

ATTACHMENT 2

DOC19/320327
SSD 10269

Ms Rose-Anne Hawkeswood
A/Team Leader
Resource and Energy Assessments, Planning Services
Department of Planning and Environment
Rose-Anne.Hawkeswood@planning.nsw.gov.au

Dear Rose-Anne,

SEARs Request for Narrabri Coal Mine Stage 3 – SSD 10269

I refer to your email dated 8 April 2019 seeking input into the Department of Planning and Environment (DPE) Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Assessment (EIS) for the Narrabri Coal Mine Stage 3 project (SSD 10269).

OEH has considered your request and provides SEARs for the proposed development in **Attachment A**, and guidance material in **Attachment B**. OEH understands that the proposed project is seeking a new development consent that will involve an extension of the existing underground mining areas, the development of supporting infrastructure, and an extension to the mine life.

OEH recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Aboriginal cultural heritage
3. Historic heritage
4. Water and soils
5. Flooding

The information in the scoping report indicates that potential environmental impacts from the proposed project may be subsidence effects, impacts on surface and groundwater resources, impacts on biodiversity from clearing, and potential impacts on Aboriginal cultural heritage items.

The Biodiversity Assessment Methodology (BAM) must be used to assess impacts to biodiversity in accordance with the *Biodiversity Conservation Act 2016* (BC Act). A Biodiversity Development Assessment Report (BDAR) must accompany the EIS.

Earlier this year OEH had discussions with DPE and the proponent regarding the Aboriginal cultural heritage requirements for this proposal. Given that a new development consent is being sought for this project, OEH recommend that a new consultation process be commenced rather than

continuing consultation with the two existing registered Aboriginal parties associated with the Narrabri Coal Stage 2 project. Consultation with Aboriginal people must be undertaken and documented in accordance with the *Aboriginal cultural heritage consultation requirements for proponents* document.

If you have any questions regarding this matter further, please contact Renee Shepherd, Senior Conservation Planning Officer on 02 6883 5355 or renee.shepherd@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'P. Christie', with a stylized flourish at the end.

PETER CHRISTIE
Director North West
Conservation and Regional Delivery

17 April 2019

Contact officer: RENEE SHEPHERD
02 6883 5355

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

ATTACHMENT A

Standard Environmental Assessment Requirements

<p>Biodiversity</p> <ol style="list-style-type: none"> 1. Biodiversity impacts related to the proposed Narrabri Coal Mine Stage 3 project are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and Biodiversity Assessment Method, unless OEH and DPE determine that the proposed development is not likely to have any significant impacts on biodiversity values. 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. 3. The BDAR must include details of the measures proposed to address the offset obligation as follows; <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. <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> 4. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM. 5. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>. 	<p>Aboriginal cultural heritage</p> <ol style="list-style-type: none"> 6. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the project and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the <i>Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW</i> (OEH 2010), and guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional branch officers. 7. 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.
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<p>8. 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.</p>
<p>Historic heritage</p>
<p>9. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to <i>State and local heritage</i> 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:</p> <ul style="list-style-type: none"> a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria), c. include a statement of heritage impact for all heritage items (including significance assessment), d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.
<p>Water and soils</p>
<p>10. 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>11. The EIS must describe background conditions for any water resource likely to be affected by the project, 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.

<ul style="list-style-type: none"> 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. e. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning
<p>12. The EIS must assess the impacts of the project 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 project 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. b. Identification of proposed monitoring of water quality. c. Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan).
<p>13. The EIS must assess the impact of the project on hydrology, including:</p> <ul style="list-style-type: none"> a. Water balance including quantity, quality and source. b. Effects to downstream rivers, wetlands, and floodplain areas. c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. d. Impacts to natural processes and functions within rivers, wetlands, 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). e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water. 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. g. Identification of proposed monitoring of hydrological attributes.
<p>Flooding</p>
<p>14. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:</p> <ul style="list-style-type: none"> a. Flood prone land. b. Flood planning area, the area below the flood planning level. c. Hydraulic categorisation (floodways and flood storage areas). d. Flood hazard
<p>15. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.</p>
<p>16. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:</p>

- a. Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

17. Modelling in the EIS must consider and document:

- 18. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
- 19. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.
- 20. 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, hazard categories and hydraulic categories.
- 21. Relevant provisions of the NSW Floodplain Development Manual 2005.

22. The EIS must assess the impacts on the proposed project on flood behaviour, including:

- a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
- b. Consistency with Council floodplain risk management plans.
- c. Consistency with any Rural Floodplain Management Plans.
- d. Compatibility with the flood hazard of the land.
- e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
- f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
- g. 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.
- h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
- i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
- j. 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 NSW SES.
- k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

