

Appendix A – SEARs compliance

Table A1 Compliance with SEARs for application number SSD-10333

| Category | SEARs requirement | Section addressed |
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| General requirements | The EIS must include: | |
| | <ul style="list-style-type: none"> • A standalone executive summary | i |
| | <ul style="list-style-type: none"> • A full description of the development, including: <ul style="list-style-type: none"> – historical mining operations on and nearby the site – the resource to be extracted, demonstrating efficient resource recovery within environmental constraints – the mine layout and scheduling – coal processing and transport arrangements – infrastructure and facilities (including any existing infrastructure or infrastructure that would be required for the development, but the subject of a separate approval process) – a waste (overburden, rejects, tailings, etc) management strategy – a water management strategy – a rehabilitation strategy – the likely interactions between the development and any other existing, approved or proposed mining development or power station in the vicinity of the site | Chapter 1 and Chapter 2 |
| | <ul style="list-style-type: none"> • A strategic justification of the development focusing on site selection and the suitability of the proposed site | Chapter 7 |
| | A list of any approvals that must be obtained before the development may commence. | Section 4.5 |
| | <p>An assessment of the likely impacts of the development on the environment, focusing on the key issues identified below, including:</p> <ul style="list-style-type: none"> • a description of the existing environment likely to be affected by the development, using sufficient baseline/background data • an assessment of the likely impact for all stages of the development, including any cumulative impacts, taking into consideration any relevant laws, environmental planning instruments, guidelines, policies, plans and industry codes of practice • a description of the measures that would be implemented to avoid, minimise, mitigate and/or offset the likely impacts of the development, and 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 – the likely effectiveness of these measures – whether contingency measures would be necessary to manage any residential risk. – a description of the measures that would be implemented to monitor • and report on the environmental performance of the development | Chapter 6 |
| | <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 D |

| Category | SEARs requirement | Section addressed |
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| | <ul style="list-style-type: none"> consideration of the development against all relevant environmental planning instruments (including Part 3 of the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007); | Section 4.1 |
| | <p>the reasons why the development should be approved, having regard to:</p> <ul style="list-style-type: none"> relevant matters for consideration under the <i>Environmental Planning and Assessment Act 1979</i>, including the objects of the Act; the biophysical, economic and social impacts of the development including the principles of ecologically sustainable development the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses, and feasible alternatives to the development (and its key components) including the consequences of not carrying out the development | Section 2.4 and Chapter 7 |
| | <ul style="list-style-type: none"> a signed statement from the author of the EIS, certifying that the information contained within the document is neither false nor misleading. | Appendix F |
| | While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this development. | N/A |
| | In addition to the matters set out in Schedule 1 of the Environmental Planning and Assessment Regulation 2000, the development application must be accompanied by a signed report from a suitably qualified and experienced person that includes an accurate estimate of the capital investment value (as defined in Clause 3 of the Environmental Planning and Assessment Regulation 2000), including details of all the assumptions and components from which the capital investment value calculation is derived. | Due to commercial confidentiality issues, a capital investment value estimate report will be provided separately to the EIS. The capital investment value for the project is estimated at \$130M. |
| Key Issues | | |
| Subsidence | Preparation of a comprehensive subsidence model incorporating all available geotechnical, geological and geophysical data; | Section 6.1.3 Appendix H |
| | An assessment of the likely conventional and non-conventional subsidence effects and impacts of the development, and the potential consequences of these effects and impacts on the natural and built environment, paying particular attention to those features that are considered to have significant economic, social, cultural or environmental value; | Section 6.1.3 Appendix H |
| | A comprehensive assessment of potential impacts on the proposed development on surface and groundwater management associated with historic mine workings in overlying coal seams; and | Section 6.1.3 Appendix H |
| | A comprehensive assessment of the potential impacts to the existing Eraring Ash Dam, as proposed to be modified (see PA 07_0084 MOD 1); | Section 6.1.3 Appendix H |

| Category | SEARs requirement | Section addressed |
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| Water | 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; | Section 6.4 Appendix K |
| | Identification of any licensing requirements or other approvals under the Water Act 1912 and/or Water Management Act 2000; | Section 4.3; 6.3 and 6.4 |
| | Demonstration that water for the construction and operation of the proposed 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; | Section 4.3; 6.3 and 6.4 |
| | An assessment of any likely flooding impacts of the development; | Section 6.5 Appendix L |
| | The measures which would be put in place to control sediment runoff and avoid erosion; | Section 6.4.5 and 6.11.5 Appendix K Appendix R |
| | An assessment of the likely impacts of the development on the quantity and quality of existing surface and groundwater resources including a detailed assessment of proposed water discharge quantities and quality against receiving water quality and flow objectives; and | Section 6.3.3 and 6.4.3 Appendix J Appendix K |
| | An assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users | Section 6.2.3; 6.3.3 and 6.4.3; Appendix I; Appendix J Appendix K |
| Biodiversity | <ul style="list-style-type: none"> accurate predictions of any vegetation to be cleared on site | Section 1.1 Appendix M |
| | <ul style="list-style-type: none"> an assessment of the likely biodiversity impacts of the development, paying particular attention to threatened species, populations and ecological communities and groundwater dependent ecosystems, undertaken in accordance with Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report | Section 6.3.3; 6.4.3; 1.1 and 6.7.3 Appendix J; Appendix K; Appendix M Appendix N |
| | <ul style="list-style-type: none"> a strategy to offset any residual impacts of the development in accordance with the offset rules under the Biodiversity Offsets Scheme | Section 6.4.5 and 1.1 Appendix M Appendix N |
| | <ul style="list-style-type: none"> an assessment on the likely impacts of Lake Macquarie City Council's Awaba Biodiversity Conservation Area | Section 6.6 Appendix M |
| Land Resources | <ul style="list-style-type: none"> an assessment of the likely impacts of the development on the soils and land capability of the site and surrounds | Section 6.11.3 Appendix R |
| | <ul style="list-style-type: none"> an assessment of the compatibility of the development with other land uses in the vicinity of the development, in accordance with the requirements of clause 12 of State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007, paying particular attention to the agricultural land use in the region | Section 6.11.3 Appendix R |

