and conveyor use. • Specify the times of operation and all noise producing activities. • Provide details of the rail and conveyor corridors and land use. • Specify noise monitoring locations. • Identify any noise sensitive locations likely to be affected by activities at the site. • Identify the land use zoning of the site and the immediate vicinity. 	<p>Appendix H</p> <p>Section 6.5.2</p> <p>Appendix H N/A</p> <p>Appendix H</p> <p>N/A</p> <p>Figure 3.15 and 3.7</p> <p>Section 3.10.3</p>

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>4.2 Impact assessment</p> <ul style="list-style-type: none"> • Determine existing background noise levels at noise sensitive locations. • Determine the expected noise levels and noise characteristics likely to be generated from noise sources. • Determine the noise levels likely to be received at the most sensitive locations under both prevailing and adverse meteorological conditions. • Noise contours for both daytime (7.00 a.m. – 6.00 p.m.), evening (6.00 p.m – 10 p.m) and night-time (10.00 p.m. - 7.00 a.m.) periods should be provided. • Consider the influence of existing meteorological conditions. • Assess the effect of noise mitigation measures incorporated into the predictive modelling. • Compare the predicted noise levels with the appropriate noise criteria for the phase of development • Demonstrate that ground vibrations and over pressure levels recommended by ANZECC will be achieved during blasting. • Assessment of traffic noise covering the expected movement of product off-site and proposed controls at source and effected locations. 	<p>Appendix H Section 3.10.3</p> <p>Section 6.5.2</p> <p>Figures 6.1 to 6.9</p> <p>Section 6.5.1</p> <p>Section 6.5</p> <p>Section 3.10.3</p>

Agency	Issue	Where Addressed In EIS
	<p data-bbox="480 248 655 277">4.3 Mitigation</p> <ul data-bbox="480 293 1147 1003" style="list-style-type: none"><li data-bbox="480 293 1147 405">• Discussion of findings from the predictive modelling and recommended additional mitigation measures.<li data-bbox="480 421 1147 875">• Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying<ul data-bbox="528 584 1147 875" style="list-style-type: none"><li data-bbox="528 584 1147 651">- locations where the noise level exceeds the criteria and extent of exceedence.<li data-bbox="528 667 1147 703">- numbers of people (or areas) affected.<li data-bbox="528 719 1147 754">- times when criteria will be exceeded.<li data-bbox="528 770 1147 837">- likely impact on activities (speech, relaxation, listening, etc).<li data-bbox="528 853 1147 875">-change on ambient conditions.<li data-bbox="480 891 1147 1003">• Determine the most appropriate noise management and mitigation measures for construction and operation noise. <p data-bbox="480 1055 700 1084">Rail noise impacts</p> <ul data-bbox="576 1099 1147 1301" style="list-style-type: none"><li data-bbox="576 1099 1147 1135">-Description of ameliorative measures.<li data-bbox="576 1151 1147 1218">-Reason for inclusion /exclusion ameliorative measures.<li data-bbox="576 1234 1147 1270">-Procedures for calculating noise levels.<li data-bbox="576 1285 1147 1308">-Overshadowing effects. <ul data-bbox="480 1317 1147 1382" style="list-style-type: none"><li data-bbox="480 1317 1147 1382">• Provide details of a noise and blasting monitoring program.	<p data-bbox="1179 248 1410 322">Appendix H Section 6.5 and 7.4</p> <p data-bbox="1179 1055 1437 1128">N/A No onsite rail facility</p> <p data-bbox="1179 1317 1342 1346">Section 4.6.2</p>

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>5 Water</p> <p>5.1 General</p> <ul style="list-style-type: none"> • Provide details of the project relevant to any water impacts. • Outline site layout, demonstrating efforts to avoid proximity to water resources. • Outline how total water cycle considerations are to be addressed. • Describe the catchment including proximity of the development to any waterways. • Describe existing surface water quality. • Provide historic stream flow data for the catchment where available. • Provide site drainage details and surface runoff yield. • Describe the condition of the local catchment. • Outline baseline groundwater information. 	Appendix K Section 3.13, 3.14, 5.17 and 7.7
	<p>5.2 Impact Assessment</p> <ul style="list-style-type: none"> • Determine any changes to hydrology. • Identify any potential impacts on quality or quantity of groundwater. • Identify potential impacts associated with surface water and sediment transport activities. • Detail sewage effluent treatment and disposal arrangements. 	Appendix K Section 6.8 and 6.9 4.6.3 and 5.19

