Our ref: DOC21/262168-4
Your ref: SSD-17017460

Melissa Anderson

Senior Planning Officer
Energy Resource Assessment
Department of Planning, Industry and Environment
melissa.anderson@planning.nsw.gov.au

Dear Ms Anderson

Input into Secretary's Environmental Assessment Requirements – State Significant Development – Chain Valley Colliery Consolidation Project (SSD-17017460) (Central Coast, Lake Macquarie)

I refer to your email dated 6 April 2021 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Chain Valley Colliery Consolidation Project. The proposed development is within the Central Coast and Lake Macquarie local government areas.

The Biodiversity and Conservation Division (BCD) understands that the project seeks to consolidate the operations of the Chain Valley Colliery Extension Project (SSD-5465) and the Manning Colliery – Continuation of Mining Project (MP06_0311), including allowing mining within the Eastern Mining Area and an extention of the life of mine to 2029. BCD understands that the proposal is a State Significant Development (SSD) project under the *Environmental Planning and Assessment Act 1979*.

BCD has reviewed the Scoping Report documents as prepared by Umwelt (dated 25 March 2021) and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

If you have any further questions in relation to this matter, please contact Jayme Lennon, Senior Conservation Planning Officer at huntercentralcoast@environment.nsw.gov.au

Yours sincerely

14 April 2021

STEVEN COX
Senior Team Leader Planning
Hunter Central Coast Branch
Biodiversity and Conservation Division

Enclosure: Attachments A, B, C

Attachment A – Standard Environmental Assessment Requirements

Biodiversity

1. Biodiversity impacts related to the proposed development (SSD 17017460) 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.
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;
    - 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.

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.

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*.

Water and soils

5. The EIS must map the following features relevant to water and soils including:
    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.

6. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
   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.

7. The EIS must assess the impacts of the development on water quality, including:
   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.
   b. Identification of proposed monitoring of water quality.

8. The EIS must assess the impact of the development on hydrology, including:
   a. Water balance including quantity, quality and source.
   b. Effects to downstream rivers, wetlands, estuaries, marine waters 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, 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).
   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.

Flooding and coastal erosion

9. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
   a. Flood prone land.
   b. Flood planning area, the area below the flood planning level.
   c. Hydraulic categorisation (floodways and flood storage areas).

10. 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.

11. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    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.

12. Modelling in the EIS must consider and document:
    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.

13. The EIS must assess the impacts on the proposed development 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. 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 or 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.

14. The EIS must describe the potential effects of coastal processes and hazards (within the meaning of the Coastal Management Act 2016), including sea level rise and climate change: a. On the proposed development b. Arising from the proposed development.
15. The EIS must consider have regard to any certified Coastal Management Program (or Coastal Zone Management Plan) and be consistent with the management objectives described in the Coastal Management Act 2016 and development controls for coastal management areas mapped under the State Environmental Planning Policy (Coastal Management) 2018.

Attachment B – Project specific environmental assessment requirements

Biodiversity - nil
Water and soils - nil
Flooding and coastal erosion - nil

Attachment C – Guidance material

Title	Web address
Relevant legislation	
Biodiversity Conservation Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2020)	http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
NSW Guide to Surveying Threatened Plant	http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf
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
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

OUT21/4404

Melissa Anderson
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

melissa.anderson@planning.nsw.gov.au

Dear Ms Anderson

Chain Valley Colliery Consolidation Project (SSD-17017460)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 6 April 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

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).

Any further referrals to DPIE Water & NRAR can be sent by email to: landuse.enquiries@dpie.nsw.gov.au.

Yours sincerely

Alistair Drew
Acting Senior Project Officer, Assessments
Water – Knowledge Division
12 April 2021

DOC21/263132-2

Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124
By email at: melissa.anderson@planning.nsw.gov.au

Attention: Melissa Anderson

15 April 2021

Dear Ms Anderson

Secretary's Environmental Assessment Requirements – Chain Valley Colliery Consolidation Project, SSD-17017460 (Central Coast and Lake Macquarie City).

I refer to your email to the Environment Protection Authority (EPA) dated 6 April 2021 seeking the EPA's Secretary's Environmental Assessment Requirements (SEARs) to assist with the preparation of an Environmental Assessment for the Chain Valley Colliery Consolidation Project SSD-17017460 located in both the Central Coast and Lake Macquarie City local government areas.

Based on the information provided, the EPA understands that the proponent is seeking approval for the consolidation of consents applicable to Chain Valley Colliery and Mannering Colliery. The proposal further seeks to align the approved extraction and production areas at both collieries and to extend the approved mining area within the great northern seam into an eastern mining area.

Both Chain Valley and Mannering Collieries currently hold Environment Protection Licenses (EPL) for the Scheduled Activities of Mining for Coal and Coal Works under Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act). The proponent may need to apply to the EPA to vary the conditions of both EPL 191 and EPL 1770 should approval be granted.

The EPA has considered the proposal and provides at **Attachment A** the information it requires to properly assess the Proposal. The EPA's key information requirements for the proposal must include an adequate description and assessment of water, noise, waste management, air quality, cumulative impacts and mitigation measures of the proposal.

The EPA has also provided the appropriate guidance material to be considered (but not limited too) at **Attachment B**.