| Category | SEARs requirement | Section addressed |
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| Air Quality | <ul style="list-style-type: none"> a detailed assessment of potential construction and operational air quality impacts, in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, and with a particular focus on dust emissions including PM2.5 and PM10, and having regard to the Voluntary Land Acquisition and Mitigation Policy | Section 6.8 Appendix O |
| | <ul style="list-style-type: none"> an assessment of the likely greenhouse gas impacts of the development | Section 6.8 Appendix O |
| Rehabilitation and Final Landform | <ul style="list-style-type: none"> a description of final landform design objectives, having regard to achieving a natural landform that is safe, stable, non-polluting, fit for the nominated post-mining land use and sympathetic with surrounding landforms | Section 6.19 Appendix X |
| | <ul style="list-style-type: none"> an analysis of final landform options, including the short and long term cost and benefits, constraints and opportunities of each, and detailed justification for the preferred option | Section 2.4 and Section 6.19 Appendix X |
| | <ul style="list-style-type: none"> identification and assessment of post-mining land use options, having regard to any relevant strategic land use planning or resource management plans/policies | Section 6.19 Appendix X |
| | <ul style="list-style-type: none"> rehabilitation objectives and completion criteria to achieve the nominated post-mining land use | Section 6.19 Appendix X |
| | <ul style="list-style-type: none"> a detailed description of the progressive rehabilitation measures that would be implemented over the life of the development | Section 6.19 Appendix X |
| | <ul style="list-style-type: none"> a detailed description of the proposed rehabilitation and mine closure strategies for the development, having regard to the key principles in Strategic Framework for Mine Closure | Section 6.19 Appendix X |
| | <ul style="list-style-type: none"> the measures which would be put in place for the long-term protection and/or management of the site and any biodiversity offset areas post-mining | Section 1.1 Appendix X |
| Noise | <ul style="list-style-type: none"> including a detailed assessment of the likely construction, operational and off- site transport noise impacts of the development in accordance with the Interim Construction Noise Guideline, NSW Noise Policy for Industry and the NSW Road Noise Policy respectively, and having regard to the Voluntary Land Acquisition and Mitigation Policy | Section 6.9.4 Appendix P |
| Visual | <ul style="list-style-type: none"> including a detailed 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 | Section 6.14 Appendix U |
| Waste | <ul style="list-style-type: none"> including estimates of the quantity and nature of the waste streams that would be generated by the project (including tailings and coarse rejects) and any measures that would be implemented to minimise, manage or dispose of these waste streams | Section 2.2.13 |
| Heritage | <ul style="list-style-type: none"> an assessment of the potential impacts of the development on Aboriginal heritage (cultural and archaeological), including consultation with relevant Aboriginal communities/parties and documentation of the views of these stakeholders regarding the likely impact of the development on their cultural heritage | Section 5; 6.12 and 6.13, Appendix S, Appendix T |
| | <ul style="list-style-type: none"> identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items | Section 6.13.1 and 6.13.3 Appendix T |

| Category | SEARs requirement | Section addressed |
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| Traffic & Transport | <ul style="list-style-type: none"> an assessment of the likely transport impacts of the development on the capacity, condition, safety and efficiency of the road and rail networks | Section 6.10.3 Appendix Q |
| | <ul style="list-style-type: none"> a description of the measures that would be implemented to mitigate any impacts | Section 6.10.5 Appendix Q |
| Hazards | <ul style="list-style-type: none"> an assessment of the likely risks to public safety, paying particular attention to potential bushfire risks, interactions with nearby prescribed dams and the handling and use of any dangerous good | Section 6.1, 0, 6.17 and 6.18 |
| | <ul style="list-style-type: none"> a health risk assessment that considers the adverse effects from human exposure to acute and cumulative project related environmental hazards, in accordance with Environmental Health Risk Assessment: Guidelines for assessing human health risk from environmental hazards; and | Section 6.17 |
| Social | <ul style="list-style-type: none"> an assessment of the potential social impacts of the development that builds on the findings of the Social Impact Assessment Scoping Report, in accordance with the Social impact assessment guideline for State significant mining, petroleum production and extractive industry development, paying particular consideration to: <ul style="list-style-type: none"> how the development might affect people's way of life, community, access to and use of infrastructure, services and facilities, culture, health and wellbeing, surroundings, personal and property rights, decision-making systems, and fears and aspirations the principles in Section 1.3 of the guideline the review questions in Appendix D of the guideline | Section 6.15 Appendix V |
| | <ul style="list-style-type: none"> how the development might affect people's way of life, community, access to and use of infrastructure, services and facilities, culture, health and wellbeing, surroundings, personal and property rights, decision-making systems, and fears and aspirations | Section 6.15 Appendix V |
| | <ul style="list-style-type: none"> the principles in Section 1.3 of the guideline | Section 6.15 Appendix V |
| | <ul style="list-style-type: none"> the review questions in Appendix D of the guideline | Section 6.15 Appendix V |
| Economic | <p>Including a detailed assessment of the likely economic impacts of the development, in accordance with the Guidelines for the economic assessment of mining and coal seam gas proposals 2015, paying particular attention to:</p> <ul style="list-style-type: none"> the significance of the coal resource the costs and benefits of the project; identifying whether the development as a whole would result in a net benefit to NSW, including consideration of fluctuation in commodity markets and exchange rates the demand on local infrastructure and services | Section 6.16.3 Appendix W |
| Consultation | <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.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> affected landowners local community groups Lake Macquarie City Council Biodiversity & Conservation Division within the Department Heritage Branch within the Department Environment Protection Authority Division of Resources and Geoscience within the Department Resources Regulator within the Department | Chapter 5 |

| Category | SEARs requirement | Section addressed |
|------------------------------------|---|---------------------------|
| | <ul style="list-style-type: none"> • Department of Primary Industries (including NSW Forestry, Agriculture and Fisheries) • Crown Lands Division within the Department • Water Division within the Department • NSW Natural Resources Access Regulator within the Department • Subsidence Advisory NSW • NSW Health • NSW Rural Fire Service • Roads and Maritime Services • Newstan Awaba Community Consultative Committee • Origin Energy • Ausgrid • TransGrid • NSW Dams Safety Committee • Sydney Trains | |
| | <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 • Identify where the design of the development has been amended and/or mitigation proposed to address issues raised • Otherwise demonstrate that issues raised have been appropriately addressed in the assessment | Section 2.4 and Chapter 5 |
| Further consultation after 2 years | If you do not lodge a development application and EIS for the development within 2 years of the issue date of these requirements, you must consult further with the Planning Secretary in relation to the preparation of the EIS. | N/a |