ATTACHMENT B

Guidance Material

Title	Web address
<u>Relevant Legislation</u>	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Coastal Management Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Fisheries Management Act 1994</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
<i>Marine Parks Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
<i>Wilderness Act 1987</i>	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
<u>Biodiversity</u>	
Biodiversity Assessment Method (OEH, 2017)	https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298079/Biodiversity-Assessment-Method-May-2017.pdf
Biodiversity Development Assessment Report	https://www.legislation.nsw.gov.au/#/view/act/2016/63/part6/div3/sec6.12
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	https://biodiversity-ss.s3.amazonaws.com/Uploads/1494298198/Serious-and-Irreversible-Impact-Guidance.PDF
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	https://www.legislation.nsw.gov.au/regulations/2017-471.pdf
Biodiversity conservation actions	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-biodiversity-actions-170496.pdf
Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	www.environment.nsw.gov.au/resources/bcact/ancillary-rules-reasonable-steps-170498.pdf
OEH Threatened Species Website	www.environment.nsw.gov.au/threatenedspecies/
NSW BioNet (Atlas of NSW Wildlife)	www.bionet.nsw.gov.au/
NSW guide to surveying threatened plants (OEH 2016)	www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
OEH threatened species survey and assessment guideline information	www.environment.nsw.gov.au/threatenedspecies/surveyassessmantgdlns.htm

Title	Web address
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm
OEH Data Portal (access to online spatial data)	http://data.environment.nsw.gov.au/
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
<u>Heritage</u>	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/
<u>Aboriginal Cultural Heritage</u>	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/comconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
<u>Water and Soils</u>	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf

Title	Web address
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and Coastal Erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf



Our reference: : SF14/12226; DOC19/312416
Contact: : Duncan McGregor – 02 6773 7000 – armidale@epa.nsw.gov.au
Date : 18 April 2019

The Director
Resource & Energy Assessments
Department of Planning and Environment
PO Box 39
SYDNEY NSW 2001

Attention: Ms Rose-Anne Hawkeswood

Email: Rose-Anne.Hawkeswood@planning.nsw.gov.au

BY EMAIL

Dear Ms Hawkeswood,

RE: Request for input into SEARs - Narrabri Coal Mine Stage 3

I refer to your request for the Environment Protection Authority (EPA) to review draft Secretary's Environmental Assessment Requirements (SEARs) for the proposed Narrabri Coal Mine Stage 3, received by the EPA on 8 April 2019. The Narrabri Coal Mine currently operates under Environment Protection Licence 12789.

The EPA has considered the draft SEARs and has identified that Attachment 1 of the draft SEARs does not include a section on surface water impacts. The EPA recommends the SEARs are revised to refer to relevant guidelines that should be used to assess potential impacts to surface water quality and quantity.

The information the EPA requires to assess the proposal is detailed in **Attachment A**. Experience with the Narrabri underground coal mine suggests that the following issues should be specifically addressed in an Environmental Impact Statement (EIS):

1. Noise from gas drainage and ventilation: The EIS needs to assess all potentially affected sensitive receivers. With the progression of the long wall, potential impacts on receivers from gas drainage and ventilation infrastructure needs to be assessed, specifically the residence on Lot 5 DP1084395 should be assessed in the EIS.
2. Air quality: Dust and odour issues have at times been generated from underground mining, surface stockpiles and other surface activities at the site. The EIS needs to demonstrate that air quality impacts can be feasibly and reasonably managed so that the EPA's criteria are met, and offensive odour is not generated.
3. Water management: The EIS needs to demonstrate that the site will not pollute waters. This includes appropriate management of pollutants generated through coal contact water, sediment-laden water from exposed areas of the site and other activities including any groundwater extraction from the underground mine.

The EIS should also demonstrate that any exploration on the licensed premises can be conducted in compliance with licence conditions, including noise limits derived in accordance with the *Noise Policy for Industry* (EPA 2017).

To assist in assessing the EIS, the EPA requests that it follows the format of Department of Planning and Environment's EIS guidelines and addresses the EPA's specific requirements in Attachment A.

The EPA requests that the proponent provide one (1) electronic copy of the EA when lodging it application with the EPA. These documents should be sent to the EPA's Armidale office at armidale@epa.nsw.gov.au

Please contact Duncan McGregor on (02) 6773 7000 or by email to armidale@epa.nsw.gov.au to discuss this matter further.

Yours sincerely,



REBECCA SCRIVENER
Head Regional Operations Unit - Armidale
Environment Protection Authority

ATTACHMENT A: Environmental Assessment Requirements – Narrabri Coal Mine Stage 3

1. Environmental impacts of the project

- 1.1. The EIS must address the requirements of Section 45 of the Protection of the Environment Operations Act 1997 (POEO Act) by determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate conditions, limits and monitoring requirements for an Environment Protection Licence (EPL).
- 1.2. Impacts related to the following environmental issues need to be assessed, quantified and reported on:
 - **Air Issues:** air quality including dust generation from the operation on the surrounding landscape and/or community;
 - **Noise and vibration impacts** associated with blasting, and operational noise particularly machinery and plant movements;
 - **Waste** including hazardous materials and radiation. Consideration needs to be given to disposal options for general waste, sanitary waste as well as hazardous materials and radiation, where relevant.
 - **Water and Soils** including site water balance and sediment and erosion controls during construction and operation phases.

The Environmental Impact Statement (EIS) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned.

2. Licensing requirements

- 2.1. The development is a scheduled activity under the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted.
- 2.2. Should project approval be granted, the proponent will need to make an application to the EPA for its EPL for the proposed facility prior to undertaking any on site works. Additional information is available through the *EPA Guide to Licensing* document (www.epa.nsw.gov.au/licensing/licenceguide.htm).