It is important that all assumptions and conclusions made in the environmental assessment are supported by adequate data. The proponent should also be aware that any commitments made in the environmental assessment may be formalised as approval conditions and/or environment protection licence conditions.

If you have any questions about this matter, please contact the EPA on 131555 or by email to info@epa.nsw.gov.au.

Yours sincerely

KAREN GALLAGHER
A/Unit Head Regulatory Operations – Metro North
Environment Protection Authority

Encl: **Attachment A** – EPA's Recommended Secretary's Environmental Assessment Requirements
Attachment B – Guidance Material

ATTACHMENT A – EPA's Recommended Secretary's Environmental Assessment Requirements – Chain Valley Colliery Consolidation Project – SSD-17017460.

How to use these requirements

The EPA requirements have been structured in accordance with relevant guidelines, as follows. It is suggested that the EIS follow the same structure:

A. Executive summary

B. The proposal

C. The location

D. List of required approvals and licences

E. Identification and prioritisation of all issues

F. The environmental issues

G. The mitigation measures

H. Justification for the proposal and conclusion

The EIS should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines/standards at **Attachment B**.

A Executive summary

The document's executive summary should include a discussion of the proposed development, the key environmental risks, the identified mitigation measures, and an overall conclusion and justification for the proposal.

B The proposal

The proposed development must be adequately described and should clearly state and refer to:

a) the type, the nature and size of the proposed development, including proposed average and maximum annual production rates that are expected to occur;

b) the type, the nature and amount of the processes and the products to be used, including the plant and equipment proposed for use, fuel and chemicals required and proposed methods for their transportation, storage, use and their emergency management provisions, including relevant process flow diagrams;

c) the by-products produced and/or wastes produced, including the fate of such products;

d) the staging and timing of the proposal, including any construction works and any plans for potential future expansion plans and the proposed construction and operational hours, including and heavy vehicle movements;

e) the anticipated benefits to relevant industry, community, etc; and

f) the proposal’s relationship to any other facility or industry both locally and abroad.

C The location

Provide an overview of the setting in which the proposed development is to take place in its local and regional environmental context including:

a) the location of the proposed facility, its layout, including plant and equipment, and details of the surrounding environment, including land use zoning with appropriate maps/diagrams;

b) the topography;

c) meteorological data (e.g. temperature, wind (prevailing wind direction and strength), rainfall, evaporation, etc);

d) surrounding land uses, including ownership details of any residence and/or land likely to be affected by the proposed facility with appropriate maps/diagrams;

e) ecological information (vegetation, fauna, waters) with appropriate maps/diagrams; and

f) availability of services and the accessibility of the site for passenger and freight transport.

D List of approvals and licences

Identify all approvals, licences or permits required to undertake the proposed development as well as those already obtained and those to be obtained.

Based on the information provided and should the proposed development be approved; the proponent may need to make a separate application to EPA for a variation to EPL's 191 and 1770. Additional information is available through EPA's *Guide to Licensing* document. General information on license requirements can also be obtained from EPA's Environment Line on 131 555 during office hours or can be found on the EPA web site (click here).

E Identification and prioritisation of issues / scoping of impact assessment

Identify a scoping risk assessment methodology, undertake a risk assessment, and identify and prioritise key issues.

F The environmental issues

1. Noise

- Identify the existing noise environment (including any relevant noise assessment groupings) and identify applicable noise goals in line with relevant guidance/standards;
- Identify potential noise and vibration sources and impacts during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to be incorporated for both stages to minimise noise and vibration emissions/impacts (with proposed timing), including validation monitoring, in line with relevant guidance/standards; and
- Propose representative noise monitoring locations for determining compliance with applicable noise goals and where relevant noise goals would be set as representative limits.

Note: this will require a detailed Noise Impact Assessment to be completed.

2. Air

- Identify the existing air quality environment and identify applicable air quality goals (i.e. ground level concentrations for pollutants and odour assessment criteria) in line with relevant guidance/standards; and
- Identify potential air quality and odour sources and impacts (including point source emissions from any site-based plant and equipment and/or fugitive dust or other emissions) during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to minimise point and/or fugitive and/or odour emissions/impacts (with proposed timing), including monitoring, in line with relevant guidance/standards; and
- Include an emission inventory of all sources of air emissions.

Note: this will require a detailed Air Quality Impact Assessment to be completed.

3. Water

- Identify the condition of the local catchment and those immediate areas on and around the proposed development e.g. soils, erosion potential, vegetation cover, etc; and
- Identify nearby water resources, the background water conditions (including river flow data, water flow/direction and quality data, the depth to groundwater, groundwater flow/gradient and quality data, reliance on water resources by surrounding users and by the environment) and relevant water quality objectives in line with relevant guidance/standards; and
- Identify existing impacts to water resources (including other industrial discharges); and

- Identify any water intakes, intake frequency and volumes related to the proposed development; and
- Identify any expected discharges (including stormwater), discharge quality, discharge frequency and volumes related to the proposed development; and
- Identify all practical measures that can be taken to prevent any expected discharges or an explanation of why any specific discharges cannot be prevented; and
- Identify potential impacts to surface and groundwater during both construction and operational stages and identify best practice mitigation measures (pollution control) and strategies to protect surface and groundwater resources, particularly erosion and sediment controls during the construction stage and the rehabilitation stage and the inclusion of permanent erosion and sediment controls where required and applicable; and
- Include a detailed water balance and discharge inventory; and
- Include an assessment of any mixing zones; and
- Include any proposed discharge limits.

