Our ref: DOC21/9643-2
Your ref: SSD-11826621

Joe Fittell

Senior Environmental Assessment Officer
Department of Planning, Industry and Environment
joe.fittell@planning.nsw.gov.au

Dear Mr Fittell

Input into Secretary's Environmental Assessment Requirements – State Significant Development – HVO South Open Cut Coal Continuation Project (SSD-11826621)

I refer to your email dated 11 January 2021 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the HVO South Open Cut Coal Continuation Project.

The Biodiversity and Conservation Division (BCD) understands that the development comprises the continuation of the life of HVO South to approximately 2045 and associated infrastructure upgrades and changes. 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 as prepared by EMM (dated 18 December 2020) 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 Brendan Mee, Senior Conservation Planning Officer, on 4904 2730 or at rog.hcc@environment.nsw.gov.au

Yours sincerely

15 January 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 11826621) 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/EA] 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/EA] 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

Crown Lands Comment

Crown Lands has the following comments for this proposal:-

For mining operations involving Crown land or Crown roads (in particular the bed and banks of the Hunter River and Mollombi Brook, and Crown land west of Riverview Pit and east of HVO South MIA) the following requirements apply:

1. All Crown land and Crown roads within a Mining Lease (with surface rights), subject to mining or mining related activity, must be subject to a Compensation Agreement issued under Section 265 of the Mining Act 1992, to be agreed and executed prior to any mining activity taking place. The Compensation Agreement may include conditions requiring the Mining Lease Holder to purchase Crown land impacted on by mining activity.
2. All Crown land and Crown roads located within an Exploration Licence, subject to exploration activity, must be subject to an Access Arrangement issued under Section 141 of the Mining Act 1992, to be agreed and executed prior to any exploration activity taking place.
3. All Crown land and Crown roads within a Mining Lease (with sub-surface rights only) must be subject to a Section 81 Consent under the Mining Act 1992 where surface activities are proposed, to be agreed and executed prior to any surface activity taking place.

OUT21/220

Lauren Evans
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

lauren.evans@planning.nsw.gov.au

Dear Ms Evans

HVO South Open Cut Coal Continuation Project (SSD-11826621)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 11 January 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 Office
13 January 2021

Department of Planning, Industry and Environment
By email: Lauren.Evans@planning.nsw.gov.au

Attention: Lauren Evans

Notice Number	1605049
Date	19-Jan-2021

Hunter Valley Operation - South Open Cut Coal Continuation Project - SSD 11826621

I refer to your request to the Environment Protection Authority (EPA) dated 11th of January 2021, seeking the EPA's Secretary's Environmental Assessment Requirements (SEAR's) to assist with the preparation of an Environmental Impact Statement (EIS) for the Hunter Valley Operation - South Open Cut Coal Continuation Project - SSD 11826621.

The EPA has considered the proposal and provides the information at **Attachment A** it requires to properly assess the proposal. The EPA's key information requirements for the proposal must include an adequate assessment of:

1. Potential noise impacts due to construction and operation;
2. Potential air quality Impacts due to construction and operation;
3. Impacts on water quality and site wide water management; and
4. Waste management and disposal.

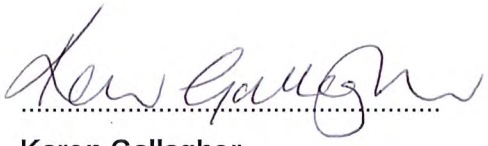
In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in **Attachment B** and any relevant industry codes of practice and best practice management guidelines.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

The Proponent should be made aware that any commitments made in the EIS may be formalised as approval conditions and may also be placed as formal licence conditions.

If you have any questions about this matter, please contact Karen Gallagher on 02 4908 6822 or by email at RegOps.MetroRegulation@epa.nsw.gov.au.