Table A2 Agency comments attached to SEARs

| Agency | Comment | Where addressed |
|------------------------------------|---|---|
| Lake Macquarie City Council | Council seeks to ensure that groundwater impacts and risks, and biodiversity impacts on the proposed Awaba Conservation Area have been adequately documented and assessed, and specifically that potential impacts are avoided on biodiversity offsets managed within Council's Awaba Biodiversity Conservation Area. In particular, Lake Macquarie City Council requires that potential risks to the Awaba Biodiversity Conservation Area are properly recognised and addressed in the EIS, and ongoing consultation and commitments from Centennial Coal are required." | Sections 6.3.5; 1.1 Appendix J Appendix M |
| | Baseline subsidence, groundwater and biodiversity monitoring sufficiently detailed to be able to identify future impacts on biodiversity should be undertaken as part of the proposal. This is essential for Lake Macquarie City Council to protect its interests in the Awaba Biodiversity Conservation Area and to be able to assess biodiversity impacts more widely. | Section 6.1.3; 6.3.3; 1.1 |
| | As provided for in the BAM, appropriate consideration must be given to avoiding biodiversity, and to the likelihood of serious and irreversible impacts on threatened species and ecological communities. Documentation in the EIS must include measures taken to avoid biodiversity impacts, with specific reference to the Lake Macquarie City Council Interim Technical Guideline for Avoiding Biodiversity Impacts 2019, and Lake Macquarie City Council Interim Serious and Irreversible Impact Technical Guideline 2019. | Section 1.1; Appendix M |
| | Mining exploration and other disturbance from surface works may impact on biodiversity values. Potential impacts must be documented, and appropriate measures should be taken to ensure that no adverse biodiversity impacts occur. | Section 1.1; Appendix D Appendix M |
| | The project application must protect Council's interests and responsibilities for protecting and managing biodiversity on this land (the Awaba Biodiversity Conservation Area), and ensure that Centennial Coal accepts legal responsibility for any damage caused to the natural environmental values of the land. | Section 1.1 Appendix D Appendix M |

| Agency | Comment | Where addressed |
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| | <p>The applicant's commitments in relation to the project must:</p> <p>a) Protect the Council's interests in its land, and legal obligations under consents given under the Environmental Planning and Assessment Act 1979</p> <p>b) Provide for a program of biodiversity monitoring on that part of Lot 463 DP 1138964 affected by the proposal, consistent with monitoring required in the Awaba Biodiversity Conservation Area – Plan of Management 2015.</p> <p>c) Support a legal agreement with Lake Macquarie City Council to indemnify the Council against any loss or damage to its land, or biodiversity, or any management cost that may arise from disturbance to the land. The agreement is to provide for financial security to adequately cover potential losses or damage. In the event that any surface disturbance to Lot 463 DP 1138964 results from the development, the project applicant must agree to find and make all necessary arrangements to secure biodiversity offsets to compensate for that surface disturbance, to the satisfaction of Lake Macquarie City Council, the NSW Minister for Planning, and the Commonwealth Department of Environment and Energy.</p> | <p>Section 1.1 Appendix C Appendix D Appendix M</p> |
| | <p>Project impacts on water resources, listed threatened species and ecological communities, and migratory species are matters of national environmental significance requiring assessment under the EPBC Act.</p> | <p>Section 6.3.5; 6.4.4; 1.1; 6.7.4; Appendix J Appendix M Appendix N</p> |
| | <p>A number of matters of national environmental significance occur within the project area, and must be considered in conjunction with other biodiversity impacts.</p> | <p>Section 6.3.5; 6.4.4; 6.7.4; Appendix J Appendix M Appendix N</p> |
| | <p>The potential for groundwater impacts from the proposed mining, and consequences for natural ecosystems is significant, and must be a priority for the EIS. For example, impacts and groundwater drawdown in the Stockyard and Kilaben Creek catchments is likely, and groundwater dependent ecosystems that may be impacted must be identified.</p> | <p>Section 6.3.5 and Appendix J</p> |
| | <p>The EIS should include surface and groundwater monitoring data within the mining area to determine baseline conditions and to enable post-mining changes to be determined.</p> | <p>Section 6.3.3 and 6.4.3 Appendix J Appendix K</p> |
| | <p>The project forms part of a larger, long-term mining area. Strategic rehabilitation planning and the transition to post mining land use should form part of the proposal and the assessment process.</p> | <p>Section 6.19 Appendix X</p> |

| Agency | Comment | Where addressed |
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| | Lake Macquarie City Council proposes that in conjunction with the project, an ongoing strategic rehabilitation and land use transition dialogue be established with relevant stakeholders to plan for the transition to sustainable post mining for the whole of the Centennial Coal landholdings within the Lake Macquarie local government area. | Section 6.19 Appendix X |
| | Greenhouse gas emissions attributable to the project should be assessed in the context of the City of Lake Macquarie emission targets. | Appendix O |
| | Consideration must be given to evaluating the feasibility of achieving for net zero carbon emissions from the project, and the options and consequences of this and alternative low carbon emission scenarios. | Section 6.8.4 and 6.8.5 Appendix O |
| | The project scoping report (page 4) notes that coal reject management does not form part of the project. This is not appropriate, given that the project relies on coal reject disposal and the approval authority must be satisfied that appropriate arrangements are in place for coal reject management and disposal. | Coal reject management would be undertaken under SSD-5145 and does not form part of this proposal |
| | Lake Macquarie City Council recommends that the EIS include a full assessment of the adequacy and impact of coal reject management arrangements for coal produced from the project. | As above |
| | It is also requested that the applicant address: a) Water quality impacts to the receiving environment at LT Creek, especially regarding heavy metals; b) Addressing the historic impacts of mining impacts upon LT Creek (particularly in relation to contributions to dredging of historic sediment accumulation in the vicinity of the upper tidal limits of the creek. | Not relevant, discharges will continue as approved under the Northern Coal Logistics Project. |
| | The strategic land use planning consequences of the proposal require identification in the EIS, together with assessment of the social and economic implications as part of any approval processes. | Chapter 3; Section 6.15.4; 6.16.4 and Appendix V Appendix W |
| | Specifically, the following matters have been identified as of interest to Lake Macquarie City Council in its role as a planning authority: a) The indicative very fast train corridor between Sydney and Newcastle is intersected by the project area. The project has the potential to require relocation of this corridor and future transport infrastructure, with significant economic and public interest consequences. Consideration must be given to options, which can protect the corridor from mining or other impacts. b) The protection of the native vegetation and biodiversity in the Awaba area as a conservation reserve (Awaba Conservation Area) has been identified as a long-term land use objective and recognised in Lake Macquarie City Council strategic planning. It is essential that this be considered in the environmental assessment of the proposal. c) Future use of Earing Power Station and associated infrastructure (including ash dam and transmission lines) has the potential to be affected by the proposal and requires assessment. | Section 6.15 |