SPECIFIC ISSUES

3 Air issues

- 3.1. The EIS must 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 (2002)*. Particular consideration should be given to section 129 of the POEO Act concerning control of "offensive odour".
- 3.2. The EIS must include an air quality impact assessment (AQIA).
- 3.3. The AQIA must be carried out in accordance with the document, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005)* <http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf>.

- 3.4. The EIS must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, *POEO (Clean Air) Regulation* and associated air quality limits or guideline criteria.

4. Noise and Vibration

The EIS must assess the following noise and vibration aspects of the proposed development

- 4.1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline>
- 4.2. 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). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration>
- 4.3. If blasting is required for any reasons during the construction or operational stage of the proposed development, 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). These are available at: <https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline>
- 4.4. Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (EPA, 2017). [https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-\(2017\)](https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017))
- 4.5. 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* and associated application notes (EPA, 2011). <https://www.epa.nsw.gov.au/your-environment/noise/transport-noise>

5 Waste, chemicals, hazardous materials and radiation

- 5.1. The EIS must assess all aspects of waste generation, management and disposal associated with the proposed development.
- 5.2. The EIS must demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.
- 5.3. The EIS must identify, characterise and classify the following in accordance with the EPA's *Waste Classification Guidelines* (2014) and associated addendums:
 - (i) all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste;
 - (ii) all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.

Note: The EPA's *Waste Classification Guidelines* (2014) and associated addendums are available at: <https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste>

- 5.4. The EIS must outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available on-site.
- 5.5. The EIS must demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.

6 Water

- 6.1. The EIS must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act.
- 6.2. The EIS must 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.
- 6.3. If the proposed development intends to discharge waters to the environment, the EIS must demonstrate how the discharge(s) will be managed in terms of water quantity, quality and frequency of discharge and include an impact assessment of the discharge on the receiving environment. This should include:
 - Description of the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
 - Description of the receiving waters including upstream and downstream water quality as well as any other water users.
 - Demonstration that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
- 6.4. The EIS must refer to Water Quality Objectives for the receiving waters and indicators and associated trigger values or criteria for the identified environmental values of the receiving environment. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (<http://www.environment.gov.au/water/policy-programs/nwqms/>).
- 6.5. The EIS must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EIS should consider the guidelines *Managing urban stormwater: soils and construction*, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).
- 6.6. The EIS must describe any water quality monitoring programs to be carried out at the project site. Water quality monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutant in NSW* (2004) which is available at: <http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf>.



Department of Industry

OUT19/4628

Rose-Anne Hawkeswood
A/ Team Leader
Resource & Energy Assessments
NSW Department of Planning and Environment

Rose-Anne.Hawkeswood@planning.nsw.gov.au

Dear Ms Hawkeswood

**Narrabri Coal Mine Stage 3 (10269)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 8 April 2019 to the Department of Industry (DoI) about the above matter.

The following advice for you to consider is from relevant branches of DoI Lands & Water and the Department of Primary Industries.

DoI — Water and Natural Resources Access Regulator

The SEARS should include:

- 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.
- A detailed and consolidated site water balance.
- 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.
- Proposed surface and groundwater monitoring activities and methodologies.
- 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>).

DPI Agriculture

- DPI Agriculture Notes the Draft SEARs request “an Agricultural Impact Statement, prepared in accordance with DPI’s Agricultural Impact Statement: Technical Notes, to assess the likely impacts of the development on the soils and land capability of the site and surrounds, paying particular attention to any Biophysical Strategic Agricultural Land (BSAL)”, this is supported and will cover issues related to Agricultural land and industries.

Any further referrals to Department of Industry can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'S. Francis', with a stylized flourish extending to the right.

Simon Francis
Senior Policy Officer, Assessments
Lands and Water - Strategic Relations
23 April 2019

DIVISION OF RESOURCES & GEOSCIENCE ADVICE RESPONSE

Rose-Anne Hawkeswood
Resource Assessments - Planning Services Division
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

rose-anne.hawkewood@planning.nsw.gov.au

Dear Rose-Anne

Project: Narrabri Underground Coal Mine - Stage 3 Extension Project (Narrabri South)
Stage: Secretary's Environmental Assessment Requirements
Development Application: SSD 10269

I refer to your email dated 8 April 2019 inviting the Division of Resources & Geoscience (the Division) to provide input into the Secretary's Environmental Assessment Requirements (SEARs) on the *Narrabri Underground Coal Mine - Stage 3 Extension Project (Narrabri South)* (the Project).

The relevant units internal to the Division have been consulted in generating this advice. Further, the Department of Planning and Environment - Planning Services Division and the Proponent should be aware that matters pertaining to rehabilitation, final landform, environmental impacts of subsidence, subsidence management, mine operator and safety are assumed and assessed by the Resources Regulator.

The Division recommends that the Environmental Impact Statement (EIS) for the Project includes all the requirements set out in both the *'Mine Application Guideline (2015)'*, where it relates to the EIS, and the *'Indicative Secretary's Environmental Assessment Requirements (SEARs) for state significant mining developments (October 2015)'*. These inclusions will ensure the resource has been adequately assessed to facilitate appropriate and efficient recovery and utilisation of the State's resources.