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>5.3 Mitigation</p> <p>A Water management plan and site water balance should be prepared including;</p> <ul style="list-style-type: none"> • Outline stormwater management designed to control pollutants at the source and contain them within the site. • Outline erosion and sediment control measures. • Describe wastewater treatment measures. • Outline pollution control measures relating to storage of materials, possibility of accidental spills, appropriate disposal methods, and generation of leachates. • Describe hydrological impact mitigation measures. • Describe groundwater impact mitigation measures. • Describe geomorphological impact mitigation measures. • Describe management procedures that will be adopted to prevent pollution of waters. 	Appendix K Section 5.17 and 7.7
	<p>5.4 Hunter River Salinity Trading Scheme (HRSTS)</p> <ul style="list-style-type: none"> • Justify wastewater discharge. • Demonstrate management in compliance with HRSTS requirements if discharging. <p>Tributary impact assessment including, -impact on downstream land holders.</p> <p>-physical and biological impacts.</p> <p>-proposed measures to minimise impact and reduce erosion.</p> <ul style="list-style-type: none"> • Collective impacts of discharging to the tributary. 	Appendix K Section 5.17.2
	<p>6. Spontaneous Combustion</p> <p>6.1 General</p> <ul style="list-style-type: none"> • Provide details and map of the existing occurrence of spontaneous combustion • Explain the reasons for the historical occurrence of spontaneous combustion on the premises during the operational life of the project. 	Sections 3.9, 4.8.6, 5.4.3, 5.5.3 and 7.3
	<p>6.2 Impact Assessment</p> <ul style="list-style-type: none"> • Provided details and map of the potential occurrence of spontaneous combustion 	Sections 3.9, 4.8.6, 5.4.3, 5.5.3 and 7.3

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	6.3 Mitigation <ul style="list-style-type: none"> • Prepare a spontaneous combustion management plan including measures proposed to totally eliminate the occurrence of spontaneous combustion 	Sections 3.9, 4.8.6, 5.4.3, 5.5.3 and 7.3
	7. Waste and Chemicals 7.1 General <ul style="list-style-type: none"> • Provide details of; <ul style="list-style-type: none"> -The quantity and type of any liquid waste and non-liquid waste generated at the premises. -The method for storing and disposing of any wastes. -Sewage effluent treatment and disposal arrangements. 	Sections 5.19 Section 4.6.3 Section 6.13 Section 4.6.3
	7.2 Impact Assessment <ul style="list-style-type: none"> • Identify potential impacts from handling and storage of waste/or chemicals. • Measures to avoid or minimise generation of waste and promote re-use and recycling. • Identify waste, which cannot be re-used. 	Sections 4.6.3, 5.19 and 6.13
	7.3 Mitigation <ul style="list-style-type: none"> • Outline measures to avoid generation of waste and promote recycling. • Outline measures to support any approved regional or industry waste plans. 	Sections 4.6.3, 5.19 and 6.13
	7. Soil Contamination 7.1 General <ul style="list-style-type: none"> • Provide details of site history if earthworks are proposed. • Identify any stream crossings. 	Appendix G N/A
	7.2 Impact Assessment <ul style="list-style-type: none"> • Identify any likely impacts resulting from construction or operation. 	Section 6.3
	7.3 Mitigation <ul style="list-style-type: none"> • Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation. 	Section 6.3

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>8. ESD</p> <p>The basic principles of ESD should be addressed in the EIS including;</p> <ul style="list-style-type: none"> • The precautionary principle. • Inter and intra generational equity. • Conservation of biodiversity and ecological integrity. • Valuation and pricing of resources. • Demonstrate that the planning and development incorporates objectives and mechanism for complying with ESD principles. 	Section 9
	<p>9. Consideration of Alternatives and Justification for the proposal.</p> <ul style="list-style-type: none"> • Consider the environmental consequences of adopting alternatives, including alternative; <ul style="list-style-type: none"> - sites and site layouts. - access modes and routes. - materials handling and loading processes. - waste and water management. - impact mitigation measures, particularly air quality and noise measures. - energy sources. • Selection of the preferred option should be justified in terms of; <ul style="list-style-type: none"> - ability to satisfy the objectives of the proposal. - relative environmental and other costs of each alternative. - acceptability of environmental impacts. - acceptability of any environmental risks or uncertainties. - reliability of proposed environmental impact mitigation measures. <p>- efficient use (including minimising re-use) of land, raw materials, energy and other resources.</p>	Section 8 and 9.

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>10. Identification & Prioritisation of issues</p> <ul style="list-style-type: none"> • Provide an overview of the methodology used to identify and prioritise issues. Taking into account the following; <ul style="list-style-type: none"> -relevant NSW government guidelines. -industry guidelines. -EISs for similar projects. -relevant research and reference material. -relevant preliminary studies or reports for the proposal. -consultation with stakeholders. • Provide a summary of the outcomes of the process. <ul style="list-style-type: none"> -all issues identified including local regional and global impacts. -key issues which will require full analysis. -issues not needing full analysis. -justification for the level of analysis proposed. 	Planning Focus Meeting Appendix B and Community Consultation.
	<p>11. Cumulative Impacts</p> <ul style="list-style-type: none"> • Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions. • Identify and assess the cumulative impact of other proposed mining operations that have the potential to impact upon the background level emissions of air, water and noise. • Assess the long-term and short-term cumulative impacts of the proposal against the relevant air, noise and water quality objectives for the area or region. • Identify infrastructure requirements flowing from the proposal. • Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts. 	Section 6.14