| Agency | Comment | Where addressed |
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| | A cumulative assessment needs to be undertaken of historical mining and legacy issues associated with the project. | Section 7.3.3 |
| | <p>Detailed independent (and peer reviewed) assessment should be undertaken the impacts of proposed mining on the Eraring Ash Dam. This assessment should consider:</p> <p>a) Any potential impacts of the stability of the ash dam structure, including assessments of impacts for Operating Base and Maximum Design Earthquake events.</p> <p>b) Impacts on groundwater interactions below the ash dam, particularly with regards to leaching or discharge of metal laden ash-dam waters to receiving water (surface or ground).</p> | Appendix H |
| | <p>The applicant is required to evaluate the existing and projected acoustic amenity to the surrounding areas, which may be affected by surface infrastructure such as heavy vehicle movements, plant and equipment, conveyor belt operation, exhaust fans and any increased traffic movements to public roads. In this regard, the applicant must provide a detailed Acoustic Report, prepared by a qualified and experienced Acoustic Consultant to determine whether the mine can operate in accordance with:</p> <p>a) The NSW EPA Noise policy for Industry 2017 for ongoing operational noise from mechanical plant and equipment, including on-site vehicle movements.</p> <p>b) NSW Department of Environment, Climate Change and Water publication “Interim Construction Noise Guideline” July 2009.</p> <p>c) Vibration from construction site operations on surrounding land shall comply with the NSW Department of Environment, Climate Change and Water publication “Assessing Vibration: a technical guideline” February 2006.</p> <p>d) NSW Road Noise Policy to evaluate any potential effect to public roads, and the amenity of residential premises along those roads.</p> <p>e) Rail noise and vibration if that forms part of the new infrastructure proposal.</p> <p>f) Any proposed blasting to be carried out as part of infrastructure construction.</p> | Section 6.4 Appendix P |
| | It is assumed that the EPA would continue licensing the facility under the provisions of the NSW Protection of the Environment Operations Act in relation to water pollution discharges. However, the EIS must include details of the types, quantity, treatment, discharge quality, final discharge points and its potential environmental impact and public health effects to the surrounding area and receiving waters. | Section 6.2.3; 6.3.4; 6.4.4; 6.15.4; 6.17.3 |
| | The applicant is required to determine whether there are any Contaminated Site issues, which may affect the health and amenity of both construction and permanent mine employees. There may have been illegal dumping within the proposed surface infrastructure expansion area which may include asbestos. | Not addressed |

| Agency | Comment | Where addressed |
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| | <p>The applicant must provide a Preliminary Site Contamination Assessment, prepared by a qualified and experienced contaminated site consultant, and in accordance with the NSW EPA Guidelines for Consultants Reporting on Contaminated Sites.</p> | Not Addressed |
| | <p>The applicant is to prepare an Air Quality Impact Assessment to assess potential air impacts on nearby sensitive receptors. The Air Quality Impact Assessment is to be prepared in accordance with the NSW EPA Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2016).</p> | Section 6.8.4 and Appendix O |
| | <p>Council's Development Planner – Heritage Focus has reviewed the scoping report and existing heritage items which could be affected by the proposal and the potential impacts to historic heritage as a result of the project.</p> <p>This would include <i>“amenity impacts and or damage to the locally significant Awaba Colliery Surface Site due to the construction of new infrastructure at the site, and subsidence related impacts following mining within the Extension of Mining Area”</i>.</p> <p>The applicant proposes that a Historical Heritage Assessment is undertaken, which would include an assessment of the potential subsidence impacts on identified built features of historic heritage significance and identify measures to avoid, mitigate, monitor and manage the potential impacts of the project. This is supported.</p> <p>The report should also include the assessment of the potential impact of the new infrastructure on the Awaba Colliery Surface Site, as identified by the applicant, and any proposed actions to mitigate impacts.</p> | Section 6.13.4 |
| | <p>The applicant has identified in the scoping report that there are six AHIMS sites within the proposed extension area, and stated that an Aboriginal Cultural Heritage Assessment would be prepared, in accordance with OEH's requirements, with the appropriate consultation. This approach is considered adequate and supported.</p> | Appendix S |

| Agency | Comment | Where addressed |
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| Water Division and NRAR | The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased. | Section 2.2 and 6.4.3 Appendix K |
| | A detailed and consolidated site water balance. | Section 6.4.3 and 6.4.4 Appendix K |
| | Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts. | Section 6.3.5; 6.4.4; 6.4.5 and Appendix D Appendix J Appendix K |
| | Proposed surface and groundwater monitoring activities and methodologies. | Appendix D Appendix J Appendix K |
| | Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water). | Section 4.3 Appendix J Appendix K |
| Crown Lands | For mining operations involving Crown land or Crown Roads, the following requirements apply: | |
| | All Crown Land and Crown Roads within a Mining Lease must be subject to a Compensation Agreement issued under Section 265 of the Mining Act 1992, to be agreed and executed prior to any mining activity taking place. The Compensation Agreement may include conditions requiring the Mining Lease Holder to purchase Crown land impacted on by mining activity. Other works consents may also be necessary under Section 81 of the Mining Act 1992. | 5.3.1 |
| | All Crown Land and Crown Roads located within an Exploration Licence, where subject to exploration activity, must be subject to an Access Arrangement issued under Section 141 of the Mining Act 1992, to be agreed and executed prior to any exploration activity taking place | Not required |
| DPI - Agriculture | Section 5.2.9 'Soil and Land Resources' of the Scoping Report indicates an intention to undertake an Agricultural Impact Assessment (AIS) in the forthcoming EIS. The proponent should be advised that in this instance an AIS is not necessary as it is unlikely that the proposed underground extension will impact on any existing or future agricultural activity or resources that would not already be addressed in the EIS. | Noted |

| Agency | Comment | Where addressed |
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| DRG | <p>The Division requires that the Project's Environmental Impact Statement (EIS) refers to and includes all the requirements set out in the following guidelines: <i>Mine Application Guideline</i> (2015) (where it relates to the EIS) (Attachment A), <i>Indicative Secretary's Environmental Assessment Requirements (SEARs) for state significant mining developments</i> (October 2015) (Attachment B) and These inclusions will ensure the resource has been adequately assessed to facilitate appropriate and efficient recovery and utilisation of the State's resources.</p> | Section 3.1.3 |
| | <p>The EIS must also include the Division's project specific requirements as applied to mining development; <i>Newstan Mine Extension Project - DRG SEARs (coal)</i> (Attachment C).</p> | Where relevant, these requirements have been addressed throughout the EIS, however commercial in confidence information and other |
| Dams Safety NSW | <p>Movement of the dam wall needs to be monitored very closely. The use of remote sensing techniques such as LiDAR or InSAR should be included in TARPS for movement of the dam wall. With extraction approaching the dam wall from the north, TARPs could be developed that cease extraction if movement at the dam wall is detected.</p> <p>The limit of horizontal movement that the dam can withstand should be determined by an expert dam engineer.</p> <p>The mine layout should ensure that the embankment is not placed in tension and that there is no differential movement along the embankment.</p> <p>A risk assessment of the impact of the proposed extraction on the embankment needs to be undertaken as the consequence of failure is very high. The recent examples of exceedance of subsidence predictions for mines in the southern coalfield should be included when assessing the risk to the embankment.</p> <p>RECOMMENDATIONS</p> <ol style="list-style-type: none"> 1) A Risk Assessment for extraction close to the Eraring Ash Dam wall should include assessment for allowable movement of the embankment as determined by an expert dam engineer. 2) The development of a TARP for the dam wall should include a cease mining condition. 3) The mine layout should not place the embankment in tension. | Appendix H |
| NSW EPA | <p>The EIS must provide sufficient information to demonstrate that the proposed development can be operated whilst complying with the <i>Protection of the Environment Operations Act 1997</i>, in particular, the protection of water quality during construction and operation of the facility. Accordingly, pollution control measures should not be proposed if they are impractical, unrealistic, or beyond the financial viability of the development.</p> | Section 6.17.2 and 6.17.3 |