The Division acknowledges that the Project Scoping Report contains some of the general requirements outlined in the documents referred to above. Further, the EIS must also include the following specific requirements:

1. Project Description

- A comprehensive description of all aspects of the Project (including mineral extraction and mining purposes).

2. Geology

- Provide a summary of the regional and local geology, including information of the stratigraphic unit or units within which the resource is located.
- Document the physical dimensions of the coal resource. Plans and cross-sections showing the location of drill holes and the area proposed for extraction. Relevant supporting documentation such as drill logs should be included or appended.

3. Resource and Reserve Statement

Include an updated resource/reserve statement outlining the tonnage of coal present in the subject area, that has been prepared in accordance with the current version of the Joint Ore Reserve Committee Code (JORC code) to a minimum of Indicated Resource level of confidence. It is preferred that at least some of the resource estimate is to a higher confidence level (measured/proved/probable). The statement must include resource and reserve estimates for each coal seam proposed to be mined. The statement must include the coal quality parameters for each seam including product specifications and yields.

The Division understands that it may not be feasible to convert the majority of an Inferred Resource to Indicated (or higher) level of confidence. However, the Proponent needs to demonstrate that there are sufficient resources to support the majority of the initial life of mine production schedule. Any contribution from Inferred Resource(s) to the schedule needs to be justified.

4. Resource Recovery

The Proponent is to supply a full assessment of resource recovery including:

- Explain how the proposed mine plan and extraction method maximise resource recovery.
- What resources will be sterilised or excluded and with what justification.
- List seams excluded from reserves. Note why each seam was excluded from reserve estimates.
- Compare seams included/excluded in reserve estimates to those in nearby operations. Being an underground operation, justify the selected working section.
- List all economic, environmental, other constraints to the resource/reserve impacting the Project.

5. Life of Mine Schedule

The Proponent must supply a life of mine production schedule for each year of operation of the mine and for the life of the Project. The production schedule is to include:

- Details of run-of-mine ore, low-grade ore-mineralised waste and waste rock tonnage planned to be extracted for each year and for the life of the Project, and an estimate of the saleable product produced for each year and the life of the Project.
- In terms of text, plans or charts, the EIS must clearly show the proposed extent and sequence of the development.
- An estimate of which market segment that product tonnes would be sold into, for example, export/domestic and thermal/metallurgical coal.

6. Project Economics

The Proponent is to supply an assessment of project economics including:

- Coal price forecasts by coal type used by the Proponent. The Division requires these forecasts to analyse the Proponent's calculations of royalty value and export value.
- Product tonnages split into market segment. These estimates are necessary to arrive at total revenue value and royalty calculations. Include justification for market segment based on quality parameters.
- CAPEX & OPEX necessary for the Project – broken down into the various sub-categories and equipment type.
- Estimates of employment generation broken down into direct, indirect, ongoing, construction and contract workers.
- Total royalty generated to the state over the life of the Project.

- Relationship and interaction with other mines. How the Project impacts on the existing mine and surrounding mines.
- Details on derivation/analysis of Run-of-Mine (ROM) production rate; to answer why this the optimum rate.

The Division understands that an estimate of product (tonnes) split into individual market segments is difficult to estimate at a point in time and is dependent on market conditions as the life of the Project progresses, however the Division requires the Proponent to provide its best estimate of their market mix at the initial stages of the Project.

The above information should be summarised in the EIS, with full documentation appended. If deemed commercial-in-confidence, the resource assessment summary included in the EIS must commit to providing the Division with full resource assessment documentation separately via the Division's Assessment Coordination Unit.

Additional Matters for Attention

Biodiversity Offsets

The Division requests that the Proponent consider potential resource sterilisation in relation to any proposed biodiversity offsets areas. Biodiversity offsets have the potential to preclude access for future resource discovery and extraction and could also potentially permanently sterilise access to mineral resources.

The EIS must therefore clearly illustrate the location (including offsite locations) of any biodiversity offsets being considered for the project and their spatial relationship to known and potential mineral and construction material resources and existing mining & exploration titles.

The Division requests consultation with both the Geological Survey of NSW and holders of existing mining and exploration authorities affected by planned biodiversity offsets. Evidence of consultation should be included in the EIS.

Consultation with the Narrabri Gas Project

The Project is located adjacent to the Santos NSW Pty Ltd held Narrabri Gas Project. The Division recommends continued consultation with Santos regarding their project and any associated potential impacts.

Mining Titles

The Division notes that this Project is located within the existing operations area of Mining Lease 1609 (Act 1992) (ML 1609) and the project extension area within Exploration Licence 6243 (Act 1992) (EL 6243).

The Proponent must obtain the appropriate mining title(s), such as a mining lease, from the Division allowing for mineral extraction (coal) under the *Mining Act (1992)* over the project extension area within EL 6243.

A development application under the *Environmental Planning and Assessment Act 1979* must be approved before a mining lease can be granted. A mining lease will only be granted for activities specified in the development consent.