Note: this will require a detailed Water Assessment to be completed.

4. Land

- Identify if the soils in the area of the Proposal are contaminated or are acid forming (i.e. acid sulphate soils) and if so, identify best practice mitigation measures (pollution control) and strategies or remedial and/or disposal actions that will be required/undertaken if applicable in accordance with relevant guidance/standards; and
- Identify potential impacts to soils/land resources as a result of the proposed development and identify best practice mitigation measures (pollution control) and strategies that will be required/undertaken if applicable in accordance with relevant guidance/standards.

5. Waste

- Identify all waste types that will be generated as a result of the proposed development during both construction and operation, their classification and the ways in which they will be legally handled, stored, transported, reused, recycled or disposed of, including sampling/monitoring, record keeping, waste tracking, contingency measures and any other verification practices, in accordance with relevant guidance/standards; and
- Identify options and strategies for waste minimisation; reuse and recycling across all activities and processes during both construction and operational stages.

6. Storage and use of fuels / chemicals etc

- Identify all fuels/chemicals/products/dangerous goods to be stored/used onsite; and
- Identify adequate handling, storage, control and usage requirements for any fuels/chemicals/products/dangerous to be stored/used onsite.

7. Incident Management

Identify adequate incident management procedures to be established including notification requirements to the Appropriate Regulatory Authority and other relevant authorities for incidents that cause or have the potential to cause material harm to the environment (Part 5.7 of the POEO Act).

8. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing

development and background levels of emissions to which this proposal will contribute; and
- Identify the cumulative impacts of the proposed development in a local context.

9. Monitoring Programs

Include a detailed proposal of any noise, air, water, land, waste, meteorological etc monitoring during construction and operation to ensure and assumptions, predictions, goals, criteria etc are achieved. The proposal should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

G. Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).
- Include any Statement of Commitments to be made by the Proponent.

H. Justification for the proposed development and conclusion

Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT B – EPA's Guidance Material (not exhaustive)

Legislation	
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Protection of the Environment Operations (Noise Control) Regulation 2017	https://legislation.nsw.gov.au/#/view/regulation/2017/449
Protection of the Environment Operations (Clean Air) Regulation 2010	https://legislation.nsw.gov.au/#/view/regulation/2010/428
Protection of the Environment Operations (Waste) Regulation 2014	https://legislation.nsw.gov.au/#/view/regulation/2014/666
Waste Avoidance and Resource Recovery Act 2001	https://legislation.nsw.gov.au/#/view/act/2001/58
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/140
Licensing	
Licensing Requirements	https://www.epa.nsw.gov.au/licensing-and-regulation/licensing
Noise/Vibration	
Interim Construction Noise Guideline (DECC, 2009)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline
Assessing Vibration: a technical guideline (DEC, 2006)	https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration
Noise Policy for Industry (2017) and Implementation and Transitional arrangements for the Noise Policy for Industry (2017)	https://www.epa.nsw.gov.au/publications/noise/17p0524-noise-policy-for-industry https://www.epa.nsw.gov.au/publications/noise/17p0293-implement-transition-arrange-noise-pol-industry
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
Air/Odour	
Approved methods for the Modelling and Assessment of Air Pollutants in NSW (2016)	http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf
Approved methods for the Sampling and Analysis of Air Pollutants in NSW (2007)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
National Environment Protection (Ambient Air Quality) Measure	http://www.nepc.gov.au/nepms/ambient-air-quality
No EPA specific guidance material exists for the control of dust from construction sites. Consideration should be given to	http://www.epa.nsw.gov.au/air/lgaqt.htm

the POEO Act and the Local Government Air Quality Toolkit (DECC, 2007)	
Technical Framework - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006) and Technical Notes - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)	http://www.epa.nsw.gov.au/air/odour.htm http://www.epa.nsw.gov.au/air/odour.htm
Water/Soils	
ANZECC Guidelines for Fresh and Marine Water Quality (2018)	https://www.waterquality.gov.au/guidelines/anz-fresh-marine
NSW Water Quality and River Flow Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
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)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/approvedmethods-water.pdf
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	https://www.shop.nsw.gov.au/publication/soil-and-landscape-issues-in-environmental-impact-assessment-technical-report-no-34-1324-6860-839
Managing urban stormwater: soils and construction, vol. 1 (Landcom, 2004) and Addendum Publications (Various)	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide Risk Management (2007)	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Dryland Salinity Resources (Various)	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Contaminated Sites Assessment and Remediation	
Contaminated Land – EPA website	https://www.epa.nsw.gov.au/your-environment/contaminated-land
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm
Guidelines for the NSW Site Auditor Scheme – 3rd Edition (EPA, 2017)	https://www.epa.nsw.gov.au/publications/contaminatedland/17p0269-guidelines-for-the-nsw-site-auditor-scheme-third-edition
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdlne.pdf
National Environment Protection (Assessment of Site Contamination) Measure	http://www.nepc.gov.au/nepms/assessment-site-contamination