Yours sincerely



Karen Gallagher

Acting Unit Head

Metropolitan North - Newcastle

(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS FOR

Hunter Valley Operations - South Open Cut Coal Continuation Project - SSD 11826621

How to use these requirements

The EPA requirements have been structured in accordance with the 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 approvals and licences

E. Identification and prioritisation of issues

F. The environmental issues

G. Compilation of 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.

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 and groundwater 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. Investigations should be undertaken in accordance with (but not limited to) guidelines identified in Attachment B ; and
- Identify potential impacts to soils and groundwater /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.
- A site auditor accredited under the *Contaminated Land Management Act* 1997 (CLM Act) should be engaged to provide a Section A site audit statement (SAS) and accompanying site audit report (SAR) certifying suitability of the land for the proposed land use. By engaging a site auditor to provide a Section A SAS, the site auditor will review the adequacy of the investigations, any remedial works or management plan required and confirm suitability of the land for the proposed use.

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 *Protection of the Environment Operations Act* 1997).

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 the POEO Act and the Local Government Air Quality Toolkit (DECC, 2007)	http://www.epa.nsw.gov.au/air/lgaqt.htm
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
Consultants reporting on contaminated land, Contaminated Land Guidelines (EPA,2020)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/contaminated-land/20p2233-consultants-reporting-on-contaminated-land-guidelines.pdf?la=en&hash=EBB6758A2DE448534B6FDD5057D280523E423CC7
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 ref: DOC21/8512

Joe Fittell
Senior Environmental Assessment Officer
Department of Planning, Industry & Environment Address
12 Darcy Street
PARRAMATTA NSW 2150

By email: Joe.Fittell@planning.nsw.gov.au

Dear Mr Fittel

Request for Secretary's Environmental Assessment Requirements (SEARS) for HVO South Open Cut Coal Continuation Project SSD 11826621

Thank you for your referral dated 11 January 2021 inviting SEARS input from the Heritage Council of NSW on the above State Significant Development proposal.

The proposed SSD site is in the vicinity of State Heritage Register item *Inn & Outbuildings (former)* (SHR no. 00242).

It is recommended that the draft SEARs outlined below are adopted:

Heritage and archaeology

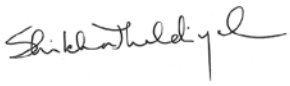
a) A Statement of Heritage Impact (SOHI) prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on the heritage significance of the site and adjacent areas and is to identify the following:
   - all heritage items (state and local) within the vicinity of the site including built heritage, landscapes and archaeology, detailed mapping of these items, and assessment of why the items and site(s) are of heritage significance;
   - compliance with the relevant Conservation Management Plan;
   - the impacts of the proposal on heritage item(s) including visual impacts;
   - the attempts to avoid and/or mitigate the impact on the heritage significance or cultural heritage values of the site and the surrounding heritage items; and
   - justification for any changes to the heritage fabric or landscape elements including any options analysis.

b) If the SOHI identifies impact on potential historical and/or maritime archaeology, an historical and/or maritime archaeological assessment should be prepared by a suitably qualified archaeologist in accordance with the guidelines *Archaeological Assessment* (1996) and *Assessing Significance for Historical Archaeological Sites and Relics* (2009). This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations or salvage programme.

As the site contains a local heritage item, and other local items are in the vicinity, advice should be sought from the relevant local council.

If you have any questions about this correspondence, please contact please contact Tim Olliver, Senior Heritage Assessment Officer, at Heritage NSW, on (02) 4927 3203 or Timothy.Olliver@environment.nsw.gov.au.

Yours sincerely



Shikha Jhaldiyal
A/Senior Team Leader
Regional Heritage Assessments North
Heritage NSW, Department of Premier and Cabinet
As Delegate of the Heritage Council of NSW
15 January 2021

Joe Fittell
Senior Environmental Assessment Officer
Department of Planning, Industry & Environment
email: joe.fittell@planning.nsw.gov.au

Your reference: SSD-11826621
Our reference: DOC21/8499-3

Advice provided via the Major Projects Portal

Dear Mr Fittell

HERITAGE NSW – ABORIGINAL CULTURAL HERITAGE REGULATION
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS)

Project: HVO South Open Cut Coal Continuation Project, Hunter Valley, Singleton LGA
SSD/SSI application no: SSD-11826621

Thank you for requesting our input on the draft Planning Secretary's Environmental Assessment Requirements (SEARs) for the above state significant project. Heritage NSW (HNSW) has reviewed the available supporting documentation and provides SEARs for the proposed development in relation to Aboriginal cultural heritage matters in **Attachment A**.