For further enquiries regarding this matter please contact Adam Banister, Senior Advisory Officer, Assessment Coordination Unit on 02 4063 6534 or assessment.coordination@planning.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to be 'SA' followed by a stylized flourish.

Scott Anson
**Manager Assessment Coordination
Resource Operations
Division of Resources & Geoscience**
23 April 2019

for
Dr David Blackmore
**A/Executive Director Resource Operations
Division of Resources & Geoscience**

Rose-Anne Hawkeswood
A/ Team Leader
Resource & Energy Assessments - Planning Services
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

By email: Rose-Anne.Hawkeswood@planning.nsw.gov.au

Narrabri Coal Mine Stage 3 (SSD 10269): Request for Resources Regulator Secretary's Environmental Assessment Requirements

Dear Ms Hawkeswood,

I refer to the Department of Planning and Environment – Resources Assessments (DPE – Resources & Assessment) email dated 8 April 2019 inviting the Resources Regulator to provide Secretary's Environmental Assessment Requirements (SEARs) for the Narrabri Coal Mine Stage 3 (SSD 10269).

The Compliance Operations unit within the Resources Regulator has responsibility for providing strategic advice for environmental issues pertaining to the proposed project in so far as they relate to or affect rehabilitation.

Development Details and Assessment

Narrabri Coal Operations Pty Ltd has submitted a project Scoping Report, March 2019 and a draft request for SEARs in support of a development application for Narrabri Coal Mine Stage 3. The application is to gain access to additional areas of run-of-mine (ROM) coal reserves within Exploration Licence (EL) 6243.

Narrabri Mine is an underground coal operation located approximately 25 kilometres south east of Narrabri, NSW. The Narrabri Coal Mine Stage 3 proposes the expansion of the existing Narrabri Underground Coal Mine, including:

The Project involves longwall mining operations in ML 1609 and new MLA areas (within EL 6243) to extract coal within the Hoskissons Seam through a southern extension of approved longwall panels and one additional longwall panel

The Project would involve an increase from the approved production limit of 11 Mtpa of ROM coal to 13 Mtpa of ROM coal, total ROM coal production increased from 170Mt to approximately 280 Mt, and an increase in the mine life from 2031 to 2045.

Other associated infrastructure and activities would include:

- Total rejects production increased. Increased rejects emplacement capacity of existing coal reject emplacement area
- Continued use of the existing surface facilities (with minor upgrades and extension) and development of additional surface infrastructure associated with mine ventilation, gas management and other ancillary infrastructure above the extended underground mining area to support underground mining, similar to the existing Narrabri Mine. Exploration activities would continue to be undertaken over the life of the Project.

- The project component Rehabilitation Strategy is proposed in this Project to remain unchanged.

The Project does not include changes to the approved underground mining operations in Longwalls 101 to 111 and 201 to 202 (and associated surface activities [such as monitoring and remediation]).

Response

The Resources Regulator has reviewed the application and recommends that the standard mining development rehabilitation SEARs be applied to this development (see attached).

For enquiries regarding this matter please contact me on 4063 6444 or minres.environment@planning.nsw.gov.au

Yours sincerely



Megan Hobbs
Inspector Environment

On behalf of
Matthew Newton
Director Compliance Operations
Resources Regulator
NSW Department of Planning and Environment

12 April 2019

ADVICE RESPONSE

Mining Development Rehabilitation Standard SEARs

Post-mining land use

- (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;

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;

Rehabilitation Methodology

- (e) Details regarding the rehabilitation methods for disturbed areas and expected time frames for each stage of the rehabilitation process; Including exploration (within the mining lease) and subsidence in addition to the rehabilitation of the mine site as a whole.
- (f) Mine layout and scheduling, including maximising opportunities for progressive final rehabilitation. 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. The mine plan should maximise opportunities for progressive rehabilitation;

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);

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;
- (i) Details of the process for triggering intervention and adaptive management measures to address potential adverse results as well as continuously improve rehabilitation practices;
- (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;

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;

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:
 - (i) evaluation of the likely effectiveness of the proposed rehabilitation techniques against the rehabilitation objectives and completion criteria;
 - (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;

(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;

(iv) a life of mine reject management strategy, which details measures to be implemented to avoid the exposure of reject material that may cause environmental risk, as well as promote geotechnical stability of the rehabilitated landform; and

(v) 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.

(m) Where the mine includes underground workings:

(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; and

(ii) consideration of the likely controls required to either prevent or mitigate against these risks as part of the closure plan for the site.

(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;

(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);

(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; and

(q) Consider any relevant government policies¹.

¹ The following government policies should be considered when addressing rehabilitation issues:

- Mine Rehabilitation (Leading Practice Sustainable Development Program for the Mining Industry, 2006)
- Mine Closure and Completion (Leading Practice Sustainable Development Program for the Mining Industry, 2006)
- Strategic Framework for Mine Closure (ANZMEC-MCA, 2000)



16 April 2019

SF2012/000358; WST07/00087

The Manager
Resource & Energy Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir

**SSD 10269: Narrabri Underground Mine Stage 3 Extension Project
Request for Secretary's Environmental Assessment Requirements (SEARs)**

Thank you for your email on 8 April referring the *Scoping Report* for SSD 10269 and seeking input from Roads and Maritime Services for the preparation of an Environmental Impact Statement. The information has been reviewed; Roads and Maritime notes the proposal is for an extension of the existing Narrabri coal mine.