Waste	
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Waste Classification Guidelines – 4 Parts (EPA, 2014)	http://www.epa.nsw.gov.au/wasteregulation/classify-waste.htm
Chemical and Fuel Storage	
Storage and Handling of Dangerous Goods – Code of Practice (WorkCover, 2005)	http://www.safework.nsw.gov.au/__data/assets/pdf_file/0005/50729/storage-handling-dangerous-goods-1354.pdf

Our reference: DOC21/261843-4
Date: 16/04/2021

HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: Chain Valley Colliery Consolidation Project
SSD/I #: SSD-17017460

1. The 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 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 Code of Practice for Archaeological Investigation in NSW (DECCW 2010), and be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011).
2. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
3. 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 EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Heritage NSW.
4. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the ACHAR.
5. The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.
6. The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

NOTE: The process described in the *Due Diligence Code of Practice for the protection of Aboriginal objects in NSW* (DECCW 2010) is not sufficient to assess the impacts on Aboriginal cultural heritage of Major Projects.

Level 6, 10 Valentine Ave Parramatta NSW 2150 ■ Locked Bag 5020 Parramatta NSW 2124
P: 02 9873 8500 ■ E: heritagemailbox@environment.nsw.gov.au

20 April 2021

NSW DEPARTMENT OF PLANNING, INDUSTRY &
ENVIRONMENT
PO Box 1226
NEWCASTLE NSW 2300

Dear Sir/Madam

Subject: **SSD-17017460 - Chain Valley Colliery Consolidation Project - SEARS Lake Macquarie & Waterways**

Thankyou for the opportunity to provide input into the Secretary's Environmental Assessment Requirements for the Chain Valley Colliery consolidation project – SSD-17017460.

Lake Macquarie City Council would like the following addressed in any subsequent application:

Groundwater

- A detailed assessment of groundwater and mine water discharge impacts on dissolved metal concentrations in receiving waters. This assessment should include consideration of cumulative impacts, and include ecotoxicological examination on aquatic ecosystems and food-chains (noting that current EPA and DPI advice currently limits consumption of seafood caught in Lake Macquarie due to elevated metal concentrations).

Subsidence

- A detailed assessment of potential impacts on aquatic biota resulting from subsidence focussing on Zone B (where up to 780mm of subsidence is predicted). This assessment must consider all habitat forms (not just seagrass) including rocky reef, mud and sand bottom habitat.

- An assessment of potential for increases in wave climate, coastal risk and foreshore stability resulting from subsidence impacts resulting in increased water depths in Chain Valley and Wyee Bays. This assessment should include a detailed assessment of potential for increased coastal risks, including foreshore erosion, wave overtopping or foreshore inundation, addressing clause 15 of the Coastal Management SEPP.

126 – 138 Main Road T 02 4921 0333
Speers Point NSW 2284 E council@lakemac.nsw.gov.au
BOX 1906 HRMC NSW 2310 W lakemac.com.au

lakemac lakemaccity ourlakemac

ABN: 81 065 027 868

General sustainability

- Assessment on how the proposal contributes to the achievement of relevant sustainability targets for the Lake Macquarie local government area, as described in the Lake Macquarie Environmental Sustainability Strategy and Action Plan 2020-2027.

Consultation

- Include the following stakeholders in the consultation

    - Lake Macquarie Coastal Zone Management Committee
    - Lake Macquarie Sustainable Neighbourhood Alliance
    - Community Environment Network
    - Hunter Community Environment Centre
    - Keep Lake Macquarie Clean

Should you require further information, please contact the undersigned on 4921 0025 or by e-mail on gkeech@lakemac.nsw.gov.au.

Yours faithfully

Geoffrey Keech
Development Planner
Development Assessment and Certification

DOC21/308135

MINING, EXPLORATION & GEOSCIENCE ADVICE RESPONSE

Melissa Anderson
Energy, Industry & Compliance Division
Planning & Assessment Group
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2150

Melissa.Anderson@planning.nsw.gov.au

Dear Melissa

Project: Chain Valley Consolidation Project
Stage: Secretary's Environmental Assessment Requirements
Development Application: SSD-17017460

I refer to your correspondence dated 6 April 2020 inviting Regional NSW – Mining, Exploration & Geoscience (MEG) to provide comments on the Chain Valley Consolidation Project (the Project) submitted by Great Southern Energy Pty Limited (trading as Delta Coal) (the Proponent).

The relevant units internal to MEG have been consulted in generating this advice. The Department of Planning, Industry and Environment – Energy, Resources & Compliance Division and the Proponent should be aware that matters concerning subsidence, subsidence management, mine operator, safety, rehabilitation and environmental impacts of final landform design are not assessed by MEG and advice should be sought from the Resources Regulator.

MEG has reviewed the information supplied in relation to the abovementioned Project and requires that the Project's Environmental Impact Statement refers to and includes all requirements set out in the MEG Standard SEARs document for the Project provided in Attachment 1 (DOC 21/269834).

For further advice concerning this matter, please contact Adam W. Banister, Senior Advisor Resource Assessments on 02 4063 6534 or assessment.coordination@planning.nsw.gov.au.