HNSW highlight the following project specific requirements for HVO South Open Cut Coal Continuation Project:

- The Environmental Impact Statement (EIS) must include an Aboriginal Cultural Heritage Assessment Report (ACHAR) must be prepared that documents the Aboriginal cultural values that exist across the whole development footprint including all additional infrastructure, ancillary areas and access roads to inform the design and approvals process for the development.
- The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR. Significant Aboriginal cultural values have been identified in the Hunter Valley region through previous assessments close to this proposed development. Similar values could be present within the development area.
- The ACHAR must demonstrate Aboriginal community consultation in accordance with clause 60 of the *National Parks and Wildlife Regulation 2019* and must consider cultural values that may be impacted by the proposed development.

If you have any questions regarding these comments, please contact Gillian Goode, Archaeologist, at Heritage NSW, on 0499 588 790 or by email gillian.goode@environment.nsw.gov.au.

Yours sincerely

Rose O'Sullivan
Acting Senior Team Leader, Aboriginal Heritage Regulation Branch – North
Heritage NSW
4 February 2021
Enclosure – Attachment A: Recommended SEARs for HVO South Open Cut Coal Continuation Project, SSD-11826621 - Aboriginal Cultural Heritage

ATTACHMENT A: HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: HVO South Open Cut Coal Continuation Project, Hunter Valley
SSD/I #: SSD-11826621

1. The Environmental Impact Statement (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). The assessment must encompass the whole development footprint, including all ancillary areas and access roads. This may include the need for surface survey and test excavation.
2. The identification of cultural heritage values must be conducted in accordance with the Code of Practice for Archaeological Investigation in NSW (OEH 2010), and be guided by the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (DECCW 2011) in consultation with Heritage NSW.
3. 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.
4. 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 Aboriginal objects recorded as part of the assessment must be documented in accordance with section 89A of the *National Parks and Wildlife Act 1974.*
5. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The results of the surface survey must 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.
6. 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.
7. The ACHAR must outline procedures to be followed in the event Aboriginal Ancestral Remains 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.

DOC21/45517

MINING, EXPLORATION & GEOSCIENCE ADVICE RESPONSE

Joe Fittell
Senior Environmental Assessment Officer
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2150

joe.fittell@planning.nsw.gov.au

Dear Joe

Project: HVO North & HVO South Continuation Projects
Stage: SEARs
Development Application: SSD-11826681 (HVO North) and SSD-11826621 (HVO South)

I refer to your correspondence dated 11 January 2021 inviting the Department of Regional NSW – Mining, Exploration & Geoscience (MEG) to provide comments on the HVO North & HVO South Continuation Projects (the Project) submitted by Hunter Valley Operations Pty Limited (the Proponent).

The relevant units internal to MEG have been consulted in generating this advice. The Department of Planning, Industry and Environment and the Proponent should be aware that matters concerning 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 (EIS) refers to and includes all requirements set out in MEG' Secretary's Environmental Assessment Requirements for the Project provided in Attachment 1 (DOC21/10774).

For further advice concerning this matter, please contact the Assessment Coordination Unit on 02 4063 6534 or assessment.coordination@planning.nsw.gov.au.

Yours sincerely

Adam W. Banister
A/Manager Assessment Coordination
Resource Operations
Departent of Regional NSW – Mining, Exploration & Geoscience
27 January 2021

for
Param Dogra
A/Executive Director Resource Operations
Department of Regional NSW – Mining, Exploration & Geoscience
Encl. Attachment 1 - Hunter Valley Operations – North [SSD-11826681] & South [SSD-11826621] Continuation Projects - SSD11826621 - SEARs (coal)

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(s)	Hunter Valley Operations – South Continuation Project SSD-11826621 Hunter Valley Operations – North Continuation Project SSD-11826681
Reference Number:	DOC21/10774
Issue date of SEARs:	27 January 2021
Type of Approval:	Mining operation - **open cut**
Proponent:	Hunter Valley Operations Pty Ltd
DA Number:	HVO North [SSD-11826681] and HVO South [SSD-11826621]
LGA:	Singleton
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 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) Wall design geometries and slope stability analysis and designs of pit walls/overburden emplacements (including possible failure mechanisms).