Roads and Maritime has reviewed the submitted documentation and identified the following key issues that need to be addressed in the Environmental Impact Statement being prepared in support of the project:

- A traffic impact study prepared in accordance with the methodology set out in Section 2 of the *RTA Guide to Traffic Generating Developments 2002* and including:
 - For the construction and operation of the development, road transport volumes and vehicle types broken down into:
 - Origin and destination
 - Travel/haulage routes
 - Peak hours.
 - The study is to provide details of projected transport operations including:
 - Traffic volumes (both proposed and cumulative).
 - Materials to be transported and types of vehicles used for transport.
 - Measures to be employed to ensure a high level of safety for all road users interacting with traffic generated by the development.

Roads and Maritime Services

- Any over size and over mass vehicles and loads expected for the operation of the site.
- Temporary and permanent staff numbers (including employees and contractors) and staff parking arrangements during operation of the site.
- Any mitigating measures required to address expected traffic generation.
- Access locations and treatments need to be identified and in accordance with *Austroads Guide to Road Design* and relevant Roads and Maritime supplements, including safe intersection sight distance. In particular, an assessment of the intersection of Kurrajong Creek Road with the Kamilaroi Highway is required.

Roads and Maritime appreciates the opportunity to contribute to the SEARs and requests that a copy of the SEARs be forwarded to Roads and Maritime at the same time they are sent to the applicant. Should you require further information please contact the undersigned on 02 6861 1449.

Yours faithfully



Ainsley Bruem
Acting Manager Land Use Assessment
Western Region

18 April 2019

Rose-Anne Hawkeswood
Resource & Energy Assessments | Planning Services
Sydney GPO Box 39
SYDNEY NSW 2001

Dear Ms Hawkeswood

SEARs - Narrabri Coal Mine Stage 3 SSD 10269

I refer to the Environmental Impact Statement (EIS) exhibited on the NSW Planning & Environment website. Narrabri Coal Operations Pty Ltd has submitted a request for Secretary's Environmental Assessment Requirements (SEARs) for Narrabri Coal Mine Stage 3 Extension Project, located at 10 Kurrajong Creek Road, Baan Baa, NSW, approximately 25 kilometres south east of Narrabri.

The Project involves the expansion of the existing Narrabri Underground Coal Mine, increasing production of up to 13 Mtpa ROM coal (increased from 11 Mtpa); including;

- a southern extension of approved longwall panels and one additional longwall panel;
- an increase in the approved run-of mine coal mining and production rates;
- continued use of approved ancillary underground and surface ancillary infrastructure, rail load out facility and transport of product coal from the site by rail; and
- additional surface development areas and ancillary surface infrastructure.

In the preparation of the EIS, proponents should consider and provide discussion, and by no means an exhaustive list;

Noise and Vibration— including:

- an assessment of the likely noise impacts of the development under the NSW Noise Policy for Industry and the Voluntary Land Acquisition and Mitigation Policy (DP&E);
- if a claim is made for specific construction noise criteria for certain activities, then this claim must be justified and accompanied by an assessment of the likely construction noise impacts of these activities under the Interim Construction Noise Guideline;

Hunter New England Local Health District
ABN 63 598 010 203

Hunter New England Population Health
Locked Bag 10
Wallsend NSW 2287
Phone (02) 4924 6477 Fax (02) 4924 6490
Email HNELHD-PHEnquiries@hnehealth.nsw.gov.au
www.hnehealth.nsw.gov.au/hneph

18 April 2019

- an assessment of the likely road noise impacts of the development under the NSW Road Noise Policy;
- an assessment of the likely rail noise impacts of the project under the Rail Infrastructure Noise Guidelines;
- an assessment of the potential vibration and low frequency noise impacts of the development; figure 2.2 page 8 of Narrabri Underground Mine Stage 3 Extension Project – SIA Scoping Report indicates a number of private in and around the proposed Longwall sites with 1 residence directly above Longwall 120;
- Potential for cumulative impact in development stage and operating stage for surrounding communities i.e. Baan Baa, Boggabri.

Air – including:

- An assessment of the likely air quality impacts of the development in accordance with the Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW;
- Particulate matter emissions (principally from the Project's coal handling operations) and the impact surrounding receivers;
- Potential for cumulative impact in development stage and operating stage for surrounding communities i.e. Baan Baa, Boggabri.