Yours sincerely

Scott Anson
Manager Assessment Coordination
Resource Operations
Department of Regional NSW – Mining, Exploration & Geoscience
21 April 2021

for
Stephen Wills
Executive Director Resource Operations
Department of Regional NSW – Mining, Exploration & Geoscience

Mining, Exploration &Geoscience

Secretary's Environmental Assessment Requirements

for proposed significant state development applications requiring consultation under Schedule 2 Part 2(3) of the Environmental Planning & Assessment Regulation 2000

Project	Chain Valley Consolidation Project
Reference Number:	DOC21/269834
Issue date of SEARs:	21 April 2021
Type of Approval:	Mining operation - **underground**
Proponent:	Great Southern Energy Pty Ltd (trading as Delta Coal)
DA Number:	SSD-17017460
LGA:	Lake Macquarie/Central Coast
Mineral:	Coal

In preparing the environmental assessment requirements with respect to an application for State significant development, the Planning Secretary must consult relevant public authorities and have regard to the need for the requirements to assess any key issues raised by those public authorities.

This development may require an approval under *the Mining Act 1992* to be issued by the Department of Regional NSW – Mining, Exploration & Geoscience (MEG). The proponent must apply to MEG for the relevant approval (mining lease) during the development assessment process, or once consent has been granted, and before the commencement of any mining or ancillary activity.

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.

Environmental Impact Statement (EIS) requirements for mining

1. Project description

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

(a) Location map showing the project area, mining titles, nearest town/s, major roads etc.

(b) Status of all titles (including mining and exploration), and development consents in place and/or timeline to obtain necessary approvals.

(c) Any relationships between the resource and existing mines or other infrastructure.

(d) Nature of operation (e.g. underground, open cut) and ore mineral/s to be extracted.

(e) Proposed life of mine and summary of production schedule.

2. Geology

(a) A summary of the regional and local geology, including information of the stratigraphic unit or units within which the resource is located.

(b) 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

The Proponent is to supply a copy of the most recent resource and/or reserve statement:

(a) Include a full and 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).

(b) 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.

MEG 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 and mine design

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

(a) Explain how the proposed mine plan and extraction method maximises resource recovery.

(b) A summary of resources that will be sterilised or excluded, with justification.

(c) List seams excluded from reserves (noting why each seam was excluded from reserve estimates).

(d) Compare seams included/excluded in reserve estimates to those in nearby operations. If an underground operation, justify the selected working section.

(e) List all economic, environmental, other constraints to the resource/reserve impacting the Project.

5. Geotechnical assessment

The Proponent is to supply a full geotechnical assessment supporting the mine design and method selected including, but not limited to, the following:

(a) Structural trends, roof and floor conditions, seam conditions, stress magnitude and orientation, jointing and cleating, pillar dimensions, ground support requirements, consideration of longwall cavability, multiple seam mining implications, in-situ horizontal stress on mine layout, subsidence considerations.

(b) Explanation of current understanding of the paleochannel(s) and their expected impact on operations and planning. Describe risk reduction measures to be implemented.

(c) Explanation of design and risk reduction measures to protect the rail corridor.

6. Subsidence

To justify proposed underground mining projects, the Proponent must demonstrate the feasibility of:

(a) The proposed mining operation (e.g. mining methods, layout and sequences).

(b) The proposed strategies to manage subsidence risks to surface or sub-surface features that are considered to have significant economic, social, cultural or environmental value.

The justification must be supported by information provided by the Proponent, including, but not limited to:

(a) Identification and general characteristics of surface and subsurface features that may be affected by subsidence caused by the proposed mining.

(b) General and relevant site conditions including; depths of cover, geological, hydrogeological, hydrological, geotechnical, topographic and climatic conditions.

7. 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:

(a) 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.

(b) In terms of text, plans or charts, the EIS must clearly show the proposed extent and sequence of the development.

8. Project economics and target market

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

(a) Coal price forecasts by coal type used by the Proponent. MEG requires these forecasts to analyse the Proponent's calculations of royalty value and export value.

(b) Product tonnages split into market segment, for example, export/domestic and thermal/metallurgical coal. These estimates are necessary to arrive at total revenue value and royalty calculations. Include justification for market segment based on quality parameters.

(c) CAPEX & OPEX necessary for the Project – broken down into the various sub-categories and equipment type.

(d) Estimates of employment generation broken down into direct, indirect, ongoing, construction and contract workers.

(e) Total royalty generated to the state over the life of the Project.

(f) Relationship and interaction with other mines. How the Project impacts on the existing mine and surrounding mines.

(g) Details on derivation/analysis of Run-of-Mine (ROM) production rate; to answer why this the optimum rate.

MEG 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 MEG 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 summary included in the EIS must commit to providing MEG with full resource documentation separately via MEG's Assessment Coordination Unit.

Additional matters for attention

Resource and Economic Assessment

The Resource and Economic Assessment (REA) is designed to review the resource/reserve estimates stated in the submitted EIS and supporting material. The REA also examines whether the project will deliver significant social and economic benefits to NSW from the efficient development of the resource, by optimising resource recovery and mine design and minimising waste. It also aims to ensure an appropriate return to the state from developing the resource. This process commences two months prior to lodgement of the EIS, the proponent to contact the Assessment Coordination Unit.