| Agency | Comment | Where addressed |
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| | <p>The Proposal and Premises</p> | |
| | <p>The objectives of the proposal should be clearly stated and refer to:</p> <ul style="list-style-type: none"> • The size and type of the operation • The nature of the processes and the products, by-products and wastes produced • The types and quantities of any chemicals to be used and stored onsite • Proposed operational hours, including any heavy vehicle movements • Proposed maximum and average annual production rates that will occur at the premises • Proposed staging and timing of the proposal. | <p>Section 1.2 and 2.2</p> |
| | <p>The EIS will need to fully identify all the processes and activities intended for the site over the life of the development. This will include details of:</p> <ul style="list-style-type: none"> • The location of the proposed facility and details of the surrounding environment • The proposed layout of the site • Appropriate land use zoning • Ownership details of any residence and/or land likely to be affected by the proposed operations • Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc. in the locality that may be affected by the facility • All equipment proposed for use at the site • All chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management • Clearly detail the boundary of the premises • Methods to mitigate any expected environmental impacts of the development | <p>Section 2.2; 3.2; 3.3; 6.17.2 Appendix B Appendix C Appendix D</p> |
| | <p>4.1 Air quality</p> | |
| | <p>The EIS should include an air quality impact assessment (AQIA). Where the scale and nature of the Proposal justifies a quantitative AQIA, the AQIA must be undertaken in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW. The AQIA must identify and describe in detail all possible sources of air pollution and activities/ processes with the potential to cause air pollutants including odours and fugitive dust emissions beyond the boundary of any premises proposed to be licenced by an EPL. The AQIA should cover both the construction and operational phases of the development. The AQIA should include cumulative impacts associated with existing developments and any developments having been granted development consent but which have not commenced.</p> | <p>Section 6.8.4; Appendix O</p> |

| Agency | Comment | Where addressed |
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| | The EIS should demonstrate that the Proposal will operate within EPA's objectives which are to minimise adverse effects on the amenity of local residents and sensitive land uses and to limit the effects of emissions on local, regional and inter-regional air quality. | Section 6.8.5 Appendix O |
| | The EIS should include an air quality impact assessment (AQIA) in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including, as a minimum the following components: | Appendix O |
| | <p>Assessment Objective</p> <ol style="list-style-type: none"> 1. Demonstrate the proposed project will incorporate and apply best management practice emission controls 2. Demonstrate that the project will not cause violation of the project adopted air quality impact assessment criteria at any residential dwelling or other sensitive receptor | Section 6.8, Appendix D Appendix O |
| | <p>Assessment Criteria</p> <p>Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the Protection of the Environment Operations (POEO) Act (1997) and the POEO (Clean Air) Regulation (2010).</p> | Section 6.8 Appendix D Appendix O |
| | <p>Existing Environment</p> <p>Provide a detailed description of the existing environment within the assessment domain, including:</p> <ul style="list-style-type: none"> • geophysical form and land-uses • location of all sensitive receptors • local and regional prevailing meteorology | Section 6.8.3 and Appendix O |
| | <p>Emissions Inventory</p> <p>Provide a detailed description of the project and identify the key stages with regards to the potential for air emissions and impacts on the surrounding environment.</p> <p>Identify all sources of air emissions, including mechanically generated, combustion and transport related emissions likely to be associated with the proposed development.</p> | Section 6.8.4 and Appendix O |
| | <p>Air Quality Emission Control Measures</p> <p>Provide a detailed discussion of all proposed air quality emission control measures, including details of a reactive/predictive management system. The information provided must include:</p> <ul style="list-style-type: none"> • explicit linkage of proposed emission controls to the site specific best practice determination assessment • timeframe for implementation of all identified emission controls • key performance indicators for emission controls • response mechanisms • responsibilities for demonstrating and reporting achievement of KPIs • record keeping and complaints response register; | Section 6.8.5 Appendix D Appendix O |

| Agency | Comment | Where addressed |
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| | 5 Noise and Vibration | |
| | The following matters should be addressed in relation to noise and vibration impacts associated with the proposal. This includes identification of the hours of operations, assessment of all activities where proposed, and impacts on sensitive receivers associated with the proposed hours of operation. The following matters should be addressed as part of the EIS. | Section 6.9.4 and Appendix P |
| | <p>General</p> <p>Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009).</p> <p>Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the Assessing Vibration: a technical guideline (DEC, 2006).</p> <p>Blast impacts should be demonstrated to be capable of complying with the guidelines contained in Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).</p> | Section 6.9 and Appendix P |
| | <p>Industry</p> <p>Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the NSW Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes.</p> | Section 6.9 and Appendix P |
| | <p>Road</p> <p>Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the NSW Road Noise Policy (DECCW, 2011).</p> <p>Noise from new or upgraded public roads should be assessed using the NSW Road Noise Policy (DECCW, 2011).</p> | Section 6.9.2 Appendix P |
| | <p>Monitoring</p> <p>Detail monitoring that will be conducted to assess the impacts of the proposal.</p> | Section 6.9.2 Appendix P |
| | 6.1 Water Quality | |
| | <p>Describe Proposal</p> <p>Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.</p> <p>Demonstrate that all practical options to avoid discharges have been implemented and environmental impact minimised where discharge is necessary.</p> <p>Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.</p> | Section 6.3.3; 6.3.5; 6.4.3; 6.4.5. Appendix D Appendix J Appendix K |

| Agency | Comment | Where addressed |
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| | <p>Background Conditions</p> <p>Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal. Issues to be discussed should include but are not limited to:</p> <ul style="list-style-type: none"> • a description of any impacts from existing industry or activities on water quality • a description of the condition of the local catchment e.g. erosion, soils, vegetation cover, etc • an outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment • historic river flow data • State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters • State the indicators and associated trigger values or criteria for the identified environmental values. This information should be based on the ANZECC (2000) Guidelines for Fresh and Marine Water Quality as a minimum. • State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government. | <p>Section 6.3.3 and 6.4.3; Appendix J Appendix K</p> |
| | <p>Impact Assessment</p> <p>Describe the nature and degree of impact that any proposed discharges will have on the receiving environment, both surface water and groundwater. Detail contractual and other arrangements that will be put in place to prevent pollution from haul roads and unsealed roads per se, particularly rights of carriageways not owned by the proponent. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:</p> <ul style="list-style-type: none"> • protect the Water Quality Objectives for receiving waters where they are currently being achieved • contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved • Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible. • Propose water quality limits for any discharge(s) that adequately protects the receiving environment. | <p>Discharges will continue as approved under the Northern Coal Logistics Project</p> |