Water – including:

- An assessment of the likely impacts of the development on the quantity and quality of the region's surface and groundwater resources;
- An assessment of the likely impacts of the development on aquifers, watercourses, riparian land, water-related infrastructure, and other water users;
- An assessment of potential flooding and ponding impacts of the development;
- 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 and transfer infrastructure and water storage structures;
- A detailed description of the proposed water management system (including sewerage), beneficial water re-use program and all other proposed measures to mitigate surface water and groundwater impacts;

It is expected that there is no town water supply to the site. Therefore the assessment should include comment on issues associated with drinking water quality and rainwater tanks. The peak

18 April 2019

reference document in Australia for information in relation to rainwater tanks is enHealth's *Guidance on use of rainwater tanks* (2010), which is accessible at:

<http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-enhealth-raintank-cnt.htm>

Businesses or facilities that supply drinking water from an independent water supply (i.e. not town water) need to follow the *NSW Health Private Water Supply Guidelines* (2014). The *Public Health Act 2010* and the *Public Health Regulation 2012* require drinking water suppliers, including private water suppliers, to develop and adhere to a 'quality assurance program' (or drinking water management system). Further information and templates can be found at:

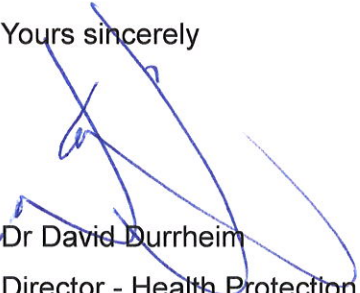
<http://www.health.nsw.gov.au/environment/water/Pages/private-supplies.aspx>

NSW Health recommends regular testing of drinking water at facilities with a private supply. If a private water supply is contaminated, or is not monitored or not treated then consumers should be warned.

We look forward to reviewing the proponent's EIS when on exhibition.

Should you wish to discuss this matter further, please contact Mr Glenn Pearce, Senior Environmental Health Officer on 6764 8000.

Yours sincerely



Dr David Durrheim
Director - Health Protection
Hunter New England Population Health



NSW RURAL FIRE SERVICE



The Secretary
NSW Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Your Ref: SSD 10269
Our Ref: D19/1185
DA19041018233 PC

ATTENTION: Rose-Anne Hawkeswood

15 April 2019

Dear Ms Hawkeswood,

Request for Environmental Assessment Requirements – Narrabri Coal Mine (Stage 3)

I refer to the NSW Environment and Planning correspondence dated 8 April 2019 seeking comment from the NSW Rural Fire Service on matters to be included in the Secretary's Environmental Assessment Requirements for the above proposal.

The subject land is partly mapped as bush fire prone land by Narrabri Shire Council. The NSW Rural Fire Service considers that the environmental assessment for the development involving expansion of the existing Narrabri Underground Coal Mine should address the following matters relating to bush fire:

- the aim and objectives of 'Planning for Bush Fire Protection 2006';
- identification of potential ignition sources during construction and operation of the development;
- storage of fuels and other hazardous materials;
- proposed bush fire protection measures for the development, including vegetation management and fire suppression capabilities;
- operational access to the site for fire fighting appliances; and
- emergency and evacuation planning.

For any queries regarding this correspondence please contact Paul Creenaune on 6691 0400.

Yours sincerely,

Wayne Sketchley
Acting Team Leader – Development Assessment & Planning

Postal address

Records
NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
Planning and Environment Services (North)
Suite 1, 129 West High Street
COFFS HARBOUR NSW 2450

T (02) 6691 0400
F (02) 6691 0499
www.rfs.nsw.gov.au
Email: pes@rfs.nsw.gov.au

117 Bull Street, Newcastle West, NSW, 2302 | T: (02) 4908 4300

99 Menangle Street, Picton, NSW, 2571 | T: (02) 4677 6500

24 Hour Emergency Service: 1800 248 083 (Free Call)

Ms Rose-Anne Hawkeswood
A/ Team Leader
Resource Assessments | Planning Services
NSW Department of Planning and Environment

Via email: Rose-Anne.Hawkeswood@planning.nsw.gov.au

Dear Ms Hawkeswood

Request for input into SEARs – Narrabri Coal Mine Stage 3

I refer to your email dated 8 April 2019 inviting Subsidence Advisory to provide comment on the draft copy of the proposed Secretary's Environmental Assessment Requirements (SEARs).

Subsidence Advisory understands the Project involves the expansion of the existing Narrabri Underground Coal Mine including;

- a southern extension of approved longwall panels and one additional longwall panel
- increase in the approved run-of-mine coal mining production rates
- continued use of approved surface and underground facilities
- additional surface development areas and ancillary surface infrastructure.

Subsidence Advisory notes the Environmental Impact Statement (EIS) scoping worksheet identifies built features for inclusion within the EIS. Subsidence Advisory has no further comment.

Please contact me on (02) 4677 1967 or at matthew.montgomery@finance.nsw.gov.au if you have any questions or wish to discuss.

Yours sincerely



Matthew Montgomery
Infrastructure Manager, Subsidence Advisory NSW

16 April 2019

Rose-Anne Hawkeswood

From: Matthew Davidson <matthew.davidson@lts.nsw.gov.au>
Sent: Tuesday, 23 April 2019 2:11 PM
To: Rose-Anne Hawkeswood
Subject: Re: FW: Request for input into SEARs - Narrabri Coal Mine Stage 3

Hi Rose-Anne

I assume this will be covered:

Any impacts on Travelling Stock Reserves and other Crown Land to be identified and impact assessed.