Biodiversity offsets

MEG 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.

MEG requests consultation with both the Geological Survey of NSW – Land Use Assessment team and holders of existing mining and exploration authorities affected by planned biodiversity offsets. Evidence of consultation should be included in the EIS.

Mining Titles

As coal is a prescribed mineral under the *Mining Act 1992*, the Proponent is required to hold an appropriate mining title(s) from MEG in order to mine the mineral.

For ancillary mining activities as, in so far as the ancillary activities are to be carried out in connection with and in the immediate vicinity of a mining lease in respect of a mineral, the proponent is required to hold a Mining Lease for ancillary mining activities or an 'off title' designated ancillary mining activity as defined by clause 7 of the Mining Regulation 2016 (the Regulation).

The EIS for a project should clearly identify existing mineral titles, mineral title applications and the final proposed mining lease area(s) for the project site and areas surrounding the proposed project area and address the environmental impacts and management measures for the mining and mining purpose activities as licensed under the *Mining Act 1992*.

Where a proposal includes Crown Land the proponent is required to comply with the Commonwealth *Native Title Act 1993* and undertake the right to negotiate process for the Crown Lands within the current exploration licence area(s) if proof of extinguishment cannot be determined.

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.

Application of section 380AA of the *Mining Act 1992* – restrictions on planning applications for coal mining and titles required to undertake mining

As coal is a prescribed mineral under the Act, the Proponent is required to hold appropriate mining titles from MEG to undertake mining.

In addition, section 380AA requires that an application for development consent (or modification to consent) to mine for coal cannot be made or determined unless the applicant is also the holder of a title under the Act or has the written consent of the holder of a title, where the parties are different.

Section 380AA(1) states:

> *An application for development consent, or for the modification of a development consent, to mine for coal cannot be made or determined unless (at the time it is made or determined) the applicant is the holder of an authority that is in force in respect of coal and the land where mining for coal is proposed to be carried out, or the applicant has the written consent of the holder of such an authority to make the application.*

Based on current title information MEG advises that the Proponent holds the appropriate titles as required for mining operations as relating to the project and satisfies the requirements of section 380AA.

Position	Approval	Date
Approving Officer: Adam W. Banister **Senior Advisor Resource Assessments** **Resource Operations** (02) 4063 6534	Approved in CM9	21 April 2021
Endorsing Officer: Scott Anson **Manager Assessment Coordination** **Resource Operations** (02) 4063 6972	Approved CM9	21 April 2021

DOC21/294192
MAAG0010582

Melissa Anderson
Senior Planning Officer
Energy Resource Assessment

Via: Major Project Portal

Dear Ms Anderson

Re. Request for SEARs – Chain Valley Consolidation Project - SSD-17017460

I refer to your request of 6 April 2021 for advice regarding the Chain Valley Consolidation Project. The Resources Regulator has reviewed the request.

Assessment
Based on the review of the request for SEARs and supporting documents, the Resources Regulator advises that the standard mine rehabilitation SEARs are recommended in this instance (see Attachment).

The Resources Regulator has no specific comment in relation to mine safety matters at this time however the proponent should be aware that as the mining is in a potentially complex subsidence area further assessment will be undertaken by the Regulator to determine whether the proposal poses a serious risk and whether specific management or mitigation strategies are required.

This will involve further desktop and site assessment of the area by Resources Regulator subsidence experts who will liaise directly with the proponent.

Regulatory requirements if approved
The proponent will be required to comply with rehabilitation requirements under the mining authorisation(s) when undertaking works associated with the proposal.

The Resources Regulator may undertake assessments of the mine operators' proposed mining activities under the *Work Health and Safety (Mines and Petroleum Sites) Act 2013* and Regulation as well as other WHS regulatory obligations.

Background
The Mining Act Inspectorate within the Resources Regulator undertake risk-based compliance and enforcement activities in relation to obligations under the *Mining Act 1992*. This includes undertaking assessment and compliance activities in relation to mine rehabilitation activities and determination of security deposits.

The Mine Safety Inspectorate within the Resources Regulator is responsible for ensuring the mine operators' compliance with the Work Health and Safety (WHS) legislation, in particular the effective management of risks associated with the principal hazards as specified in the

Work Health and Safety (Mines and Petroleum Sites) Regulation 2014.

Contact
Should you require any further information or clarification, please contact the Office of the Executive Director (ED.ResourcesRegulator@planning.nsw.gov.au)

Yours sincerely,

Alex Tutt-Branco
Executive Officer
Office of the Executive Director, Resources Regulator

22 April 2021

Att: Standard SEARS (Mining Project)

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;

(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 tailings management strategy, which details measures to be implemented to avoid the exposure of tailings 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 a void is proposed to remain as part of the final landform, include:

(i) a constraints and opportunities analysis of final void options, including backfilling, to justify that the proposed design is the most feasible and environmentally sustainable option to minimise the sterilisation of land post-mining;

(ii) a preliminary geotechnical assessment to identify the likely long term stability risks associated with the proposed remaining high wall(s) and low wall(s) along with associated measures that will be required to minimise potential risks to public safety; and

(iii) outcomes of the surface and groundwater assessments in relation to the likely final water level in the void. This should include an assessment of the potential for fill and spill along with measures required be implemented to minimise associated impacts to the environment and downstream water users.