| Agency | Comment | Where addressed |
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| | <ul style="list-style-type: none"> Assess impacts on groundwater and groundwater dependent ecosystems. Describe how stormwater will be managed both during and after construction. | |
| | <p>Monitoring</p> <p>Describe how predicted impacts will be monitored and assessed over time.</p> | <p>Section; 6.3.5 and 6.4.5</p> <p>Appendix D</p> <p>Appendix J</p> <p>Appendix K</p> |
| | <p>6.2 Soil</p> | |
| | <p>The EIS should include:</p> <p>An assessment of potential impacts on soil and land resources should be undertaken, being guided by Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:</p> <ul style="list-style-type: none"> Soil erosion and sediment transport - in accordance with Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008). A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. | <p>Section 6.11.3, 6.11.5 and</p> <p>Appendix D</p> <p>Appendix R</p> |
| | <p>7 Waste</p> | |
| | <p>The EIS should:</p> <ul style="list-style-type: none"> Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots. Identify, quantify, characterise and classify all waste that currently exists at the site. Identify the intended end use, for example reuse or disposal, and the end use location(s) for the waste. Also, specify the mechanism under which waste will be reused or disposed, such as a Resource Recovery Exemption. Note: All waste must be classified in accordance with EPA's Classification Guidelines. Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste. Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines. Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling. | <p>Section 2.2.13; 2.2.14 and 6.4.5</p> |

| Agency | Comment | Where addressed |
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| | <p>Note: All waste must be classified in accordance with EPA's Classification Guidelines.</p> <ul style="list-style-type: none"> • Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with EPA's Waste Classification Guidelines. • Provide details of how waste will be handled and managed onsite to minimise pollution, including: <ul style="list-style-type: none"> a. Stockpile location and management: • Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste). • Proposed height limits for all waste to reduce the potential for dust and odour. • Procedures for minimising the movement of waste around the site and double handling. • Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc. • Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as Sediment traps, Diversion banks, Sediment fences, Bunds (earth, hay, mulch), Geofabric liners, Other control measures as appropriate. | |
| | <p>The Proponent should also provide details of:</p> <ul style="list-style-type: none"> • how leachate from stockpiled waste material will be kept separate from stormwater runoff • treatment of leachate through a wastewater treatment plant (if applicable) • any proposed transport and disposal of leachate off-site • Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal. • Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment. • Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste. • Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time. | <p>Section 6.4.5 Appendix K</p> |

| Agency | Comment | Where addressed |
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| | <ul style="list-style-type: none"> • Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc. • Include details of the quantity and type of liquid and/or non-liquid waste(s) generated, handled, processed or disposed of at the premises, including: <ul style="list-style-type: none"> • the transportation, assessment and handling of waste arriving at or generated at the site • any stockpiling of wastes or recovered materials at the site • any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on- and off-site • the method for disposing of all wastes or recovered materials at the facility • the emissions arising from the handling, storage, processing and reprocessing of waste at the facility • the proposed controls for managing the environmental impacts of these activities | |
| | <p>Sewage and Wastewater:</p> <p>Identify the management and disposal methods for sewage and wastewater generated onsite including:</p> <ul style="list-style-type: none"> • quantity of sewage and wastewater to be generated by the proposal • proposed strategies for the handling, storage, treatment, reuse/recycling, discharge and disposal of sewage and wastewater • details of actions to prevent potential impacts to surface water, groundwater, any other environmental aspect or human health which may occur as a result of the management technique utilised | Section 2.2.13 |
| | <p>8 Dangerous Goods, Chemical storage and Bunding</p> | |
| | <p>The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.</p> <p>The EIS should identify any fuel or chemical storage areas proposed for the site.</p> <p>The EIS should consider compliance with the following legislation, standards and guidelines where relevant:</p> <ul style="list-style-type: none"> • Australian Standard AS1692:1989 Tanks for Flammable and combustible liquids • The DECC’s “Bunding and Spill Management” Technical Guideline (November 1997) • Australian Standard AS 1940:2004 The Storage and Handling of Flammable and Combustible Liquids | Section 2.2.14 and 6.17.3 Appendix D |

| Agency | Comment | Where addressed |
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| | <ul style="list-style-type: none"> • Australia Standard AS 4452-1997: The Storage and Handling of Toxic Substances • Australian/New Zealand Standard AS/NZS 4452:1997: The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers • Road and Rail Transport (Dangerous Goods) Act 1997 | |
| | 9 Monitoring Programs | |
| | <p>The EIS should include a detailed assessment of any noise, air quality, weather, water or waste monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.</p> | Appendix D |
| BCD | Biodiversity | |
| | <p>1. Biodiversity impacts related to the proposed development (SSD-10333) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method.</p> | Appendix M |
| | <p>2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.</p> | Appendix M |
| | <p>3. The BDAR must include details of the measures proposed to address the offset obligation as follows:</p> <ul style="list-style-type: none"> • The total number and classes of biodiversity credits required to be retired for the development/project • The number and classes of like-for-like biodiversity credits proposed to be retired • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules • Any proposal to fund a biodiversity conservation action • Any proposal to conduct ecological rehabilitation (if a mining project) • Any proposal to make a payment to the Biodiversity Conservation Fund | Appendix M |
| | <p>If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.</p> | Appendix M |

| Agency | Comment | Where addressed |
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| | 4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the Biodiversity Conservation Act 2016. | Appendix M |
| | Aboriginal cultural heritage | |
| | 5. The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers. | Section 6.12.3 Appendix S |
| | 6. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR. | Section 5.3.6 Appendix S |
| | 7. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH. | Appendix S |
| | Historic heritage | |
| | 8. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall: <ul style="list-style-type: none"> b. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996) c. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria d. include a statement of heritage impact for all heritage items (including significance assessment) | Section 6.13.4; 6.13.5 and Appendix D Appendix T |