(b) Structural trends, stress magnitude and orientation, jointing and cleating.

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

(d) Explanation of design and risk reduction measures to protect the Hunter River and Wollombi Brook.

(e) Long term stability of final voids

6. 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.

7. 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 is to commence two months prior to lodgement of the EIS; the proponent is required 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 Authorities

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 mining authorities, mining authority 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.*

Officer	Approval	Date
Approving Officer: Adam W. Banister A/Manager Assessment Coordination Resource Operations (02) 4063 6534		27 January 2021

DOC21/9486
MAAG0009505

Joe Fittell
Senior Environmental Assessment Officer
Department of Planning, Industry & Environment

Via: Major Project Portal

Dear Mr Fittell

Re. Request for SEARs – HVO North (SSD- 11826681) & South (SSD-11826621) Open Cut Coal Continuation Project

I refer to your requests of 11 January 2021 for advice regarding the Hunter Valley Operations Open Cut Coal Continuation 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 scope of the EIS should address the standard rehabilitation SEARs (see attachment) in relation to both projects. In addition, where a native ecosystem is proposed, further detail should be provided in regard to the target vegetation communities.

Background
The Mining Act Inspectorate within the Resources Regulator has responsibility for providing strategic advice on environmental issues as they relate to or affect mine rehabilitation.

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

20 January 2021

Att: Mining Development Rehabilitation Standard SEARs

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, including regional integrated landscape management (e.g. connectivity with adjacent landscapes);

(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)

SINGLETON COUNCIL

29 January 2021

Mr Joe Fittell
Senior Environmental Assessment Officer
Resource Assessments - Planning Services
GPO Box 39
Sydney NSW 2001

Dear Joe

DPIE request for Advice – Hunter Valley Operations Continuation Project - SSD 11826681 (HVO North) and SSD 11826621 (HVO South)

I refer to your request via the NSW Major Projects Planning Portal for advice from Singleton Council on the Request for SEARs Input for the Hunter Valley Operations Continuation Project. This Project incorporates two existing mining operations, HVO North (**SSD 11826681**) and HVO South (**SSD 11826621**).

Council staff have undertaken a review of the Scoping Report provided to inform SEARs and provides this letter as its response to the Department's request. Please note, this letter constitutes council's advice in relation to both the HVO North and HVO South Project.

The Proposed Hunter Valley Operations Continuation Project (the Project)

The Project consists of mining operations and associated infrastructure at at Hunter Valley Operations North (HVO North) and Hunter Valley Operations South (HVO South) and includes open cut mining operations coal handling and preparation plant, water management infrastructure, waste reject and tailings disposal, coal handling and transport infrastructure including rail load out facilities. The Hunter Valley Operations Complex spans the Singleton Local Government Area from Warkworth in the south, to Liddell Power Station in the North and encompasses approximately 13,000 hectares of disturbance, amounting to approximately 3% of the Singleton Local Government Area. The existing operations are significant in terms of both land area and location.

Council understands that the Project is needed to continue the operational life of the complex. Current development approvals will expire in 2025 (HVO North) and 2030 (HVO South). The Project is seeking approval for a further 25 years of mining for HVO North, taking the approved operations to 2050. The components of the Project include:

- Extraction of an additional 400 million tonnes of Run of Mine (ROM) coal;
- Realignment of Lemington Road, resulting in the closure of the existing Lemington Road;
- Increasing in the mining footprint outside previously approved boundaries;

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- Amendment to the approved final landform;
- Interaction with other local roads in the Singleton Council network, including Pikes Gully Road and Liddell Station Road;
- Development of a Tailing Management Strategy;
- Integration of water management into the Greater Ravensworth Area Water Transfer Scheme;
- Reprocessing of tailings;
- Construction of the Cheshunt and Riverview Flood Protection Levees;
- Changes to final landform at HVO South;
- Changes to the dimensions of the final void and backfill of South Lemington Pit 1 final void.