Thanks

Matt

Matthew Davidson | **Manager, Land Services**
North West Local Land Services
Tamworth Agricultural Institute
[4 Marsden Park Road, Tamworth NSW 2340](#)
PO Box 500 | Tamworth | NSW 2340
M: 0429 120 007 | **T:** 02 6764 5915
E: matthew.davidson@lts.nsw.gov.au
W: northwest.lts.nsw.gov.au

Our Reference:	ED:KDK: 451537
Your Reference:	SSD 10269
Contact Name:	Erika Dawson
Telephone:	(02) 6799 6866

Rose-Anne Hawkeswood – A/Team Leader
Resource & Energy Assessments
Planning Services
GPO Box 39
SYDNEY NSW 2001

18 April 2019

E: Rose-Anne.Hawkeswood@planning.nsw.gov.au

Dear Ms Hawkeswood,

Re: NARRABRI COAL MINE STAGE 3 (SSD 10269) - REQUEST FOR INPUT INTO SECRETARY'S ENVIRONMENT ASSESSMENT REQUIREMENTS (SEARS)

I refer to your email dated 8 April 2019 requesting input from Narrabri Shire Council in relation to the above State Significant Development. We have reviewed the Preliminary Environmental Assessment (PEA) as supplied. Please find following the Council's comments:

1. Draft SEARs

Council is generally satisfied with the proposed draft SEARs. The following additional matters are also requested to be included.

2. Narrabri Local Environmental Plan 2012 (LEP)

The following provisions of the LEP are to be addressed within the EIS:

- a. Clause 6.1 – Earthworks
- b. Clause 6.5 – Essential Services

3. Mining SEPP

Full consideration of the relevant clauses of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* (Mining SEPP) is to be provided within the EIS. In particular the following are to be specifically addressed in the EIS:

- a. An assessment of the greenhouse gas emissions (including downstream emissions) of the development, and must do so having regard to any applicable State or national policies, programs or guidelines concerning greenhouse gas emissions.
- b. Impacts on surface and groundwater.
- c. The suitability of the site to return to agricultural land uses following completion of the development, considering any subsidence and on-going management of groundwater or gas production from the underground workings.

4. Sensitive Receptors

- a. Council has received advice that not all sensitive receptors have been included in previous environmental assessments and ongoing monitoring commitments. It is requested that as part of this assessment a review of sensitive receptors be undertaken to ensure all are included, including (but not limited to) those on Davis Road, Turrawan.
- b. It is recommended that consultation be undertaken with all the identified sensitive receptors during the EIS preparation process.

5. Bushfire

The site is partially mapped as being bushfire prone. Other areas of grassland, that are not currently mapped, provide a bushfire risk in accordance with the NSW Rural Fire Services' *Guideline for Council to Bushfire Prone Area Land Mapping* which includes a Category 3 incorporating grasslands.

The change of land use/extension of use has the potential to create a bushfire risk both through activities on site and change in land management practices, particularly in the area retains for ecological purposes. In this regard, it is recommended that a Bush Fire Assessment Report be prepared as part of the EIS documentation, in accordance with the NSW Rural Fire Services' *Planning for Bush Fire Protection*.

6. Water

- a. A Water Balance is to be provided for the project (expansion and intensification) to demonstrate sufficient water supply can be made available for the development and to enable assessment of the impacts of any proposed measures.
- b. The stormwater generation shall be considered as part of the EIS, including potential erosion and sediment generation. Measures shall be included in the development to mitigate any adverse impacts from stormwater, erosion and sedimentation both on and off site.

7. Rail Impacts

It is understood that there are capacity issues with the rail network. With the proposed intensification of the project, it should be demonstrated that the network is capable of accommodating the proposed intensification of the project.

8. Road Impacts

The impacts on the local road network, in terms of the extension and expansion of the project, need to be considered. There have been some issues to date with mine related traffic using alternate routes to the site and adversely impacting upon Kurrajong Creek Road. In particular consideration needs to be given to improving road safety and on-going maintenance of the local roads affected by the project related traffic.

9. Risks & Hazards

Details of risks and hazards from the development shall be considered and assessed as part of the EIS and in accordance with SEPP 33.

10. Economic Impacts

An Economic Assessment is to be undertaken in accordance with the *Guidelines for the economic assessment of mining and coal seam gas proposals*.

11. Cumulative/Interaction Impacts

The Project Area is situated directly adjacent to the project area of the proposed Narrabri Gas Project. Consideration needs to be given to any impacts (including risks) occurring as a result of the two projects operating concurrently and any cumulative impacts that may result from the two projects operating.

12. Voluntary Planning Agreement

Council requests further consultation with the applicant during the EIS preparation process regarding the terms of any Voluntary Planning Agreement proposed. Any VPA with Council is to reflect the socio-economic impacts in, and immediately around, the local community and provides a lasting net economic benefit to the local community and, the wider Narrabri Shire.

13. Ecologically Sustainable Development

- a. The project is to ensure that it is ecologically sustainable from an economic, environmental and social perspective.
- b. The precautionary principle is to be applied in the assessment of the economic, environmental and social impact of the Project.

I trust this information is to your satisfaction, should you require any further clarification, please do not hesitate to contact me on (02) 6799 6866.

Yours faithfully,



Erika Dawson

ACTING MANAGER PLANNING AND DEVELOPMENT