(n) 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.

(o) 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;

(p) 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);

(q) 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

(r) Consider any relevant government policies[1].

[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)

NSW RURAL FIRE SERVICE

Department of Planning and Environment (Sydney Offices)
GPO Box 39
Sydney NSW 2001

Your reference: SSD-17017460
Our reference: DA20210413001449-SEARS-1

ATTENTION: Melissa Anderson

Date: Wednesday 21 April 2021

Dear Sir/Madam,

Development Application
State Significant – SEARS – Industry
Chain Valley Consolidation Project - Construction Road Mannering Park, 102//DP1065718

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 09/04/2021.

The referral relates to a request for Secretary's Environmental Assessment Requirements (SEARs) for the Chain Valley Colliery Consolidation Project. The NSW Rural Fire Service has reviewed the information provided and advises that a bush fire report that addresses the relevant sections of *Planning for Bush Fire Protection (PBP) 2019* must be provided with future referrals.

For any queries regarding this correspondence, please contact Emma Jensen on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese
Team Leader, Dev. Assessment & Planning
Planning and Environment Services

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
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Subsidence Advisory

117 Bull Street, Newcastle West, NSW, 2302
T: (02) 4908 4300 | **24 Hour Emergency Service:** 1800 248 083 (Free Call)

Attn: Melissa Anderson
Department of Planning Industry and Environment
Email: melissa.anderson@planning.nsw.gov.au

Dear Melissa,

EMIN21-00004 - Chain Valley Consolidation Project (SSD-17017460).

I refer to your request through the portal dated 7 April 2021 inviting Subsidence Advisory NSW (SA NSW) to provide comment on the consolidation of existing mining approvals granted to Chain Valley Colliery and Mannering Park Colliery.

SA NSW understands that the proposal will not result in additional planned subsidence impacts other than that allowed under existing approvals and consents.

If you would like more information, please contact Subsidence Advisory NSW on 4908 4300 or subsidencedevelopment@customerservice.nsw.gov.au.

Yours sincerely

Kieran Black
Technical Specialist

21 April 2021

CR201/001181
SF2013/091657
KK

27 April 2021

Department of Planning, Industry & Environment
Industry Assessments
GPO Box 39
SYDNEY NSW 2001

Attention: Melissa Anderson

SSD 17017460 SEARS REQUEST – CHAIN VALLEY COLLIERY CONSOLIDATION PROJECT, MANNERING PARK & DOYALSON NORTH

On 07 April 2021 TfNSW accepted the referral by the Department of Planning, Industry and Environment (DPIE) through the Major Projects Planning Portal regarding the abovementioned application. DPIE referred the application to TfNSW for comment. This letter is a submission in response to that referral.

TfNSW's primary interests are in the road network, traffic and broader transport issues. In particular, the efficiency and safety of the classified road network, the security of property assets and the integration of land use and transport.

TfNSW have reviewed the *Chain Valley Colliery Consolidation Project Scoping Report* (Scoping Report) prepared by Umwelt and dated March 2021 and its appendices, Appendix A and Appendix B. It is understood that the proposal be for consolidation of the approved mining operations at Chain Valley Colliery (CVC) and Mannering Colliery (MC) under a single development consent. The resulting development would include:

- The operational workforce levels across the two operations of approximately 390 FTE employees.

- The Project will primarily involve suppling coal to the Vales Point Power Station (VPPS), however, CVC is currently approved to transfer up to 660,000 tpa to the Port of Newcastle by road for export and up to 180,000 tpa to other domestic sources by road.

TfNSW understands that neither CVC operations nor MC operations are currently operating at full production rates and therefore do not currently give an accurate representation of full development on the network.

The prospective application would extend the life of mining operations at CVC and MC by two years

to the end of 2029.

Existing road access to CVC surface facilities is via Ruttleys Road (local road) and Construction Road, which is a private road servicing CVC and VPPS. The MC surface facilities and pit top are accessed directly from Ruttleys Road. The proposed project does not seek change these existing access arrangements.

No changes are proposed to the previously approved coal transport arrangements other than the inclusion of an option to transfer coal from CVC to VPPS via conveyor and the ability to use trucks for coal haulage to VPPS on a temporary basis in emergencies from MC to VPPS via an internal haul road.

It is noted that the consent for CVC has been modified on three occasions since it was granted, and a fourth modification application (CVC Mod 4) is currently under assessment.

TfNSW response & requirements

TfNSW 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*, and,

- Section 2 Traffic Impact Studies of Roads and Maritime's NSW's *Guide to Traffic Generating Developments 2002*.

Furthermore, a traffic and transport study shall be prepared in accordance with the RTA *Guide to Traffic Generating Developments*, RMS *Traffic Modelling Guidelines*, Austroads *Guide to Traffic Management, Part 6, Intersections, Interchanges and Crossings*, and Austroads *Guide to Traffic Management, Part 12, Integrated Transport Assessments for Developments,* 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, in particular, the intersection Ruttleys Road and Pacific Highway, 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.