The interactions of the various approvals within the Hunter Valley Operations are complex. These interactions require careful consideration within the Environmental Environmental Impact Statement, particularly in the area of final landform and final land use. The EIS should include an assessment of the following matters:

General Matters

1. The role of the GRAWTS in ensuring adequate water licenses are held for the Project, including whether additional water licenses will be required for other participants in the GRAWTS as a result of this Project and therefore the impact that current and additional licensing might have on downstream and Water Sharing Plan users;
2. Overburden emplacement across the operations, including scheduling;
3. Reject and tailings production from the Project, and the impact of this production on the capacity of storages and rehabilitation timing of tailings and emplacement areas at HVO North;
4. Scheduling of construction, mining, decommissioning and rehabilitation activities across HVO North and HVO South, which impact not only approved production limits for the respective mining operations, but also water licensing requirements, and cumulative amenity impacts to be felt by the community for a longer period of time; and
5. The provision of a figure that depicts the inter-relationships, flow pathways and volumes of each flow pathway for all input and outputs related to the inter-dependencies.

Proposed Lemington Road Realignment

The proposed realignment of Lemington Road will result in an increase in road pavement and travel distance for existing road uses, noting that Lemington Road is used as an alternative route for traffic where either the New England Highway or Golden Highway are closed. The EIS should include consideration of:

1. How the Applicant intends to provision for the long term (in perpetuity) maintenance of the new Lemington Road to meet the asset life requirements;
2. How the Applicant intends to progress the closure of the old Lemington Road alignment, having regard to the provisions of the *Roads Act 1993*; and

3. The impact of not realigning Lemington Road, including transparent costs and lost coal value, and the consequent environmental, social and economic impacts and benefits of not relocating the road.

Rehabilitation and Mine Closure

HVO North is within five (5) years of mine closure. As such, detailed mine closure planning for the HVO North operations should have commenced in accordance with its current conditions of approval. The Scoping Report identifies that mine closure and final rehabilitation will be deferred, as the Project will be extended for a further 25 years.

Council considers that reliance on the potential for a new Project approval is not an adequate justification to delay mine closure planning for the current operations. In addition, given the short time frame until the current approval expires, Council considers that it would be imperative to include detailed mine closure planning the EIS, and that the EIS must include a timetable for completion of a detailed mine closure plan and a stakeholder engagement plan to underpin closure planning outcomes, under both scenarios – if the Project gains approval, and if it does not.

The EIS for the Project, and specifically the Rehabilitation and Mine Closure Strategy should include:

1. Timing of detailed closure planning for the existing operation, should the Project not be approved, including the actions needed to be taken to achieve a post mining land use that is suitable, and does not result in a negative socio-economic impact to the community. This analysis must include:
    a. Potential areas of the mining lease (or mine owned land) where these land uses could be applied;
    b. Relationship between the proposed final land uses and the final landform;
    c. The integration of these uses with other existing and proposed land uses in the region, including the compatibility and viability of potentially competing uses;
    d. Whether any or all of these options will be safe, stable, non-polluting and sustainable in the context of the final landform; and
    e. A timeframe/timetable for investigation and implementation of one or more option(s) through to feasibility.
2. Role of both council and the community in the post mining land use options assessment and analysis, including the extent to which such consultation has occurred and its outcomes;
3. The relationship between post mining land use and the principles of strategic land use planning, including the extent to which the Applicant has consulted with council on the future strategic land use planning outcomes for the local government area;
4. Final void management actions that will be taken to ensure highwall stability during and post mining, including contingencies for final landform design and

rehabilitation outcomes should the highwall destabilise during and/or post mining;