Agency	Issue	Where Addressed In EIS
Environment Protection Authority	<p>12. Management and Mitigation of Environmental Impacts</p> <ul style="list-style-type: none"> • Use environmental impacts as key criteria in selecting between alternative sites, designs and technology. • Describe any mitigation measures and management options proposed to minimise identified environmental impacts. • Outline any proposed approach that will demonstrate how commitments made in the EIS will be implemented. (such as an Environmental Management Plan). 	Section 7
	<p>13. Compilation of Mitigation Measures</p> <ul style="list-style-type: none"> • Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner and complying with an EPA licence. (Such as an outline of an environmental management plan). • Mitigation strategy should include environmental management and cleaner production principles including; <ul style="list-style-type: none"> -program for managing the proposal. -monitoring program with a feedback loop. 	Section 7
	<p>14. EPA Licensing</p> <ul style="list-style-type: none"> • Identify licensing required by the EPA under environment protection legislation. 	Section 2
Agency	Issue	Where Addressed in EIS
Department of Land and Water Conservation	<p>Water Management</p> <ul style="list-style-type: none"> • A detailed assessment of water management for the proposal and how the water management system will integrate into the overall site water management plan. This must include; <ol style="list-style-type: none"> 1. Water supply requirements, licenses, options for water management on site. 	Appendix K Section 4.6, 5.17 and 7.7
	<ol style="list-style-type: none"> 2. Anticipated groundwater make volumes and rates for the extension; including variations in make during and post mine life. 	Appendix K Section 7.7

Agency	Issue	Where Addressed In EIS
Department of Land and Water Conservation	<p>3. Number and capacities of all storages on site, purposes and use of water captured.</p> <p>-Include as a detail of the harvestable right assessment for the site and delineation of the Maximum Harvestable Right Dam Capacity (MHRDC).</p> <p>-Storages grouped into non assessable and assessable dams under the site harvestable right and licensable structures.</p>	Appendix K Section 7.7
	<p>4. Water circuits for clean run on, sediment laden waters and contaminated waters</p> <p>- A system for use of contaminated water for dust suppression and other uses.</p> <p>-Show how these water circuits are to be managed - separately including preventing contamination of adjacent areas.</p>	Appendix K Section 7.7
	<p>5. Discuss final void waters, long term groundwater recovery make inflow rates and void water levels.</p> <p>-Discuss quality and proposed use of void waters.</p> <p>-Explain long term impacts on rehabilitated void faces and landforms from an increase in saline void levels.</p> <p>Explain in terms of water use, long term water quality and post-mining groundwater table levels and potential degradation of water quality for post</p>	Appendix K Section 7.7
	6. mining use of voids.	Section 5.13

Agency	Issue	Where Addressed In EIS
Department of Land and Water Conservation	<p>Groundwater Management EIS should address the following;</p> <ul style="list-style-type: none"> • Description of current groundwater flux, direction of movement and quality, over a range of climatic conditions for the site. • Pre and post mining groundwater regimes and an explanation of the conclusions for the post mining groundwater table recovery level. • Potential risks to groundwater quality which may occur during and after mining occurs with process for mitigating any groundwater contamination which occurs as a result of mining.. • Monitoring procedures for the development, a pre and post mining monitoring and performance measurement system to manage any alteration in groundwater quality 	<p>Appendix K</p> <p>Section 3.14</p> <p>Appendix K</p> <p>Section 6.9</p> <p>Section 7.7</p>
	<p>Rehabilitation EIS should provide;</p> <ul style="list-style-type: none"> • An explanation of soil stockpiling and emplacement of overburden materials • Explain the landscaping and use of stockpiled soils and topsoils • Demonstrate the departmental standards for rehabilitation and soil management. • Explain vegetation management on site • Explore the opportunities to protect the dryland box/ironbark communities • Incorporate the use of vegetative material including fallen timber, trees which are felled and revegetation into a site management plan which should comply with the synoptic plan for mining rehabilitation for the region. 	<p>Section 5.6</p> <p>Section 5.14 and 4.7</p> <p>Section 5.14</p> <p>Appendix F</p> <p>Section 6.2</p>
	<p>Crown Land</p> <ul style="list-style-type: none"> • Assess the Crown Land area in terms of visual protection • Protection of the Crown Land boundaries affected by the proposal. • Revegetation strategy with boundary plantings of native vegetation to protect Crown Land from impacts 	<p>N/A</p>

Agency	Issue	Where Addressed In EIS
Mine Subsidence Board	<ul style="list-style-type: none"> • All surface improvements are to be approved by the Mine Subsidence Board. • Any relocation or alterations to existing improvements will also require Board approval, including roads power lines building structures etc. • Issues with the Manproof fence surrounding the Bimbadeen pothole area. 	Section 5.4.2