- Identify any 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 Transport for NSW and Council.

- Traffic analysis of any major / relevant intersections impacted, using SIDRA or similar traffic model, including:
  - 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
  - Electronic data for Transport for NSW review.

- Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

In addition to above recommendations, the advice previously provided by TfNSW Maritime via an email on 1 February 2021 to Delta Coal (copied to DPIE) in relation to a post approval matter for the Chain Valley Extension Project- SSD-5465 to remain. A copy of the advice is attached.

On determination of this matter, please forward a copy to TfNSW for record and / or action purposes. Should you require further information please contact Kumar Kuruppu, Development Services Case Officer, on 0429 037 333 or by emailing development.hunter@transport.nsw.gov.au.

Yours sincerely

Kylie-Anne Pont

Kylie-anne Pont
A/Team Leader Development Services
Development Services North

Attach. – TfNSW Maritime advice Re SSD - 5465-PA-38

Kumar Kuruppu

From: Kumar Kuruppu
Sent: Monday, 1 February 2021 3:25 PM
To: Chris Armit
Cc: Melissa Anderson; Wayne Jones; Navigation Advice North
Subject: FW: Major Projects – Proponent Request for Advice - Chain Valley Extension Project- SSD-5465 - CVC Built Features Management Plan (SSD-5465-PA-38) (Central Coast,Lake Macquarie City)

Good afternoon Chris,
Please find Transport for NSW (TfNSW) Maritime advice below in relation to a post approval matter for the Chain Valley Extension Project- SSD-5465 referred to TfNSW by Department of Planning, Industry and Environment via Major Projects Portal. A copy of this advice will also be uploaded to MP Portal.
Kind regards

Kumar Kuruppu
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From: Lynda Hourigan **On Behalf Of** Navigation Advice North
Sent: Monday, 1 February 2021 1:18 PM
To: Kumar Kuruppu <Kumar.Kuruppu2@transport.nsw.gov.au>; Navigation Advice North <navigationadvicenorth@rms.nsw.gov.au>
Cc: Mike Baldwin <Mike.Baldwin@transport.nsw.gov.au>; Brett Boehm <Brett.Boehm@transport.nsw.gov.au>; Chris Austen <Chris.Austen@transport.nsw.gov.au>; Peter Browne <Peter.Browne@transport.nsw.gov.au>; Nicole Waller <Nicole.Waller@transport.nsw.gov.au>; Lun Yeung <lun.yeung@transport.nsw.gov.au>; Sonia Mckay <Sonia.McKay@transport.nsw.gov.au>; Nathan Koch <Nathan.Koch@transport.nsw.gov.au>
Subject: RE: Major Projects – Proponent Request for Advice - Chain Valley Extension Project- SSD-5465 - CVC Built Features Management Plan (SSD-5465-PA-38) (Central Coast,Lake Macquarie City)

Hello Kumar

Thank you for your email requesting TfNSW Maritime's comment on the CVC Built Features Management Plan below.

Transport for NSW (TfNSW) Maritime is responsible for the ongoing maintenance of safe navigation throughout NSW under the Marine Safety Act 1998. As such, proposals like this are reviewed to ensure that any disruption to navigation for vessels is minimised as much as is practical.

The project documentation provided has been assessed as having minimal impact on the safety of navigation to vessels operating in this area and Maritime has no objections to the proposed works.

TfNSW Maritime advises the following matters need to be considered and addressed when preparing the REF and / or the Scope of Works for the Chain Valley Extension Project:

1. Any works impacting on navigation during the construction phase must seek TfNSW Maritime support 21 days prior to works commencing. A full scope of works including dates is to be provided to *navigationadvicenorth@rms.nsw.gov.au.*
2. All associated work boats to comply with the relevant NSW Marine Legislation for survey, registration and safety equipment, and comply with the Marine Safety (Domestic Commercial Vessels) National Law Act 2012.
3. Vessels must exhibit lights and shapes in accordance with International Regulations for Preventing Collisions at Sea.
4. ***"That If the subsidence was >500mm or the pylon ends up with more than 5° of lean on it, then there would need to be action taken."*** and NSW Maritime is to be notified immediately.
5. For pelican rock NLM045, please confirm if this is an additional 155mm vertical subsidence to the 130mm already predicted for the mining of Miniwall S2-S4. NSW Maritime is seeking confirmation that the vertical subsidence is still within the limits allowing the project to go ahead without any action needed to be taken on NLM045.
6. NSW Maritime acknowledges that the 4mm/m tilt on NLM045 is less than 0.25 degrees so this is not an issue and using this same criteria for NLM062 the 20mm movement and 0 tilt is also acceptable.
7. NSW Maritime notes that NLM063 and NLM064 are both buoys so the tide has more impact on the Aid to Navigation height than the mining with the effect on the chain length and scope being almost undetectable. Therefore the subsidence values for these are also acceptable.

Subsequently, NSW Maritime advises that "**There is no action required for these 4 navigation aids for the predicted subsidence and tilts and no further action required unless the subsidence and tilt exceed the values that have previously stipulated"**

For more information, please direct all correspondence to *navigationadvicenorth@rms.nsw.gov.au*.

Kind regards

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