5. Assessment of the suitability, permissibility and sustainability of the final land use(s) proposed by area or domain, including actual feasibility and economic viability, as well as linkage between final landform and final land use(s) (that is, will be landform proposed actual provide for the uses identified);
6. Analysis of the climate changing risks (temperature, rainfall, fire) on the success of rehabilitation, including the contingency measures that would be implemented in the event rehabilitation fails;
7. Viability of the proposed final land uses, including where on the lease or buffer areas these uses could be applied, the relationship between the proposed final land uses and final landform, the integration of these uses with other existing and proposed land uses in the region, including the compatibility and viability of potentially competing uses;
8. The consequences of the final land use options, including the final use of the void, on the principles of ecologically sustainable development, in particular, inter-generational equity; and
9. safety, stability, pollution potential and sustainability of the proposed final land uses in the context of the final landform.

Planning Agreement

Council and the Applicant initiated discussions on a proposed Planning Agreement (**VPA**) for the Project in 2020. To date, no agreement has been reached between the Council and the Applicant on a Planning Agreement for the Project.

Council has spent significant time reviewing the contributions made to the Singleton community by the mining industry and in November 2017, Council resolved to apply a 1% levy on capital investment value to all future mining voluntary planning agreements. The application of this levy is consistent with the provisions of Council's existing Development Contributions Plan, section 4.10, which states:

> *Whether as a result of a Minister's consent or council consent, these contributions will take the form of monetary contributions or inkind contributions and be determined through negotiation between the applicant and Council. The proposed contributions agreed between the applicant and Council will be detailed in a voluntary planning agreement in accordance with s93F of the Environmental Planning and Assessment Act 1979.*

Council is currently reviewing its Development Contributions Plan.

Further, Council, at its meeting of December 2019 resolved to create the Singleton Community and Economic Development Fund using VPA monies from mining and other major Projects. The intent of this Fund is to preserve the capital and use investment returns to fund programs that will facilitate the future security, prosperity and wellbeing of our community. These programs would include undertaking investigations to understand the impact of mining on our community, research and development in Projects that build resilience and improve liveability of Singleton during

and post mining. Council believes this approach allows the provision of a longer term view on the use of VPA funds.

On 19 June 2017, a notice of motion regarding voluntary planning agreements was put to the Council. This motion, resolved by Council, requires *that, in future discussion with mining companies over Voluntary Planning Agreements, include a clause that will ensure that as the mine expands and they take on trainees/apprentices the majority (if not all) these trainees/apprentices come from the Singleton Local Government Area*. Council will continue to raise this in VPA negotiations with the Applicant.

To date, no agreement has been reached on a Planning Agreement quantum and further consultation with Council is required to progress the discussions.

Social Impacts and Community Loss

There is a desire, at a local community level, for village communities to maintain their rural and social values, protect amenity and provide for resources to support village lifestyle and growth, such as local access to retail and other services. The presence of mining and the number of property acquisitions has impacted these basic needs and values.

The social impact assessment should include consideration of the affordability impacts of property acquisition. Acquisition does not equate to equitable relocation. That is, the intrinsic values identified in the social impact assessment of any individual whose property has been acquired because of a mining related impact may not be accessible due to cost, loss of connection or availability. In a world where a social licence to operate is essential for Project approval, if acquisition is the only option to enable mining, then it should be complemented with relocation in a manner that is sympathetic to the intrinsic values being sought.

Biodiversity

The EIS should include the preferred option for securing offsets required for the Project, where land based offsets would (or could) be located (including current and future tenure), the area and location of proposed ecological rehabilitation and communities to be reinstated, the long-term tenure of ecological rehabilitation, and whether the required credits are available for purchase.
It is important to note that in perpetuity conservation of land has an economic impact on the community wherever that offset is secured. Offset land is not rateable and the impact on council's with significant offset land can be significant, and outside the area of immediate benefit. That is, offsets can be secured in other council areas where the benefits of the project are not realised.

Greenhouse Gas Assessment and Climate Change

The impact of coal mining emissions, regardless of where they occur, is a consideration that is reflected in the NSW Climate Change Policy Framework, which has seen the development of Climate Change Adaptation Plans for a majority of regions in NSW.