| Agency | Comment | Where addressed |
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| | <ul style="list-style-type: none"> e. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant) f. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations. | |
| | Water and soils | |
| | <p>9. The EIS must map the following features relevant to water and soils including:</p> <ul style="list-style-type: none"> a) Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). b) Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method). c) Wetlands as described in s4.2 of the Biodiversity Assessment Method. d) Groundwater. e) Groundwater dependent ecosystems. f) Proposed intake and discharge locations. | <p>Section 6.4.3 Appendix K Appendix M</p> |
| | <p>10. The EIS must describe background conditions for any water resource likely to be affected by the development, including:</p> <ul style="list-style-type: none"> a) Existing surface and groundwater. b) Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. c) Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. d) Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government." | <p>Section 6.3.3 and 6.3.4 Appendix J Appendix K</p> |
| | <p>11. The EIS must assess the impacts of the development on water quality, including:</p> <ul style="list-style-type: none"> a) The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction. | <p>Section 6.3.5, 6.4.4, 6.4.5 and Appendix D Appendix J Appendix K</p> |

| Agency | Comment | Where addressed |
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| | b) Identification of proposed monitoring of water quality. | |
| | <p>12. The EIS must assess the impact of the development on hydrology, including:</p> <p>a) Water balance including quantity, quality and source.</p> <p>b) Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.</p> <p>c) Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.</p> <p>d) Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).</p> <p>e) Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.</p> <p>f) Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.</p> <p>g) Identification of proposed monitoring of hydrological attributes.</p> | Section 6.4.4, 6.4.5 and Appendix D Appendix K |
| | Flooding and coastal erosion | |
| | <p>13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:</p> <p>a) Flood prone land.</p> <p>b) Flood planning area, the area below the flood planning level.</p> <p>c) Hydraulic categorisation (floodways and flood storage areas).</p> | Section 6.4.3 |
| | 14. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event. | Section 6.5.4 Appendix L |
| | <p>15. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:</p> <p>a) Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.</p> | Section 6.5.4 and Appendix L |

| Agency | Comment | Where addressed |
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| | <p>16. Modelling in the EIS must consider and document:</p> <ul style="list-style-type: none"> a) The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood. b) Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories. c) Relevant provisions of the NSW Floodplain Development Manual 2005. | Section 6.5.4 and Appendix L |
| | <p>17. The EIS must assess the impacts on the proposed development on flood behaviour, including:</p> <ul style="list-style-type: none"> a) Whether there will be detrimental increases in the potential flood affection of other properties, assets and infrastructure. b) Consistency with Council floodplain risk management plans. c) Compatibility with the flood hazard of the land. d) Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land. e) Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site. f) Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses. g) Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council. h) Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council. i) Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES. j) Any impacts the development may have on the social and economic costs to the community as consequence of flooding. | Section 6.5.4 and Appendix L |

| Agency | Comment | Where addressed |
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| Resources Regulator | Post-mining land use | |
| | <ul style="list-style-type: none"> a) Identification and assessment of post-mining land use options b) Identification and justification of the preferred post-mining land use outcome(s), including a discussion of how the final land use(s) are aligned with relevant local and regional strategic land use objectives c) Identification of how the rehabilitation of the project will relate to the rehabilitation strategies of neighbouring mines within the region, with a particular emphasis on the coordination of rehabilitation activities along common boundary areas | Section 6.19.1; 6.19.3 and 6.19.5 Appendix X |
| | Rehabilitation objectives and domains | |
| | d) Inclusion of a set of project rehabilitation objectives and completion criteria that clearly define the outcomes required to achieve the post-mining land use for each domain. Completion criteria should be specific, measurable, achievable, realistic and time-bound. If necessary, objective criteria may be presented as ranges | Section 6.19.3 |
| | Rehabilitation Methodology | |
| | e) Details regarding the rehabilitation methods for disturbed areas and expected time frames for each stage of the rehabilitation process | Section 6.19.5 |
| | f) Mine layout and scheduling, including maximising opportunities for progressive final rehabilitation | Section 6.19.5 |
| | The final rehabilitation schedule should be mapped against key production milestones (i.e. ROM tonnes) of the mine layout sequence before being translated to indicative timeframes throughout the mine life. | Appendix X |
| | The mine plan should maximise opportunities for progressive rehabilitation; | Appendix X |
| | Conceptual Final Landform Design | |
| | g) Inclusion of a drawing at an appropriate scale identifying key attributes of the final landform, including final landform contours and the location of the proposed final land use(s) | Appendix X |
| | Monitoring and Research | |
| | h) Outlining the monitoring programs that will be implemented to assess how rehabilitation is trending towards the nominated land use objectives and completion criteria | Appendix X |
| | i) Details of the process for triggering intervention and adaptive management measures to address potential adverse results as well as continuously improve rehabilitation practices | Appendix X |
| | j) Outlining any proposed rehabilitation research programs and trials, including their objectives. This should include details of how the outcomes of research are considered as part of the ongoing review and improvement of rehabilitation practices | Appendix X |

| Agency | Comment | Where addressed |
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| | Post-closure maintenance | |
| | k) Description of how post-rehabilitation areas will be actively managed and maintained in accordance with the intended land use(s) in order to demonstrate progress towards meeting the rehabilitation objectives and completion criteria in a timely manner | Section 6.19.5 and 6.19.6 Appendix X |
| | Barriers or limitations to effective rehabilitation | |
| | l) Identification and description of those aspects of the site or operations that may present barriers or limitations to effective rehabilitation, including: <ul style="list-style-type: none"> <li data-bbox="580 568 1123 689">(i) evaluation of the likely effectiveness of the proposed rehabilitation techniques against the rehabilitation objectives and completion criteria <li data-bbox="580 696 1123 965">(ii) an assessment and life of mine management strategy of the potential for geochemical constraints to rehabilitation (e.g. acid rock drainage, spontaneous combustion etc.), particularly associated with the management of overburden/interburden and reject material <li data-bbox="580 972 1123 1151">(iii) the processes that will be implemented throughout the mine life to identify and appropriately manage geochemical risks that may affect the ability to achieve sustainable rehabilitation outcomes <li data-bbox="580 1158 1123 1487">(iv) existing and surrounding landforms (showing contours and slopes) and how similar characteristics can be incorporated into the post-mining final landform design. This should include an evaluation of how key geomorphological characteristics evident in stable landforms within the natural landscape can be adapted to the materials and other constraints associated with the site. | Appendix X |
| | m) Where the mine includes underground workings: <ul style="list-style-type: none"> <li data-bbox="533 1554 1123 1733">(i) determine (with reference to the groundwater assessment) the likelihood and associated impacts of groundwater accumulating and subsequently discharging (e.g. acid or neutral mine drainage) from the underground workings post cessation of mining <li data-bbox="533 1740 1123 1832">(ii) Consideration of the likely controls required to either prevent or mitigate against these risks as part of the closure plan for the site | Section 6.3.5 Appendix M |
| | n) Consideration of the controls likely to be required to either prevent or mitigate against rehabilitation risks as part of the closure plan for the site | Section 6.3.5 Appendix M |

| Agency | Comment | Where addressed |
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| | o) Where an ecological land use is proposed, demonstrate how the revegetation strategy (e.g. seed mix, habitat features, corridor width etc.) has been developed in consideration of the target vegetation community(s) | Section 6.19.6 Appendix X |
| | p) Where the intended land use is agriculture, demonstrate that the landscape, vegetation and soil will be returned to a condition capable of supporting this | Not applicable |
| | q) Consider any relevant government policies | Section 4.2; 4.3 and 4.4 |
| NSW Rural Fire Service | The NSW Rural Fire Service has reviewed the information provided and advises that a bush fire assessment report shall be prepared which identifies the extent to which the proposed development conforms with or deviates from the relevant provisions of Planning for Bush fire Protection 2006 or subsequent edition. | Section 6.18 |
| TfNSW | Roads and Maritime recommends that the Environmental Impact Statement (EIS) should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development: Road and Related Facilities within the Department of Planning EIS Guidelines, Section 2 Traffic Impact Studies of Roads and Maritime's Guide to Traffic Generating Developments 2002, and Austroads Guide to Traffic Management, Part 12, Traffic Impacts of Developments. | Section 6.10.1 Appendix Q |
| | Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime's Guide to Traffic Generating Developments 2002 and is to include (but not be limited to) the following: Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject properties. Current traffic counts for all of the traffic routes and intersections. The anticipated additional vehicular traffic generated from both the construction and operational stages of the project. The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation. Consideration of the traffic impacts on existing and proposed intersections, and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development during both the construction and operational stages. The traffic impact shall also include the cumulative traffic impact of other proposed developments in the area. | Section 6.10 Appendix Q |

| Agency | Comment | Where addressed |
|--------------------------------|--|---|
| | <p>Traffic analysis of any major / relevant intersections impacted, using SIDRA or similar traffic model, including:</p> <ul style="list-style-type: none"> • Current traffic counts and 10 year traffic growth projections • With and without development scenarios • 95th percentile back of queue lengths • Delays and level of service on all legs for the relevant intersections • Data files for Roads and Maritime review. | Section 6.10.3; 6.10.4 Appendix Q |
| | <p>Identify the necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Roads and Maritime and Council.</p> | Section 6.10.4 and 6.10.5 Appendix Q |
| | <p>Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.</p> | Section 6.10.4 and 6.10.5 Appendix Q |
| Subsidence Advisory NSW | <p>Subsidence Advisory notes the Environmental Impact Statement (EIS) scoping worksheet identifies built environment for inclusion within the EIS. Subsidence Advisory has no further comment.</p> | Appendix H |

Table A3 Commonwealth assessment requirements EPBC 2019/8528

| Assessment Requirement | Section Addressed |
|--|--|
| <p>General Assessment Requirements</p> <p>The EIS must address the matters outlined in Schedule 4 of the EPBC Regulations and the matters outlined below in relation to the controlling provisions:</p> <p>Listed threatened species and communities (section 18 and 18A)</p> <p>For each of the EPBC Act listed species known or predicted to occur in the project site, and each of the EPBC Act listed ecological communities likely to be significantly impacted, the EIS must provide:</p> <ol style="list-style-type: none"> 1. Survey results, including details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Commonwealth guidelines and policy statements and/or the relevant NSW offsetting method. For ecological communities, this includes any condition thresholds provided in the listing advice or approved conservation advice. 2. A description and quantification of habitat in the study area (including suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advices, conservation advices, recovery plans, and threat abatement plans. 3. Maps displaying the above information (specific to each EPBC protected matter) overlaid with the proposed action. It is acceptable, where possible, to use the mapping and assessment of Plant Community Types (PCTs) and the species surveys prescribed by the BAM as the basis for identifying EPBC Act-listed species and communities. The EIS must clearly identify which PCTs are considered to align with habitat for the relevant EPBC Act listed species or community, and provide individual maps for each species or community 4. Description of the nature, geographic extent, magnitude, timing and duration of, any likely direct, indirect and consequential impacts on any relevant EPBC Act listed species and communities. It must clearly identify the location and quantify the extent of all impact areas to each relevant EPBC Act listed species or community. The EIS must address the likelihood and extent of any impacts downstream of the proposed action. 5. For each of the EPBC Act listed species and communities likely to be impacted by the development, the EIS/assessment must provide information on proposed avoidance and mitigation measures to deal with the impacts of the action, and a description of the predicted effectiveness and outcomes that the avoidance and mitigation measures will achieve. 6. Quantification of the offset liability for each species and community significantly impacted, and information on the proposed offset strategy, including discussion of the conservation benefit for each species and community, how offsets will be secured, and the timing of protection. All suitable habitat for MNES significantly impacted must be offset. It is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action i.e. 'like-for-like'. <p>Like-for-like includes protection of native vegetation that is the same EEC or habitat being impacted, or funding to provide a direct benefit to the matter being impacted i.e. threat abatement, breeding and propagation programs or other relevant conservation measures.</p> | <p>Section 6.6 Appendix M</p> |
| <p>A water resource, in relation to coal seam gas development and large coal mining development (section 240 and 24E)</p> <p>The EIS must include a detailed water assessment. The water assessment must be undertaken in accordance with the IESC Information Guidelines (http://iesc.environment.gov.au/publications/information-guidelines-independent-experts-scientific-committee-advice-coal-seam-gas) and provide the information outlined in these guidelines including:</p> | <p>Section 6.3.3; 6.3.4; 6.3.5; 6.4.3; 6.4.4 and 6.4.5 Appendix D Appendix J</p> |

| Assessment Requirement | Section Addressed |
|--|-------------------|
| <p><u>Groundwater modelling:</u></p> <ul style="list-style-type: none"> 7. Include a groundwater model that uses a wide variety of parameters and predictions to enable clarification of potential drawdown impacts and include, accordingly 8. Include a groundwater model that has been integrated with the subsidence model to provide an improved understanding of impacts on surface water and alluvium. <p><u>Analysing potential impacts to groundwater dependant ecosystems (GDEs)</u></p> <ul style="list-style-type: none"> 9. Confirm the distribution of GDE's in the region and depth to groundwater in areas of potential GDE's 10. Conduct a detailed cumulative impact assessment of potential risks to groundwater and surface water ecosystems that may be impacted by the project 11. Include an assessment of GDE's <p><u>Surface Water Monitoring</u></p> <ul style="list-style-type: none"> 12. The EIS should provide surface water modelling which considers water loss from surface waters due to groundwater draw down, cracking and ponding. 13. Include a surface water assessment <p><u>Comprehensive and detailed monitoring</u></p> <ul style="list-style-type: none"> 14. The EIS should derive site specific water quality guidelines and provide more information on how the proponent plans to monitor impacts. For example, the parameters and frequency of monitoring should be detailed. | <p>Appendix K</p> |