Clause 14(2) of the *State Environmental Planning Policy (mining, Petroleum Production and Extractive Industries) 2007* requires the consent authority to consider the greenhouse gas emissions of any mining development, in the context of any State or national policies, programs or guidelines. The NSW Climate Change Policy Framework is one such policy.

Council sees alignment of development objectives with the Policy Framework as an important step in understanding the actions that have been, or could be, taken by a Project to mitigate its impacts, whether they be local or global. The EIS should provide detail on how the Project will support the policy framework in the following areas:

- The Project's contribution towards achieving (or otherwise) the NSW target of net-zero emissions by 2050, including any quantifiable actions that can (or have been) taken to support this objective;
- The measures proposed by the Applicant to ensure that the Project will be more resilient to a changing climate, including rehabilitation and mine closure;
- How Scope 1 emissions proposed for the life of the Project will be reduced so as to not contribute to the current increasing trend in annual scope 1 emissions in NSW[1] (where half of all NSW emissions are from stationary energy sources with transport emissions the second largest component of NSW greenhouse gas emissions); and
- The impact of alternative scenarios for the Project on the framework objectives.

The extent to which this Project aligns with the Framework, and contributes to meeting the Framework's objectives, is likely to be an important public interest consideration for any decision maker.

Air Quality

Given the expected life of the proposed Project, the relationship between air quality and climate change indicators published by AdaptNSW should be considered in the EIS, including the Project's role in either improving or exacerbating the impact. For example, The EIS should include an assessment of the air quality impacts associated with a projected decrease in rainfall during spring and winter months, where PM_{10} and $PM_{2.5}$ have been regionally identified as having greatest impact.

The EIS and air quality assessment should quantify the effectiveness of any proposed controls, including how successful existing controls have been in reducing the impact of the existing operation, to enable certainty regarding the impact of the proposed Project.

Waste Management

The Scoping Report does not consider the current or future waste management strategies. The volumes of waste material generated by the current operation and proposed to be generated by the Project require quantification, including projected volumes of tailings (and the subsequent impact of this on management and

[1] AdaptNSW https://climatechange.environment.nsw.gov.au/Climate-projections-for-NSW/Climate-projections-for-your-region/Hunter-Climate-Change-Downloads

rehabilitation of tailings disposal areas). The EIS should consider the objectives of the NSW EPA Waste Strategy and the targets set within the Strategy and identify waste streams and how the management of these waste streams will contribute to meeting State and local waste targets.

The EIS should include an assessment of how demolition waste will be managed, including asbestos and other contaminated materials. Demolition waste will be generated from Lemington Road and the demolition of the Newdell train loading facility. The Applicant does not have approval to dispose of any waste on site, including waste tyres. The EIS should include an assessment of the current and future waste management volumes generated at the Project (including, but not limited to, reject and tailings materials and their management), as well as how waste tyres are proposed to be managed.

Building Related Matters

The Project proposes to demolish existing buildings and construct new ones. In order to do so, the Applicant will require, amongst other things, construction certificates, fire safety certificates and an approval to install and operate on site sewerage management systems. The EIS should include details of the buildings proposed as part of the development and the associated waste water treatment to enable council to assess whether the proposed buildings meet the relevant statutory requirements.

Concluding Comments

I would like to thank you for the opportunity to provide advice into the HVO North and HVO South Project SEARs. Please contact me on 02 6578 7290 if you have any questions.

Yours sincerely

Mary-Anne Crawford
Manager Development and Environmental Services

Muswellbrook Shire Council requests that the EIS:
* includes a traffic impact assessment that specifically considers the impact that changes to Lemington Road will have on traffic with origins from Jerrys Plain and further west;
* Identify how the site will be rehabilitated, with an emphasis on reducing negative legacy visual and environmental impacts on the landscape and waterways.

CR2021/000023
SF2017/027511
DSN

18 January 2021

Department of Planning, Industry & Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Joe Fittell

SEARS REQUEST – SSD-11826621, HUNTER VALLEY OPERATIONS SOUTH (HVO SOUTH) OPEN CUT COAL CONTINUATION PROJECT

Transport for NSW (TfNSW) advises that legislation to dissolve Roads and Maritime Services and transfer its assets, rights and liabilities to TfNSW came into effect on 1 December 2019. It is intended that the new structure will enable TfNSW to deliver more integrated transport services across modes and better outcomes to customers and communities across NSW.

For convenience, correspondence, advice or submissions made to or by Roads and Maritime Services prior to its dissolution, are referred to in this letter as having been made to or by 'TfNSW'.

On 11 January 2021 TfNSW accepted the referral by the Department of Planning, Industry and Environment (DPIE) through the 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 Scoping Report prepared by EMM dated 18 December 2020. It is understood that Hunter Valley Operations Pty Ltd is seeking approval for continued use of HVO North and HVO South beyond their approved completion dates of 2025 and 2030 respectively to 2050 for HVO North and 2045 for HVO South. The subject SSD relates to the extension of HVO South mine only whereas a separate application (SSD-11826681) has been lodged with DPIE for HVO North mine.

TfNSW understands that extension of completion dates for HVO North and HVO South would allow extraction of an additional 400 Mt of run of mine coal reserves within existing mining tenements and predominately existing approved disturbance footprints across the HVO Complex. The project will also enable maintaining employment for existing workforce of approximately 1,500 full-time equivalent workers beyond the current approved completion dates.

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*, and,
- Austroads Guide to Traffic Management, Part 12, Integrated Transport Assessments for Developments.

Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime Services NSW's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Comparison of current (approved) and proposed operations to determine change in traffic generation and the associated impact on the road network.
- An assessment of all relevant vehicular traffic routes and intersections for access to / from the site.
- Details of all traffic types and volumes likely to be generated by the proposal during construction, operation and rehabilitation, including description of heavy vehicle types, and haul route origins and destinations.
- Details of daily inbound and outbound traffic profile by time of day and day of week broken down per vehicle types.
- Traffic analysis of all major / relevant intersections impacted, using SIDRA or similar traffic model, including:
  - Current traffic counts and traffic growth projections at current and proposed completion dates
  - Traffic generation and distribution during construction and operational stages
  - With and without development scenarios
  - Delays, level of service, 95th percentile back of queue lengths and midblock capacity on all legs of intersections
  - Electronic modelling data for Transport for NSW review.
- An assessment of cumulative study area traffic impacts associated with the proposal and any other proposed/approved developments in the area.
- An assessment of affected intersections on the local and classified road network, including but not limited to New England Highway, Golden Highway, Lemington Road and Comleroi Road. The assessment to include review of road safety, crash data analysis, sight distance,

swept paths, pavement lifespan and design compliance to current Austroads and TfNSW supplements for the largest vehicle anticipated to access the site.

- Identification of infrastructure upgrades on the local and classified road network that are required to maintain existing levels of service and achieve design compliance in accordance with current Austroads and TfNSW supplements to the satisfaction of TfNSW and Council.

- Concept plans for identified infrastructure upgrades on the local and classified road network. It should be noted that identified infrastructure upgrades will need to be to the satisfaction of TfNSW and Council. It should be noted that seagull intersection arrangement is no longer supported by TfNSW in NSW.

- Concept plans for proposed Lemington Road realignment and new intersection of Golden Highway and Comleroi Road, with and without approved United/Wambo JV project involving Golden Highway realignment.

- As road works are proposed or may be required on classified road network, TfNSW will require the developer to enter into a Works Authorisation Deed (WAD) with TfNSW. TfNSW would exercise its powers and functions of the road authority, to undertake road works in accordance with Sections 64, 71, 72 and 73 of the Roads Act, as applicable, for all works under the WAD (Attachment A).

- An assessment of any other impacts on the local and classified road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

On determination of this matter, please forward a copy to TfNSW for record and / or action purposes. Should you require further information please contact Dipen Nathwani, Development Assessment Officer, on 0418 514 166 or by emailing development.hunter@rms.nsw.gov.au.

Yours sincerely

Peter Marler
Manager Land Use Assessment
Hunter Region